

THE FUNCTIONAL CATEGORIES  
AND PHRASE STRUCTURE OF SASON ARABIC

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THE FUNCTIONAL CATEGORIES  
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The Functional Categories and Phrase Structure of Sason Arabic

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## Thesis Abstract

Faruk Akkuş, “The Functional Categories and Phrase Structure of Sason Arabic”

The study aims to investigate primarily the functional categories and the phrase structure of Sason Arabic. Adopting the main premises of the Minimalist Program, I analyze the syntactic representations of functional projections, relying on the morphological properties of the language. Sason Arabic displays different properties across sentence types, hence following Akkuş and Benmamoun (2014) I argue that Sason Arabic exhibits both the head initial and head final properties.

In this study, the initial step was to examine the tense projection with the aim of explaining the morpho-syntactic properties of elements that can occupy it. The description of tense elements and the verbal morphology led to the analysis of the syntax of complex tense in SA. Based on the discussion of several instances of tense syncretism, mainly following Stowell 1996, 2005, Giorgi and Pianesi 1997, I argued for a *bi-layeral* TP analysis, where the lower layer projects two separate Ts. The main motivations for this analysis came from the past particle *kə-*, exclusive to SA, and the different function of *kwn* from other Arabic varieties.

In addition, I discussed the representation of sentential negation in Sason Arabic and concluded that the order of negation relative to tense seems to be different in copular and non-copular sentences (Akkuş and Benmamoun 2014). The investigation shed light on the influence of language contact on the clause structure of Sason Arabic, that is, the head-directionality and the position of negation relative to tense. I also suggested that the pronominal element which shows up in positive and negative sentences be best treated as *Pron* in the sense of Doron (1983, 1986) due to its distributional and morphophonological properties.

Finally, I examined possible word-order variations in the Sason Arabic depending on the information structure of the sentence and discussed their syntactic derivations within the phrase structure that I proposed in this study. This examination included the position of subjects and the derivation of CLLDed elements.

## Tez Özeti

Faruk Akkuş, “Sason Arapçası’nın İşlevsel Kümeleri ve Öbek Yapısı”

Bu çalışmanın amacı temel olarak Sason Arapçası’nın işlevsel kümelerini ve öbek yapısını incelemektir. Bu çalışmada Yetinmeci Çizgi (YÇ)’nin ana öncülleri uyarlanarak ve dilin biçimbilimsel özelliklerine dayanarak, işlevsel yansıtmanın sözdizimsel gösterimleri analiz edilmiştir.

Bu çalışmada, ilk olarak, zaman yansıtmasında yer kaplayabilecek unsurların biçimsözdizimsel özelliklerini açıklamak amacıyla bu yansıtma incelenmiştir. Zaman unsurlarının ve eylemsel biçimbilimin betimlenmesi Sason Arapçası’ndaki karmaşık zaman kiplerinin sözdizimsel analizlerine olanak sağlamıştır. Dilde gözlenen çeşitli zaman aynılaşması örneklerine bakılarak ve Stowell 1996, 2005, Giorgi & Pianesi 1997 benimsenerek, alt katmanın iki farklı zamandan oluştuğu *iki katmanlı* bir zaman yansıtması önerildi. Bu önerinin temel nedenlilikleri Sason Arapçası’na mahsus olan geçmiş zaman eki *kə-* ve diğer Arapça lehçelerinden farklı işlevlere sahip olan *kwn* yardımcı fiildir.

Ayrıca, Sason Arapçası’ndaki tümcesel olumsuzluğa bakılıp eylem tümceleri ile ad tümcelerinde olumsuzluğun zaman kipine göre sırasının farklı olduğu sonucuna varılmıştır (Akkuş & Benmamoun 2014). Bu inceleme dillerarası etkileşimin Sason Arapçası’nın tümcecik yapısı, yani baş değiştirgenliği ve olumsuzluğun zaman kipine göre pozisyonu, üzerindeki etkisine ışık tutmuştur. Buna ek olarak, olumlu ve olumsuz ad cümlelerinde görülen adilsil unsurun da Doron (1983, 1986) doğrultusunda, dağıtımsal ve biçimsel sesbilimsel özellikleri dolayısıyla *Pron* olarak adlandırılması gerektiğini savunduk.

Sonuç olarak, Sason Arapçası’nda tümcenin bilgisel yapılanmasına bağlamında olası sözcük diziliş farklılıkları incelendi ve bu çalışmada Sason Arapçası için öne sürülen öbek yapısı çerçevesinde bu diziliş farklılıklarının söz dizimsel türetimi tartışıldı. Bu tartışma öznelerin pozisyonlarını ve Sola Kaydırılan Biçimcesel unsurları da içermiştir.

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## ABBREVIATIONS

1/2/3	1/2/3 Person
C	complementizer
F	feminine
HAB	habitual
IMPF	imperfective
IND	indicative
M	masculine
MOD	modal
N	noun
SG	singular
PAST	past tense
PERF	perfect
PFV	perfective
TEL	telicity
PL	plural
PROG	progressive
T	tense

## CHAPTER I

### INTRODUCTION

## 1.1. The Aim

This thesis aims to examine and analyze the phrase structure of Sason Arabic (hereafter SA), one of the so-called *peripheral* Arabic dialects, spoken in southeastern Turkey. The study primarily examines the functional categories in SA adopting Chomsky's Minimalist Program (1995, 2000, 2001) in comparison with other well-studied Arabic dialects. The comparison will demonstrate the influence of contact languages on the syntactic structure of SA, along with phonology and morphology. In order to sketch a comprehensive picture of the language, the study examines temporal/aspectual system, negation in verbal and non-verbal sentences, word order, and subject positions. Briefly, the questions investigated in the thesis are:

- (i) Does SA project only one tense category or more?
- (ii) What is the location of negation with respect to tense in verbal and non-verbal sentences?
- (iii) Does SA have a uniform head-directionality?
- (iv) What is the position of the preverbal subject,  $\bar{A}$ -or A-domain?
- (v) What is the syntax of word order alternations? Is it stylistic 'scrambling' or a result of some discourse-oriented function(s)?

The thesis tries to account for the above questions in separate, but intertwined chapters, which complement one another; hence it contains a number of cross-references within the work.

## 1.2. Theoretical Framework

In this section I introduce the minimalist framework (Chomsky 1995, 2000, 2001, 2008), which constitutes the theoretical basis of this work. I will review here only the main premises of the framework and the points which are important to the subsequent analysis.

### 1.2.1. The Design of Minimalist Grammar

Like its predecessors, the Minimalist Program (henceforth, MP) takes the human language faculty as its object of study with the question of how “perfect, simple and elegant” language is. The assumption is that the language faculty contains a lexicon and a computational system for human language that operates on items selected from the lexicon (Hornstein et.al., 2005). This mapping from lexicon to interfaces (articulatory-perceptual and the conceptual-intentional systems to construct sound-meaning pairs, i.e. for interpretation) should be as *economical* as possible. Furthermore, the sound-meaning pairs have to meet a condition of *Full Interpretation* at the PF and LF for the derivation to *converge*.<sup>1</sup>

As a recursive system, one of the primitive operations of MP is *Merge*, which takes two objects  $\alpha$  and  $\beta$ , and forms a new object  $(\alpha, \beta)$  from them. Merge of  $\alpha$  and  $\beta$  is unconstrained, therefore either *external* or *internal*. In external Merge,  $\alpha$  and  $\beta$  are two

---

<sup>1</sup> The principle of Full Interpretation states that there can be neither superfluous symbols in syntactic representations nor superfluous steps in syntactic derivations (Chomsky 1986; also Chapters 2-4 of Chomsky 1995).

separate objects that are then grouped together to form a unified syntactic object  $\gamma = \{\alpha, \beta\}$ . In internal Merge, by contrast,  $\beta$ , itself a part of  $\alpha$ , is re-Merged in the Spec of  $\alpha$ , also forming a new syntactic object  $\gamma = \alpha$ .  $\beta$  is now at the edge of  $\alpha$ , leaving a trace  $t_\beta$  behind, and the whole operation of internal Merge is simply “Move” or displacement.

Another assumption is that syntactic representations have features that are uninterpretable at LF, e.g., agreement features on verbs and case features on nominals. Since the presence of such features would violate the principle of Full Interpretation, they have to be licensed (and deleted) in the course of the derivation, so the syntactic representation is legible at the interface. For this, the grammar needs a mechanism of licensing these uninterpretable features [ $uF$ ]. One possible way is to allow these [ $uF$ ] to be matched against corresponding interpretable features [ $F$ ]. Although the Spec-head configuration was argued to be the sole configuration for feature checking in early Minimalism (Chomsky 1993), Chomsky (2000, 2001) proposes that the Spec-head relation should be dispensed with in the account of agreement phenomena, in favor of the head-head relation *Agree*.<sup>2</sup>

*Agree* is an operation that establishes a relationship between an element  $\alpha$  (*Probe*) with uninterpretable features [ $uF$ ] and an element  $\beta$  (*Goal*) with matching

---

<sup>2</sup> Miyagawa (2009), in order to capture Koopman and Sportiche’s (1991) intuition that agreement requires a Spec-head relation, takes the Spec-head relation to be a two-step derivation: *Agree* and *Move*. Miyagawa contends that agreement relations are established (via Chomsky’s *Agree* process) independently of movement, which is the second step necessary for the Spec-head configuration. The purpose of agreement is stated as follows:

- (i) *Purpose of Agreement:*  
 Agreement occurs to establish a functional relation.

Still he maintains that this non-local relation must be transformed into a local relation by moving the goal to the probe. The purpose of this movement is to keep a record of the functional relation beyond narrow syntax so that semantic interpretation and the information structure can make use of it.

interpretable features [F] in the c-command domain of  $\alpha$ , whereby the uninterpretable features on the Probe are valued by the matching interpretable features on the Goal (Hornstein et.al., 2005). In order to enter a checking relation both the Probe and the Goal must be *active*, i.e. each must have an uninterpretable feature or features to be valued as a result of this operation.

To sum up, syntactic structures are built via the recursive procedure Merge, in both its external and internal guises. Uninterpretable formal features on functional heads (Probes) are licensed via Agree with matching interpretable features on substantive categories (Goals), thereby allowing the derivation to converge at the LF interface.

### 1.2.2. Phase-based Syntax (Multiple Spell-Out)

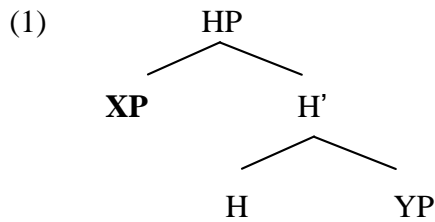
In the previous section I introduced the two main operations needed to generate syntactic representations: Merge (external and internal) and Agree. In this section, I discuss the phased-based syntax, the proposal that syntactic derivations proceed in cycles.

Chomsky (2000, 2001) proposes that computation in language, such as the numeration and Merge, occurs within specific local domains called *phases*.<sup>3</sup> Each phase is a separate chunk of structure, built from a distinct *subnumeration*, and once the computational system completes its work within one phase, the products of this computation are sent to PF and semantic interpretation, and the computation then goes on with its work in the next higher phase. What counts as a phase then? Chomsky (2000,

---

<sup>3</sup> This is, in essence, very similar to Uriagereka's (1999, cited in Soltan 2007) *Multiple Spell-Out* proposal, where it is argued that the computational system of human language allows syntactic derivations to access the phonological component not only once, but multiply so.

2001, 2008) proposes, rather stipulatively, that CP and vP constitute phases. He argues that the former comprises the *expression structure*, i.e. illocutionary force of the clause and the latter represents the *argument structure*.<sup>4</sup> Phase heads are assumed to have an EPP feature, such that the EPP position is the “edge” of the phase. Below is the representation:



In this structure, if H is a phase head, then HP is a phase and XP is at the edge of the phase head. YP, the sister of H, is called the complement domain of phase. Chomsky (2000:108) further assumes that once the products of a phase are sent to interfaces, only the phase head and the edge of the phase are accessible to further computation, a constraint which Chomsky calls *Phase Impenetrability Condition (PIC)*:

- (2) In a phase  $\alpha$  with head H, the domain of H is not accessible to operations outside  $\alpha$ , only H and its edge are accessible to such operations.

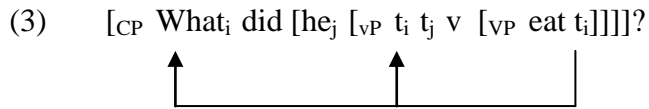
The phase edge, thus, serves as an *escape hatch* from a lower phase to a higher phase.

This will be required to account for successive cyclic movement across phases, for

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<sup>4</sup> Bošković (to appear) argues against the rigid nature of Chomsky’s phase theory and proposes a different analysis of phasehood, where the status of an X with respect to phasehood changes depending on the syntactic context in which X occurs.

example, as shown by the derivation in (3) of the *wh*-question “What did he eat?”, where the *wh*-phrase *what* moves first to the edge of the *vP*-phase on the way to its final destination at the edge of the *CP*-phase:



### 1.3. General Properties of Sason Arabic

Sason Arabic is one of the many Arabic varieties spoken in Anatolia. Jastrow (2005a, 2006, 2007) classifies SA as a member of Kozluk-Sason-Muş group, as a sub-branch of Mesopotamian Arabic varieties.<sup>5</sup>

Anatolian *qəltu*-dialects are conventionally divided into four groups (Jastrow 2006)<sup>6</sup>:

(4) i. Mardin group

Mardin town (Muslims; Christians, mostly emigrated)

Mardin villages (Muslims; Christians, emigrated)

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<sup>5</sup> By *Sason Arabic*, I refer to the dialect spoken in the villages of Purşeng, Batman and Kuzzi, Bitlis. This dialect is different from the one documented by Isaksson (2005) in the village of Xalile, e.g. in terms of its verbal modifications (ibid:187), which forms the basis of our examination, among others.

The existence of such a variation in such a small area is surprising, but not unexpected at all. Jastrow (2006, 2007) points out that Kozluk-Sason-Muş group is the least studied category, hence one might observe significant differences in such a small geography.

<sup>6</sup> This classification relies on Blanc’s (1964) seminal book *Communal Dialects in Baghdad*. This work is an investigation of Arabic spoken in three religious communities, Muslims, Jews, and Christians, who were speaking radically different dialects despite living in the same town. Based on the word “I said”- *qultu* in Classical Arabic- Blanc called the Jewish and Christian dialects *qəltu* dialects, and the Muslim dialect a *gilit* dialect.



Plain of Mardin (Muslims; Christians, extinct)

*Kosa* and *Mhallami* dialects (Muslims, 1 Christian village)

*Azəx* (Christians, now emigrated)

Nusaybin and Cizre (Jews, emigrated)

ii. Siirt group

Siirt town (Muslims; Christians, extinct)

Siirt villages (Muslims)

iii. Diyarbakır group

Diyarbakır town (Christians extinct; Jews migrated)

Diyarbakır villages (Christians extinct)

Siverek, Çermik, Urfa (Jews migrated)

iv. Kozluk-Sason-Muş group

Kozluk (Muslims; Christians extinct?)

Sason (Muslims; Christians extinct?)

Hasköy (Muslims)

Note that this classification does not contain the Arabic dialects spoken in the coastal region of the eastern Mediterranean from Hatay to Mersin and Antalya. This is because these dialects are considered to be linguistically part of the Syrian Arabic dialect area.

SA, in Jastrow's (2011) terms, is one of the Arabic *Sprachinseln* - isolated pockets of spoken Arabic in non-Arab countries, which is Turkey in this case. It is

impossible to give an exact number of SA speakers at this point, yet my estimation is somewhere between 5,000 to 6,000 based on the population of villages, in which this dialect is spoken. The dialect group SA belongs to comprises dialects that were spoken exclusively by Christians, and came close to extinction as early as during the First World War, today it is spoken by Muslim villagers.<sup>7</sup> Below is a map taken from Jastrow (2006) that marks the area where SA is spoken.

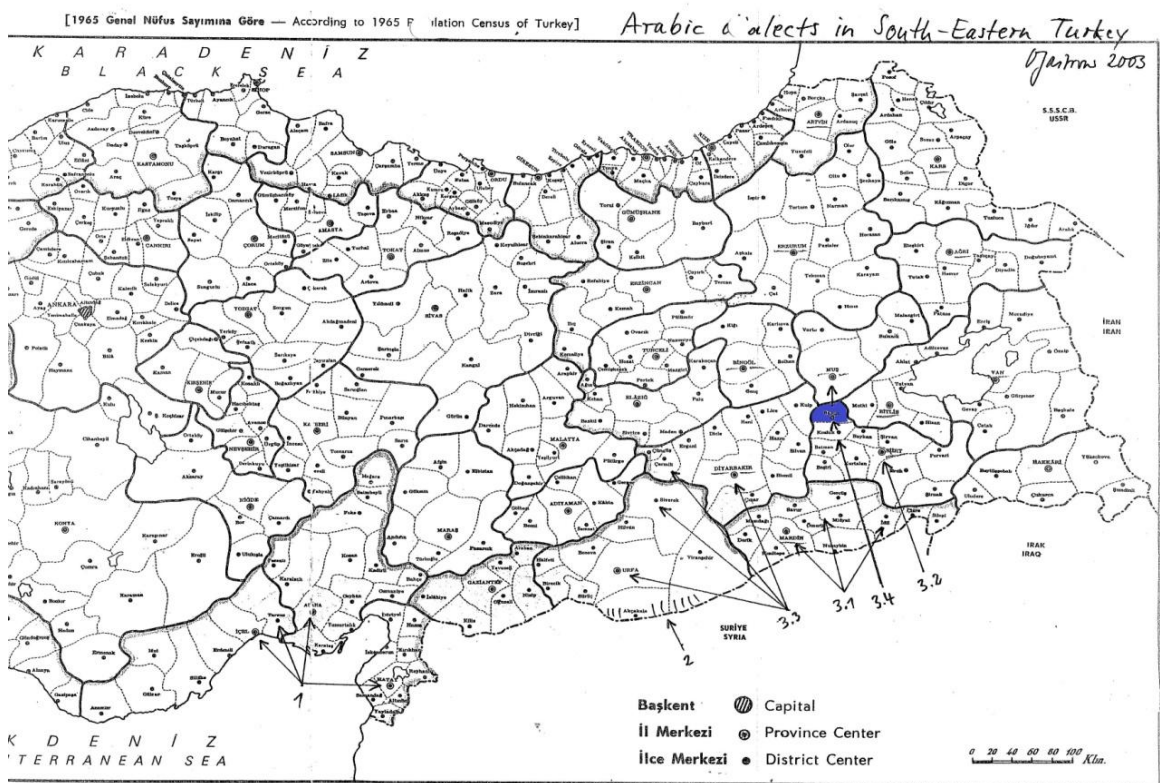


Figure 1: Arabic dialects in South-Eastern Turkey

The disappearance of Arabic diglossia<sup>8</sup>, coupled with strong influence from the surrounding languages, such as Turkish (the official language), Kurdish and Zazaki (the

<sup>7</sup> The reader is referred to Jastrow (2005a, 2006), Talay (2001, 2002), Lahdo (2009) for more sociological and historical background of Kozluk-Sason-Muş dialects, along with other Anatolian Arabic dialects.

<sup>8</sup> Diglossia refers to a linguistic situation where there are two dialects, called High and Low, which are in complementary distribution (Jastrow 2005a). The diglossic situation prevents the Low variety from

two Indo-Iranian languages) and Armenian (spoken by SA speakers of Armenian origin) are the two primary factors that have molded SA linguistically and sociologically. This work reflects some of the dramatic changes that the language has undergone/is undergoing due to its contact situation, making SA a fertile ground to study both for dialectology and formal linguistics. These changes are not limited to phonology, or morphology, but are clearly visible in the realm of syntax as well. In fact, it will be seen that morphology is the most conservative aspect of grammar, which resists change (cf. Jastrow 2005b for Uzbekistan Arabic in which the Turkic and Iranian influence is mostly visible in syntax). The degree of mutual intelligibility varies among the speakers of different Anatolian Arabic varieties, usually as a result of geography, leading to complete unintelligibility in most cases.

SA, as a Semitic language, exhibits certain patterns whose presence can be best attributed to its contact with these languages. Among these patterns are the weakening of the extent and the role of the templatic morphology peculiar to Semitic languages, the use of periphrastic causative constructions rather than gemination or the “ablaut” causative, and the development of some head-final properties. Finally, SA lacks case morphology, despite its rich agreement morphology.

In the subsequent sections I describe the general properties of Sason Arabic, focusing on aspects that will be relevant for the overall discussion in this thesis.<sup>9</sup>

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developing into an independent language because the dialect is not allowed to take over the functions of the High variety.

<sup>9</sup> See Akkuş (2013a) for an introduction to the phonological and morphological properties of Sason Arabic.

### 1.3.1. Word Order

Sason Arabic is a VS(O)/SV(O) language with permutations to these basic orders also being allowed.

- (5) a. kemal qar-a kitab-ad. SVO  
K read.PAST.3M book-PL  
'Kemal read books.'
- b. qar-a kemal kitab-ad. VSO  
read.PAST.3M K book-PL
- c. misafir-ad go SV  
guest-PL came.3PL  
'The guests came.'
- d. go misafir-ad VS  
came.3PL guest-PL

VS(O) order is used frequently in embedded clauses (Yakut, 2013) and relative clauses (Safina, 2013).

- (6) a. int kitab le i-habb cihan tı-qri.  
2M book that 3M-love C 2M-read

‘You read the book that Cihan likes.’

- b.      ma-sima-tu            le      go            zyār.  
NEG-heard.1SG          that    came.3PL      children  
‘I didn’t hear that the children came.’

The orders illustrated in (7) are not allowed in Sason Arabic, as in many other Arabic dialects.

- (7) a.      \*kitab-ad      qar-a            kemal                            OVS  
book-PL          read.PAST-3M K  
‘Kemal read the books.’
- b.      \*kitab-ad      kemal qar-a.                            OSV  
book-PL          K          read.PAST.3M
- c.      \*kemal          kitab-ad      qar-a                            SOV  
K                  book-PL      read.PAST-3M

In (7a) the object precedes the V-S sequence while in (7b) it precedes the S-V sequence. In (7c), the object occurs between the subject and the verb. All these orders are not acceptable in Moroccan Arabic (Benmamoun, 2000), Lebanese Arabic (Aoun et al. 2010) and, as Mohammad (2000) also shows, Palestinian Arabic.

However, the OVS, OSV, and SOV orders are possible if the object is resumed by a pronominal clitic/agreement inflection on the verb,<sup>10, 11</sup>

- (8) a. kitab-ad qar-en kemal OVS  
 book-PL read.PAST-3M-them K  
 “The books, Kemal read them.”
- b. kemal kitab-ad qar-en SOV  
 K book-PL read.PAST-3M-them
- c. kitab-ad kemal qar-en OSV  
 book-PL K read.PAST.3M-them

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<sup>10</sup> Note that though I will refer to the particle on the verb as ‘clitic’ for the sake of simplicity, I will refrain from making any commitments regarding its status. Although this type of construction is by no means alien to forms in other Arabic dialects (e.g. Ouhalla 1994, Brustad 2000:349), where the syntactic role of a fronted word is indicated by a ‘resumptive pronoun’, I regard Ratcliffe’s (2005:145) position on this issue worth considering. Based on the much higher frequency of such constructions (SOV<sub>-DO</sub>, SOOV<sub>-IO,DO</sub>) than the simple (S)OV pattern in Bukhara Arabic, Ratcliffe argues that what might be happening in the language is the reanalysis of a resumptive pronoun as a verbal inflection agreeing with the object.

However, apart from the fact that it is impossible to tell if speakers have internalized such a reanalysis, intuitively, if what we are dealing with is agreement, one would expect to see the marker on the verb in any configuration, and not just when the object precedes the verb. That is, the order should not matter. Moreover, as the example provided in Ratcliffe (2005) shows that even in SOV order, the particle on the verb is not obligatory.

- (ii) dabba ijir zarab (Ratcliffe’s (9), glossing retained)  
 horse leg struck  
 ‘The horse thrashed its legs.’

<sup>11</sup> The OVS and SOV orders illustrated in (7) also become acceptable if the object is contrastively focused. In such contexts, the object receives focal stress and is not related to a pronominal clitic on the verb. OSV order, on the other hand, is ungrammatical even when the object is focused. I will discuss the derivational properties of these constructions in Chapter 4.

Moreover, unlike Jordanian Arabic (Alsarayreh, 2012), SA allows VOS configuration, too, when the VP is contrastively focused.

- (9) [qar-a kitab-ad] kemal  
 read.PAST.3M book-PL K  
 ‘Kemal read books.’

With respect to the double-object constructions, the theme and the goal can occur in either order since SA is a ‘scrambling’ language.

- (10) a. ali ād-a kitab şa naze. (theme>goal)  
 A gave-3M book to N  
 ‘Ali gave book(s) to Naze.’
- b. ali ād-a şa naze kitab. (goal>theme)  
 A gave-3M to N book  
 ‘Ali gave book(s) to Naze.’

The theme>goal order is much more widely preferred among native speakers, as in Turkish (Kornfilt 2003, Öztürk 2005: 213). This raises the question of what the underlying order of theme and goal is in SA. We will discuss the issue of the word order in SA in detail in Chapter 4.

### 1.3.2. Head-Directionality

Sason Arabic is, for the most part, a head-initial language, like other Arabic varieties.

The following examples illustrate the head-initial nature of the language in VP and PP<sup>12</sup>, respectively.

(11) a. qafal-tu        atsurā-ma.  
          caught-1S     bird-a  
          ‘I caught a bird.’

          b. ša        herdem  
              for     H  
              ‘for Herdem’

In (12), C head *le* ‘that/when’ precedes the TP and as a result has a head-initial structure.

In (13) auxiliary verb *ki* ‘is (*fem*)’, which we assume to be at T, is to the left of the main verb. Hence, we assume that TP in SA has a head initial structure.

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<sup>12</sup> Below is a list of commonly used prepositions in SA:

<i>amma</i>	to, towards	<i>hatta</i>	until
<i>ša</i>	to, for	<i>sob</i>	by
<i>mi</i>	from	<i>kama</i>	like
<i>and</i>	by, beside	<i>le</i>	since, because
<i>b-</i>	in, with	<i>qiddam</i>	before
<i>wara</i>	with	<i>qafa</i>	after
<i>be</i>	without	<i>ta(t)</i>	under
<i>imbala</i>	without	<i>fi</i>	in
<i>ben</i>	between	<i>fo</i>	on, over



(12) [CP le [TP kemal iči]]  
 that K 3M.come  
 ‘When Kemal comes...’

(13) ki ta-yel ši.  
 is.F 3F.eat food  
 ‘She is eating.’

Likewise in (14), both the determiner and the demonstrative precede N and with PP following the N it modifies in line with the head-initial nature of the language.

(14) l-ala beyt le recel  
 the-this(m.) house of man  
 ‘this house of the man’

DET(eterminer) + DEM(onstrative) + N +PP

In this work, I will not deal with the nominal structures, however briefly mentioning, the following phrase structure might be a possible representation of this construction.

(15) [DP l [DemP ala [NP [N beyt [PP [P le [NP [N recel]]]]]]]]]

Giusti (1993, cited in Bernstein 2001) suggests that demonstratives are generated in the specifier position of a functional projection below DP and raise to Spec of DP,

particularly in languages with co-occurring pronominal demonstrative and definite article. Sason Arabic is such a language even though the definite article, with its use in very limited contexts, has no effect on the referential qualities of the NP. Jastrow (2006) states that in the dialects of Kozluk-Sason- Muş groups there is a tendency to drop the definite article while retaining it before a preposition. I take this statement one step further and argue that the definite article is retained only in a few frozen expressions, as illustrated below:

- (16)            b1-l-xer                      ci-to!  
                   in-the-goodness        came-2PL  
                   ‘Welcome!’

In other instances, the definite article is entirely dropped.

- (17) a.        hatta    beyt  
                   until    house  
                   ‘until the house’
- b.        mi        fistox  
                   from    roof  
                   ‘from the roof’

### 1.3.3. Construct State

The Construct State (CS) is a genitive construction common in Semitic languages such as Arabic and Hebrew<sup>13</sup>. Basically, a Construct State DP consists of two elements: a head noun and a genitive DP following it. The relationship between these two constituents is not very clear for the moment, but it seems that mainly either an inalienable possession (possessed-possessor), e.g. body-part or kinship relations are expressed via CS.

- (18) a.    karra    ahmad  
         head    A  
         ‘Ahmet’s head’
- b.    ras        bint-i  
         hair    girl-my  
         ‘my daughter’s hair’
- c.    bint            oratman  
         daughter    teacher  
         ‘the teacher’s daughter’
- d.    ebe        kemal

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<sup>13</sup> In this thesis, ‘Arabic’ will serve as an umbrella term, when a distinction between varieties of Arabic is neither clear nor significant. In all other cases, specific varieties will be mentioned explicitly.

son K  
'Kemal's son'

The regular genitive construction is formed with the preposition *le* 'of'.

(19) bint le oratman  
daughter of teacher  
'the teacher's daughter'

Still, it is not possible to resort to CS in every body-part context. While certain body parts, such as *ras* 'hair', *zar* 'back', *karra* 'head' allow the CS strategy, others, e.g. *faʔz* 'leg', *anen* 'eyes' do not. Furthermore, in cases where it is not enough for the head noun to be [+animate], but it must be [+human] if a relationship of possession is to be established.

(20) faʔz \*(le) mara  
leg of woman  
'the woman's leg'

(21) kelp \*(le) recel  
dog of man  
'the man's dog'

Since SA lacks the definite article, it is not possible to draw a contrast between CS and non-CS with respect to which element carries the (in)definite marker as in (22). Only the rightmost member can carry the (in)definite marker in dialects which have the definite article.

(22) a. ktab 1-wald (Moroccan Arabic)

book the-boy

‘the boy's book’

b.\* l-ktab 1-wald

book the-boy

‘the boy's book’ (Benmamoun, 2000:10)

In SA, however, both elements must be definite, as illustrated by the ungrammaticality in (23).

(23) \* bint oratman-ma

daughter teacher-a

‘a teacher’s daughter’

Not only adjacency is another restriction on the CS, i.e. no element intervenes between the members, but also no adjective or modifier can occur in the CS of Sason Arabic (Benmamoun, 2000: 141).

(24) \* bint            oratman        pir  
           daughter        teacher        old  
           ‘the old teacher’s daughter’

In order to modify either member or express their indefiniteness, non-CS strategy is employed, i.e. the use of preposition is obligatory.

(25) a.    bint            le        oratman-ma  
           daughter        of        teacher-a  
           ‘a teacher’s daughter’

b.    bint            le        oratman        pir  
           daughter        of        teacher        old  
           ‘the old teacher’s daughter’

c.    kafas ha:mar u        gbir le        atsurā  
           cage red        and        big of        bird  
           ‘the bird’s big and red cage’

#### 1.3.4. Pro-drop

SA is a pro-drop language when both the subject and the object can be dropped when the relevant information is recoverable from the context. Once the subject or the object has

been introduced into the context, it can be dropped unless contrastive/exhaustive focus is intended. When the object is dropped, it may be resumed by a clitic on the verb.

(26) A: ahmad ičax ġa?  
A when came.3M  
'When did Ahmet come?'

B: ams ġa.  
yesterday came.3M  
'(He) came yesterday.'

(27) A: naze adle dars-a?  
N did.3F homework-her  
'Did Naze do her homework?'

B: he, adle / adli-du.<sup>14</sup>  
yes, did.3F/did.3F-it  
'Yes, she did (it).'

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<sup>14</sup> Note that here we have one of the word-level phonological processes that take place in Sason Arabic concerning the feminine marker in the perfective form. In SA when the object is used along with a clitic on the verb, the vowel undergoes reduction to /-ə/ and /-d/ or another consonant dictated by the suffix surfaces. (see Benmamoun, 2000: 142 for a similar discussion in Moroccan Arabic).

### 1.3.5. Question Formation

#### 1.3.5.1. Yes-No Questions

Yes-No questions are formed through intonation and no question particles or word order alternations are required. In order to form a Yes/No question, the predicate is stressed.

(28)        ali    ga.  
              A        came.3M  
              ‘Ali came.’

(29)        ali    ĠA?  
              A        came.3M  
              ‘Did Ali come?’

#### 1.3.5.2. Wh- Questions

Wh-words in Sason Arabic are as follows:



(30) It is possible contrast phrases with	ande	who/whom	to speak of a between <i>wh</i> - respect to their
	şine (işne)	what	
	içax	when	
	amma	where	
	atey/fo şine	why	
	ıştaba/şime/iştarz <sup>15</sup>	how	
	iş habbe	how many	
	işqadari	how much	
iş NP	which NP		

distribution. Some of the *wh*-words clearly undergo movement out of the base-generated postverbal position, such as *amma* ‘where’, *şine* ‘what’, whereas some others such as *içax* ‘when’, *atey* ‘why’ always occur in the preverbal position (constituents and their corresponding *wh*-phrases are italicized).

- (31) a.    ali    *ams*            miş-i            barra.  
          A    yesterday    went-3M        outside  
          ‘Ali went outside yesterday.’
- b.    ali    *içax*    miş-i            barra?  
          A    when    went-3M        outside  
          ‘When did Ali go outside?’

<sup>15</sup> Although I translate the three *wh*-words as ‘how’, I should note that they are used in different contexts.

- (iii) a. şime kit?  
          how cop.2M  
          ‘How are you?’
- b. iştarz cit-o?  
          how came.2M  
          ‘How did you come?’

- (32) a. ahmad *le kan raxu* şarab halib wara asal.  
 A that was.3M sick drank.3M milk with honey  
 ‘Ahmet drank milk with honey since he was sick’
- b. ahmad *atey* şarab halib wara asal.  
 A why drank.3M milk with honey  
 ‘Why did Ahmet drink milk with honey.’

As illustrated in examples (31-32), adverbial adjuncts unmarkedly occur preverbally, and so are the corresponding *wh*-phrases. Compare these constructions with the following:

- (33) a. omar *mış-i tattun.*  
 O went-3M tobacco  
 ‘Ömer went to the tobacco field.’
- b. omar *amma* *mış-i?*  
 O where went-3M  
 ‘Where did Ömer go to?’
- (34) a. ayşo *kıllom tı-tbex şorbiye.*  
 A everyday 3F-cook soup  
 ‘Ayşo cooks soup every day.’

- b. ayšo killom şine tı-tbex.  
 A everyday what 3F-cook  
 ‘What does Ayšo cook everyday?’

Notice that in the declarative sentence (33a), the object follows the verb, while it precedes the verb in interrogatives as in (33b). Similarly, with verbs of directed motion such as *mš* ‘go’ illustrated in (33) we see that the oblique argument surfaces postverbally, unlike adjuncts in (31-32). At first glance SA seems to pattern with Kurdish –one of the contact languages of SA - in allowing postverbal arguments and adverbs denoting goal (Gündoğdu 2012), however it turns out that it is more complicated, and the contrast cannot be reduced to adjunct *vs.* verbs of position/directed motion distinction. If SA was in fact like Kurdish in this respect, the following sentence would be expected to be ungrammatical, contrary to the fact. I will leave this issue for further research.

- (35) ku i-patteg fo yatax.  
 be.3M 3M-jump on bed  
 ‘He is jumping on the bed.’

Examples (33) and (34) clearly demonstrate that in declaratives with verbal predicates, the complements follow the verb as in the Arabic pattern but in *wh*-constructions there is

movement but not like the Arabic pattern. It is a kind of movement that targets a position lower than the position of subject.<sup>16</sup>

### 1.3.6. Agreement

#### 1.3.6.1. Verbal Paradigms

##### The Perfective and Imperfective Forms

As in other Semitic languages and Arabic dialects (Aoun et al. 2010), verbs in Sason Arabic exhibit two morphological patterns: perfective and imperfective. In the perfective, subject agreement is realized as a suffix on the verb.<sup>17, 18</sup> In the imperfective, by contrast, the realization of agreement differs dramatically. It is realized by both prefixes and suffixes.

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<sup>16</sup> It should be noted that even in Arabic, *wh*-movement to a position below C takes place, however it must be before the subject, unlike SA. Consider the following from Moroccan Arabic:

- (iv) r-rajel lli m'a men kunt (Abbas Benmamoun, p.c.)  
the-men that with whom I was

Below is an SA embedded clause that shows that *wh*-phrase must be preceded by the subject.

- (v) a. mo-re leyla wara ande miş-e  
neg-1S.know L with whom went-3F  
'I don't know with whom Leyla went.'

b.\*/?? more wara ande Leyla mişe.

c. more wara ande mişe Leyla.

<sup>17</sup> Fassi Fehri (2012), taking into account the Person Placement, calls the two contrasting forms as suffixed Tense (=ST) and prefixed Tense (=PT).

<sup>18</sup> Brustad (2000:16) substitutes *perfective* and *imperfective* for the traditional terms *perfect* and *imperfect*, arguing that the latter refer to an aspect, arguably, expressed by the participle.

## A. PERFECTIVE<sup>19</sup>

<i>Person</i>	<i>Number</i>	<i>Gender</i>	<i>Affix</i>	<i>Verb+Affix</i>
1	Singular	M/F	-tu	faqastu
2	S	M	-t	faqast
2	S	F	-te	faqaste
3	S	M	∅	faqaz
3	S	F	-e	faqaze
1	Plural	M/F	-na	faqazna
2	P	M/F	-to	faqasto
3	P	M/F	-o	faqazo

## B. IMPERFECTIVE<sup>20</sup>

In Anatolian Arabic a distinction is made in the inflection of strong and weak verbs (Jastrow 1978, Talay 2001).

### i. Strong Verbs

<i>Person</i>	<i>Number</i>	<i>Gender</i>	<i>Affix</i>	<i>Affix+Verb</i>
1	Singular	M/F	a-	afqez
2	S	M	tı---∅	tıfqez
2	S	F	tı---e	tıfqıze
3	S	M	i-	ifqez
3	S	F	tı---∅	tıfqez
1	Plural	M/F	nı-	nıfqez
2	P	M/F	tı---o	tıfqızo
3	P	M/F	i---o	ifqızo

<sup>19</sup> The table format is that of Benmamoun 1999.

<sup>20</sup> I use the terms ‘perfect’ and ‘perfective’ in the sense of Comrie (1976:12), i.e. in very different senses from one another. The term ‘perfective’ contrasts with ‘imperfective’, and denotes a situation viewed in its entirety, without regard to internal temporal constituency; the term ‘perfect’ refers to a past situation which has present relevance, for instance the present result of a past event (her finger has been sprained). See Comrie (*ibid*) for details.

In addition to the position of Person agreement (as suffix in the Perfective and as prefix in the Imperfective)<sup>21</sup>, the two forms differ with respect to their internal vocalic melody of the verb stem.

ii. Weak Verbs<sup>22</sup>

<i>Person</i>	<i>Number</i>	<i>Gender</i>	<i>Affix</i>	<i>Affix+Verb</i>
1	Singular	M/F	a-	addel
2	S	M	ta---Ø	taddel
2	S	F	ta---e	tadle
3	S	M	ya-	yaddel
3	S	F	ta---Ø	taddel
1	Plural	M/F	na-	naddel
2	P	M/F	ta---o	nadlo
3	P	M/F	ya---o	yadlo

1.3.6.2. Nominal Agreement

Sason Arabic displays agreement within the noun phrase as well. For instance, adjectives follow the nouns they modify and agree with them in number and gender, not person.

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<sup>21</sup> The only exception to the generalization that person is expressed as a prefix is the second person feminine where gender is expressed as a suffix, like number.

<sup>22</sup> Verbs can also be divided as *a-type* and *i-type*, a categorization that reflects the internal vowels.

- (36) a. kelp            gbir  
           dog.M.S        big.M.S  
           ‘big dog’
- b. buyid            koys-in  
           house.PL        beautiful-PL  
           ‘beautiful houses’

Numerals precede the nouns and also trigger number agreement on the nouns they modify.

- (37)            sɪrɪs    sabi-yad  
                   three   boy-PL  
                   ‘three boys’

Note that if the particle *habbe* ‘piece’ comes between the numeral and the noun, then it is this element that agrees with the numeral.

- (38)            sɪrɪs    habub            sabi  
                   three   piece.PL        boy  
                   ‘three boys’

#### 1.4. Outline

The organization of this thesis is as follows: Chapter 2 introduces the verbal morphology in SA and provides a syntactic analysis of complex tense. Chapter 3 deals with negation in verbal and non-verbal sentences and argues that SA exhibits head-initial structure in the former and following Akkuş and Benmamoun (2014) head-final properties in the latter. It also discusses the theoretical implications of copular constructions. Chapter 4 looks at (dis)-allowed word order configurations, including double object constructions, and presents a syntactic explanation for these configurations and for the position of preverbal subject. Chapter 5 presents a summary of the thesis and discusses implications for further research.



## CHAPTER II

### THE TENSE SYSTEM OF SASON ARABIC

This chapter introduces the verbal morphology in matrix clauses in Sason Arabic (in comparison with Standard Arabic and Moroccan Arabic). I will start by describing the morphology of the past, present, future and imperatives in this dialect. The aim is to discuss the morpho-syntactic properties of elements that can occupy the tense projection. In the course of the description, I will discuss some of the prevailing assumptions about the morphology of tense and aspect in Arabic, particularly the autosegmental account (McCarthy 1979), and suggest alternative analyses, mainly following Benmamoun (2000). The detailed description of tense will set the stage for the analysis of the syntax of complex tense in SA, in the light of the current literature, and exploration of the formal features of the various elements in the tense projection (TP). The description will also pave way for the next two chapters, 3 and 4, which explore the negation and the syntactic distribution of subjects.

## 2.1. Verb Morphology in Sason Arabic

As pointed out in Section 1.3.6.1, verbs occur mainly in two morphological forms, imperfective and perfective. The verb consists of the stem (the root and its vowel melody) and agreement affixes, which surface as suffixes in the perfective and as prefixes (and suffixes) in the imperfective.

### 2.1.1. Distribution of the Imperfective Verb

#### 2.1.1.1. Imperfective in Non-past

The imperfective form mostly occurs in the context of verbs with present tense interpretation (progressive and habitual). It should be noted that there is also a separate Progressive, formed with the auxiliary.

- (1) a. ya-mel.<sup>23</sup>  
3M-work  
'He works/He is working.'
- b. ku ya-mel.  
be.3M 3M-work  
'He is working.'

In addition to appearing in verbal participles, the auxiliary is also used in non-verbal sentences. Sason Arabic does not have a separate morpheme or auxiliary to express future tense, unlike other dialects of Arabic. An example is given from Standard Arabic in (2a). The above sentence in SA is ambiguous between present tense and future tense. Temporal adverbs distinguish the temporal reference of the clause as in (2b). In this

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<sup>23</sup> The verb *ml* also means 'to study'.

respect, SA exhibits the properties of ‘binary tense systems’, in Comrie’s (1985: 48) terms, such as German or Finnish.

(2) a. sa-ya-drus-u (Standard Arabic)  
FUT-3M-study-IND  
‘He will study.’ (Benmamoun, 2000: 28)

b. yade ya-mel.  
tomorrow 3M-work  
‘He will work tomorrow.’

The imperfective occurs also in modal contexts.

(3) macbur ya-mel.  
have to 3M-work  
‘He has to work.’

In embedded non-finite clauses:

(4) iri-llu ya-mel.  
want-him 3M-work  
‘He wants to work.’

In negative imperatives:<sup>24</sup>

- (5)            laa        tamel.  
                 NEG      work.2M  
                 ‘Don’t work.’

I follow Benmamoun (2000) in arguing that the fact that imperfective form occurs in the context of present tense, future tense, imperative and non-finite clauses shows that it does not morphologically carry any temporal or aspectual information. It is difficult to come up with a temporal feature that is shared by all these constructions.

Benmamoun’s approach inevitably leads to the treatment of the imperfective as the default form of verb, due to the use of the imperfective in a number of contexts unlike the perfective, which has a narrow environment, a view that I am adopting.<sup>25</sup>

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<sup>24</sup> As seen in the example (5), the form of the verb is exactly the same as the imperfective verb, whereas the positive imperative has its exclusive form (see Benmamoun 2000, chapter 7, Shlonsky 1997 for the analysis of imperatives in Arabic, see also Kayne 1992, Zanuttini 1997, i.a. for a general perspective on imperatives).

- (i)            aməl  
                 work  
                 ‘work (m.)’

<sup>25</sup> Adding to the discussion above, the default is different from the infinitive form of the verb, as it is understood in languages such as Turkish or English. In SA certain elements in the form of cognate objects behave like infinitives, as illustrated below:

- (ii)            qaru            a-qri  
                 reading      1sg-read  
                 ‘I read’
- (iii)            ši                akıl      a-yel  
                 food            eating    1sg-eat  
                 ‘I eat’

However, in SA word forms are not derived from the cognate form that appears to function as infinitival, unlike Turkish or English. The derivation is realized out of the consonantal root.

Apart from the present tense sentences, in other contexts listed, the main temporal information is carried either by a modal, the negative, or a matrix verb. Thus, the imperfective is resorted to whenever the relevant verb does not carry the main tense information. This idea is independently motivated by the fact that some nominalization processes seem to take as the input the imperfective form (see McCarthy 1979, 1981 for a groundbreaking autosegmental account of Arabic morphology).

- (6) a. i-heseb  
3M-calculate  
'He calculates.'
- b. hesāb  
'calculation, account.'
- (7) a. y-allem  
3M-teach  
'He teaches.'
- b. mu-allim  
n-teach  
'teacher'

As evident from (6) and (7), the imperfective verb (6a, 7a) and the nominal (6b, 7b) have almost the same vocalic melody, which indicates that the two forms are related (perhaps

derivationally). This in turn suggests that the imperfective does not carry any temporal information, given that in most languages nominals are derived from or related to non-tensed verbs.

This analysis, which argues that the imperfective has no temporal information, also readily accounts for the occurrence of imperfective in past contexts.

#### 2.1.1.2. Imperfective in past

Sason Arabic has the particle *kə-*, which is attached to the verb in the imperfective form as a prefix in expressing past imperfective. Consider the following:

- (8) a.    ya-yel.  
          3M-eat  
          ‘He eats./He is eating./He will eat.’
- b.    kə-ya-yel  
          PAST-3M-eat  
          ‘He was eating./He used to eat./He was going to eat.’

The imperfective verb in (8a) by itself has the present/future interpretations, and in both (8a) and (8b) habitual and progressive meanings are available. The example (8b) illustrates that when the thematic verb is preceded by the particle *kə-* the imperfective is used with past time reference, hence we take this to suggest that *kə-* conveys past tense interpretation. In parallel with the non-past form (1b), there is a separate progressive,





- (11) kan            \*(kə)-ya-yel.  
 be.PAST-3M    PAST-3M-eat  
 ‘He was eating.’

The tensed morphology and agreement on the auxiliary and “*kə*+the thematic verb” provides evidence in support of two distinct TPs - that is, double past marking- separate from English examples, e.g. ‘I was sleeping’ where the time reference is conveyed by the auxiliary, not the thematic verb. The obligatory use of *kə*- in past contexts, even when the auxiliary is realized as perfective in (11) lends support to analyzing it as the past marker.

Given the above discussion, it is plausible to claim that the prefix *kə*- functions as marking the imperfective past, as previously suggested (Talay 2001, Akkuş 2013b).<sup>26</sup>

<sup>27</sup> However, the discussion in the following section shows that the prefix is not

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<sup>26</sup> Talay (2001:84) calls the particle *k-* in Hasköy dialect the *imperfektive Vergangenheit*. Since Talay does not include any example regarding the form of past perfect tense, I have no chance to make any comparison in that respect. The argument in Akkuş (2013b) was based on the assumption that in line with the passive morpheme, which undergoes allomorphy depending on the aspect of the thematic verb, i.e. it surfaces as *m-* in the perfective, and as *in-* in the imperfective, the past marker *kə*- as well undergoes a similar allomorphy. Hence, the assumption was that *kə* is realized as *ki* in the imperfective, and as *kə* in the perfective, making it sensitive to the aspect of the verb. However, my recent investigations and discussions with native speakers led me to abandon that view in favor of the view defended in this work. I have noted that although speakers mostly use *kə*, there is a free variation with *ki* in some unprincipled cases.

<sup>27</sup> Isaksson (2005:187) says that the variety of Arabic he documented in Sason area has the verbal modifier *kəl-*, a particle that “before the perfect marks the perfect tense”. His example is the following.

- (iv)      bōwš kəl-štağal ingilzğa                      (transcription retained as the original)  
             ‘He has spoken much English’

First, the dialect discussed in this thesis does not have such a particle. Second, it is seen that the perfective form of the verb ‘speak’ is used, hence the reading I expect is ‘he had spoken much English’, i.e. past perfect, not present perfect, in traditional sense. Hypothetically, if this was my dialect one way to test this would be via temporal adverbials that are used with each tense. If the above sentence meant ‘he has

exclusively used with imperfective, but also with perfective verbs. These facts will pave the way for the investigation of the implications for the syntactic status of the particle.

### 2.1.2. Distribution of the Perfective Verb

The perfective form of the verb, on the other hand, is found mainly in the past tense contexts.<sup>28</sup>

- (12)            ğa                    ams  
                   came.3M            yesterday  
                   ‘He came yesterday.’

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spoken’, then it should be compatible with *sa* ‘just, now’, a prediction that is not correct according to all my informants and to me as well.

- (v)            \*sa bōwš kəl-štaġal ingilzġa

On the other hand, the adverb *ams* ‘yesterday’ is felicitous with the sentence, rendering the following meaning.

- (vi)            ams bōwš kəl-štaġal ingilzġa  
                   ‘He had spoken much English yesterday.’

Hence, if Isaksson’s interpretation of data is correct, that variety is distinct from the dialect discussed here.<sup>28</sup> Still, the perfective form does not always have to denote past time reference, but could express future time reference. The following example with a subordinate clause makes the point clear. (The example is adapted from Comrie 1976: 79). This interpretation of the embedded clause past tense is often described as a past-shifted reading (e.g. Stowell, 2005: 444).

- (vii)          ač:i (impf)    čax        le        salur    lay-o (pfv)  
                   1SG-come    when    that    plums    ripened.3PL  
                   ‘I will come when the plums ripen.’

Although the embedded verb is inflected for the perfective paradigm, the interpretation of the perfective *laŸo* is with future time reference (i.e. the plums have not yet ripened). This is not predicted on a hypothesis that attributes the perfective/imperfective opposition to purely tense. Still, the significant point in this sentence is the relative time reference of the verb in that the ripening of the plums is prior to my coming. Thus, one might still conclude that the difference between the perfective and the imperfective is one of relative tense.

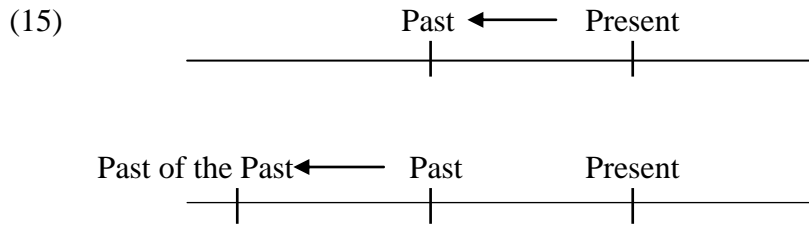
In the previous section, the example (8b) shows that the imperfective is used with past time reference with the attachment of the the particle *kə-* to thematic verb. In (10), on the other hand, the verb has past time reference without a separate particle. The crucial set of data that argues against the treatment of *kə-* as the imperfective past marker is illustrated below:

- (13)            (bahalče) kə -nam,            le ġit  
                   already PAST-slept.3M        that came.2M  
                   ‘He had (already) slept, when you came.’

In example (13) the particle *kə-* is attached to a perfective verb, the sentence becomes past perfect. Note that this feature differentiates SA from other dialects, in that the perfective form of the auxiliary, *kan* ‘to be’, is not used to form past perfect as in (12). Note that the presence or absence of *kə-* is irrelevant.

- (14)            \*bahalče kan            (kə)-knam,        le ġit  
                   already be.3M        PAST-slept.3M that came.2M  
                   *Intended:* ‘He had already slept, when you came.’

The compatibility of the morpheme *kə-* with both the perfective (13) and imperfective (8) suggests that *kə-* has no aspectual content, but carries only temporal information. The function of the marker of past tense can be schematized as follows:



Independent evidence that *kə-* heads its own projection comes from the fact that it can scope over conjoined verbs.

- (16)            killom            sāde    kə-    [ya-yel            u    i-nam].  
                   every day        just    PAST- 3M-eat            and 3M-sleep  
                   ‘He would just eat and sleep all day long.’

The discussion so far leads to the conclusion that the perfective indicates both perfective meaning and relative past time reference, while the imperfective indicates everything else (i.e. either imperfective meaning or the time reference meaning component of relative non-past tense). The Sason Arabic opposition imperfective/perfective incorporates both aspect and (relative) tense. Thus, the imperfective can be characterized as the default form of the verb. Moreover, we have established that *kə-* is a past marker and heads its own projection.

At least two questions that arise from the above discussion are as follows:

- (i)     if *kə-* is a marker of past tense, why doesn't it occur in simple past tense?
- (ii)    how is (perfective) past tense realized in SA?

I will first discuss the second question in the light of the analyses in the literature. Then I will put forth a proposal for the first question whose implications will lead me to choose from the alternative analyses for the second question.

Following McCarthy (1979, 1981), one hypothesis is that past tense information is expressed by vocalic melody, which occupies a different tier separate from the consonantal tier.<sup>29</sup> McCarthy's proposal is an attempt to account for the typical Arabic root and template system, in which verbs are formed by substituting the root into one of the ten templates, or derivational classes, called *binyān* in Hebrew (Wright 1981). According to this approach, the representation of the verb *zaraba* (hit) comprises three grammatical elements: the consonantal root, which ranges over the semantic field of the predicate; the vocalic melody, which expresses tense/aspect; and the CV tier, which represents the morphological template on which the other two tiers are mapped.

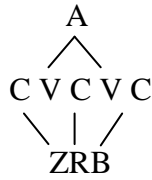
- (17)            Semantic Field: ZRB  
                  Tense/Aspect: a—a  
                  CV Tier: CVCVCV

The generalization is based on the fact that the perfective and the imperfective have different vocalic melodies. Thus, according to this hypothesis, in a form such as *zarab* the vocalic melody carries tense/aspect information that gets attached to the verbal CV tier via left to right autosegmental mapping.

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<sup>29</sup> This view was adopted, for example, by Fassi Fehri 1993. See Ouali and Fortin 2005 for an analysis against Fassi Fehri, and along the lines of Benmamoun 2000.

(18)



Regarding the realization of tense and voice in the perfective, Benmamoun (2000:26), referring to the literature on cumulative exponence, argues that voice, a derivational category, and tense, an inflectional category cannot be expressed by the same grammatical morpheme. This poses a problem for McCarthy's hypothesis. Further evidence against McCarthy's hypothesis is the lack of an elaborate vocalic melody in SA, similar to Moroccan Arabic (Benmamoun 2000, O&F 2005). To express voice, SA relies on prefixation of a passive/reflexive morpheme to the perfective and imperfective verbs.

(19) a. qadal-u  
killed.3M-it  
'He killed it.'

b. hačal in-qadal.  
partridge PASS-killed.3M  
'The partridge was killed.'

Significantly, the loss of the vocalic melody implies the loss of expressing voice by vowels in SA. In other words, the vocalic melody cannot be relied on to see if a verb is active or passive.

At this point, I would like to draw the reader's attention to the verb types in SA. As mentioned in footnote 21, verbs can also be classified as *a*-type and *i*-type, following Talay (2001). This classification is significant because it seems that while *a*-type verbs show a distinction both in the position of person agreement and the vocalic melody (20), (in favor of McCarthy's hypothesis), *i*-type verbs only rely on the person agreement (21), i.e. agreement morphology is an indication (in favor of Benmamoun's hypothesis). Consider the following:

(20) *a*-type

- |    |              |    |               |
|----|--------------|----|---------------|
| a. | t1-mseg      | b. | masak-t       |
|    | 2M-catch     |    | caught-2M     |
|    | 'You catch.' |    | 'You caught.' |

(21) *i*-type

- |    |              |    |                      |
|----|--------------|----|----------------------|
| a. | t1- šrəb     | b. | šrəp-t <sup>30</sup> |
|    | 2M-drink     |    | drink-2M             |
|    | 'You drink.' |    | 'You drank.'         |

In example (20), both the position of the agreement morphology and the vocalic melody of the stem change depending on the tense/aspect of the verb. In (21), on the other hand, only the placement of agreement is different, while it is realized as a prefix in the

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<sup>30</sup> Notice the devoicing in the context of voiceless consonants.

imperfective (21a), and as a suffix in the perfective (21b). Based on this contrast, one could argue that SA exhibits two patterns of expressing tense.

After discussing two alternatives with respect to the realization of tense in the past, let us now turn to the first question, that is, why *kə* is not used in simple past tense if it is a past marker. I hypothesize that in simple past tense the suffixal agreement is an indicator of past tense, hence the need for *kə* is obviated. Note that this is not the same as saying the agreement is the realization of past tense. One argument against the latter hypothesis comes from the Standard Arabic negative *laysa* (Benmamoun 1992, as cited in Benmamoun 2000). This negative is inflected only as a past tense verb but is restricted to sentences in the present tense (Ryding 2005: 641).

(22)           lays-at   munaqqibat-a 'aathar-in                   (Standard Arabic)  
                  NEG-3F   archaeologist-ACC  
                  ‘She is not an archaeologist.’

(23)           haadhaa lays-a           l-sabab-a.  
                  this       NEG-3M       the-reason-ACC  
                  ‘This is not the reason.’

The person agreement suffixes are identical on the verbs in the past tense and the negative. This shows clearly that the suffix on the perfective verb carries agreement only. Still, as the reason for the lack of *kə*- in simple past tense, I would like to propose following Benmamoun (2000) that the past tense is an abstract morpheme that does not have any specific phonological realization. The only indicator is the suffixal agreement.



As Benmamoun points out, the past tense in this respect is similar to the present tense in English which is also phonologically null. The only morphological reflex it has is third person singular agreement on lexical verbs (*eat* vs. *eats*) and suppletive forms of the copula (*am, are, is*). However, like the English present tense, the abstract past tense in Arabic is syntactically active in that it has features that need to be checked by the subject and the verb. The implication of this analysis is that the vocalic melody of the verb makes no distinction in the realization of past tense. Hence, in terms of denoting past tense there is no difference between the *a*-type and *i*-type, contrary to my suggestion based on McCarthy (1981).<sup>31</sup> If vocalic melody was to express past tense, one could expect the type of affix not to matter for *a*-type verbs, i.e. they should be able to have a prefix as in (24), because the contrast of vowel melody between the present and the past would carry the tense, contrary to the fact.

- (24) a.     \*t<sub>i</sub>-masag  
               2M- caught
- b.     masag-t  
               caught-2M

In brief, the perfective verb carries past tense features. However, these features are not realized by an overt affix. The only morphological reflection is the suffixal agreement pattern that the past tense verb selects. However, it is clear that suffixal agreement by

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<sup>31</sup> Abbas Benmamoun's (p.c.) proposal is that there is more than one vowel melody to pick one as realization of past tense (*a-a, a-i, a-u* in the active and *u-i* and *u-a* in the passive).



realization of the agreement marking on the verb. As illustrated in Section 2.1., perfective stems are only compatible with past tense, while imperfective stems by themselves are only compatible with present and future tense. Only when attached with the marker *kə-* can an imperfective stem express a past meaning. This is due to a selectional restriction between null past and perfective stem. Imperfective stems are ‘default’ and appear in all other environments. The following table, adopted from O&F (2005), illustrates the restricted selection between past and perfective and the default nature of imperfective with present and future.

VERBAL ASPECTUAL FORMS	TENSES		
	PRESENT	FUTURE	PAST
PERFECTIVE	*	*	Past
IMPERFECTIVE	progressive <i>kwn+imperfective</i> habitual aspect	Future	*
			<i>kə+imperfective</i>

Table 1. Selectional restrictions between past tense and perfective aspect

Having established the distribution of imperfective and perfective stems in SA, in the next section, I will turn to the syntax of complex tense in SA. I will first explore the instances of tense syncretism in SA (Comrie 1985) and relying on such instances I will provide a syntactic analysis for sentences used in these tenses. Note that the conclusion arrived in this section regarding the feature content of the present and past will play a role in the discussion in Chapter 3.

## 2.2. The Syntax of (Complex) Tense

As the discussion in the previous section reflects, the temporal and aspectual properties of the verb have been a hotly debated issue within Arabic (along with other Semitic languages) syntax and morphology (Travis 1979; Fassi Fehri 1993, 2012; Shlonsky, 1997; Benmamoun 1999, 2000, among others). The ambiguity of morphological expression of some temporal or aspectual categories in some languages, in addition to its total absence in others (in tenseless and/or aspectless languages, Comrie (1976, 1985), is sufficient to stress that the descriptive program of the temporal/aspectual variation is basically morphological (or morpho-syntactic), and that semantically temporal or aspectual cross-linguistic generalities have to be built in general syntax (Fassi Fehri, 2012: 3).

In the literature, past, present and future tense are traditionally referred to as ‘absolute’ tenses, while perfect tenses are referred to as ‘relative’ tenses and assumed to be temporally complex, e.g. Comrie 1985; Fassi Fehri 2000/2004. Sason Arabic displays several instances of tense syncretism, in which different tenses have the identical form. I will adopt Giorgi and Pianesi’s (GP, 1997) revised version of Reichenbachian framework, which hypothesizes that tense instantiates relationships between events, and Stowell’s (1996, 2005) account, which calls for syntactic decomposition of semantic features traditionally attributed to tense. In the course of the analysis I will make use of Fassi Fehri’s (2000/2004, 2012) application of these approaches and conclude the SA requires a more articulated structure for the representation of its morphological properties.

### 2.2.1. Tense Syncretism

As Shlonsky (1997:11) points out, the temporal/aspectual system of Arabic is highly complex, mainly because the verbal form used to express non-past serves the function of both an active participle and a tensed verb (cf. (8)). Moreover, SA can be characterized by the *ambiguous* use of the same finite verbal form for past and perfect (or non-past, imperfect). In order to account for the tense syncretism in SA, I assume the Reichenbachian model of tenses, precisely its revised version in GP, 1997. This framework suggests that tense instantiates relationships between events (GP, 1997:27) and that the logical form of a tense contains terms referring to particular events,  $e$  and  $s$  (speech event), and a term introducing a relationship of temporal precedence between them. Consider the following case, where a past verbal form appears:

- (27)            John ate an apple
- $$\exists e \exists x (\text{eat}(e, \text{John}, x) \wedge \text{apple}(x) \wedge e < s)$$

This representation can be extended also to present and future tenses. Let us now consider compound tenses:

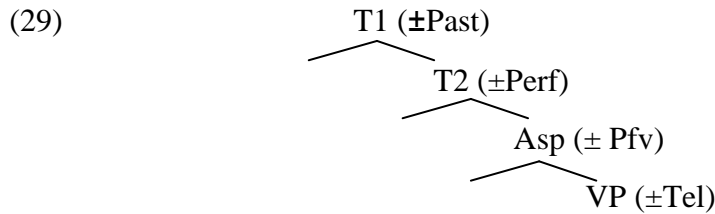
- (28)    a.        John has eaten an apple.  
           b.        John had eaten an apple.  
           c.        John will have eaten an apple.

To correctly represent the meaning of these tenses, a more complex system seems to be required. The presence of only two points could not distinguish the simple forms from

the complex ones. Focusing on this problem, Reichenbach (1947) proposed and discussed a theory of tenses based on three temporal primitive entities: one, denoted by S, is an indexical referring to the utterance time - that is, the speech time; E denotes the time of the event *e* instantiated by the predicate of the clause and is, therefore, called the event time. Finally, another point, R, is introduced, which is called the reference time. Reichenbach developed R, showing that it is required to account satisfactorily for the semantics of perfect tenses. Fassi Fehri (2000/2004) assumes this model of tenses, conceived as expressing relations between times, with two syntactic TP projections headed by predicative Ts, to account for perfect tenses. Each T defines a temporal ordering relation between two temporal arguments: T1 orders UT with respect to RT (and/or ET), and T2 orders RT and ET. T1 is usually qualified as “deictic” or “absolute” (Past, Present, or Future), and T2 as “relative” (Perfect/Imperfect or Anterior/non-Anterior). As for perfectivity, it is conceived as an expression of completeness, boundedness or culmination of events or situations (which cannot be further extended). In contrast, imperfective events do allow completion or addition of an end. This is basically the definition Comrie (1976) provides. Following GP (1997) and Fassi Fehri (*ibid*), I will take the semantic correlate of perfectivity to be *terminativity*. Such a hypothesis easily accounts for the *ambiguous* use of the same finite verbal form for past and perfect (or non-past, imperfect) to express Anteriority (or non-Anteriority) of Reference Time (RT) with respect to either Utterance Time (UT) or Event Time (ET). Put in a tree, the core configurational structure of T and Asp proposed by Fassi Fehri is roughly as follows<sup>32</sup>:

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<sup>32</sup> In his cartographic approach, which assumes a richer structure for functional categories (and adverbs),



I will take this configuration as a starting point and propose to modify it in order to account for the morphological properties of SA. These properties are mainly the particle *kə-*, unique to SA, and the ambiguity between the past progressive and the past perfect progressive. I will argue that although the current structure explains the ambiguity between a simple and a complex tense, it falls short of accommodating the structure for the ambiguity between two complex tenses.

#### 2.2.1.1. Past/Perfect Ambiguity

Similar to other Arabic dialects, the perfective form in Sason Arabic expresses past in neutral (non-dependent, non-embedded) context, as evidenced by its cooccurrence with appropriate deictic adverbs.

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Cinque (1999) also adheres to the notion which views tenses as relations between temporal entities in the sense of Reichenbach 1947, following the references cited here, mainly Giorgi and Pianesi 1997, along with Vikner 1985, in that each relation corresponds to a separate T°: T(Anterior), T(Future), T(Past). Following the account in GP 1997, he takes the three tenses to be in particular scope relation to each other (with T(Anterior) embedded under T(Future), itself embedded under T(Past). T(Future) serves to account for languages such as Anejom in certain contexts both past and future particles are realized separately.

- (viii) Is ika aen *is pu* apam imran. (from Cinque, 1999:72)  
 PAST say he *PAST FUT* come tomorrow  
 ‘He said he would come tomorrow’.

Note that the articulated form of *would* in English corresponding to its Anejom equivalent would be *did will*. As expected, T(Anterior) refers to perfect constructions which marks the relation between event time and reference time.

(30) a.   ams           faqaz  (\*xade)  
          yesterday    ran.3M  (\*tomorrow)  
          ‘He ran yesterday.’

          b.   amlol         mıŝ-e  
          last year    left.3F  
          ‘She left last year.’

ST expresses also perfect (= present perfect) in neutral context, as indicated by the respective adverbs.

(31) a.   aŝŝin         faqaz  
          (just) now    ran.3M  
          ‘He has run just now.’

          b.   aŝŝin         mıŝ-e  
          (just) now    left.3F  
          ‘She has left just now.’

As the examples in (30) and (31) illustrate, the present perfect, although presumably complex, is synthetic in that it is identical to the past morphologically. The ambiguity can be represented in Reichenbachian terms as follows:



- (32) a. PAST: (ET), RT < UT  
 b. PRESENT PERFECT: (ET <) RT, UT

ST can also be the embedded member of other perfect tenses (e.g. past perfect), typically when the marker of past tense *kə-*, not a copular auxiliary, which is the case in other Arabic varieties (cf. (12)), is overtly realized. This use confirms the T nature of the Perfect ST. The example (11) is repeated here as (33). In (33), the sleeping event (which occurs in the past) is prior/anterior to the coming (which occurs also in the past). This indicates that two ‘shifting’ tenses are involved in the matrix clause (a past of the past, or a past perfect). With respect to Standard Arabic, Fassi Fehri (2000) argues that the two anteriority relations do not follow if the thematic verb is interpreted as expressing Aspect only (i.e. perfective). However, I would like to suggest that in SA that it is the particle *kə-* that leads to the anteriority relations in line with the discussion thus far. They do not obtain in (34), where the thematic verb is not able to express the same temporal orderings:

(33)            *bahalče kə-nam,            le ġit*  
                   already PAST-slept.3M    that came.2M  
                   ‘He had (already) slept, when you came.’

(34)            *nam-tu            le ġit*  
                   slept-1M            that came.2M  
                   ‘I slept when you came.’

In (34), both verbs can be construed as past, but coming is understood as prior/anterior to the sleeping. Consider now another case of synthesis, namely that of the present perfective, as exemplified below. The perfective nature of ST is corroborated by its use in the so-called “performative” sentences.

- (35) ġu-tu  
hungered-1M  
'I am hungry' (*lit.*: I hungered)

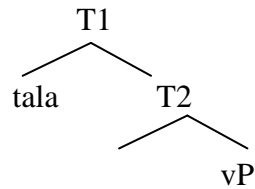
The data in this section illustrate that Past, Present Perfect, or Present Perfective all have the same form, i.e. the morphology cannot be resorted to for discrimination. The question is that how can the same form of the (temporally inflected) verb be Past, Present Perfect, or Present Perfective? Fassi Fehri (2012:94, 252) proposes that complex tenses project two TP projections, TP1 and TP2 (as in GP 1997; Stowell 2005), in addition to AspP, vP being dedicated to telicity.<sup>33</sup> The differences are due to the effects of the Move/Agree relations of v with respect to T1, T2, or Asp. Suppose that in order to get the [ $\pm$ Past] interpretation, v has to move to T1; if it moves to T2, it is interpreted as Perfect ( $\pm$  Perf); and if it moves to Asp, it is associated with  $\pm$ Pfv. Note that Present is a default (zero valued) interpretation of T1. (see the configuration in (29)). The core idea behind this proposal is that semantics of tense is determined by independently motivated principles of syntactic theory (Stowell 1996, 2005) and hence various temporal

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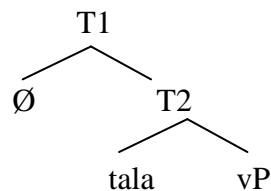
<sup>33</sup> Demirdache and Uribe-Etxebarria (2007) propose that complex tense projects only one TP and one AspP projection.

meanings are hierarchically interpreted in the structure. The three essential structures are then tentatively sketched as follows:

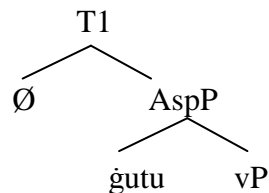
(36) Simple Past



(37) Present Perfect

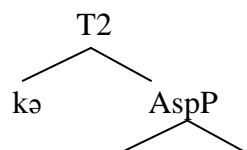


(38) Present perfective



Three distinct configurations are then found. With simple tenses, the verb is moved to T1, past T2, whereas with complex verbs, the thematic verb stays in T2, and the auxiliary raises to T1. With synthetic present perfect, the thematic verb could be staying in T2, but it is involving agreement with an empty T1, more like what happens with the analytic present perfect. In the case of Past Perfect, the thematic verb remains in-situ and *kə*-occurs in T2.

(39) Past Perfect



The proposal seems to work just fine with suffixed tenses, i.e. the modal has no difficulty in accounting for the ambiguity between Past and Perfect. Now, we will turn to cases where there is a tense syncretism between progressive and perfect, and see whether Fassi Fehri's proposal for SA accounts for the morphological make-up of Sason Arabic.

#### 2.2.1.2. Progressive/Perfect Syncretism

It is widely observed that languages use grammaticalized temporal inflections, auxiliaries, or temporal adverbials to express various kinds of temporal reference. Sason Arabic is a language without a distinct inflection or auxiliary to express Perfect. Accordingly, SA has no separate forms for the Present Progressive and Present Perfect Progressive. Therefore, adverbials coerce different interpretations.

(40) a. sa ku i-fqez.

now AUX.3M 3M-run

'He is running now.'

b. mi-ssari ku i-fqez.

since-morning AUX.3M 3M-run

'He has been running since morning.'

The same ambiguity is also observed between Past Progressive and Past Perfect Progressive.

- (41) a.     kan            kə-i-fqez.  
           be.PAST.3M    PAST-3M-run  
           ‘He was running.’
- b.     mɪ-ssari        kan            kə-i-fqez.     le     adaš-tu-n  
           since-morning be.PAST.3M    PAST-3M-run    that    saw-1M-him  
           ‘He had been running since morning, when I saw him.’

In brief, SA exhibits various instances of tense syncretism, where an ‘absolute’ tense and a ‘relative’ tense are morphologically identical. Now I will apply Fassi Fehri’s configuration to account for these instance and see how it fares. However, before proceeding with the syntactic representation of such ambiguities, I would like to elaborate on the feature content of the copular/verbal auxiliary *kan*.

### 2.2.1.3. The Auxiliary KAN

The incompatibility of *kan* with a verb that has the Perfective (pfv) form (cf. (12 = 42)) shows that this auxiliary carries some aspectual information.

- (42)           \* (bahalče) kan        (kə)-nam,     le    ğit  
           already   be.3M    PAST-slept.3M that came.2M

Unlike *kə-*, which is compatible with the imperfective and perfective (cf. (8) and (11) respectively), it occurs only with verbs that express imperfective. In (42), the thematic verb expresses perfective past tense, which rules out its embedding under the copular auxiliary. If the verb were absent of aspectual information, the expectation would be that this auxiliary should freely collocate with either Aspect (imperfective or perfective). This is similar to English, where the auxiliary is inflected with perfective, but the thematic verb is in the participle form, as illustrated in (43). Different from English, in such constructions, the participle, i.e. the ‘default’ imperfective, must be preceded by the tense marker *kə-*.

(43) He was playing the piano.

As mentioned earlier, aspect is morphologically encoded by the position and phonological realization of the agreement marking on the verb. Hence one could argue that since the copular is in the perfective form, it should project an AspP, and hence VP, where it is base-generated.

The verbal auxiliary also carries temporal information because it is inflected for tense (cf. (1b) and (11) along with other examples). (11), repeated here as (44), demonstrates that when the copular auxiliary is overtly realized, the main verb must have the imperfective form.

(44)            kan            kə-ya-yel.            (\*kə-ayal)  
                  be.PAST-3M    PAST-3M-eat

‘He was eating.’

The use of *kan* is in fact more restricted in that it is not compatible with all imperfective verbs, but only a subsection of them. This auxiliary cannot appear with *stative* verbs, as exemplified in (45) and (46), a fact which is another piece of evidence that *kan* interacts with the aspectual content of the thematic verb. Hence, I will analyze this constituent as a tense marker that also subcategorizes for certain aspectual forms, tentatively, progressive (or durative).<sup>34</sup>

(45) a. \*kan            kə-irill-u  
          aux.PAST      PAST-want-3M

b.    kə-irill-u.  
      PAST-want-3M  
      ‘He wanted.’

(46) a. \*ku            y-are  
          aux.PRES    3M-know

b.    y-are  
      3M-know

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<sup>34</sup> This might be comparable to Turkish, in which certain verbal markers, e.g. *-mİş*, *-(I)yor*, are called Tense-Aspect-Modality (TAM) markers, referring to the observation that a marker can express tense and aspect and/or modality simultaneously depending on the context.

‘He knows.’

The selectional restrictions of the verbal auxiliary *kan* can be schematized as follows:

(47)            kan            kə-V [+impf, +prog]  
                  └──────────┘

### 2.2.2. Analysis of Constructions with Auxiliary

In this section I apply Fassi Fehri’s analysis to account for the *ambiguity* discussed in Section 2.2.1.2. I will first examine the past progressive and past perfect progressive ambiguity since the past tense has a morphological marker, which will set the scene for further discussion.

#### 2.2.2.1. Progressive Ambiguity in Past

The following sentence is ambiguous between Past Progressive and Past Perfect Progressive.

(48)            kan            kə-i-fqez.  
                  be.PAST.3M    PAST-3M-run  
                  a. ‘He was running.’  
                  b. ‘He had been running.’



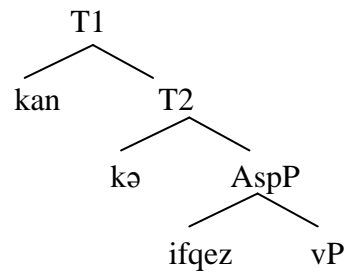
Under the assumption that *kan* and *kə-* occupy distinct TP projections, it is impossible to represent past progressive in a bi-TP analysis. The independent evidence for the argument that the auxiliary and the past marker occur in distinct projections comes from the fact that the auxiliary scopes over two conjoined *kə+thematic verb* complexes.

Consider the following:

- (49)            *kan*            *kə-ya-yel*    *u*    *kə-i-si*        *gerre.*  
                   be.PAST.3M    PAST-3M-eat    and    PAST-3M-do    noise  
                   ‘He was eating and making noise.’

For the past perfect progressive reading in (48b) one could propose the following structure:

- (50)    Past Perfect Progressive



Since the auxiliary is traditionally associated with T1, and T2 associated with Perfect reading, the configuration in (50) correctly captures the past perfect progressive meaning.<sup>35</sup> Yet, the current model faces a problem when the intended meaning is the past progressive. This is because, in order to express past meaning, *kə-* needs to occur in

<sup>35</sup> Soltan (2007:47) also suggests that the tensed morphology and agreement on the auxiliary and the thematic verb in Standard Arabic provides evidence in support of a two distinct TPs in such constructions.

T1, the position which is associated with the past interpretation, unlike T2, which is reserved for perfect reading. However, T1 is already occupied by the auxiliary *kan* and the example (49) demonstrates that the two constituents must occur in distinct projections. One argument could be that *kə-* ends up occurring in the same position. The independent evidence that *kə-* heads its own projection was provided in example (15), repeated here as (51), where it can scope over conjoined verbs.

- (51)            killom            sade    kə-    [ya-yel u    i-nam].  
                   every day        just    PAST- 3M-eat and 3M-sleep  
                   ‘He would just eat and sleep all day long.’<sup>36</sup>

The syntactic merger is problematic because the particle *kə-* merges only with the adjacent verb. This seems to be better accounted by a post-syntactic merger. Another option would be to say that *kə-* cliticizes onto the higher constituent *kan*, so that the two end up in the same position.<sup>37</sup> Regarding this hypothesis, one could say that (i) cliticization doesn’t necessarily mean that cliticized constituents share the same syntactic position, in fact in instances of cliticization it is argued that the two elements

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<sup>36</sup> In constructions with *kan* the allowed coordination is (ix-a), and not (ix-b). Given that we have shown both *kan* and *kə-* are independent heads, I take this to mean that the highest constituent may conjoin over the lower constituents. For instance, in (51), *kə-* is the highest constituent and scopes over the verbs, similar to its English counterpart ‘He would eat and sleep.’ In (49) on the other hand, *kan* scopes over the next constituent, namely *kə-*.

- (ix) a.    \*kan            kə-[yayel        u        inam]  
               be.PAST.3M    PAST-3M-eat    and    3M-sleep
- b.    kan            kə-yayel        u        kə-iştixel  
               be.PAST.3M    PAST-3M-eat    and    PAST-3M-speak  
               ‘He was eating and speaking.’

<sup>37</sup> This point was brought to my attention by Aslı Göksel.

are located in their respective projections throughout the syntactic component and are merged (through cliticization) in the post-syntactic component (e.g. Benmamoun and Al-Asbahi (2013)), and (ii) the cliticization strategy in negative sentences in SA argues against this hypothesis. The following example lends support to both arguments.

(52) a. mɪ kə-ya-yel laham.

NEG PAST-3M-eat meat

‘He wasn’t eating meat./He didn’t use to eat meat.’

b. mɪ-k ya-yel laham.

NEG-PAST 3M-eat meat (Akkuş 2013b, Akkuş and Benmamoun 2014)

The tense marker can be morphologically independent as in (52a) or optionally encliticize to the negative particle (52b).<sup>38</sup> Encliticization in (52b) indicates that there is no constituent intervening between the negation and the past tense marker and that the negation c-commands the tense. One argument that supports the treatment of this process as encliticization is the relatively low degree of selection that the tense marker exhibits with the hosts preceding it in the sense of Zwicky and Pullum (1983). This particle can be preceded by two different elements, *ta/te* ‘if’ (53a), and *le* ‘when, that’ (53b) along with negative marker.

(53) a. te-k kan raxu

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<sup>38</sup> It should be noted that native speakers prefer to use the encliticized (b) form although both forms are available and grammatical.

if-PAST          be.PAST.3M    sick

‘If he was sick...’

b.    le-k            kī-çi

that-PAST      PAST-3M.come

‘When he came...’

Furthermore, attachment of the particle to its host does not lead to a morphological change in the host, a property attributed to clitics again. Note also that when *kə-* cliticizes to the preceding element, the otherwise pronounced vowel is elided. If such a process was operative in the context of the auxiliary and the past marker (48), the prediction would be that the vowel in *kə-* is dropped, contrary to the facts. To make the issue fairer, let’s see what happens in a different auxiliary which ends with a vowel, assuming that this would yield cliticization between a final vowel and the consonant of *kə-* more possible than the cliticization of two consonants. Consider the following example:

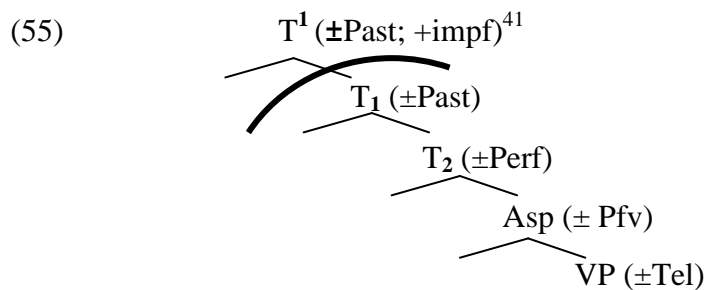
(54) a.    kɪnna            kə-na-yel      laham.

were.1PL      PAST-1PL-eat    meat

‘We were eating meat.’

b.    \*kɪnnak    na-yel laham.

In the light of the above discussion, I assume that every element or particle occupies a separate syntactic projection and merger, if applies, takes place in the post-syntactic component. Accordingly, the current structure falls short of accommodating the morphological properties of SA and thus we need a more articulated configuration. Based on the assumption that T1 is reserved to express past meaning, and the auxiliary is canonically placed in T, just as the marker of past tense *kə-*, I am led to propose a configuration with two T1s. This is in essence not very different from the observation made in the literature regarding the need for two distinct TPs. I suggest that if these two TPs are conceived of occurring in two separate layers, which would not block each other from having the same function, i.e. expressing past tense, Fassi Fehri’s bi-TP analysis could be maintained for the lower layer, hence giving us three TPs in total.<sup>39</sup> The proposed configuration is sketched basically as follows (in order to reflect the difference between the Ts of two layers, I will use superscript for the upper layer, and subscript for the lower layer):<sup>40</sup>



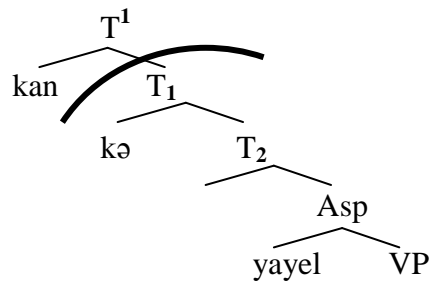
<sup>39</sup> Demirdache (1989, as cited in Diesing and Jelinek 1995) analyzes tense and aspect markings in Standard Arabic as tense markers. Thus her clause structure also consists of stacked TPs.

<sup>40</sup> One could in fact take the highest T, i.e. T<sup>1</sup>, to stand for Fin (in the sense of Rizzi 1997) following Aoun et al. 2010. Another alternative is to assume that T<sup>1</sup> moves to or merges with the elements in Fin or higher positions (e.g. negative element, or force head). These analyses are partly entertained later in this chapter in order to account for certain constructions and in Chapter 4.

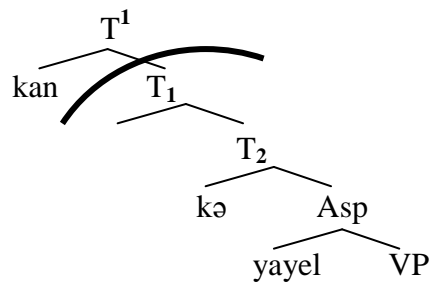
<sup>41</sup> To repeat, *kan* carries tense and agreement morphology, hence *phi*-features, while *kə-* is deprived of such properties.

The core idea behind this configuration is that there are two distinct TP layers, the lower layer consisting of two TPs. Subdivision of the lower layer into two TPs serves to account for complex tenses along the lines of GP 1997, Stowell 1996, 2005; Fassi Fehri 2012. Projection of two distinct TP layers due to tensed morphology and agreement on the auxiliary and the thematic verb is coupled by projecting two TPs in the lower layer to account for the synthesis in the language. I hypothesize that the upper layer is more associated with the subject since there are contexts, such as non-verbal predicates, that allow the use of the T<sup>1</sup> auxiliary without the thematic verb or the lower Ts. Drawing on this discussion, the diagrams for the Past Progressive and Past Perfect Progressive are as follows:

(56) Past Progressive



(57) Past Perfect Progressive



In these representations the constituents *kan* and *kə* are located in different layers, and thus presumably may perform the same function, i.e. express the past tense. This is corroborated by the tensed morphology and agreement on the auxiliary and the thematic verb complex, i.e. *kə+V*, as observed by Soltan (2007). In this configuration, *kan* is located in T<sup>1</sup>, while the position of *kə*- depends on the time reference. In cases where *kə*- remains in T<sub>2</sub>, the sentence is interpreted as Past Perfect Progressive, when it raises to T<sub>1</sub> the Past Progressive meaning is reached. Note that T<sup>1</sup> still interacts with the lower layer since it is sensitive to the aspect of the thematic verb. As pointed out in Section 2.2.1.3, T<sup>1</sup> is compatible only with imperfective and non-stative verbs.

#### 2.2.2.2. Progressive Ambiguity in Present

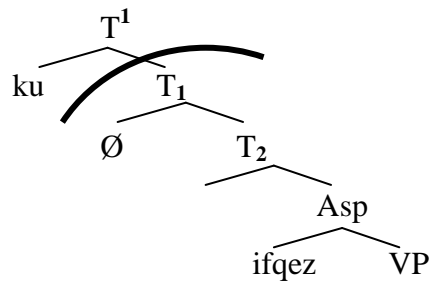
We have seen that a similar ambiguity exists in the context of present tense as well, as exemplified in (58).

- (58)            ku            i-fqez.  
                   AUX.3M        3M-run  
                   a. ‘He is running.’  
                   b. ‘He has been running.’

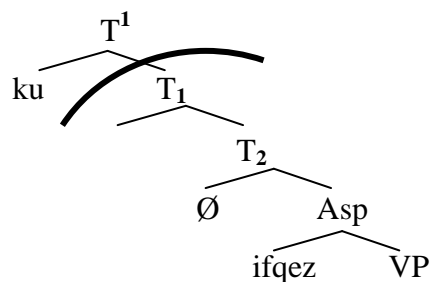
Note that SA doesn’t morphologically mark present tense, hence I would like to entertain the idea that in such contexts, there is an abstract/null present tense marker, without an overt realization unlike the past tense, but is manifested via the imperfective

form of the verb. Such an approach would produce the following configurations for the Present Progressive and Present Perfect Progressive, respectively.

(59) Present Progressive



(60) Present Perfect Progressive



Similar to its counterpart *kə-* in past contexts, the position of the null tense marker in the lower layer determines the temporal interpretation of the sentence. When '∅' occupies T<sub>1</sub>, then the verb is interpreted to have 'absolute' tense, whereas when it remains in T<sub>2</sub>, the position associated with Perfect, the sentence is said to have a 'relative' tense interpretation.

Now let us turn to the question raised in Section 2.2.1.3, that is, are we dealing with a biclausal structure in SA, similar to what O&F (2005) proposed for Moroccan Arabic, or is the configuration in SA favors a mono-clausal analysis? In order to answer this question, I will compare the tense morphology of SA with MA and conclude which



analysis fares better. O&F (2005:181) provides the following sentence as an example for complex tense:

- (61)           ya     y-kun-u ka   y-leʃb-u                           (O&F' (11))  
                  FUT   3-be.IMP-PL   PRES 3-play.IMP-PL  
                  “They will be playing”

They argue that the evidence for the biclausal analysis comes from the fact that both the main verb and the copula are inflected for aspect and agreement and preceded by a tense marker. They also draw attention to the contrast between ECM constructions in which the embedded verb cannot be preceded by a tense marker. The configuration they propose is as follows:

- (62) Complex tense clauses:

[TP [AspP [VP BE [TP [AspP [ $\nu$ P [VP main verb (no  $\nu$ P in matrix domain)

As explained throughout this chapter, two crucial morphological properties distinguish SA from MA: (i) unlike MA, in SA complex tense, e.g. Past Perfect, is not expressed by using a copula with the main verb, (ii) SA has a unique marker of past tense, namely *kə-*. Hence unlike MA, morphologically marks past tense in the Past Perfect. Moreover, the prediction made by a biclausal analysis is not borne out in SA. O&F (2005) points out that since complex tense clauses contain two TPs, it is predicted that such clauses would allow negation to surface in two different positions. This prediction is correct in MA.

(63) a. ma ya (\*ma) y-kun-u-ʃ Ø mʃa-w daba  
 NEG FUT NEG 3-be.IMP-P-NEG PAST leave.PERF-3P now  
 ‘They will not have left now/by now.’ (O&F’ (26))

b. ya y-kun-u ma Ø mʃa-w-ʃ daba  
 FUT 3-be.IMP-P NEG PAST leave.PERF-3P-NEG now  
 ‘They will have not left now/by now.’

If complex constructions in SA are biclausal, the prediction is that they also allow negation to surface in different position. However, this prediction is not borne out.

(64) a. ma-kano binad kə-yadlo dars-en.  
 NEG-were girls PAST-3PL.make homework-their  
 ‘‘The girls hadn’t been doing homework.’’

b. \*kano binad mɪ-kə-yadlo dars-en.<sup>42</sup>  
 were girls NEG-PAST-3PL.make homework-their

Under the assumption that the auxiliary and the verb are in separate clauses, in theory, nothing would prevent negation to surface either in the higher clause or in the lower clause, being located above TP in either one (Akkuş 2014, Akkuş and Benmamoun

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<sup>42</sup> The form of the negation differs depending on its context. See Chapter 3 for a detailed discussion on negation.

2014). The empirical facts, however, argue against such an analysis. Therefore, I will take it that in SA the auxiliary is base-generated in TP rather than VP, contra MA, hence obviating the need for a biclausal analysis. The subject, on the other hand, is expected to occupy Spec positions of either T layer in complex tenses, which is correct:

- (65)            (bɪnad) kano    (bɪnad) kə-yadlo        dars-en.  
                   (girls) were    (girls) PAST-3PL.make homework-their  
                   ‘The girls had been doing their homework.’

However, there is one specific construction in SA that calls for some attention. The relevant examples in (53) are repeated here:

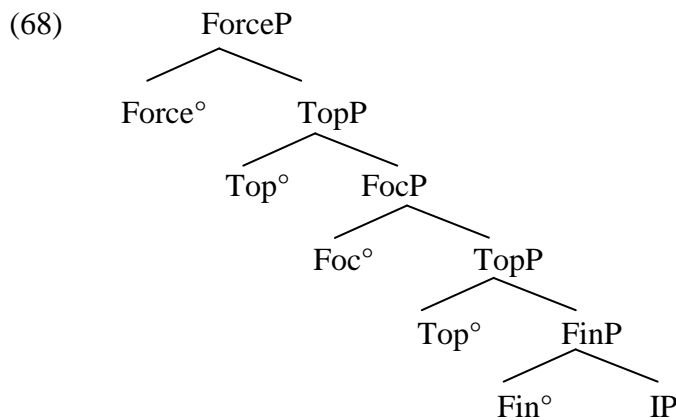
- (66) a.        ta-k                    kan                    raxu  
                   if-PAST                be.PAST.3M        sick  
                   ‘If he was sick...’
- b.        le-k                    kī-çi  
                   that-PAST            PAST-3M.come  
                   ‘When he came...’

Notice that the complementizers *te/ta* “if, whether” and *le* “that” are followed by the encliticized tense marker *kə-*, which is in turn followed by the auxiliary in (66a), and by another *kə-* which attaches to the thematic verb. The fact that we are dealing with two separate tense markers, not an instance of gemination is evinced by the example (66b),

where the subject intervenes. These complementizers function as *interfaces* between two clauses and indicate what kind of a clause it is (a declarative, an exclamative, a relative, etc.) and can be selected by the main verb (Rizzi 1997:283).

- (67) a. mi-saddex                    le        hassan nam  
           NEG-3M.believe        that    H        slept.3M  
           ‘He doesn’t believe that Hasan slept.’
- b. i-staxber            ta hassan        ġa  
       3M-ask            if H                came.3M  
       ‘He asks if Hasan came.’

Rizzi (1997) argues that the selection must be local, hence such elements must be *at the top* of the CP domain to mark the illocutionary ‘force’ of the clause, i.e. in the ForceP. Hence, I assume that these complementizers occupy Force°. Rizzi argues that the CP level should be split into distinct heads, as illustrated below (ignoring specifiers):



FocusP, flanked by two topic phrases (TopP), hosts foci and *wh*-phrases. TopP hosts CLLDed elements. FinP marks the finiteness of the clause. Following Aoun et al. (2010) I will assume that FinP stands for TP (as mentioned in footnote 38, one could assume that the highest T element is generated in T° and then ends up in FinP or in a higher position.) This configuration inevitably places negation in the Foc°, right above the Fin/T.<sup>43</sup>

Similar to the construction in (65) the subject can either precede the complementizer as in (69a) or intervene between the elements; however, different from it the negation can surface in various positions.

(69) a.   ʔhassan       ta-mı-k       ams       kan       raxu  
           H           if-NEG-PAST   yesterday was.3M   sick  
           ‘If Hasan wasn’t sick yesterday’

b.    le       hassan   mı-kə-iči  
       when H       NEG-PAST-3M.come  
       ‘When Hasan didn’t come...’<sup>44</sup>

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<sup>43</sup> This is consistent with Ouhalla (1994), who takes negation to be in the Left Periphery, in the head of the functional projection FP.

<sup>44</sup> Note that in neutral (non-dependent, non-embedded) context, the highest T element is the auxiliary, not the past marker. The overt complementizers, as in (69), head these embedded/dependent clauses.

(x) a. kan                   kə-i-nam  
       was.3M               PAST-3M-sleep  
       ‘He was sleeping.’  
       b. \*kə       kan       i-nam  
           PAST was.3M   3M-sleep

Projecting ahead of our discussion regarding the phrase structure of SA, the configuration for (69b) is as follows (ignoring some details):

(70) Adverbial Clause:

[<sub>FORCE</sub> *le* [<sub>TopP/FocP</sub> *hasan* [<sub>FOC</sub> *mi* [<sub>FIN</sub> *kə* [<sub>V</sub> *iči*

Note that in (70) the subject intervenes between the Foc° and Force°, while it precedes the Force°, presumably occupying Spec, ForceP, hence there is no intervening element between the elements occupying the head positions of the split-CP. This allows them to merge.

Likewise, the structure for the sentence in (71a) would be represented as in (71b).

- (71) a.    *ta hikmet m<sub>1</sub>-k            kan            kə-ya-ddel    dars-u*  
           if H            NEG-PAST    was.3M PAST-3M-do homework-his  
           (i) ‘If Hikmet had not been doing his homework...’  
           (ii) ‘If Hikmet weren’t doing his homework...’

- b.        (i) [<sub>FORCE</sub> *ta* [<sub>TopP/FocP</sub> *hikmet* [<sub>FOC</sub> *mi* [<sub>FIN</sub> *k* [<sub>T<sup>1</sup></sub> *kan* [<sub>T<sub>2</sub></sub> *kə* [<sub>ASP</sub> *yaddel* [<sub>V</sub>  
           (ii) [<sub>FORCE</sub> *ta* [<sub>TopP/FocP</sub> *hikmet* [<sub>FOC</sub> *mi* [<sub>FIN</sub> *k* [<sub>T<sup>1</sup></sub> *kan* [<sub>T<sub>1</sub></sub> *kə* [<sub>ASP</sub> *yaddel* [<sub>V</sub>

Notice that the difference in meaning is attributed to the position of *kə-*, which precedes the main verb, occurs in. If it occupies T<sub>1</sub> the interpretation is past progressive, and T<sub>2</sub>

past perfect progressive. The following sentences show that the highest *kə-* adds the irrealis meaning to the sentence, which I take as evidence for its Fin feature.

- (72) a.    ta    i-tiṣṣ-a  
           if    3M-see-her  
           ‘if he sees her’
- b.    ta-k        i-tiṣṣ-a  
           if-PAST    3M-see-her  
           ‘if he saw her’
- c.    ta-k        adaṣ-a  
           if-PAST    saw.3M-her  
           ‘if he had seen her’

### 2.3. Conclusion

In this chapter I have examined the verbal morphology in matrix clauses in SA with the aim of explaining the morpho-syntactic properties of elements that can occupy the tense projection. In the course of the description, I have discussed some of the prevailing assumptions about the morphology of tense and aspect in Arabic, particularly the autosegmental account of McCarthy (1979), which argues that past tense information is expressed by vocalic melody, which occupies a different tier separate from the consonantal tier. The morphology of SA has led me to suggest an alternative analysis

that takes the suffixal person agreement to be an indication of tense, mainly following Benmamoun (2000).

Due to the wide distribution of the imperfective verb, I have taken it to be the default form of the verb. I have shown that in order to form a verbal participle in SA, the auxiliary *kwn* and *kə+verb* is used. Unlike other Arabic varieties, *(kə)+perfective verb* cannot be embedded under *kwn* to form a past perfect reading, which differentiates SA from Arabic dialects and leads to another instance of tense syncretism in the language. I have argued that *kə* - is a past marker that moves a time reference one step further back in the temporal line. The detailed description of tense set the scene for the analysis of the syntax of complex tense in SA. Based on the discussion of several instances of tense syncretism, mainly following Stowell 1996, GP 1997, I argued for a *bi-layeral* TP analysis, where the lower layer projects two separate Ts. This is motivated by the different function of *kwn* in SA and the past particle *ke-*, exclusive to SA. The syntactic position of *kə-* determines the interpretation of a clause: if it is located in T1, the reading is past, whereas in T2 the reading achieved is perfect. The next question was whether the configuration is better explained through a biclausal analysis or not, similar to O&F (2005). I contended that the instances of tense syncretism in SA do not lend support for such a hypothesis.



## CHAPTER III

### NEGATION

In this chapter I discuss the representation of sentential negation in Sason Arabic in the context of verbal and non-verbal sentences. I will sometimes make reference to other (non)-peripheral Arabic dialects and Hebrew in order to highlight the peculiar properties of Sason Arabic. In the first part of the chapter I will explore negation in verbal sentences, particularly focusing on the question of the position of negation with respect to tense, and presenting some data that will contribute to the ongoing discussion. Later I will turn to the investigation of negation in non-verbal sentences following the discussion in Akkuş and Benmamoun (2014). The investigation will shed light on the influence of language contact on the clause structure of SA, that is, the head-directionality and the position of negation relative to tense. I will also suggest that the pronominal element which shows up in positive and negative sentences be best treated as *Pron* in the sense of Doron (1983, 1986).

### 3.1. Negation in Verbal Sentences

The discussion in this section aims to provide evidence for the recent claim of Benmamoun et al. (2014) that Standard Arabic and the spoken dialects pattern the same way as far as the syntactic mechanisms that govern the relationship between lexical categories and functional categories is concerned. Drawing mainly from SA data and making comparisons with other Arabic varieties, it will be shown that the underlying syntax patterns the same, particularly with regard to clause structure and the interaction

between tense, negation and the predicate.<sup>45, 46</sup> I will first briefly look at the realization of sentential negation in Arabic varieties to form a basis for the discussion.

### 3.1.1. Sentential Negation in Arabic Dialects

Sentential negation has been one of the most investigated issues in Arabic linguistics along with agreement (Ouhalla 1991, Eid 1993, Benmamoun 1992, 2000, Fassi Fehri 1993, Shlonsky 1997, Brustad 2000, Soltan 2007, 2011, Hoyt 2010, Aoun et al. 2010, Benmamoun et al. 2014, i.a.) Standard Arabic and the colloquial dialects employ different strategies in realizing sentential negation. In Moroccan Arabic (MA) and Egyptian Arabic (EA), for instance, sentential negation is realized by the *discontinuous* or *circumfixal* negative *ma-š* (Benmamoun 2000, Soltan 2007, 2011, Aoun et al. 2010, among many others).

- |     |    |                                 |                         |           |                           |
|-----|----|---------------------------------|-------------------------|-----------|---------------------------|
| (1) | a. | xalid                           | ma-ʔaraa-š              | əl-kitaab | EA                        |
|     |    | Khalid                          | NEG-read.PAST.3SG.M-NEG | the-book  |                           |
|     |    | ‘Khalid did not read the book.’ |                         |           | (Soltan 2007:183)         |
|     | b. | ma-t-ži-š                       |                         |           | MA                        |
|     |    | NEG-2M-come-NEG                 |                         |           |                           |
|     |    | ‘Don’t come!’                   |                         |           | (Benmamoun et al. 2014:4) |

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<sup>45</sup> In the next section I will revisit this statement in the context of negation in non-verbal sentences.

<sup>46</sup> I argued that SA clause structure consists of stacked TPs in complex tenses in the previous chapter, still in this chapter I will limit my attention to simple tenses and when I give examples from complex tenses I will assume one TP projection for the sake of simplicity.

In other dialects, such as Syrian Arabic and Kuwaiti Arabic (Brustad 2000) only *maa* is used both in verbal and non-verbal contexts.

(2) a. hu ma y-ḥibbh-a KA  
 he NEG 3M-love-her  
 ‘He doesn’t love her.’ (Brustad 2000:280)

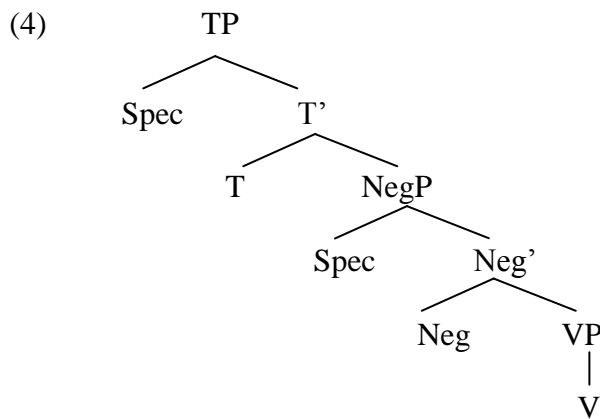
b. ʔəl-li, baʕəd maa zərt ʔasaaraat ləbnaan Syrian Arabic  
 tell-me, yet NEG visited.2SG.M ruins Lebanon  
 ‘Tell me, haven’t you visited the ruins of Lebanon yet?’  
 (Aoun et al. 2010:97)

Regarding the syntactic representation of sentential negation in Arabic, most of the research has focused on the position of the negative and its interaction with the verb and tense. The close relationship between negation and verb is clearly observed in Standard Arabic, whose main negative particle is *laa*. This particle is tense-inflecting, that is the form of the sentential negation co-varies with tense, as illustrated in examples taken from Benmamoun 2013:

(3) a. laa yanbaḥu l-kalb-u  
 NEG bark.3MS the-dog-NOM  
 ‘The dog is barking/barks’

- b.     lam             yanbaḥ         l-kalb-u  
           NEG.PAST       bark.3MS       the-dog-NOM  
           ‘The dog did not bark’
- c.     lan             yanbaḥa        l-kalb-u  
           NEG.FUT       bark.3MS       the-dog-NOM  
           ‘The dog will not bark’

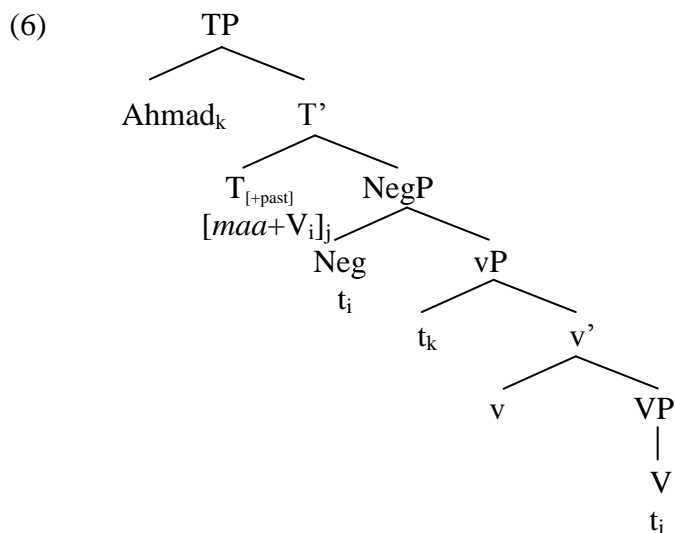
The fact that the form of the negative varies according to tense even though the form of the verb remains relatively the same has led to the analysis whereby negation and tense merge with each other, assuming an analysis where tense and negation head their own phrases in the syntax as illustrated in (4).



As seen in (4), NegP is located between TP and the predicate (Shlonsky 1997, Benmamoun 2000, Ouhalla 2002, Aoun et al. 2010 Al Mamoni 2011, i.a.) This is mainly an extension of Pollock’s (1989) analysis of French negation. For example, Benmamoun’s (2000) argument is that in the past tense, the verb must merge with tense,

the only option for it to do so is to move to negation, merge with it and then move to tense, as represented in (6) for the sentence in (5). As such, it would circumvent minimality (Rizzi 1990).

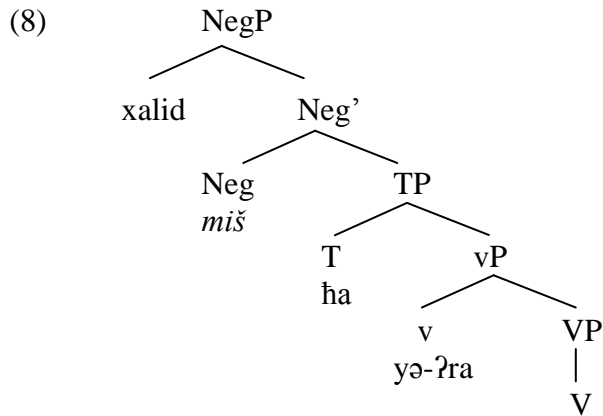
- (5)           ahmad maa-ga  
           A       NEG-came.3M  
           ‘Ahmet didn’t come.’



However, a significant range of data from several Arabic dialects has shown that TP>NegP analysis cannot account for all the facts. For instance in Egyptian Arabic the independent Neg morpheme *miš* has to precede the future verb form (Soltan 2007), contrary to what Benmamoun’s analysis predicts:

- (7)           xalid   miš   (f-əl-xaalib)   ħa-yə-ʔra       l-kitaab  
           Khalid   NEG   (probably)   FUT-3SG.M-read the-book  
           ‘Khalid won’t probably read the book.’

According to this hypothesis, the negative head precedes the tense, an analysis adopted in Benmamoun et al. (2014) (see also Fassi Fehri 1993, Soltan 2011).



### 3.1.2. Sentential Negation in Sason Arabic

Sentential negation in SA is realized by the particle *maa*, which appears left-adjacent to the verb in a simple tense, as shown in (9).

- (9)
- |      |     |              |       |
|------|-----|--------------|-------|
| naze | maa | qare         | kitāb |
| N    | NEG | read.PAST.3F | book  |
- ‘Naze didn’t read book(s).’

The negative particle *maa* and the verb are in a strict adjacency relationship: no material (e.g. subject, adjunct or parenthetical expression) can occur between them, as illustrated by the ungrammatical sentences in (10), which should be compared with those in (11),

where the same intervening elements can occur between the subject and the verb in both affirmative and negative clauses.

(10) a. \*naze maa ams qar-e kitāb  
N NEG yesterday read.PAST-3FS book ā  
'Naze didn't read book(s) yesterday.'

b. \*naze maa fād-i qar-e kitāb  
N NEG opinion-my read.PAST-3FS book  
'Naze, in my opinion, didn't read book(s).'

(11) a. naze ams maa qar-e kitāb  
N yesterday NEG read.PAST-3FS book  
'Naze didn't read book(s) yesterday.'

b. naze fād-i maa qar-e kitāb  
N opinion-my NEG read.PAST-3FS book  
'Naze, in my opinion, didn't read book(s).'

At this point, I would like to touch upon Pollock's (1989) major work where he used several diagnostics to determine if V remains within VP or raises to a higher functional category, since it will feature a role in the following discussion. He took the positioning of adverbs and floating (subject) quantifiers as a criterion to account for the syntax of French and English.



The assumption is that such categories occupy fixed positions and mark XP boundaries in that their occurrence between two elements shows that an XP boundary occurs between those elements. Sentences in (12) show that adverbial adjuncts and floating quantifiers can appear between the verb and the direct object in Sason Arabic. This entails Sason Arabic as a verb-raising language, like other Arabic dialects.

(12) a.     zyer   kara           ams           maitub-ma.  
           child  wrote.3M    yesterday   letter-a  
           ‘The child wrote a letter yesterday.’

          b.     zyar     karo           killen maitub-ma.  
           children wrote.3PL all    letter-a  
           ‘The children all wrote a letter.’

It follows that the verb and the direct object in (12) are not within the same maximal projection. In other words, these sentences show that the verb has raised out of VP, over the adverb (12a) and the floating quantifier (12b).

In examples (13-15), I give negative present/future, past and imperative sentences, respectively.

(13)       mi     y-addel       šine   le     i-xlo-llu.  
           NEG   3M-do       what   that   3PL-say-him  
           ‘He doesn’t do what they tell him to.’

(14) maa adaš-tu tuši.  
 NEG saw-1SG anything  
 ‘I didn’t see anything.’

(15) laa tamel.  
 NEG work.2MS  
 ‘Don’t work.’

The distribution of the negative in SA is illustrated in the following table.<sup>47</sup>

<i>Tense</i>	<i>Negative Particle</i>
present/future	mo-/mī-/mī- <sup>48</sup>

<sup>47</sup> Note that in existential and possessive constructions, which both use the existential particle *ifi* ‘there’, unlike some other Arabic dialects (Choueiri 2014), the opposite pattern is observed regarding the form of the negative and the tense reference. SA exhibits the following negative particles in present and past. (*cf.* (Table 2)).

- (i) **Neg**    **Existential**  
 maa-    fi                    ‘There is not’  
 mī-    kə-fi                    ‘There was not’

As seen in (i), in present tense, which is correlated with the imperfective, the form *ma* is used, while in past *mī* is preferred. This is the reverse of the pattern illustrated in Table 2. Another interesting property is that in possessives, the form is “*existential + dative clitic*” is observed, again different from other Arabic varieties. The paradigm is given below:

- (ii) ifi-nni    kelp-ma    ‘I have a dog’  
       *there-me*    *dog-a*
- ifi-lley                    ‘you (m.) have’  
 ifi-kki                    ‘you (f.) have’  
 ifi-llu                    ‘he has’  
 ifi-lla                    ‘she has’  
 ifi-nna                    ‘we have’  
 ifi-kken                    ‘you (pl) have’  
 ifi-llen                    ‘they have’

<sup>48</sup> Isaksson (2005:188) says that in the dialect he documented in Sason area *mā* is used before the perfect, and *mō* before the imperfect. Talay (2001:88) mentions that in the Hasköy dialect, similar to SA, but with some difference, *mā* and *mə* are used in the perfect, and *mō*, *mī* and *m* are used in the imperfect.

(16)

(non-past)	
Past	maa
imperative	laa

Table 2

Note that the form of the negative particle in the imperfective is phonologically conditioned. As the following paradigm illustrated, with the first singular person, *mo-*, in third person singular (masculine) and plural *mi*, and with the other persons *mi-* is used. In the past tense, on the other hand, only one form of the negative is available.

(17)

<i>Person</i>	<i>Number</i>	<i>Gender</i>	<i>Neg+Imperf</i>	<i>Neg+Perf</i>
1	Singular	M/F	mo-čči	mā-citu
2	S	M	mi-tiči	mā-cit
2	S	F	mi-tiče	mā-cite
3	S	M	mi-či	mā-ca
3	S	F	mi-tiči	mā-catte
1	Plural	M/F	mi-niči	mā-cinna
2	P	M/F	mi-tičo	mā-cito
3	P	M/F	mi-čo	mā-co

In the substantial literature on the syntax of negation, the commonly-held view is that Neg head, such as French *ne* and Italian *non*, dominates the predicate, while Spec, Neg contains elements, such as English *not*, French *pas*, and negative operators and adverbs such as English *never*. (e.g. Zanuttini 1991, 2001, Haegeman 1995, Shlonsky 1997, Radford 2009)

With respect to the negative *mā* in SA, there are (at least) two pieces of evidence that support its treatment as the head of its own syntactic projection, i.e. a Neg° element. First, in copular constructions in SA, the negative element carries agreement and tense, a phenomenon that is a property of heads, not that of maximal projections (Akkuş, 2013c).

- (18) mara-di mey.  
 wife-my NEG.3F  
 ‘She is not my wife.’

Second, in some dialects, *mā* can host subject clitics, again a property of heads.<sup>49</sup>

Coupled with the capacity of the negative to bear agreement and tense, I assume that the negative particle is a head element.<sup>50</sup> Therefore, I take NegP in SA to consist of an overt head, *mā*, and a silent specifier, as represented below:

- (19) NegP

<sup>49</sup> See Aoun et al., 2010 for examples from various dialects and the discussion of the issue.

<sup>50</sup> Further evidence on the head status of negative markers in Arabic can be provided based on what is known as the *why not* test developed by Merchant (2001). Merchant argues that the *why not* construction is a form of phrasal adjunction and thus it is only allowed in languages with phrasal negative markers such as English:

- (iii) [ YP [XP why] [ YP not]]

Languages with head negative markers, on the other hand, have been shown to disallow such constructions (iv) and employ instead a construction of the *why no* form (v) (Merchant, 2001; Zeijlstra, 2004, 2008):

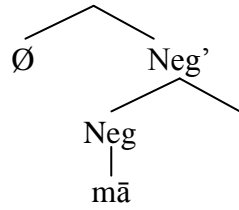
- (iv) \*Perche non? (Italian, Zeijlstra, 2004:154)  
 why NEG  
 ‘Why not?’

- (v) Perche no?  
 why no  
 ‘Why no?’

The *why not* test confirms the head-status of the negative in SA. For example, SA disallows *why not* constructions and makes use of *why no* constructions instead.

- (vi) \*atey maa?  
 why not  
 ‘Why not?’

- (vii) atey laa?  
 why no  
 ‘Why not?’



Now that we have established the head status of the negative in SA, the following question is where it is located in the structure, below or above TP? In SA, the negative marker can also attach to some other elements in addition to the main verbal predicates. The elements that SA contains are auxiliary elements and the existential particle, as illustrated in (20) and (21), respectively. This is the main motivation for the NegP>TP analysis, which I will defend here.

- (20)            mā-kano                    kə-inam-o.  
                   NEG-aux.PAST.3PL    PAST-slept-3PL  
                   “They were not sleeping.”

- (21)            mā-fi                    axpeys fi beyt.  
                   NEG-there            bread    in house  
                   “There is not bread in the house.”

The negative marker surfaces as a prefix attached to an element that seems to be base-generated in a position in TP. For example, in (21) the negative attaches to the expletive particle, whose standard analysis is that it occupies Spec, TP. Another strong piece of evidence for the NegP>TP order comes from the fact that the negative morpheme precedes the past marker *kə-*, which optionally encliticizes to it, similar to the situation

in Egyptian Arabic (Soltan 2007). The example (52) from Chapter 2 is repeated here. Note that this order is contrary to the prediction made the analysis that locates NegP below TP.

- (22) a.      mɪ      kə-ya-yel      laham.  
              NEG    PAST-3M-eat    meat  
              ‘He wasn’t eating meat./He didn’t use to eat meat.’
- b.      mɪ-k              ya-yel    laham.  
              NEG-PAST      3M-eat    meat    (Akkuş 2014, Akkuş & Benmamoun 2014)

The above structure indicates the options available in the interaction between negation, tense and the predicate. In (22a) each projection is realized independently, whereas in (22b) tense merges with negation, which is linearly adjacent to it.

The data from SA provide evidence to the analysis that NegP is located above TP in the structure, thus lending support to Benmamoun’s claim of a cross-dialectal generalization that the underlying syntax is the same, particularly with regard to clause structure. In the next section, I will turn to the analysis of negation in non-verbal sentences by Akkuş and Benmamoun (2014) and question the generalization reached so far.

### 3.2. Negation in Non-verbal Sentences

In Sason Arabic, non-verbal sentences are usually formed with the auxiliary *kwn* ‘be’, which carries both tense and agreement morphology.

(23) a.    *ina    kittu    raxu*  
          1SG    be.1SG sick  
          ‘I am sick.’

          b.    *into    kinto    wane*  
              2PL    be.2PL there  
              ‘You are there.’

The negative counterparts of such constructions are formed the same way it is in verbal sentences, that is, by attaching the negative marker to the auxiliary as a prefix.

(24) a.    *ina    ma-kittu    raxu*  
          1SG    NEG-be.1SG    sick  
          ‘I am not sick.’

          b.    *into    ma-kinto    wane*  
              2PL    NEG-be.2PL    there  
              ‘You aren’t there.’

In present third person, however, a different construction is resorted to. Rather than the auxiliary, a pronominal element is preferred. The negative particle usually merges with this element. Unlike the auxiliary, this pronominal element shows no person agreement.

- (25) a. iyu raxu-ye  
3M sick-be.SG  
'He is sick'
- b. iyu raxu muu  
3M sick NEG.be.SG.M  
'He isn't sick'

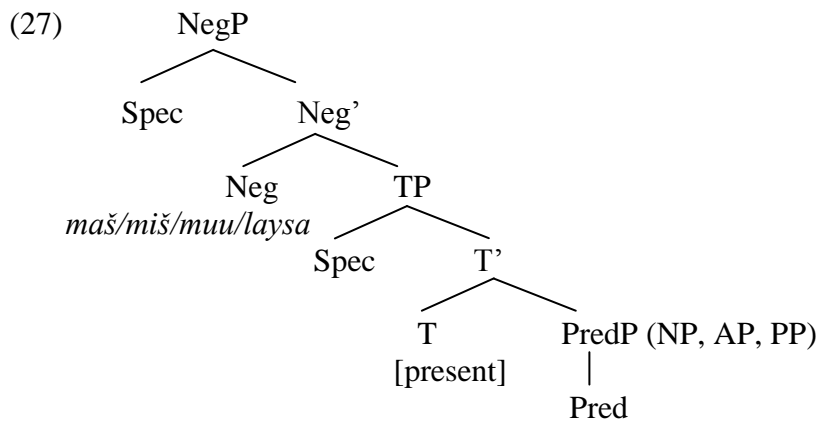
### 3.2.1. Akkuş and Benmamoun (2014)

Akkuş and Benmamoun (2014) discuss non-verbal negation in SA in comparison to peripheral and non-peripheral dialects of Arabic. In the context of non-verbal predicates, sentential negation is also realized differently across Arabic varieties. In Moroccan Arabic (26a), the negative proclitic *ma* and the negative enclitic *š* are realized as one single non-discontinuous element. In Egyptian Arabic (26b, Diesing and Jelinek 1995:145) and Lebanese Arabic (Aoun et al. 2010), there is also a non-discontinuous element *miš* (26c). In Syrian and Kuwaiti Arabic (26d, Brustad 2000:280) the negative *muu* is used. In Standard Arabic the non-verbal negation is *laysa* (26e, Benmamoun and Al-Asbahi, (B&A, 2013)).



- (26) a. huwa maši hna  
 he NEG here  
 ‘He is not here.’
- b. ?ali miš maSri.  
 Ali NEG Egyptian  
 ‘Ali isn’t Egyptian.’
- c. huwwe miš hon  
 he NEG here  
 ‘He is not here.’
- d. hagič muu hilwa  
 that-one NEG pretty  
 ‘The other one is not pretty.’
- d. huwa laysa huna  
 he NEG here  
 ‘He is not here’

As seen above, the negative is realized independently. The assumption is that in non-verbal sentences negation generally does not merge with the predicate and all these negation forms are the result of the lack of morphological interaction between negation, tense and predicate, as represented below after B&A (2013).



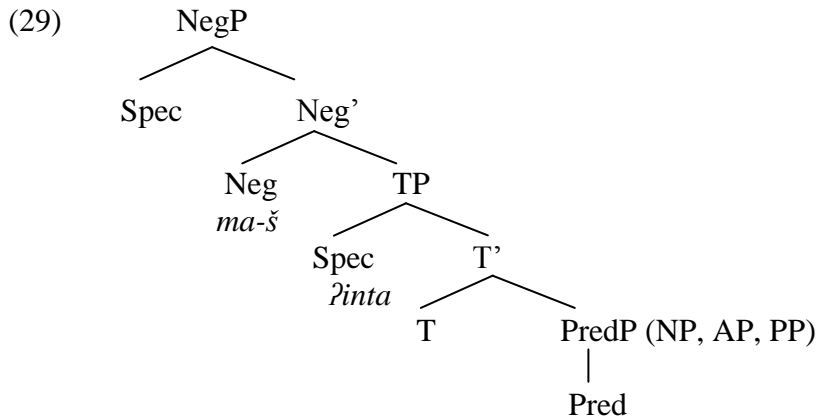
Regarding the pronominal negation in Arabic varieties, such as (27) where a few instances from Egyptian Arabic are given to illustrate the point, the proposal is that negation merges with the subject pronoun, which is located in Spec, TP (B&A 2013, Benmamoun et al. 2014).

(28)

<i>Pronoun</i>	<i>EA</i>
1S	maniiš
2M	mantaš
2F	mantiš
3M	mahwaaš
3F	mahyaaš
1PL	mahnnaš

Table 3, (B&A, 2013:16)

The negative pronouns in Table 3 are argued to be the result of a merger between negation and subject pronoun. For example, the diachronic derivation of the pronoun *mantaš* in Egyptian Arabic involves the merger of the discontinuous negative *ma-š* and the pronoun *?inta* (B&A 2013). The structure for this phenomenon is given below:



Benmamoun (2000) maintains that this is what gave rise to the negative *laysa*. Although it is inflected as a perfective verb, it is not a verb that carries verbal features but just a negative that diachronically merged with a subject pronoun that later evolved into an agreement marker. The agreement marker on *laysa* and the perfective verb is the vestige of an old pronominal enclitic, an assumption that is well accepted within historical Semitic. Benmamoun argues that the subject pronoun, which most likely encliticized in the post-syntactic component, occurred in a context where it does not get pre-empted by a verb or tense that may merge with negation. Such an analysis would also support the pronominal negative hypothesis.

When we turn to SA, we see that unlike non-peripheral Arabic dialects, the negation follows the predicate. The fact that this negation can license polarity and take scope over quantifier shows that it is sentential negation, not constituent negation.

Consider the following:

- (30)            oratman le        tunes    mey  
                  teacher of    anyone NEG.3SG  
                  ‘She is not the teacher of anyone.’

(31) yazar le kitab-ad killen mey  
 author of book-PL all NEG.3SG

‘She is not the author of all books.’

- (i) It is not the case that she is the author of all books.
- (ii) \* It is true for every x s.t. she is not the author of every x = She is not the author of any of the books.

Moreover, in present tense copular sentences in SA (along with other Anatolian Arabic dialects), a third person pronominal element is used regularly. In SA, this element agrees with the subject only in number (and not gender and person) in positive sentences.<sup>51</sup>

Consider the following examples:

<sup>51</sup> I should note that Anatolian Arabic dialects vary greatly in their realization of the ‘copula’, its agreement features and order with respect to the predicate. In this work, I will primarily focus on Sason Arabic, but I will refer to references to other varieties to make a point clearer or illustrate the similarities with or differences from SA. For example, in the context of agreement, other Anatolian varieties documented so far show agreement in gender as well (see Jastrow 1978, 2005 for Mardin, Siirt and Azex dialects, Grigore 2007 for Mardin dialect, Talay 2001 for Hasköy dialect and Lahdo 2009 for Tillo dialect.) The paradigms in the table in (viii) show the ‘copula’ (from the available data of several works on these dialects, the empty slots mean that the relevant information wasn’t available in the source I got the data from).

(viii)

	Gender	Positive	Negative
<b>Mardin Arabic</b> (Jastrow 2005:91)	M	hawne- <b>we</b> “he is here”	<b>ma-wwe</b> hawne “he isn’t here”
	F	hawne- <b>ye</b>	<b>ma-yye</b> hawne
	PL	hawne- <b>nne</b>	<b>ma-nne</b> hawne
<b>Muş (Hasköy)</b> (Talay 2001)	M	ismi mhamma- <b>wa</b>	
	F	imme- <b>ya</b>	
	PL	kwās- <b>ne</b>	
<b>Siirt Arabic</b> (Jastrow 2005:91)	M	<b>uwe</b> awne	<b>mawwe ~ maw</b> Predicate
	F	<b>iye</b> awne	<b>mayye ~ may</b>
	PL	<b>onne</b> awne	<b>Manne</b>
<b>Tillo Arabic</b> (Lahdo 2009:72-	M	sağlam- <b>yye</b> əmqɑ <b>uww</b> ašš əmtar	<b>maww</b> bows suwari (or <b>ma uww</b> )

- (32) a.   sabi   nihane-ye  
           boy    here-COP.3SG  
           ‘The boy is here.’
- b.   bint   nihane-ye  
           girl   here-COP.3SG  
           ‘The girl is here.’
- c.   zȳar         nihane-nen  
           children    here-COP.3PL  
           ‘The children are here.’

76, 127, 172)	F	iȳy maliha- <b>ye</b> harara <b>iȳy</b> bows awnak ‘the heat is too much here’	<b>mayy</b> eke əStanbul (or <b>ma iȳy</b> )
	PL	ənnē- <b>nne</b> / ənnē- <b>ənnē</b>	<b>ma-nne</b> ġərab (or <b>ma-ənnē</b> )
Āzex (Jastrow 2005:91)	M	fi-lbayt- <b>u</b> ‘he is in the house’ hawne- <b>we</b> ‘he is here’	
	F	fi-lbayt- <b>i</b> hawne- <b>ye</b>	
	PL	fi-lbayt- <b>en</b> hawne- <b>nen</b>	

A few things are in order with respect to this table. First, all dialects mark gender distinction on the copula although this is not observed in positive sentences in Sason Arabic. Second, in all cases the copula follows the predicate in positive sentences. In negative sentences, on the other hand, (based on the available data) in all dialects except Sason Arabic, “neg+cop” precedes the predicate. I attribute this difference to the level of change a dialect underwent due to the language contact, SA being at the extreme end. (It would be interesting to see the negative sentences in Hasköy dialect, which I think is the closest variety to SA). Moreover, note that in Tillo dialect, the full pronoun serves as the copula it precedes the predicate, whereas in the case of abbreviated form, the pronominal element follows the predicate, a fact acknowledged by Ladho, too.

A number of interesting points are also observable in the table. I will refer to some of them in the discussion as arguments or evidence for the proposal I defend here. For a more detailed analysis of comparison among dialects, see Benmamoun and Akkuş (in preparation).

Note that the pronominal element, treated as a ‘copula’ in traditional grammars (e.g. Jastrow 1978, 2005, Talay 2001, Grigore 2007, Isaksson 2008, Lahdo 2009, among others), is sometimes the shortened form of the independent personal pronouns and follows the predicate. Let us now consider the negative counterparts of the above examples.

- (33) a.   sabi   nihane muu  
           boy    here   NEG.COP.3SG  
           ‘The boy isn’t here.’
- b.   bint   nihane mey  
           girl   here   NEG.COP.3SG  
           ‘The girl isn’t here.’
- c.   zyar           nihane me-nnen  
           children    here   NEG.COP.3PL  
           ‘The children aren’t here.’

The form of the pronominal element or ‘copula’ in positive and negative sentences is illustrated in Table 4.

(34)

Pronoun	Positive (Pred+Cop)	Negative (Pred+Neg+Cop)
3M.SG	<i>ye</i>	<i>muu/mou</i>
3F.SG	<i>ye</i>	<i>mey/miy</i>
3PL	<i>nen</i>	<i>mennen</i>

#### Table 4

Note that gender agreement is not marked in positive constructions, but only in negatives. At least two questions that arise regarding the pronominal element are as follows:

- (i) Taking the distribution of this element into consideration, what is the syntactic configuration of such structures (Akkuş and Benmamoun 2014)?
- (ii) What is the nature of this element (Akkuş 2013b)? Does it have the same syntactic role as *kwn* ‘be’ that shows up with other persons?

A crucial point about this pronominal element is that it is obligatory for the grammaticality of a sentence, as illustrated in (35a). This property distinguishes it from other non-peripheral dialects (35b, Eid 1983) which consist of only a subject NP followed by NP/AP/PP functioning as a predicate or Tillo dialect (35c, Lahdo 2009:174) where the copula is omitted when the subject of the nominal clause is an independent personal pronoun.

- (35) a.    iyu    mamlun-\*(ye)  
          he    content-3SG  
          ‘He is content.’
- b.    il-walad    zariff  
          the-boy    nice

‘The boy is nice.’

- c.    iyy    garibe  
      she    stranger  
      ‘She is stranger’

In this respect, the copula in SA patterns with the copular elements of the surrounding languages, such as Kurdish, Zazaki (or Dimili in some places), Turkish, Armenian and neo-Aramaic languages, e.g. Turoyo. What is common among these languages is that they exhibit head-final properties (at least in the VP).<sup>52</sup> Below are some nominal sentences from the languages in question.<sup>53</sup>

- (36) a.    bavê min    şivan-*e*                   (Kurdish, Grigore 2007:55)  
          father-my    shepherd-3SG  
          ‘My father is a shepherd.’
- b.    nan    germ-*o*                   (Zazaki, Todd 1985:88)  
          bread    warm-3SG  
          ‘The bread is warm’

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<sup>52</sup> For the discussion and/or examples indicating the head-final property for Kurdish see Gündoğdu 2011, Atlamaz 2012, for Turkish Ouhalla 1991, Kelepir 2001, for Zazaki Todd 1985, Akkuş (in preparation), Khanjian (2013) for Western Armenian, and for Turoyo Jastrow’s article titled ‘The Turoyo Language Today’ (date ?), Goldenberg 2000.

<sup>53</sup> Note that I do not claim that the pronominal element in these languages has the same nature as the Pron in Sason Arabic. The comparison is solely intended to establish the head-directionality of this construction in SA.





‘The child is not sick’

b. cinya niwaš *niy-o* (Zazaki)

child sick NEG-3SG

‘The child is not sick’

c. sen hasta *değil-sin* (Turkish)

you sick NEG-2SG

‘You are not sick.’

d. isla hivan-*ç-im*<sup>56</sup> (Sason Armenian)

I sick-NEG-1SG

‘I am not sick’

Note that the order observed in Sason Arabic, Kurdish, Zazaki, Armenian and Turkish is *Pred+Neg+Cop* and the languages SA is contact with are argued to be head-final in the literature. Note also that in all languages (maybe except Turkish)<sup>57</sup> the “neg+cop” complex must follow the predicate. Consider the following:

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<sup>56</sup> The example is due to Ali Akkuş. By Armenian, I mean the variety spoken around the Sason area. Songül Gündoğdu (p.c.) reports that the same pattern is observed in Hemşin Armenian as well.

<sup>57</sup> To my judgement, Turkish also doesn’t allow such a configuration even in contrastive focus reading let alone neutral focus.

- (ix) \*Çocuk değil ev-de.  
child NEG house-LOC  
‘The child is not in the house.’

For a contrastive reading the following sentence is preferred.

- (38) a. \*sabi *muu* raxu<sup>58</sup> (Sason Arabic)  
 boy NEG.3SG sick  
 ‘The boy is not sick’
- b. \*zarok *nin-e* nexweš (Kurdish)  
 child NEG-3SG sick  
 ‘The child is not sick’
- c. \*cinya *niy-o* niwaš (Zazaki)  
 child NEG-3SG sick  
 ‘The child is not sick’

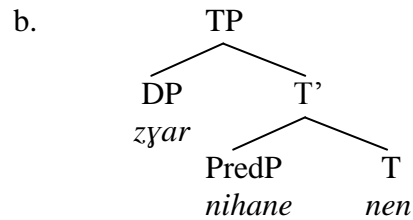
Hence, based on the distributional facts of the pronominal element, i.e. its relative position to negation and predicate Akkuş and Benmamoun propose that nominal sentences in SA exhibit head-final property. Accordingly, the structures for positive and negative verbless sentences, respectively, in SA are given in (39b) and (40b), respectively<sup>59</sup>:

- 
- (x) Çocuk değil, kız ev-de.  
 child NEG girl house-LOC  
 ‘Not the child, but the girl is in the house.’

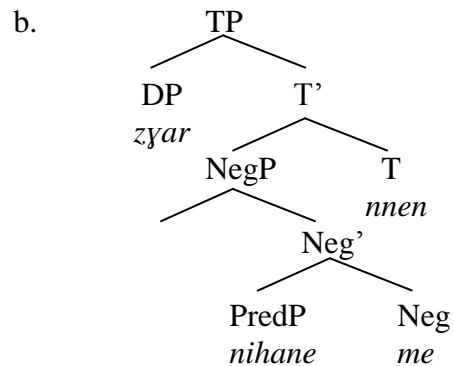
<sup>58</sup> In SA, this order is possible only when the subject is contrastively focused.

<sup>59</sup> See Chapter 4 for the discussion of subject position in non-verbal sentences although I take them to be in Spec, TP here.

- (39) a.    *zyar*            *nihane-nen*  
           children        here-COP.3PL  
           ‘The children are here.’



- (40) a.    *zyar*            *nihane me-nnen*  
           children        here    NEG.COP.3PL  
           ‘The children aren’t here.’



Notice that the configurations carry a couple of implications with them. First, NegP is below TP like the other head-final languages. Second, as a natural result of the head-final property of the structure (forced out of empirical facts), the merger between negation and the pronominal element cannot be like the process Benmamoun (2000)

assumes for other Arabic dialects (cf. (29)).<sup>60</sup> Benmamoun argues that Neg° merges with the pronoun in Spec, TP in the post-syntactic component. Such a process would not drive the correct configuration. The crucial point is that what we have is not a full pronoun, but a shortened version of the personal pronoun (see Jastrow 1978, 2005, Talay 2001, Lahdo 2009).<sup>61</sup> Lahdo observes that in Tillo dialect the full pronoun precedes the predicate and optionally encliticizes to the negative, similar to the situation in non-peripheral Arabic varieties. The pronominal element, on the other hand, encliticizes to the predicate. Hence, Akkuş and Benmamoun suggest that what we deal with is two separate processes: let's dub the former the “Arabic pattern” since it patterns with non-peripheral Arabic dialects, such as Moroccan Arabic or Egyptian Arabic and the latter the “non-Arabic pattern” for the sake of exposition.<sup>62</sup>

<sup>60</sup> Doron (1983) argues that the pronouns in Hebrew occupy T, not TP. If such an argument is to be proposed and supported empirically for Arabic, then the merger observed in non-peripheral dialects and Sason Arabic wouldn't be different after all. I will leave this issue for future research.

<sup>61</sup> Note that in Sason Arabic, the phonological similarity between the full pronouns and their shortened versions in singular is not that evident, as illustrated in the table below. In fact, a similar situation is observed in Hasköy dialect (Talay 2001:76).

(xi)

Sason Arabic	<i>Pronoun</i>	<i>Pronominal element</i>
3M.SG	iyu	ye
3F.SG	iya	ye
3PL	iyen	nen

Talay argues that the pronouns *yu* ‘he’, *ya* ‘she’ and *iyen* ‘they’ were formed out of the early forms *hiyu*, *hiya* and *hiyen*, respectively. I will adopt his path for SA as well. Regarding the relative difference between the forms of pronoun and copula, I would venture to argue that the singular copula might have been formed via the elision of the final consonant of the plural pronoun or deletion of final vowels of the respective pronouns and insertion of the vowel *e* instead for both genders, whereby resulting in gender neutralization. Still I don't have a satisfactory answer for this.

(xii)    *nen* > *iyen*  
           *ye* > *ye~~n~~*

<sup>62</sup> Note that the representations in (36) and (37) are not consistent with the theory that T has a verbal feature that needs to be checked by V, such as Grimshaw (1991). Within Grimshaw's extended projection theory, TP would indeed be an extended projection of the VP headed by a null copula in non-peripheral

As Akkuş and Benmamoun (2014) discuss, one expectation that the head-final analysis raises is that SA should have *wh*-in-situ in its nominal sentences like the languages it is in contact with (see Akar 1990, Özsoy 1996 for Turkish, Gündoğdu 2011, Atlamaz 2012 for Kurdish, Todd 1985, Akkuş (in preparation) for Zazaki) and unlike its verbal sentences, in which *wh*-phrases undergo movement (cf. Section 1.3.5). This prediction is correct. Consider the following examples:

(41) a. kemal beyt-ye  
 Kemal house-3SG  
 ‘Kemal is in the house.’

b. kemal amma-ye?  
 Kemal where-3SG  
 ‘Where is Kemal?’

(42) a. herdem axt-i-ye  
 Herdem sister-my-3SG  
 ‘Herdem is my sister.’

b. herdem ande-ye?

---

Arabic dialects, such as Standard Arabic or Moroccan Arabic, and by an overt copula in Sason Arabic. I will explore the nature of the pronominal element in T after (Doron 1986) and conclude if the empirical facts support Grimshaw’s extended projection account or not. See Benmamoun 2000, Aoun et al. 2010 for the problems with the null copula analysis.

Herdem        who-3SG

‘Who is Herdem?’

As the examples illustrate, no movement is required for *wh*-phrases in nominal sentences in SA. Hence this constitutes another piece of evidence for the head-final property of non-verbal sentences in SA.

### 3.2.2. What do we have: A Copula or *Pron*?

Now we will turn to the seemingly copular construction observed in positive and negative non-verbal sentences in SA. I should note that this is not peculiar to Sason Arabic (or Anatolian Arabic) for that matter, but a similar structure is observed in Hebrew, too. In certain varieties of Hebrew present tense copular sentences, a third person pronoun, agreeing in number and gender with the clausal subject, occurs in lieu of a copula. Doron (1983) convincingly shows that this pronoun, which she labels *Pron*, is not the present tense form of the copular verb *be*, but rather constitutes the phonetic realization of AgrS° in sentences in which a veritable copula is missing. She proposes that the pronominal is the realization of the agreement features of the functional category I/T. Doron’s analysis, adopted in Shlonsky (1997:29) and Benmamoun (2008:123-126) is based on the different behavior of this pronoun.<sup>63</sup> Consider the following:

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<sup>63</sup> See also Rapoport 1987; Rothstein 1995; Falk 2004. The consensus is that the pronominal in these contexts is not a subject pronoun but a realization of features of the T.

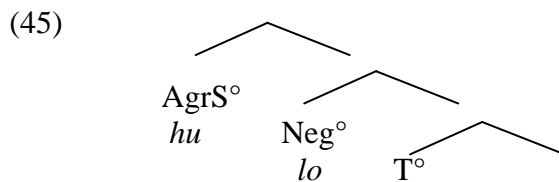
- (43) dani hu ha-more (Doron's (1))  
 Dani he the-teacher  
 'Dani is the teacher.'

In negative sentences, the negative *lo* must follow the *Pron*, as in the contrast in (44).

- (44) a. \*dani lo hu manhig dagul (Shlonsky 1997:14)  
 Dani NEG PRON-MS leader-MS renowned  
 'Dani is not a renowned leader.'

- b. dani hu lo manhig dagul  
 Dani PRON-MS NEG leader-MS renowned  
 'Dani is not a renowned leader.'

Shlonsky (1997:15) based on the order of these constituents, proposes the following structure:



Notice that in Hebrew the “cop+neg” complex precedes the non-verbal predicate in line with the head-initial structure of the language. This is in contrast with the ordering in SA, as mentioned above. After establishing the syntactic structure of this pronominal



construction in SA as head-final, I now turn to the nature of the element that occupies the tense projection.

An obvious hypothesis would be the claim that *Pron*, in Doron's terms, has the same syntactic role as *kwn* 'be'. Or a stronger claim would be that *Pron* is merely the suppletive form of *kwn* in third person. But the hypothesis that *Pron* is the suppletive form is easy to refute. It suffices to note that on distributional grounds alone, *kwn* appears in constructions or positions that *Pron* cannot. Contrast the examples in (46) with those in (47).

(46) a.    ali    nihane ye  
           Ali    here   PRON.3SG  
           'Ali is here.'

          b.    \*ali   ye            nihane<sup>64</sup>  
               Ali   PRON.3SG   here

(47) a.    ina    nihane kittu  
           I    here   was  
           'I was here'

---

<sup>64</sup> The sentence becomes grammatical only with a cleft-reading. Doron (1983) argues that the same thing happens in Hebrew.

(xiii)    ali ye            nihane  
           Ali PRON.3SG   here  
           'It is Ali who is here.'

- b.     ina kittu     nihane  
        I    was     here

Pron in (46) occurs in post-predicate position in neutral focus, if not the sentence becomes ungrammatical. The auxiliary, on the other hand, may occur in pre- or post-predicate position without any change in the discourse function. The following example shows that *kwn* appears in verbal present participles, whereas Pron cannot, similar to the situation in Hebrew:

- (48) a.     ali     ku     ya-yel     tiffa  
           Ali     aux.3M  3M-eat     apple  
           ‘Ali is eating apple(s).’
- b.     \*ali    ye            ya-yel tiffa  
           Ali   PRON.3SG   3M-eat apple

Now I will deal with the nature of Pron and argue why it needs to be treated as an agreement clitic, and not an independent constituent.

Following Doron (1986), I claim that Pron is a *clitic* in that it is not an independent NP node, but a possible phonological realization of the feature bundle of T, {[number] [gender]} in Anatolian Arabic varieties, including Sason Arabic.

Doron (1986:318-320) explains Pron via *clitic chain* that falls under the generalized notion of a *chain* advocated in Aoun (1981) and Chomsky (1982) in order to account for the Case Filter. She also points out that clitic chains are attested in Hebrew

independently of the chain in the case of Pron. Similar chains are observed in SA too. Objects, both direct and indirect, cliticize on the verb when they are pronominal. Consider (49) where the relative order of the objects is unmarked, and the objects are full NPs. (see Chapter 4 for the discussion of basic order between direct and indirect objects).

- (49)            dani    ad-a            ša Leyla asal  
                   Dani    gave-3M        to Leyla honey  
                   ‘Dani gave Leyla honey.’

In case the direct object is a pronoun, it is not a free-standing pronoun, but must be an attached pronoun, hence it cliticizes on the verb, as is evinced by the contrast between (50a) and (50b).<sup>65</sup>

- (50)    a.        \*dani    ada    iyu    ša leyla  
                   Dani    gave    it        to Leyla  
                   ‘Dani gave it to Leyla.’
- b.        dani    ado-u    ša leyla  
                   Dani    gave-it to Leyla

---

<sup>65</sup> Egyptian Arabic exhibits the same restriction in that it does not allow free-standing object pronouns (Diesing and Jelinek 1995). Their suggestion is that this asymmetry can be explained in terms of a syntax-semantics interaction. Essentially, in EA the object pronouns must appear attached to the verb because they must raise out of the VP to get out of the scope of existential closure (Diesing 1992).

Notice the contrast between a direct object which is a full NP as in (49) and a pronoun as in (50), in that the former follows the indirect object and is separated from the verb, whereas the latter needs to be attached to the verb. Relying on this asymmetry, Doron (1983, 1986) assumes that the structure of S-structure of (50b) is (50c).<sup>66</sup>

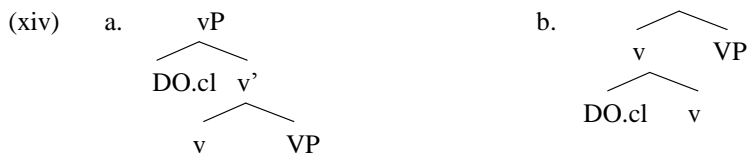
c. Dani [v ado-u<sub>i</sub>] ša Leyla e<sub>i</sub>

Note that when V is fronted, the object pronoun must be fronted as well, confirming the view that it is a clitic:

(51) a. ičax ado-u dani ša leyla  
 when gave-it Dani to Leyla

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<sup>66</sup> Another environment where clitics are observed is the clitic doubling construction. Nevins (2010) proposes that clitics are generated in argument positions alongside the arguments, and move to the specifier of vP via Object Shift. In other words, he treats object cliticization as movement of D element of a complex argument out of the complement of v to the specifier of v. (see also Roberts 2010). Adopting the Merger operation of Matushansky (2006), Nevins argues that clitics undergo syntactic rebracketing with their host, i.e., two heads that are in a spec-head relation (xiv-a) as a complex head (xiv-b).



In other words, pronominal clitics are attached to a functional head position in which the verb is found, which Nevins assumes to be v. The result of rebracketing is a complex head consisting of the *clitic* + v. Note that this is the morpho-phonological difference between clitics/weak pronouns and strong pronouns in addition to the information structure-related difference between the two. (While full/strong pronouns are used for emphasis/contrast, clitic/weak pronouns, as well as *pro-drop* are used elsewhere, e.g. in a sentence with a topicalized constituent or a clause with neutral stress. (see Progovac (1995) for the discussion of this issue for Serbo-Croatian)) Only the former category undergoes rebracketing. The rebracketed, complex v may then undergo further head-movement to T.

Note that the configuration Nevins proposes does not correctly reflect the linear order. Nevins argues that his configuration encodes the dominance and sisterhood, but not linear order. The clitic itself, within the postsyntactic component, may be right-linearized, yielding enclisis. In other words, according to language-particular requirements, a clitic may be right- or left-linearized. See also Sportiche (1993, 1998) for the proposal of Clitic Projection.

‘When did Dani gave it to Leyla?’

- b. \*ičax ada dani u ša leyla  
when gave Dani it to Leyla
- c. \*ičax ada dani ša leyla u  
when gave Dani to Leyla it

Now that we have seen that clitic chains are attested in SA, I return to the claim that Pron is a *clitic*, that is, the phonological realization of a feature bundle. Pron has some properties that Zwicky and Pullum (1983) list as characterizing clitics. First, Pron does not carry (contrastive/exhaustive) stress (Jastrow 2005, Talay 2001, Lahdo 2009), unlike *kwn*.

- (52) a. int oratman KINT  
‘You ARE a teacher.’
- b. \*dani oratman YE  
‘Dani IS a teacher’

However, when it merges with negation, it receives stress since the long vowel of the negation in the “neg+Pron” complex attracts stress (see Jastrow 2005, Akkuş 2013a for the connection between vowel length and stress in Anatolian Arabic and Sason Arabic).

- (53)            dani    oratman        MUU  
                   Dani    teacher        NEG.PRON.3SG  
                   ‘Dani IS NOT a teacher.’

Moreover, the clitic in Āzex dialect is sensitive to the final sound of the host it attaches to (Jastrow 2005:91), a property of clitics. In (54) when the Pron cliticizes to a host ending with a consonant, it is realized as *u*, and if the final sound is a vowel, it surfaces as *we*.

- (54) a.        fi-lbayt-u  
                   in-house-PRON.3M  
                   ‘He is in the house’
- b.        hawne-we  
                   here-PRON.3M  
                   ‘He is here’

Moreover, Pron cannot occur in isolation, not even as an answer to a question:

- (55) Q:        dani    oratman ye                    ya da    oratman        kan?  
                   Dani    teacher PRON.3SG    or        teacher        was.3M  
                   ‘Is Dany a teacher or was he a teacher?’

A:        (i) kan

(ii) \*ye

As we saw in Chapter 1, the verb in SA may precede the subject.

- (56) a. kemal iri-llu tiffa  
Kemal want-him apple  
'Kemal wants apples.'
- b. iri-llu kemal tiffa  
want-him Kemal apple

However, this is not true of Pron.

- (57) a. kemal oratman ye  
Kemal teacher PRON.3SG  
'Kemal is a teacher.'

- (58) b. \* ye kemal oratman  
PRON.3SG Kemal teacher

The *kwn*, on the other hand, patterns with the verb in this respect.

- (59) a. kemal kan nihane  
Kemal was.3M here

‘Kemal was here.’

- b. kan kemal nihane  
Kemal was.3M here

In brief, I have discussed the distributional and morpho-phonological properties of Pron in comparison with the verbal copula in Sason Arabic and concluded that they are of different natures. I suggested that Pron is the overt realization of T, in which a veritable copula is missing, similar to what we find in Hebrew. In the next section, I will elaborate on the nature of T.

### 3.2.3. Pron as the Realization of Nominal Feature of T

Benmamoun (2008) takes the non-verbal head in Hebrew that shows up only in present-tense contexts to be the overt realization of nominal feature of tense (see also Rapoport 1987, Rothstein 1995, Shlonsky 1997, Falk 2004). This is essentially to say that it is a Spell-Out of the nominal categorial feature of tense. Hence, Benmamoun follows Ritter (1995:418–421) and Shlonsky (1997:122) and takes the person feature of pronominals to be associated with definiteness, which basically provides the categorial label of the (DP) projection. It is not surprising, then, that the D-feature of tense can be realized by the person feature of a pronoun. This is in fact an extension of Benmamoun’s (2000) account of the contrast between Arabic present tense and past tense.<sup>67</sup> Looking at only

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<sup>67</sup> As Balkız Öztürk (p.c.) points out, in Turkish the copula is realized as null in present, while in past it is realized as *i* (Kornfilt 1996).



relevant part for our discussion, i.e. the non-verbal sentences, an independent sentence in the present tense in Arabic may have only a subject and a non-verbal predicate.<sup>68</sup>

- (60)            ʕomar muʕallim                    (Moroccan Arabic, Aoun et al. 2010:35)  
                   Omar teacher  
                   ‘Omar is a teacher.’<sup>69</sup>

In the past tense, on the other hand, a verbal copula/auxiliary appears:

- (61)            ʕomar kan      muʕallim      (Benmamoun 2008:111)  
                   Omar was      teacher

- (xv)      öğrenci-Ø-sin  
             student-cop-2sg  
             ‘You are a student.’

- (xvi)      öğrenci-i-di-n  
             student-cop-past-2sg  
             ‘You were a student.’

This is still different from the situation in SA, since despite the different realizations of the copula in the present and past, its nature is the same. In SA, on the other hand, in present third person a pronominal element is used, while in the past a verbal copula/auxiliary.

<sup>68</sup> In the literature there is no consensus about the structure of verbless sentences. See Bakir (1980), Jelinek (1981), Doron (1986), Eid (1991, 1993), Fassi Fehri (1993), Shlonsky (1997), Benmamoun (2000), Aoun et al. (2010), among others. The three positions advocated in the literature are the following: (i) verbless sentences are small clauses with no functional projection (Mouchaweh 1986, cited in Benmamoun 2000), (ii) verbless sentences contain a copula (Bakir 1980, Fassi Fehri 1993), (iii) verbless sentences contain a functional projection specified for present tense, but no copula (Jelinek 1981, Doron 1986, Benmamoun 2000, 2008, Aoun et al. 2000).

<sup>69</sup> Verbless sentences are not exclusive to non-peripheral Arabic dialects, in that the Arabic variety spoken in the province of Hatay, Turkey also contains such constructions. This is in fact not surprising because Hatay is on the border of Syria and Jastrow (2005, 2006) classifies them as Syrian Arabic dialect area due to the closeness of this dialect to Syrian Arabic.

- (xvii)      il-mara      (maa)      keys-e  
             the-woman      (not)      beautiful-F  
             ‘The woman is (not) beautiful.’                    (example due to Mehmet Köse)

‘Omar was a teacher.’

The examples from Arabic and Hebrew show that a dependency between tense and verb is not observed in these languages, hence support is lacking for a verbal head that would license tense under the checking theory of Chomsky 1995 or Grimshaw’s (1991) extended projection system, which are set up to capture the dependency between tense and verbs in languages such as English. The question that raises is how to capture the dependency that exists in English and the lack of such dependency in Arabic and Hebrew verbless sentences. Benmamoun’s (2000, 2008) approach is that the observed dependency cannot be grounded in the morphology and instead argue that it is categorial features, in the sense of Chomsky 1995, that are critical to whether a sentence should have a verbal head. He departs, however, from Chomsky 1995 by arguing that a particular tense is not universally specified for the same set of categorial features.

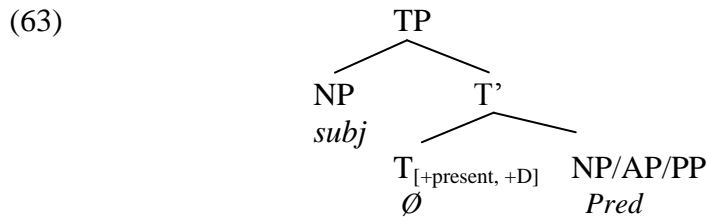
One of the central aspects of the Minimalist Program is the assumption that the syntax of lexical categories, their ordering, displacement, and relationship with other categories, is due to the interaction between formal features on the lexical categories and functional categories. With respect to the interaction between tense and the verb, according to Chomsky 1995, the dependency between tense and the verb is due to a categorial verbal feature of tense that forces it to be paired with the verb. The main reason the pairing of tense and the verb is not grounded in the need of a lexical host for the tense affix is presumably that in English, as opposed to French, the two codependent elements are paired covertly. This is captured by allowing tense to be generated on the verb and endowing tense with a categorial feature (+V) that can be checked by the verb either overtly or covertly. In English, the verbal categorial feature is checked covertly in

the context of main verbs, while in French, it is checked overtly. The use of categorial features to capture the dependency between the verb and tense makes this dependency parallel to the dependency between tense and the subject. Here also, according to Chomsky 1995, tense has a categorial feature (+D) that needs to be paired with a nominal element such as the NP subject. Movement of the subject to check the categorial feature of T can also be overt or covert.

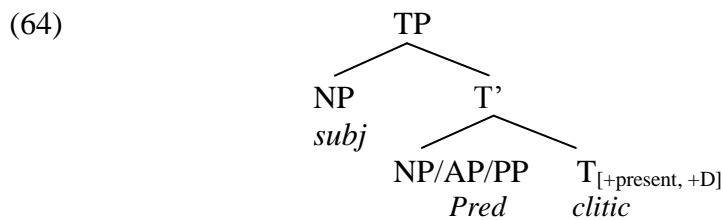
Although the dependency between tense and the verb with respect to the categorial feature of the former has been abandoned in Chomsky's (2000, 2001) recent work, Benmamoun argues that it has merits because it accounts for the contrast between the syntax of present-tense and past-tense sentences and also the structure of verbless sentences. However, he argues that languages may differ as to whether a particular tense is specified for the verbal and nominal categorial features. In English, both the present tense and the past tense are specified for such features, hence the movement of the subject to check the nominal feature and the obligatory presence of verbal copulas in both tenses to check the verbal feature. On the other hand, in Arabic, the present tense is not specified for the verbal feature. It is only specified for the nominal feature, which gets checked by the subject. The past tense, by contrast, is specified for both nominal and verbal features (for a detailed discussion of the issue, see Benmamoun 2000, especially Chapter 3).

- (62) a. Past [+V, +D]  
b. Present [+D]

This analysis allows us to account for the distribution of the copula. Since the present tense is not specified for a verbal feature, it does not need to be paired with a verbal element. Therefore, the verbal copula is not needed, which yields a representation without a VP.<sup>70</sup>



Note that this configuration is for dialects such as Egyptian Arabic or Moroccan Arabic. For a dialect like Sason Arabic, we have the following representation.



Note that while T is empty in (63), the clitic is the overt realization of the [+D] in Sason Arabic. As mentioned above, Benmamoun takes the person feature of pronominals to be associated with definiteness, which basically provides the categorial label of the (DP)

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<sup>70</sup> Baker (2003) puts forward a theory of lexical categories that does not rely on categorial features, but that grounds the dependency or lack of dependency in the morphology of tense. His argument is that in Arabic the present tense does not require a lexical host while the past tense does. Baker's main hypothesis is that that only verbs project the Spec position, while nominals require a PredP to be predicative, and assign theta-role to the subject. However, Arabic facts when looked closely do not support Baker's analysis. The facts are, rather, more consistent with an analysis that deploys categorial features. For the discussion, see Benmamoun 2008.

projection. It is not surprising, then, that the D-feature of tense can be realized by the person feature of a pronoun.

That the person feature of the pronoun may be an overt realization of the nominal feature of tense may provide a possible explanation for an agreement puzzle that arises in the context of copular constructions. The pronoun that shows up in copular constructions in Anatolian Arabic agrees with the subject in number and gender only. Crucially, it does not agree in person. This can be accounted for as follows. Consider the feature structures of the present and past tenses. The present tense is [+D] while the past tense is [+D] and [+V]. As a nominal element the present tense is expected to display the nominal agreement pattern, namely agreement in number and gender, on a par with adjectives and nouns (cf. Chapter 1). The past tense, by contrast, is both nominal and verbal. As a verbal element we expect it to display the agreement pattern of verbs, namely agreement in person, number, and gender. In other words, T in the present tense has the tense, categorial, and agreement specification in (65a) while T in the past tense has the tense, categorial, and agreement specification in (65b).<sup>71</sup>

(65) a. *Present tense*

[+D, Number, Gender]

b. *Past tense*

[+D, +V, Person, Number, Gender]

In other words, the genuine agreement features in the present tense - that is, those involving agreement between T and the subject - are number and gender. The person

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<sup>71</sup> This approach implicates that two different present tenses are found in SA: the present tense constructions with *kwn* pattern with past tense in terms of its categorial features, and agreement specification, while those with *Pron* exhibits separate properties.

feature is a realization of the D-feature of the present tense. It is not an agreement feature. Needless to say, this account of agreement in the present and past tenses is a first approximation and is highly tentative.

### 3.3. Conclusion

In this chapter I have analyzed the negation in verbal and non-verbal sentences in SA. I have proposed that verbal negation patterns with other Arabic varieties in occurring higher than tense. Non-verbal negation, on the other hand, patterns with surrounding head-final languages, hence non-verbal sentences are head-final, mainly following Akkuş and Benmamoun (2014). I have also suggested analyzing the third-person pronominal which surfaces in the copular constructions in the present tense in Sason Arabic as a realization of the nominal feature of that tense, building on Doron (1983, 1986). The argument is based on the contrast between the behavior of this element and the verbal copula/auxiliary in terms of their syntactic distributions and morphophonological properties. If this is on the right track, it provides the clearest evidence for categorial features as part of the feature structure of tense, and probably other functional categories.

## CHAPTER IV

### SYNTAX OF WORD ORDER VARIATIONS

In this chapter I will discuss the possible derivations of word order alternations, particularly SVO and VSO in SA. I will also compare the derivation of verb-initial configurations (VOS, VSO) with the analyses proposed for Austronesian/Mayan languages to investigate if separate derivations are operative or a single derivation can be offered. The discussion of the functional categories in the previous chapters will assist with one of the most controversial issues in Arabic syntax, that is, the position of the subject. Finally I will examine the basic order between direct and indirect objects.

#### 4.1. Word Orders

In illustrated in Chapter 1, Sason Arabic is a VS(O)/SV(O) language both in matrix and embedded clauses with permutations to these basic orders also being allowed.

- (1) a. kemal qar-a kitab-ad. SVO  
 K read.PAST.3M book-PL  
 ‘Kemal read books.’
- b. qar-a kemal kitab-ad. VSO  
 read.PAST.3M K book-PL
- c. misafir-ad go SV  
 guest-PL came.3PL  
 ‘The guests came.’





- (3) a. kitab-ad qar-en kemal OVS  
 book-PL read.PAST-3M-them K  
 “The books, Kemal read them.”
- b. kemal kitab-ad qar-en SOV  
 K book-PL read.PAST-3M-them
- c. kitab-ad kemal qar-en. OSV  
 book-PL K read.PAST.3M-them

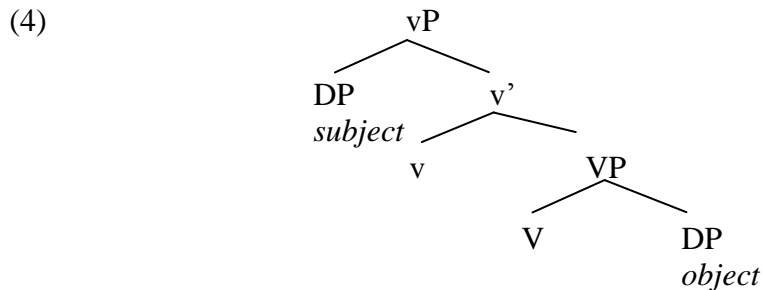
In this chapter, I will focus on the syntactic distribution of subjects, and in particular to the SVO and VSO orders, and investigate the derivation of different word order configurations.

#### 4.2. Subject Position(s)

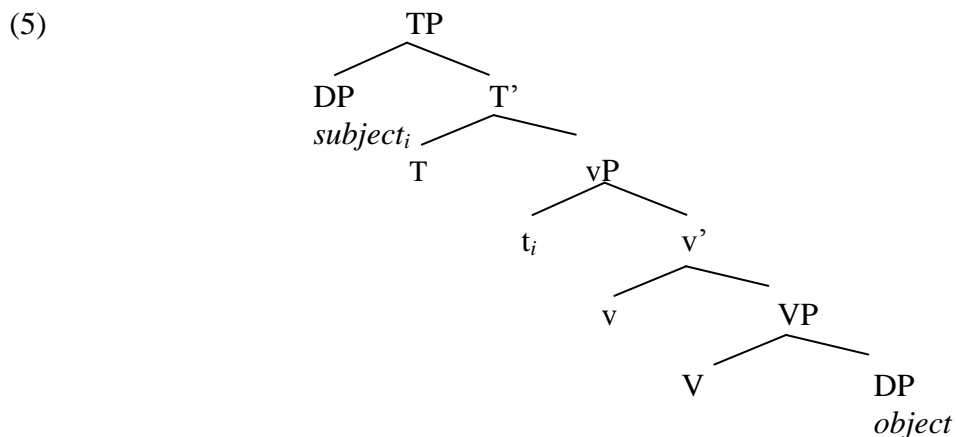
Given the number of positions that the subject can occupy in a sentence, the question that arises is whether all those positions are genuine subject positions. Genuine subject positions are designated as such in the sense that they are reserved for the subject within the A-domain of a clause *à la* Aoun et al. 2010.

Within the Generative Theory, the consensus is that there are at least two positions that genuine subjects occupy (Koopman and Sportiche 1991). One position is

within the thematic shell and the assumption is that a base-generated subject receives its theta-role from the predicate in this position, as illustrated below:



The other position that may host the subject is Spec, TP, the functional category dominating VP.

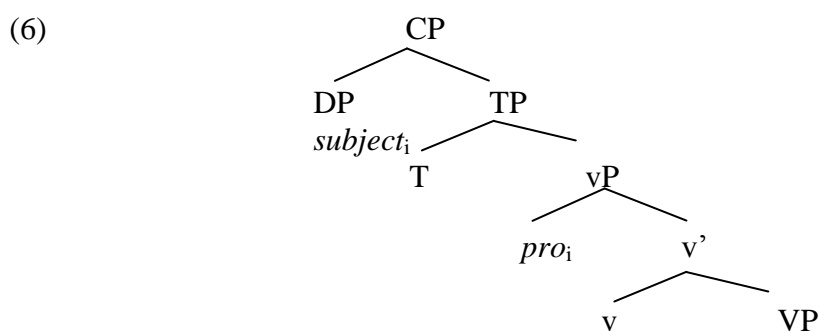


According to one proposal put forth for Arabic, the subject in VSO order is within the VP (or vP) and the Spec, TP is left empty, as in (4). Arabic in this respect would be different from languages like English, where it is assumed that the subject must move from Spec, vP to Spec, TP in order to satisfy the EPP.<sup>72</sup> As far as the preverbal subject is

<sup>72</sup> Note that the status of the EPP (Extended Projection Principle) is controversial within the Generative Syntax. When it was first proposed (Chomsky 1981), it referred to the requirement that sentences must

concerned, Arabic is just like English, where the element in Spec, TP is a genuine subject occupying an A-position (Mohammed 1990, 2000; Benmamoun 2000).

The second hypothesis is that the only genuine overt subject occurs in VSO order, hence the preverbal subject is thus in the  $\bar{A}$ -domain, either as a topic or a clitic-left dislocated element (CLLD) that relates to or binds a pronominal clitic within the A-domain of the clause, as illustrated in (6) leaving out some details (Bakir 1980; Fassi Fehri 1993; Ouhalla 1991, 1994; Demirdache 1991; Aoun et al. 2010). In this respect, English and Arabic are radically different as far as the syntax of subject goes.



Under these hypotheses, I will now discuss the position of subject and the word order in SA.

#### 4.2.1. The Status of Preverbal Subjects

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have subjects, which can be fulfilled by base-generation (of NPs or expletives) or movement of NPs (e.g. passives or subject-to-subject raising constructions). Chomsky (1995) takes it to be the requirement to check the nominal categorical feature [+D] of T. Alexiadou and Anagnostopoulou (1998) argue that the agreement on the verb mainly in *pro*-drop languages is enough to fulfill the EPP, thus movement of the subject may not be necessary. Within recent versions of the Minimalist Program, the EPP refers to a requirement that an overt expression be in the specifier position of a phrase (Spec, TP or Spec, CP) with the appropriate EPP feature (Chomsky 2000).

The aim of this section is to demonstrate the available position(s) of the preverbal subject in SA. In order to do this, I will repeat the TP analysis I assumed in Chapter 2.

I have argued in Section 3.1.2 that V raises to T in Sason Arabic and in the previous chapter that NegP is located above TP. These facts provide us with a testing ground to determine if Spec, TP is available as a subject position. Consider the following example:

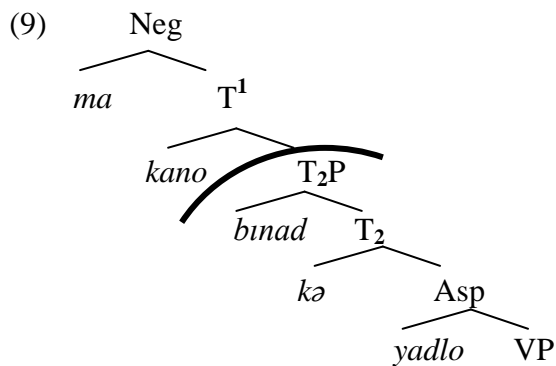
(7) a.     ahmad           mı-k           ya-yel laham.  
           Ahmad           NEG-PAST       3M-eat meat  
           ‘Ahmet wouldn’t eat meat.’

b.       \*mı     ahmad kə-ya-yel     laham.  
           NEG AhmadPAST-3M-eat   meat           (Akkuş 2014)

In the example (7a) the subject precedes negation and tense, whereas in (7b) the subject occurs between the negation and tense, an order which renders the structure ungrammatical. This ungrammaticality illustrates that the subject cannot occupy Spec, TP. However, the following sentence seems to contradict our hypothesis.

(8)       mıs-sari       ma-kano       bınad kə-ya-dlo     dars-en.  
           since-morning NEG-be.PAST.3PL girls PAST-3PL-make homework-their  
           ‘The girls hadn’t been doing homework since morning.’

In (8) it is seen that the subject precedes the tense marker *kə-*, hence making presumably Spec, TP an available position. The crucial point is that in Chapter 2 I argued that complex tenses comprise stacked TPs and the syntactic position of certain elements like *kə-* in languages leads to disambiguation. Note that negation and the past marker *kə-* occupying the lower T2 (which expresses *anteriority* in the sense of GP 1997, Cinque 1999) are not adjacent in (8), in fact there is another tense projection, *kano*, which intervenes, bearing tense and agreement morphology, hence leading to double-past marking.



In Chapter 2, I also argued that the specifier position of tense attaching to negation is unavailable, hence the subject cannot occur there. Then the prediction this analysis makes is that the subject should not be able to occur between the negation and the auxiliary *kano*, either. This prediction is correct:

- (10)            \*mis-sari        ma    binad    kano    kə-yadlo        dars-en.  
                   since-morning NEG girls    were    PAST-3PL-make homework-their

The conclusion is that negation is located above the highest tense projection and the corresponding Spec of TP is absent, whereas subject may occupy the specifier of another TP. This also reflects the general property of Arabic varieties, where Neg, Fin and T (and verb) interact. Based on the distributional evidence (cf. (7-8)), I propose that the preverbal subject can occur in specifier positions of TPs whose heads do not interact with the negative element and in the  $\bar{A}$ -domain, preceding both negation and the verb. The next question that arises is whether the subject is in Spec, NegP or in a higher position? Benmamoun and Al-Asbahi (2013) argue that in San’ani Arabic the subject is in Spec of NegP, possibly to fulfill the EPP requirement that the negative projection host a nominal element. I suggest on the basis of distributional evidence that the preverbal subject is in a higher position and that there is no Spec-head relation between Neg<sup>o</sup> and the subject in SA.<sup>73</sup> In (11) a number of adverbs may intervene between the preverbal subject and the *neg+verb*.

- (11) kemal ams            mīl-qafa    le gīze-ma    amīl    muhaqqaq    ma-bax-a  
 K        yesterday from-after    of such-one    work definitely    NEG-ailed-3M  
 mī        dars.  
 from    class  
 ‘After so much work, Kemal definitely didn’t fail the class yesterday.’

The ordering of preverbal subject, adverbs and negation with respect to one another is strong evidence that negation and subject are not within the same maximal projection,

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<sup>73</sup> This idea was put forward in Alexiadou and Anagnostopoulou (A&A, 1998) for some other null-subject languages that show SVO-VSO alternation.

under the assumption that adverbs mark the edge of maximal projections and may not adjoin to the X-bar level (see A&A, 1998 and references therein).

Another relevant observation is that subjects in SA can precede both the complementizer and *if*-clauses (12a) or intervene between them (12b).

(12) a.   ahmad ta     le     mı-k-içi,                   çıxo     kə-i-xul-ni.  
           A     if     that   NEG-3M.PAST.come   already PAST-3M-tell-me  
           ‘If Ahmet weren’t coming, he would tell me.’

          b.   ta     ahmad le     mı-k-içi,                   çıxo     kə-i-xul-ni.  
           if     Ahmad that   NEG-3M.PAST.come   already PAST-3M-tell-me

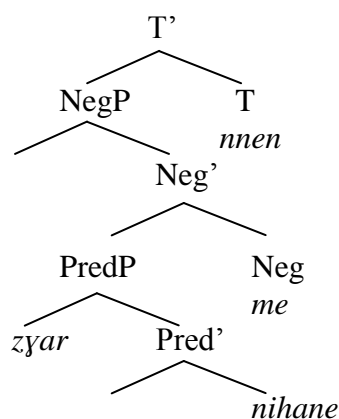
On the basis of the relative position of subject and adverbs, I argue that the preverbal (or more accurately, pre-negational) subject position is in the  $\bar{A}$ -domain (cf. Fassi Fehri 1993, Aoun et al. 2010).

Notice that the situation is different in the context of non-verbal sentences, which exhibit head-final properties (cf. Chapter 3). Accordingly, the structure for negative verbless sentences is as follows, the subject being located in Spec, PredP.

(13) a.   zıyar               nihane me-nnen  
           children       here   NEG.COP.3PL  
           ‘The children aren’t here.’

b.        





The scope properties of the subject favor this approach.<sup>74</sup>

- (14) kul zyer nihane muu  
 every child here NEG.Pron.3M  
 ‘Every child isn’t here.’ neg >> every; \*every >> neg

<sup>74</sup> One might argue that what we have is an instance of V-raising both with preverbal and postverbal subjects. I believe that this is hard to defend for several reasons. First, since we are assuming a head-final structure for non-verbal constructions following Akkuş and Benmamoun (2014), predicate raising in a head-final construction is hard to defend since there is no evidence from the string of elements (adverb, verb) to support a raising analysis. Second, another possible argument for V-raising, namely NPI-licensing, does not provide a definitive answer either because as Han et al. 2007 points out, the scope of negation and NPI-licensing domain do not always go together. This is because SA speakers do not agree on judgements concerning scope of negation and argument QPs (subject QPs in nominal sentences), similar to the situation in Korean. Still, the clearest evidence against V-raising comes from Coordinate Structures. Consider the following:

- (i) [kemal tawwil], [naze raxu-e] ye.  
 K tall.M N sick-F Pron.SG  
 ‘Kemal is tall, and Naze is sick.’

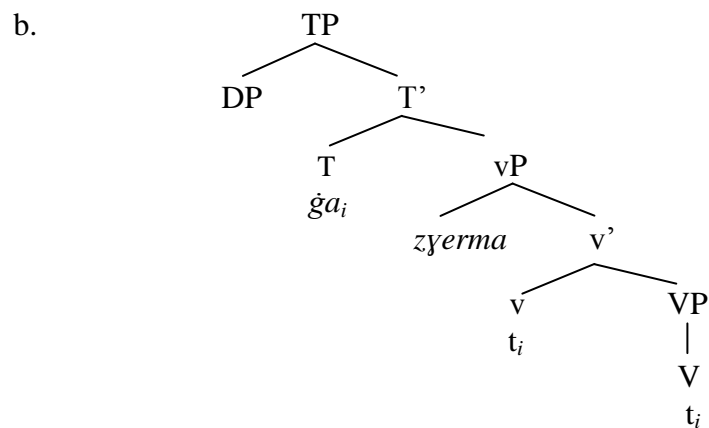
Note that the Pron is specified only on the predicate in the last conjunct, but it conjoins over two separate phrases. Assume that the subjects are in the respective Spec, PredP (see (13b)), hence *ye* cannot be combining with the predicates through V-raising. This is so because V-raising would violate the Coordinate Structure Constraint. The only possibility then is that the Pron cliticizes to phrases for which they subcategorize for in post-syntactic component, i.e. morphology, similar to what Yoon (1994) proposes for Korean in his discussion against V-raising.

In brief, the syntax of functional categories in SA, and the distributional facts lend support for an analysis that take the preverbal subject to be either in the lower TP or in the Left Periphery. In non-verbal sentences, on the other hand, the subject is in Spec, PredP. Now let us turn to the analysis of postverbal subjects.

#### 4.2.2. The Status of Postverbal Subjects

Regarding the position of the subject in VSO order, I will assume with Fassi Fehri 1993, Mohammad 2000, Aoun et al. 2010 that it is in Spec, VP (or Spec, vP) and the VSO order can be derived by moving the verb to T, leaving the subject in its base position, as illustrated in (15).<sup>75</sup>

- (15) a.      ġa              zyer-ma  
               came.3M      boy-a  
               ‘A boy came.’



<sup>75</sup> See Benmamoun (2013) for a survey of VSO word order, mainly in Arabic varieties.

Note that the postverbal subject with the indefinite element *-ma* ‘a’ most naturally gets an existential reading, which can be accounted by Diesing’s (1992) Mapping Hypothesis, which states that existential interpretations arise by the existential closure applying to VPs.

A related observation is the expletive constructions. SA has the expletive particle that occurs in the context of indefinite subjects (see fn. 42). The standard account is that the expletive particle is in TP, and the associate is in Spec, vP (Chomsky 1995, 2000).

- (16)            ifi        sabi-ma        fi beyt  
                  there   boy-a            in house  
                  ‘There is a boy in the house.’

Regarding the position of postverbal subject in non-verbal sentences, I will argue that the easiest way to account for this word order variation would be to argue for rightward adjunction of the subject, an operation which would correlate with the function of postverbal NPs, as has been argued for several languages.<sup>76</sup> Postverbal constituents in SA convey backgrounded information, usually marked by an intonational break or pause from the rest of the clause. Consider the following:

- (17)            nihane-nen    zyār  
                  here-PRON.3PL children

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<sup>76</sup> For right adjunction in Turkish, see Taylan (1984), Kornfilt (1996), Kural (1997).

‘The children are here.’

The following example illustrates that the postverbal subject also must be within the scope of negation. I take this to argue that it undergoes reconstruction for scope purposes.

- (18)           nihane muu           kul   zyer  
          here   NEG.Pron.3M every child  
          ‘Every child isn’t here.’                           neg >> every; \*every >> neg

Before proceeding with the discussion of marked word orders, I would like to dwell on an alternative analysis that has been proposed for verb-initial languages/configurations and compare it with the derivation suggested for Arabic. VSO and VOS are the two word orders in which the verb/predicate is the first constituent. In addition to the VSO order, we have stated that VOS is also encountered in SA. Consider the following:

- (19)           qar-a           kitab-ad       kemal  
          read.PAST.3M book-PL       K  
          ‘Kemal read books.’

Hence similar to other verb-initial languages, SA also exhibits VSO and VOS orders. An obvious hypothesis would be to argue that the derivation patterns the same way in all these languages. In fact, V-raising has been proposed and defended in a number of

languages along with Arabic.<sup>77</sup> However, in the growing body of literature on Austronesian and Mayan languages, the currently popular approach is that VOS/VSO orders are not base-generated, but are derived via phrasal fronting of the vP predicate (resulting in VOS) or remnant verb phrase (resulting in VSO) over the subject to the specifier of TP.<sup>78</sup> This analysis draws a distinction between languages like Arabic and Irish on one side as *V-Raising*, and Austronesian and Mayan languages as *vP/VP-Raising*, on the other.

Oda (2005:118-119) lists a number of differences between V-Raising and VP-Raising languages, among them is the argument that only V-Raising languages can have rich verbal agreement. This is a consequence of their satisfying the EPP via  $\phi$ -features on the verb that moves to T (Alexiadou & Anagnostopoulou 1998). Bobaljik (2002) asserts that rich verbal inflection entails verb raising. If a VP-Raising language were to have rich inflection, the verb embedded within the VP in Spec, TP would not be in a structural position from which it could raise to T and check  $\phi$ -features. Therefore, VP-raising languages cannot have rich agreement. Hence the inflection determines the strategy of satisfying the EPP: languages with rich inflection, including SA, satisfies the EPP via verb raising, while Austronesian/Mayan languages does it via VP-raising to Spec, TP. In other words, predicate fronting is an EPP reflex.

Potsdam (2009) argues for another potential universal in addition to Oda's hypotheses: Languages that derive verb-initial word order by VP raising do not have *wh*-

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<sup>77</sup> See McCloskey 1996 for Irish, Otsuka 2000 for Tongan, Aldridge 2004 for Tagalog, among others.

<sup>78</sup> See Rackowski 1998 for Tagalog, Pearson 2001 and Rackowski and Travis 2000 on Malagasy, Massam 2000 on Niuean, Lee 2000 on Zapotec, Aldridge 2004 for Seediq, Coon 2010 on Chol, among many others.

movement. Following this hypothesis, one would predict SA not to have *wh*-movement if it was a VP-raising language, rather than a V-raising language, contrary to the fact.

(20) a. kemal miş maitebe

Kemal went.3M school

‘Kemal went to school.’

b. kemal amma miş

Kemal where went.3M

‘Where did Kemal go to?’

Therefore, we are led to conclude that verb-initiality in SA is not the result of VP-raising, but V-raising in the case of VSO. One crucial point is that VOS in SA is not a neutral word order, unlike the situation in Austronesian/Mayan languages, and is used in limited contexts. This also hints that VOS order is not derived via the raising of the verb phrase to Spec, TP, but to a higher clause associated with discourse functions, namely Spec, CP. This analysis is on the right track, because VOS order is preferred when the verb phrase is fronted for focus purposes.

(21) qal-ni le ma-ayal şı kemal, şarab çaye azar-u

told.3M-me that NEG-ate.3Mfood Kemal, drank.3M tea instead

‘He told me that Kemal didn’t eat, but drank tea instead.’

The focus interpretation on the fronted phrase is corroborated by the focus denoting elements (emphatic particle) such as *watu* ‘only’, where the most natural way is to front the VP with the focus particle.

- (22)            addel            dars-u            watu    ahmad, (ma-nazzef            beyt)  
                   did.3M            homework-his only    Ahmad NEG-cleaned.3M    house  
                   ‘Ahmad only did his homework, (he didn’t clean the house.)’

In brief, we have looked at the derivation of verb-initial orders in different languages, and concluded that in SA the derivation of VSO/VOS orders differ from the derivation process in Austronesian/Mayan languages. In SA, VSO is derived via V-raising to T, which fulfills the EPP, leaving the subject in its base position, while VOS is the result of the focus fronting of the predicate phrase. In Austronesian/Mayan languages, however, both VSO and VOS orders are considered to be the result of (remnant) predicate raising to Spec, TP to satisfy the EPP with a Pred-feature.

#### 4.2.3. The Syntax of Marked Word Orders

As described in Chapter 1, the orders illustrated in (23) are not allowed in Sason Arabic, as in many other Arabic dialects.

- (23) a.            \*kitab-ad            qar-a            kemal            OVS  
                   book-PL            read.PAST-3M K  
                   ‘Kemal read the books.’

- b. \*kitab-ad kemal qar-a. OSV  
 book-PL K read.PAST.3M
- c. \*kemal kitab-ad qar-a SOV  
 K book-PL read.PAST-3M

In (23a) the object precedes the V-S sequence while in (23b) it precedes the S-V sequence. In (23c), the object occurs between the subject and the verb. All these orders are not acceptable in Moroccan Arabic (Benmamoun 2000), Lebanese Arabic (Aoun et al. 2010) and, as Mohammad (2000) also shows, Palestinian Arabic.

However, the OVS, OSV, and SOV orders are possible if the object is resumed by a pronominal clitic/agreement inflection on the verb, a construction known as Clitic Left Dislocation (CLLD). Below I will discuss the derivation of CLLDed NPs in detail.

- (24) a. kitab-ad qar-en kemal OVS  
 book-PL read.PAST-3M-them K  
 “The books, Kemal read them.”
- b. kemal kitab-ad qar-en SOV  
 K book-PL read.PAST-3M-them
- c. kitab-ad kemal qar-en. OSV  
 book-PL K read.PAST.3M-them



It should be noted that the OVS and SOV orders illustrated in (23) also become acceptable if the object is contrastively focused. In such contexts, the object receives focal stress and is not related to a pronominal clitic on the verb. The focused phrase *KITABAD* ‘the books’ is distinguished prosodically by bearing an extra-heavy pitch accent (indicated in small caps), which is a typical way to mark contrastive foci.

- (25) a.      KITAB-AD      qar-a      kemal      OVS  
                  book-PL      read.PAST-3M K  
                  ‘Kemal read the books.’
- b.      kemal      KITAB-AD      qar-a      SOV  
                  K      book-PL      read.PAST-3M

It is possible to attach a phrase introduced by *laa* ‘not’ as a continuation to either clause in (25), thus excluding the other possible alternative that might be provided (i.e., *dargiyad* ‘magazines’), but it is infelicitous to attach a phrase that includes this other alternative.

- (26) a.      KITAB-AD      qar-a      kemal, dargiyad      laa.  
                  book-PL      read.PAST-3M K      magazine-PL not  
                  ‘Kemal read the books, not the magazines.’
- b.      \*KITAB-AD      qar-a      kemal, u      dargiyad      (inġe).

book-PL read.PAST-3M K and magazine-PL too  
 ‘Kemal read the books, and the magazines as well.’

OSV order, on the other hand, is ungrammatical when the object is focused.

(27) \*KITAB-AD kemal qar-a. OSV  
 book-PL K read.PAST.3M

The ungrammaticality is consistent with Shlonsky’s (2000) adjacency requirement, a constraint that states that in Arabic focus phrases need to be adjacent to the verb (see also Bakir 1980). This adjacency requirement also accounts for subject–verb inversion in Standard Arabic *wh*-questions under the assumption that those constructions are a subclass of focus constructions (É. Kiss 1998, 2002; Ouhalla 1994).

(28) a. kemal šine qar-a?  
 K what read.PAST.3M  
 ‘What did Kemal read?’  
 b. \*šine kemal qar-a?  
 what K read.PAST.3M

The same holds for embedded clauses as well. It should be noted that even in Arabic, *wh*-movement to a position below the complementizer (corresponding to Force in split-

CP hypothesis) takes place, however it must be before the subject. Consider the following from Moroccan Arabic:

- (29) r-rajel lli m'a men kunt (Abbas Benmamoun, p.c.)  
 the-men that with whom I was  
 'the men with whom I was'

Below is an SA embedded clause that shows that *wh*-phrase must be preceded by the subject.

- (30) a. mō-re leyla wara ande miş-e  
 NEG-1S.know L with whom went-3F  
 'I don't know with whom Leyla went.'

- b. ??/\* mō-re wara ande leyla mişe.  
 NEG-1S.know with whom L went-3F

The data suggest that no constituent can intervene between the verb and the f-phrase or *wh*-phrase. I take this fact to argue that in certain circumstances the lower TopP is not instantiated in SA (Rizzi, 1997), which makes the fronting of a *wh*-phrase or an f-phrase

across a CLLDed phrase impossible. As discussed in Chapter 2, Rizzi assumes a split-CP analysis, as illustrated below:<sup>79</sup>

(31) ForceP > TopP > FocP > TopP > FinP

ForceP marks the illocutionary force of the clause, i.e. specifies if it is a declarative, interrogative, or any other type of clause. FocP hosts foci, *wh*-phrases and it is flanked by two topic phrases (TopP), which hosts CLLDed elements. FinP marks the finiteness of the clause. Following Aoun et al. (2010) I will assume that FinP stands for TP, that is, in close interaction with tense, which may result in merger or conflation. In the light of this articulated CP, focus phrases and *wh*-phrases occupy the Spec, FocP. Note that both types of phrases display island effects: a focused phrase or *wh*-phrase in SA may not be related to a gap within an island.

Sason Arabic patterns with Standard Arabic in not instantiating the lower TopP and behaves differently from Lebanese Arabic. Aoun and Benmamoun (1998) argue that the following generalization holds in Lebanese Arabic (LA): a *wh*-phrase or an *f*-phrase can be fronted across a CLLDed element derived only by movement and that these phrases cannot be fronted across a base-generated CLLDed element (see also Aoun et al. 2010). This is based on the fact that in LA matrix clauses the CLLDed NP can be found before and after C (The CLLDed NP and the clitic element are italicized):

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<sup>79</sup> Shlonsky (2000) offers the split-CP analysis for Lebanese Arabic.

(32) a. *naadya ju ʔaalət-la l-mʕallme?* (Aoun and Benmamoun's (6))

N what said.3F-her.DAT the-teacher

'Nadia, what did the teacher say to her?'

b. *ju Naadya ʔaalət-la l-mʕallme?*

what N said.3F-her.DAT the-teacher

'What Nadia, did the teacher say to her?'

According to Aoun and Benmamoun's hypothesis, CLLDed elements do not display a uniform behavior in that the CLLDed NP in (32a) is base-generated, while the one in (32b) is derived by movement. They make use of reconstruction to support their claim, since reconstruction is a property of chains: it applies only to elements generated by movement (Hornstein 1984, Chomsky 1993).

This line of argumentation implies that CLLDed elements in SA are base-generated, since they must precede a *wh*-phrase or an *f*-phrase. Consider the following:

(33) a. *naze šine qal-la muallim?*

N what said.3M-her teacher

'Naze, what did the teacher say to her?'

b. *\*šine naze qal-la muallim?*

what N said.3M-her teacher

(34) a. *naze MUALLIM adaš-a*

N teacher saw.3M-her

‘Naze, the teacher saw her.’

- b. \*MUALLIM *naze* adaš-a  
teacher N saw.3M-her

The ordering restriction is retained even when the CLLDed NP is not separated from its corresponding clitic by an island.

- (35) a. *naze* šine (simat le) qalo-lla?  
Naze what (heard.2M that said.3PL-her  
‘Naze, what did (you hear that) they told her?’

- b. \*šine *naze* (simat le) qalo-lla?  
what Naze (heard.2M that said.3PL-her  
‘What Naze, did (you hear that) they told her?’

Note that the relation between the CLLDed NP and the clitic can violate island conditions such as the Adjunct Condition (36), the Complex NP Constraint (37), and the *Wh*-Island Constraint (38).

- (36) sima-tu *kemal* mişit qıddam le ıstavalt waro-*u*  
heard-1M K went.2M before that talked.2M with-him  
‘I heard that Kemal, you left before talking to him.’

(37)           sima-tu           le       *ali bint*   iřtaxalt       wara sabi le   adař-a.  
 heard-1M       that   this girl   talked.2M   with boy   that saw.3M-her  
 ‘I heard that this girl, you talked with the boy who saw her.’

(38)           sima-tu           *naze*   ya-rfo           iř       sabi   adař-a.  
 heard-1M       N       3PL-know   which boy   saw.3M-her  
 ‘I heard that Naze, they know which boy saw her.’

As these examples clearly illustrate, CLLD constructions consistently violate island conditions.

The relevant configurations are given in (39).

- (39) a.       CLLDed-NP<sub>*i*</sub> ... [Adjunct ... X +Clitic<sub>*i*</sub>]  
 b.       CLLDed-NP<sub>*i*</sub> ... [CNP ... X + Clitic<sub>*i*</sub>]  
 c.       CLLDed-NP<sub>*i*</sub> ... [wh ... X + Clitic<sub>*i*</sub>]

Focus phrases and *wh*-interrogatives related to gaps, on the other hand, display island effects: an *f*-phrase or a *wh*-phrase may not be related to a gap within an adjunct clause (40a), a complex NP (40b), or a *wh*-island (40c).

(40) a.       \*sima-tu       le       *naze*   talat           qıddam le   adařt  
 heard-1M       that   Naze   left.2M       before that   saw.2M  
 ‘I heard that Naze, you left without seeing.’

- b. \*sima-tu le *ala kitab* ištaxalt wara recel le kara.  
 heard-1M that this book talked.2M with man that wrote.3M  
 ‘I heard that this book, you talked with the man who wrote.’
- c. \*sima-tu *naze* ya-rfo iŝ sabi adaŝ.  
 heard-1M N 3PL-know which boy saw.3M  
 ‘I heard that Naze, they know which boy saw.’

The interim summary is that CLLD constructions related to clitics are not subject to island conditions, whereas focus constructions and *wh*-interrogatives involving gaps, obey various island effects. These facts can be accounted for if we assume that *f*-phrases and *wh*-phrases are generated by movement and move to FocP, while CLLDed elements related to clitics are base-generated, presumably in the higher TopP. This assumption is consistent with standard analyses of  $\bar{A}$ -movement in Arabic and other languages. Since they violate various island conditions, constructions with the resumptive pronoun strategy are base-generated (Ross 1967, Cinque 1990).

Now let us discuss the interaction of *wh*-movement, focus fronting with CLLD. The example (35a) shows that it is possible to have a CLLDed NP followed by a *wh*-phrase if it is not separated from its corresponding clitic by an island. The construction in (32a) significantly contrasts with the ones in (41) where the *wh*-phrase follows a CLLDed NP, related to a clitic within a complex NP island, or a *wh*-island.

- (41) a. \**naze* ŝine qalo ŝa sabi le adaŝ-*a*? (complex NP island)



Naze what said.3PL to boy that saw.3M-her

‘Naze, what did they tell the boy who saw her?’

b. \**naze* şa ande ıstaxbirto ta kariim adaş-*a*? (wh-island)

N to who asked.2PL whether K saw.3M-her

‘Naze, who did you ask whether Kerim saw her?’

The main generalizations are represented in (42).

(42) a. CLLDed-NP<sub>*i*...</sub> Wh/Focus<sub>*k*</sub> ... V + (Dat. or Acc.)Clitic<sub>*i*...</sub> t<sub>*k*</sub>

b. \*CLLDed-NP<sub>*i*...</sub> Wh/Focus<sub>*k*</sub> ... [island ...Clitic<sub>*i*...</sub> ]... t<sub>*k*</sub><sup>80</sup>

As illustrated in (42), the relation between a CLLDed NP and the corresponding clitic is retained when the *wh*-phrase follows the CLLDed NP. However, the relation between the two is consistently ruled out when the CLLDed NP is related to a clitic within an island.

Lacking a definitive answer with respect to these facts and leaving a more comprehensive analysis for future research, my tentative hypothesis is that the cooccurrence of an island, which contains a clitic related to the CLLDed element, with a *wh*-phrase or an *f*-phrase (both quantificational) seems to result in some sort of

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<sup>80</sup> Note that in the representations in (37), the link between the fronted *wh*-phrase and its trace, and the one between the CLLDed element and its corresponding clitic, cross paths. Hence, the unacceptability of those sentences cannot be attributed to a prohibition against crossing since representation is grammatical, while the other one is not.

interception. This might also be regarded as a crossing dependency, which may be adding to the degradation of the sentence. It appears that the dependency cannot cross a *wh*-phrase and an island, reminiscent of subjacency effects, though an odd one.

Given the absence of the lower Spec, TopP, one argument could be that unlike Lebanese Arabic, focus fronting in SA is ruled out regardless of whether the CLLDed element is related a clitic within or without an island. Hence the higher Spec, TopP might be hosting CLLDed elements with different derivations. We have seen that CLLD constructions violate various conditions on movement, which could be explained with an analysis according to which the base-generated CLLDed element is related to a pronominal clitic, as illustrated in (43).

(43) CLLDed-NP<sub>i</sub>.. [<sub>island</sub> ... pronoun<sub>j</sub>...

As Aoun and Benmamoun point out, CLLD constructions that do not involve islands (42a) could actually correspond to two different representations: one where the clitic is coindexed with a lexical NP that can later undergo movement (42a), and another where the clitic is coindexed with a null pronominal that is related to a base-generated CLLDed NP (42b).

- (44) a. CLLDed-NP<sub>i</sub>.. .t<sub>i</sub>-X + Clitic  
b. CLLDed-NP<sub>i</sub>... .pro<sub>i</sub>-X + Clitic

Applying the reconstruction test, we would expect that the representation in (44a) to be unavailable for CLLD constructions since under no circumstances can f-phrases or *wh*-phrases cross over the CLLDed NP in SA. Consider the following contrast:

- (45) a.    *ibn-[a]<sub>i</sub> tawwil, tarfo*            *le*        [*kul bint*]<sub>i</sub> *basə-du*  
           son-her tall        2PL-know    that    every girl    kissed.3F-him  
           “Her tall son, you know that every girl kissed him.”
- b.    \**ibn-[a]<sub>i</sub> tawwil, talat-o qıddam*    *le*        [*kul bint*]<sub>i</sub>    *basə-du*  
           son-her tall        left-2PL before    that    every girl    kissed.3F-him  
           “Her tall son, you left before every girl kissed him.”

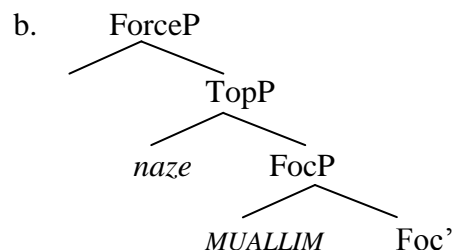
In (45a), the quantifier phrase (QP) *kul bint* ‘every girl’ can bind the pronoun within the CLLDed NP *ibna tawwil* ‘her tall son’. Under the assumption that bound pronouns must be c-commanded at LF by the operators that bind them (Hornstein and Weinberg 1990), the relevant reading in (45a) then follows from the reconstruction of the CLLDed NP containing the bound pronoun below the subject QP. As expected, the pronoun in (45b) cannot be interpreted as bound by the QP within the adjunct clause. This is because the CLLDed NP containing the pronoun to be bound is related to a clitic within an island. Since extraction from islands is not possible, the CLLDed NP in (45b) does not reconstruct under the QP since reconstruction is a property of chains created by movement.

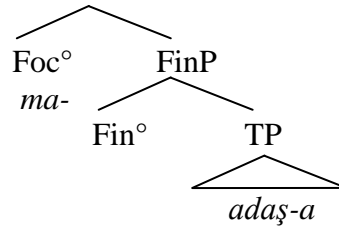
Thus, although Lebanese Arabic and Sason Arabic differ in allowing the lower TopP, we reach the same conclusion regarding CLLD constructions, in that they do not

behave uniformly with respect to reconstruction: CLLDed elements that are not separated from their corresponding clitics by an island reconstruct; others do not. Aoun and Benmamoun (1998) account for this observation by linking it to the presence of movement in constructions that display reconstruction and its absence from those that don't. Given these observations, I hypothesize that the behavior of CLLD with respect to reconstruction is not necessarily tied to allowing an f-phrase or a *wh*-phrase crossing over it. Since the lower Spec, TopP is not instantiated due to the adjacency requirement in SA, CLLDed NPs of different derivations end up occupying the same position. Needless to say, this account of the interaction between CLLDed NPs, focus phrases and *wh*-interrogatives is a first approximation and is highly tentative and calls for further consideration.

In brief, we have seen that in SA the orders OVS, OSV, and SOV are allowed only if the object is resumed by a clitic on the verb, whereas OVS and SOV orders are also acceptable if the object is focused. Moreover, a CLLDed NP must precede an f-phrase or *wh*-phrase. Let us illustrate this on a tree below:

- (46) a.    *naze*    MUALLIM    ma-adaš-*a*  
           N        teacher        NEG-saw.3M-her  
           ‘Naze, the teacher didn’t see her.’





A related observation for the movement analysis of the lexical NP in CLLD constructions concerns the dative-double object constructions in Sason Arabic, where dative structure (47a) alternates with the double object construction (48a), and the locality condition is respected.<sup>81</sup>

- (47) a.    oratman ku    i-qarri    l-ala    kitab    ša herdem  
teacher    aux.3M 3M-make read    the-this    book    to H  
‘The teacher is making Herdem read this book.’
- b.    [lala    kitab]<sub>i</sub> oratman ku    i-qarri-[**u**]<sub>i</sub>    ša herdem.  
the-this    book    teacher    aux.3M    3M-make read-it    to H  
‘This book, the teacher is making Herdem read it.’
- c.    \*[ša herdem]<sub>i</sub> oratman ku    i-qarri-[**a**]<sub>i</sub>    l-ala    kitab  
to H    teacher    aux.3M    3M-make read-her    the-this    book
- (48) a.    oratman ku    i-qarri    herdem l-ala    kitab  
teacher    aux.3M 3M-make read    H    the-this    book

<sup>81</sup> This constraint was first noticed by Balkız Öztürk during a data-elicitation session in the Field Methods course taught at Boğaziçi University.

‘The teacher is making Herdem read this book.’

- b. [herdem]<sub>i</sub>      oratman ku      i-qarri-[a]<sub>i</sub>      l-ala kitab.  
H                    teacher aux.3M 3M-make read-her the-this book  
‘Herdem, the teacher is making her read this book.’

- c. \*[lala kitab]<sub>i</sub>      oratman ku      i-qarri-[u]<sub>i</sub>      herdem  
the-this book      teacher aux.3M      3M-make read-it H

The examples illustrate that the locality constraint is obeyed in CLLD constructions.

This is analogous to locality accounts proposed for English passivization, an instance of A-movement. Consider the passivization in the following double-object construction in English:

- (49) a. Alexandra gave Isaac a kiss.  
b. Isaac was given a kiss.  
c. \*A kiss was given Isaac.

Locality-based accounts of this construction explain the differences in terms of the relative ordering of the theme and the goal.<sup>82</sup> Under such accounts, in languages like

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<sup>82</sup> See Larson (1988) for a case-theoretic account of this asymmetric passivization. Bruening (2001), on the other hand, attributes the scope freezing effects observed in double object constructions in English to Superiority, which implies locality.

English only the higher argument, i.e. goal can be passivized, otherwise, passivization of the lower argument (theme) causes a violation of locality. Following in essence the locality account suggested for passivization (A-movement), we could propose that CLLD, an instance of  $\bar{A}$ -movement also obeys locality. For instance, in (48c) *herdem* is higher in the structure, hence *lala kitab* ‘this book’ cannot skip over it to be CLLDed. This line of argumentation would correspond to the configuration in (44a), where the clitic is coindexed with a lexical NP that can later undergo movement.

In the next section, I discuss the basic order in double object constructions in the light of the binding test.

#### 4.3. Basic Word Order in Dative Constructions

In the previous section, we have seen that in causative constructions, SA exhibits dative-double object alternation. However, in neutral contexts, this alternation is optional, in other words, the theme and the goal can occur in either position.

(50) a.    ali     ād-a            kitab    şa naze.

A        gave-3M        book    to N

‘Ali gave book(s) to Naze.’

b.        ali     ād-a            şa naze        kitab.

A        gave-3M        to N            book

‘Ali gave book(s) to Naze.’

The theme>goal order is much more widely preferred among native speakers, similar to what has been observed in Turkish (Kornfilt 2003, Öztürk 2005). This raises the question of what the underlying order of theme and goal is in SA. In fact, several accounts have been proposed for such structures in scrambling languages. For example, in Japanese, Yatsushiro 1999 (as cited in Öztürk, 2005) based on the reconstruction properties, proposes that the goal>theme order is the basic one.

- (51) a. Taroo-ga dareka-ni dono-nimotu-mo okutta. (Öztürk 2005:152)  
 Taro-nom someone-dat every-package sent  
 ‘Taro sent someone every package.’  
 (some>every, \*every>some)

- b. Taroo-ga dono-nimotu-mo<sub>i</sub> dareka-ni t<sub>i</sub> okutta.  
 Taro-nom every-package someone-dat sent  
 ‘Taro sent someone every package’  
 (some>every, every>some)

Since there is scope ambiguity in the theme>goal order, it is assumed that the theme is originally in a lower position than the goal, where it reconstructs for scope purposes.

However, Miyagawa and Tsujiko (2004), on the other hand, propose that there are two separate base positions for dative-marked goal arguments in Japanese:

- (52) a. high goal (possessive) ... low goal (locative) ... theme  
 b. high goal (possessive) ... theme ... low goal (locative)





(55) a.    adi-tu            şa kul sabi<sub>i</sub>    kitab-u<sub>i/j</sub>.  
           gave-1M        to every boy    book-his  
           ‘I gave every boy his book.’

          b.    adi-tu            kitab-u\*<sub>i/j</sub>    şa kul sabi<sub>i</sub>  
           gave-1M        book-his        to every boy  
           ‘I gave every boy his book.’

As seen in (55a) the goal can bind the theme when the theme follows it. When the theme is scrambled to a position where it precedes the goal, on the other hand, the goal cannot bind the theme in the surface order given in (55b), as this is an instance of A-scrambling. This also relates to the ordering in (47) where the same A-scrambling is observed. This follows from the general phrase structure of SA defended in this work, since the postverbal position is where the arguments are base-generated, and preverbal position is the  $\bar{A}$ -domain.

Some goals like *azar* ‘place’, *babe* ‘door’ when used with verbs like *ht* ‘put’ do not usually need a preposition, and can be used on their own. In the neutral order, the theme precedes the goal, which is inanimate, as in (56a), and the goal>theme order leads to ungrammaticality.

(56) a.    kemal hat            kitab<sub>i</sub> azar-u<sub>i/j</sub>  
           K        put.3M        book    place-3poss  
           ‘Kemal put the book to his/its place.’

- b. kemal hat azar-u\*<sub>i/j</sub> kitab<sub>i</sub>  
 K put.3M place-3poss book  
 ‘Kemal put the book to his/\*its place.’

The ungrammaticality in (56b) can be attributed to the lack of reconstruction due to A-scrambling. Note that it is not possible to introduce a focused phrase in SA in this word order configuration since SA requires focus fronting, unlike Turkish.

Based on the reconstruction facts, I argue that similar to Japanese and Turkish, SA also has two separate goal positions: the one expressing possession is above the theme, whereas the one with the locative interpretation below the theme.

To summarize, in this chapter I have looked at the basic word order VSO and SVO, along with other word order configurations allowed under certain conditions. The orders OVS, OSV, and SOV are acceptable if the object is resumed by a pronominal clitic on the verb, a construction known as CLLD. Moreover, SOV and OVS orders are possible also when the object is contrastively focused. OSV order, on the other hand, is ungrammatical when the object is focused. This is accounted by the analysis that a focused phrase must be adjacent to the verb, hence disallowing the instantiation of the lower TopP. This also means that a CLLDed NP must precede an *f*-phrase or *wh*-phrase in the structure. I also examined the nature of the CLLDed NPs and concluded that it is conceivable to propose that while CLLDed NPs that are related to a clitic within an island are base-generated in the Left Periphery, those without an island can be derived via movement, relying on reconstruction effects and locality constraints. Finally, I investigated the basic word order between the goal and the theme. Similar to Japanese

and Turkish, I suggested that SA has two separate goal positions, sensitive to the nature of the goal, i.e. if it expresses possession or location.

CHAPTER V

CONCLUSION

This thesis has attempted to examine the phrase structure of Sason Arabic, one of the so-called *peripheral* Arabic dialects by mainly focusing on the functional categories within the framework of Chomsky's (1995, 2000, 2001) Minimalist Program. The study was conducted in a comparative fashion with other well-studied, *non-peripheral* Arabic varieties to highlight the differences and similarities among them. It also referred to the surrounding dominant languages to demonstrate the influence of contact languages on the syntactic structure of SA. The main enquiries investigated in the thesis are: (i) the internal structure of the tense category in SA, (ii) the position of negation with respect to tense in verbal and non-verbal sentences, (iii) the syntax of word order variations in the light of their interactions with the functional projections. These questions were analyzed in separate, but intertwined chapters, which complement one another.

Chapter 1 briefly reviews the main premises of the Chomsky's Minimalist Program (1995, 2000, 2001), theoretical framework within which this study is couched. It also describes the general properties of SA, to establish background information for the theoretical analyses to follow in the subsequent chapters.

Chapter 2 deals with the tense category and the verbal morphology in matrix clauses in SA, with the aim of discussing the morpho-syntactic properties of elements that can occupy the tense projection. The morphology of SA and several factors have led me to suggest an alternative analysis that takes the suffixal person agreement to be an indication of tense, mainly following Benmamoun (2000). The main motivation for choosing the latter alternative is the realization of simple past tense.

The purpose was to account for the instances of tense syncretism in SA due to its distinct morphological properties and the shifting function of the present morphemes,

e.g. *kwn*, namely that *(kə)+perfective verb* cannot be embedded under *kwn* to form a past perfect reading.

- (1)            \*bahalče kan            (kə)-knam,    le    ğit  
                  already be.3M        PAST-slept.3M that came.2M  
*Intended:* ‘He had already slept, when you came.’

The significance of this chapter is that the previous application of the model (Reichenbach 1947, GP 1997) by Fassi Fehri 2000/2004 aimed to account for the ambiguity between an absolute tense and a complex tense, e.g. simple past and present perfect, respectively. This chapter extends this model to explain a syncretism between two complex tenses. I have argued that this was made possible due to the morphophonological properties of SA.

Chapter 3 discusses another functional category, namely negation, both in the contexts of verbal and non-verbal sentences in detail. I have concluded that the relative order of negation, tense, and the predicate does not seem to be consistent across sentence types. This chapter also addresses a key issue in the theory of clause structure that also engages the syntax/morphology interface, namely, whether both the categories T and V are universally projected elements in every clause, focusing on the nature of the dependency between T and V.

It is argued that the fact that the negative marker can attach to some other elements other than the main verbal predicates, such as the auxiliary elements (2) and the existential particle (3), provides evidence for location Neg above T.

(2) mā-kano kə-inam-o.  
 NEG-aux.PAST.3PL PAST-slept-3PL  
 “They were not sleeping.”

(3) mā-fi axpeys fi beyt.  
 NEG-there bread in house  
 “There is not bread in the house.”

The first part of this chapter shows that negation in verbal sentences patterns with other Arabic dialects. The study of non-verbal sentences brings about a different picture: It highlights the influence of contact on the structure of languages and looks at the issue of syntax-morphology interface. The impact of contact on SA is illustrated in (4a) to be contrasted with (4b) from Egyptian Arabic.

(4) a. zyar nihane me-nnen  
 children here NEG.COP.3PL  
 ‘The children aren’t here.’

b. ʔali miš maSri.  
 Ali NEG Egyptian  
 ‘Ali isn’t Egyptian.’

Unlike Egyptian Arabic, where the negation precedes the predicate, in SA the complex of the negation and the pronominal element follows the predicate. Hence, the order in



non-verbal sentences is *predicate+neg+pronominal* reflecting the order in the surrounding head-final languages (Turkish, Kurdish, Zazaki, Armenian, neo-Aramaic languages), leading us to attribute its development to the influence of contact. Accordingly, non-verbal sentences are argued to exhibit head-final structure, NegP being located below TP (Akkuş and Benmamoun 2014).

Non-verbal sentences present one piece of evidence for the importance of interaction between languages. Future studies of certain aspects of Anatolian Arabic dialects and surrounding languages, such as negation, agreement and word orders (e.g. in relative clauses, AdjPs), can bear on larger questions like: How are reversals of normal word order patterns implemented in the course of a change? Are there any limitations on what aspects of a language can change due to contact with other languages? Such questions bear theoretical implications that might show that some aspects are more universal than others.

The next question, namely the nature of the element that occupies  $T^{\circ}$ , also addresses a key issue in the theory. Based on the distributional evidence and the morphophonological properties of this element, I argued that it should be treated as *Pron* in the sense of Doron (1983, 1986). This is crucial in that it provides evidence for the independence of syntax and morphology (in the sense that morphology does not drive the syntax). This proposal, developed in Benmamoun (2008), contrasts with that of Grimshaw (1991), in which functional categories are considered extended projections of lexical categories; hence, the presence of the former is contingent on the presence of the latter. Further research is intended to include a detailed investigation of Anatolian Arabic dialects and provide a fuller picture of them. This investigation is likely to serve valuable data for the argument presented here. Moreover, as Benmamoun points out, the

questions this analysis raises need dwelling on, such as whether there are languages where the past tense is nominal only while the present tense is both verbal and nominal. If such cases do not exist, then does that have to do with some semantic aspect of the present and past tenses that is ultimately related to their categorial features? However, if the analysis further developed here is correct, we have strong arguments that functional categories are specified for categorial features that determine their interaction with lexical categories.

Chapter 4 focuses on the (dis)-allowed word order configurations, including dative constructions, and presents a syntactic explanation for these configurations and the position of preverbal subject. The innovative aspect of this investigation is that it argues that given the articulated tense projections, preverbal subjects can either occur in A-domain or CP-domain. This shows that both A- and  $\bar{A}$ -domains are available for the subject, although the interaction between negation and tense makes certain positions unavailable for the subject.

Next it briefly looks at the interaction between CLLDed elements, *wh*-phrases and *f*-phrases in order to lay out the structure of the CP layer in the language and the derivational history of the CLLDed elements in light of Aoun and Benmamoun's (1998) account for Lebanese Arabic. It is argued that although in SA only the higher TopP is available unlike Lebanese Arabic, which Aoun and Benmamoun interpret as a way to distinguish between the derivational histories of CLLDed NPs, the CLLDed NPs of different natures occupy the same position since it is the only one available. Based on Aoun and Benmamoun's account, I show that CLLDed NPs not involving islands can in fact correspond to a configuration where movement is involved. Evidence comes from reconstruction effects and the locality constraint. Theoretically, it is significant to show

that elements of different derivational history can occupy the same position. The subsequent research will focus on the co-occurrence restrictions and possibilities of f-phrases and *wh*-phrases in SA. The questions to be pursued are: the preliminary data lean towards the availability of more than one focus phrase in the clause, hence do they occupy different projections or are adjunctions to a single projection? What does this have to implicate about the nature of topicalization and focusing (including *wh*-formation)? To what extent are *wh*- and f-phrases the same and can the cooccurrence permutations give us any insight in this perspective. How can a uniform account be provided for focus fronting languages such as Arabic and in-situ languages like Turkish, in terms of constructions where a f-phrase precedes a *wh*-phrase, but not vice versa?

Finally, with respect to the basic order in dative structures, I make use of the binding test and conclude that the animacy of the goal is significant in determining the basic order: the high goal expressive possession is above the theme, hence giving us the GOAL<sub>Possessive</sub> > THEME, while the goal expressing location, has THEME > GOAL<sub>Location</sub> as the underlying order.

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