

## Is Standard Arabic a VSO Language? Evidence from Syntax and Semantics\*

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## المخلص

يتناول هذا البحث ظاهرة اللا تماثل في الجملة العربية الفصيحة، وهذه خاصية ميزت العربية عن غيرها من اللغات كالانجليزية والفرنسية -مثلا- ذات الترتيب الجُملي الواحد، فقد عُرِفَت العربية بخاصية اللا تماثل في جملتها المكونة من فعل (ف) وفاعل (فا) ومفعول به (مف) حيث يمكن ان تأتي الجملة على ستة ترانتيب كما هو الحال في (1). إن ظاهرة اللا تماثل هذه كانت ولا تزال محل خلاف بين النحاة (قدماء كانوا او محدثين) الى يومنا هذا، لكن الخلاف البارز يكمن في اي من الترتيبين الاثنيين (أ1) و (ب1)، يكون الرئيس، حيث يرى بعض النحاة أن هذه العناصر الثلاثة تأتي بالترتيب: (ف+فا+مف)، وعادة ما يطلق على هذا الترتيب "الجملة الفعلية" أي التي تبدأ بفعل، ويرى البعض الاخر انها تأتي بالترتيب: (فا+ف+مف)، ويطلقون عليه "الجملة الاسمية" أي التي تبدأ باسم. ومن هذا المنطلق، وبعيدا عن التعصب لاي من الرأيين السابقين، او للنظريات التي اتبعتها منظروها في اثبات آرائهم ومدى صحتها من عدمه، فإن الباحث قد خلص الى انها (اي الجملة العربية) في الاصل لا تأتي الا على (ف+فا+مف). هذه النتيجة التي توصل اليها الباحث كانت نتيجة لبحث وتقص داما طويلا، وقد اخضع الباحث الجملة العربية الفصيحة الى جُملة من الادلة اللغوية الناجعة، على المستويين النحوي والدلالي. فعلى المستوى النحوي، عمل الباحث على إعمال ادلة عديدة وتطبيقها على هذين الترتيبين شملت-على سبيل المثال لا الحصر- مميزات اعراب الرفع (ع ر)، الاسوار العائمة (س ع)، التقاطع الضعيف (تق ض)، نقل المصدر الاستفهامي (مص أ) بشقيه القصير والطويل، خاصية الضمير الغائب (ضم ع)، الفاعل الضمير الملتصق (فا ضم صق) الخ. أما على المستوى الدلالي، فقد عمل الباحث عدة ادلة مثل: المعنى الدلالي للمثل، التفسير الخطابي، والابهام الناتج عن غياب العلامة الاعرابية الخ. هذه الادلة كلها لا يقبلها الا الترتيب (ف+فا+مف). وفي تبيان هذه الادلة، استخدم الباحث نظرية "التطابق" (تط)، وهي نظرية ادنوية سهلت الكثير من الصعوبات النظرية التي كانت تعاني منها النظريات السابقة. ففي هذه النظرية يتم ادخال فا في العملية الحسوسبية الاشقاقية في مخصص فص (ص= صغير) ويبقى في مكانه. ولان تط مبنية اساسا على فرضية امكانية حصول اوحداث تطابق بين فا والزمن (ز) على مسافة بعيدة، فإننا لا نحتاج الى نقل فا الى مخصص ز لحدث تفسير السمات الغير مؤولة، لان تط يمكنها تقييم سمات ز (باعتبارها السبيرة) و فا (باعتبارها الهديفة) على مسافة بعيدة. عملية التفسير "عن بعد" هذه ينتج عنها تأويل السمات الغير مؤولة لكل من فا و ز.

## Abstract

The fact that clause structure in Standard Arabic (SA) is asymmetric in nature arouses much controversy in generative syntax. In this article, I argue that SA is purely a VSO language, providing empirical evidence from the syntax and semantics of this language. The syntactic evidence is built on Case properties, weak crossover, floating quantifiers, wh-extraction, pro-drop property, clitic arguments, negation and modality and aspectuality. The semantic evidence, however, is based on idiomaticity, discourse interpretation, ambiguity, (in)definiteness of the subject and exclamation. Almost all the evidence examined

indicates that SA is mainly a VSO language. To examine the evidence provided, I have employed an *Agree*-based approach. This approach solves one of the most important requirements for Spec-head configuration that was assumed to be the trigger of agreement intrinsic features in the preminimalist syntax. In that an *Agree* operation is established between T and the subject DP, which is base-generated in Spec-*v*P, the result of which is valuing the unvalued features of both at a distance. It is also proposed that sometimes multiple *Agree* takes place in structures where floating quantifiers are involved.

**Keywords:** Standard Arabic, clause structure asymmetries, VSO order, *Agree* approach, weak crossover, floating quantifiers

### 1. Introduction

In this article, I argue that Standard Arabic (SA) is basically a VSO language, providing evidence from the syntax and semantics of this language. In fact, clause structure in SA is asymmetric in nature as presented in (1), where six different orders are observed (cf. Mohammed 1990). This asymmetry arouses much controversy, perhaps as one of the most controversial issues in Semitic generative syntax.

- (1) a. qara?a ʕali-un kitaab-an  
 read Ali-NOM book-ACC  
 ‘Ali read a book.’
- b. ʕali-un qara?a kitaab-an  
 Ali-NOM read book -ACC  
 ‘Ali read a book.’
- c. qara?a kitaab-an ʕali-un  
 wrote book-ACC Ali-NOM  
 ‘It is a book that Ali read.’
- d. ʕali-un kitaab-an qara?a  
 Ali-NOM book -ACC read  
 ‘Ali, it is a book that he read.’
- e. kitaab-an ʕali-un qara?a  
 book-ACC Ali-NOM read  
 ‘A book, Ali read.’
- f. kitaab-an qara?a ʕali-un  
 book-ACC read Ali-NOM

‘A book, Ali read.’

(1) clearly shows clause structure asymmetries in this language. The six orders are: VSO, SVO, VOS, SOV, OSV and OVS in (1a-f, respectively). Though examples in (1) are all grammatical, most researchers (see e.g. Fassi Fehri 1993; Bakir 1980; Ayoub 1981; Plunkett 1993; Emonds 1980; Mohammad 1990, 2000; Aoun et al 1994) agree that SA has only two word orders, namely VSO and SVO in (1a&b), and those in (1c-f) are derived via movement (see also Majdi 1990; Anshen and Schreiber (1967), who see SA as a VOS language).<sup>1</sup>

The article provides an *Agree*-based analysis to the evidence presented here. I assume that  $vP$  constitutes the thematic domain, and that  $T$  enters the derivation with unvalued  $\phi$ -features [ $u\phi$ ] and a valued Case [ $vCase$ ] feature. The subject DP in turn enters the derivation with [ $v\phi$ ] and [ $uCase$ ] features. An *Agree* relation is established between the subject DP and  $T$  whereby all the  $T$ 's and DP's unvalued features get valued, (interpreted), and hence, deleted at LF.  $T$  has also an EPP feature, but is valued via V-raising to  $T$  (see Aoun et al 2010; Alexiadou and Anagnostopoulou, 1998, 2001).

Thus, the article proceeds as follows. In section 2, I outline *Agree*-based approach adopted in this article. In section 3, I review the *Principles and Parameters* (P&P) account of SA clause structure asymmetries and their underlying assumptions. In section 4, I present evidence from the syntax of the language in support of VSO. Syntactic evidence capitalizes on Case properties, weak crossover (=WCO), floating quantifiers (=FQs), floating quantifiers, pro-drop property, clitic arguments, etc. In section 5, I present the semantic evidence. This evidence is discussed in relation to idiomaticity, discourse interpretation, ambiguity, etc., and section 6 concludes the paper.

## 2. Agree

In this article, *Agree* is defined as a potential long-distance agreement relation established between two matching nodes  $\alpha$  and  $\beta$  (probe and goal, respectively) as shown in (2) (see Chomsky 2000, 2001; Fassi Ferhi 2009).

(2) *Agree* ( $\alpha$ ,  $\beta$ ) iff:

- a.  $\alpha$  and  $\beta$  bear the same matching features

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<sup>1</sup> The following abbreviations are used throughout this article. S= Singular, DL= dual, PL= plural, F= feminine, M=masculine, Nom= Nominative, Acc= Accusative, Gen= Genitive, T=tense, V= verb, P=preposition, C= Complementizer, Lit=literally, Idm=Idiomatic, u=unvalued, v=valued, 1= first person, 2=second person, 3= third person, fn=foot note. Those abbreviations that are not mentioned here are indicated in the first use.

- b.  $\alpha$  closely c-commands  $\beta$  (i.e. there is no  $\gamma$  such that  $\alpha$  c-commands  $\beta$ , and  $\gamma$  c-commands  $\beta$ )
- c. either  $\alpha$  or  $\beta$  has (at least) one unvalued feature, and
- d.  $\beta$  may be ( $\beta_1$  and  $\beta_2$ ) (e.g., T values the ( $u$ Case) features of the subject DP and the floating quantifier in some sort of multiple *Agree* )

Multiple *Agree* is well-documented in minimalism literature (see e.g. Norvins 2009, see also Bobaljik and Branigan 2006, for *Multiple Case Checking Hypothesis*(=MCCH).<sup>2</sup> Thus, I assume that in structures, where floating quantifiers are present, multiple *Agree* takes place between T, and the subject DP and the floating quantifier, whereby the unvalued features of T, the subject DP and the floating quantifier are valued.

### 3. SA clause structure and the P&P

P&P account of clause structure in SA basically centers around subject-verb agreement, building on the P&P standard assumption of Spec-Head agreement (or government) configuration, ‘housing’ the subject and the verb, where the former (re)merges in Spec-IP, and the latter moves from V to I. Based on this framework, there are actually two analyses, what I name SV-analysis and VS-analysis.

#### 3.1. SV-analysis

In this section, I outline the SV-analysis, and how it accounts for the clause structure in SA in relation to subject-verb agreement. In fact, within SV-analysis, there are two well-known analyses, namely *Agreement Loss Analysis* (=ALA, see Aoun et al,1994), and *Null Expletive Analysis* (=NEA, see Mohammad,1990, 2000). As for ALA, Aoun et al (1994) claim that the subject DP is base-generated in Spec-IP and that VS is derived via the movement the verb undergoes to a head F (of a FP) higher than IP. As far as SV structures are concerned, Aoun et al claim that Spec-head configuration (of IP) accounts straightforwardly for the full agreement between the subject and its verb, because the subject in Spec-IP, properly governs the verb in I, and thus, agrees with it in all  $\phi$ -features as (3) shows.

- (3) a. t-tullaab-u                      qara?-uu    l-kutub-a  
       the-students-3MPL.NOM    read-3MPL    the-books-ACC  
       ‘The students read the books.’

b.  $[_{IP} [_{DP} \text{t-tullaab-u}] [_I [\text{qara?}-\text{uu}]_i [_{VP} [_V [\text{t}_i] [_{DP} \text{l-kutub-a}]]]]]]$

<sup>2</sup> For instance Norvins applies Multiple Agree to multiple-argument exponence and other phenomena like subject-object interaction, object shift constructions, etc.

In (3), the verb and the subject agree in all feature, both are 3 masculine plural.

In VS, however, the verb raises to F, and this raising, Aoun et al claim (1994), results in losing some agreement features, which accounts for the partial agreement in VS structures. That is to say, the movement of the verb to F results in the loss of the number feature. The ALA is roughly shown in (4b).

(4) a. qara?-a    t-tullaab-u                    l-kutub-a  
       read-3MS   the-students-3MPL.NOM   the-books-ACC  
       ‘The students read the books.’

b.  $[_{FP} [e] [_F [qara?-a]_i [_{IP} [t-tullaab-u] [_{VP} [v[t_i] [_{DP} l-kutub-a\dots]]]]]]]$

Within the assumption that SA is a SV language, Mohammad (1990, 2000) proposes NEA. As for SV order, Mohammad claims that the full agreement between the subject and its verb is directly obtained in Spec-head configuration, perhaps similar to that of Aoun et al, discussed above.

As for VS order, Mohammad claims that NEA accounts straightforwardly for the partial agreement between the subject and the verb. He argues that VS contains two subjects: the real subject in Spec-VP and a null EXPL(itive) subject, i.e. pro, in Spec-IP, and this expletive pro is what licenses “the agreement features onto the verb” (Mohammad,1990: 98). The NEA is roughly shown in (5b).

(5) a. qara?-a    t-tullaab-u                    l-kutub-a  
       read-3MS   the-students-3MPL.NOM   the-books-ACC  
       ‘The students read the books.’

b.  $[_{IP} EXPL \text{ pro} [_I [qara?-a]_j [_{VP} [t-tullaab-u] [_v [t_i] [_{DP} l-kutub-a]]]]]$

Mohammad (1990) bases his argument in favor of (5b) on the assumption that VP has a Spec position (see e.g. Chomsky,1986; Kuroda,1986) which can host the lexical subject (i.e. the real subject) in VS structures, along with the EXPL pro base-generated in Spec-IP. As can be seen in (5b), it is the EXPL pro and the verb which are hosted by Spec-head configuration: the former is in Spec-IP, and the latter in I, but the lexical subject DP is in Spec-VP. Since this EXPL pro is characterized as 3 masculine singular, Mohammad claims, it licenses the partial agreement, and hence, the verb appears with 3 masculine singular inflection(s).

**3.2. VS-analysis**

VS-analysis is to some extent similar to SV-analysis. In principle, both are based on Spec-head agreement, though they are conceptually different. The difference lies in the fact studies in VS-analysis employ the INFL-split hypothesis (see Pollock,1989) where I is split into AgrP and TP as independent projections. In VS-analysis, it is claimed that the subject is basically base-generated in Spec-VP at D-structure, and that the unmarked VS is derived by V-raising to I/Agrs at S-structure (see Fassi Ferhi,1982, 1993), or MP (=Mood Phrase, lower than TP, see Plunkett,1993). As for SV order, Fassi Ferhi argues that what seemingly appears a subject is in fact a topic/CLLD element, which is presumably base-generated in Spec-AgrsP at S-structure, though he claims that there are subjects which raise to Spec-AgrsP at S-structure. However, such subjects, Fassi Ferhi asserts, are “quantificational or ‘weakly referential’ indefinite NPs (with a specific or generic interpretation), but they cannot be pure indefinite ‘non-referential’ NPs” (Fassi Ferhi,1993: 29), as in (6, adopted from Fassi Ferhi,1993: 28).

- (6) baqarat-un takallam-at  
 cow-NOM spoke-3FS  
 ‘A cow has spoken.’

To account for the agreement asymmetries in SA, and again under Spec-head configuration, Fassi Ferhi(1993) assumes that AgrP is higher than TP, and that it is Agr which determines the word order. For instance, to account for partial agreement in VS structures, Fassi Ferhi proposes that since Agr in VS is ‘poor’ (or weak, licensed by the ‘poor’ agreement inflection on the verb), Agr cannot lexicalize the subject in its Spec, nor can it license pro. He claims that it is the ‘richness’ or ‘poorness’ of Agr which plays the central role in determining subject-verb agreement, and hence, the word order. He perhaps bases his argument on the fact that not only number feature, but even gender feature is not maintained in some VS structures as (7) shows.

- (7) a. qaal-a niswat-un fii l-madiinat-i  
 said-3SM women-3FPL.NOM in the-city-GEN  
 ‘Some women in the city said.’
- b. jaa?-at r-rijaal-u  
 came-3FS the-men-3MPL.NOM  
 ‘The men came.’

In (7a&b), neither number nor gender is retained. For instance, in (7a), the verb is masculine singular but the subject is feminine plural, and in (7b), the verb is feminine singular but the subject is masculine plural. Given this, thus, Fassi

Ferhipostulates that Agr is actually contextualized. In that gender feature may or may not be retained, and hence, ruling out expletive pro analysis.

In SV, however, Fassi Ferhi claims that Agr is strong which licenses the lexicalization of the subject in its Spec, be it lexical or expletive. He argues that this lexicalization takes one of two forms: i) either via movement of the subject from within the thematic domain to Spec-AgrsP, hence resulting in SV structures like (6), or ii) base-generation of a DP in Spec-AgrsP, hence resulting in a topic/CLLD structure.

Within VS-analysis, Plunkett (1993) also proposes that SA is also a VS language. In fact, Plunkett's analysis is to some extent similar to that of Fassi Ferhi (1993). However, there are three main differences between both analyses: the first one concerns the position of the subject. Plunkett argues that the subject originates in Spec-VP and remains there throughout the derivation, while the verb raises to M/T. The second is that she considers SV (both verbal and verbless) sentences to be topic-comment structures, and the third concerns the parameterization of the order of AgrsP and TP. Unlike Fassi Ferhi, she assumes that in SA TP is parametrically higher than AgrsP, and that MP is positioned in-between.

To recapitulate, in SV-analysis, ALA and NEA are theoretically different, but the scope is almost the same. The similarity lies in that both assume that SA is a SV language, with the subject DP (re)merged in Spec-IP. The difference, however, concerns VS. In that while in the former the verb raises to F heading FP higher than IP (Aoun et al, 1994), which results in agreement loss, in the latter an EXPL pro is base-generated in Spec-IP, and the subject DP in Spec-VP (Mohammad, 1990, 2000). In VS-analysis, however, it is hypothesized that the subject DP is base-generated in Spec-VP at D-structure. SV, however, is a topic/CLLD derived by base-generating the topic/CLLD element in Spec-AgrsP (Fassi Ferhi, 1993) or Spec-TP (Plunkett, 1993), and VS is derived by V-raising to Agr/M at S-structure, and the subject remains in situ. However, these two analyses suffer from a number of weaknesses, which I tackle in the section to follow.

### **3.3. Critique of P&P account**

In this section, I attempt a critique of the P&P account of clause structure asymmetries in SA. Under the approach adopted here, the critique is crystallized on theoretical and empirical problems these analyses are suffering from. I first tackle the problems concerning SV-analysis and return to VS-analysis.

From a theoretical perspective, SV-analysis suffers from a number of problems. I will just focus on those concerning NEA and ALA. For instance, NEA is hard to maintain, simply because a null expletive is an LF-inert-and-PF-empty

phenomenon (Soltan 2007). This explicitly implies that the null expletive has no value in the interfaces, which is due perhaps to the fact that it functions only in the narrow syntax. This is what minimalism does not allow (see e.g. Uriagereka 2001; Holmberg 2005; Alexiadou and Anagnostopoulou, 1998, 2001, see also Soltan 2007). As we will see, expletive *pro* seems to be  $\phi$ -complete in the sense of Holmberg (2005, 2008). If we assume that transmission of features between *pro* and the lexical DP-subject (by virtue of coindexation) takes place, then, this poses a question: why is Num feature not transmitted? This question is, in fact, left open by NEA (see also Fassi Ferhi, 1993: 27ff).

That the Num feature is not transmitted in VS structures gives rise to a serious problem, specifically, if *pro*'s overt counterparts can be plural even in verbless sentences as (8) shows.

- (8) a. *huwa*     $\bar{t}$ -*taalib-u*  
       he.3MS    the-student-3MS.NOM  
       'It is the student.'
- b. *hum*         $\bar{t}$ -*tullaab-u*  
       they.3MPL    the-students-3MPL.NOM  
       'It is the students.'
- c. *hia*         $\bar{t}$ -*taalibat-u*  
       she.3FS    the-students-3FS.NOM  
       'It is the student.'
- d. *hunna*     $\bar{t}$ -*taalibaat-u*  
       they.3FPL    the-students-3FPL.NOM  
       'It is the students.'

In (8), the pronominal subjects of verbless sentences, *huwa*, *hum*, *hia* and *hunna* agreeing with the predicates (in question) indicate that NEA is not well-founded. Observing such a phenomenon, Fassi Ferhi (1993) asserts that if expletive *pro* is always a 3 masculine singular, then, it is difficult to account for the facts in (8). It is, in other words, unreasonable to limit the list of expletive pronouns to only 3 masculine singular. If this were the case, then, there would be a contradiction between null expletives and overt ones in the same language, which in turn rules out NEA. Along these lines Soltan (2007) argues that the null expletives in verbal sentences add a construction-specific complication to the grammar. In that if null expletives behave in verbal sentences differently from those in verbless sentences, and perhaps, in the whole pronominal system, then, such behavior adds a construction-specific complication to the grammar.

Another problem with transmission hypothesis, as noted by Fassi Ferhi(1993: 94, fns.40&41), concerns the transmission of Case, where Case is not transmitted from the expletive onto the lexical subject as (9a) shows. Gender and person are also not transmitted as in (9b&c).

(9) a. ?inna-hu fii d-daar-i rajul-un/\*an)<sup>3</sup>  
that-it in the-house-GEN man-NOM/\*ACC  
'There is a man in the house.'

b. ?inna-hu ?amat-u llaah-i jaa?at  
that-it/he maid-3FS.NOM Allah-GEN came.3FS  
'It is the maid of Allah who came.'

c. ?inna-hu ?anta llaði faʕalta haaðaa  
that-it/he you who did this  
'It is you who did this.'

In (9a), the overt expletive *-hu* is assigned Acc Case by C. If transmission is correct, then, we expect that Acc Case be transmitted onto the subject *rajul*, which is not the case (see Fassi Ferhi,1993). In (9b), gender feature is not transmitted; *-hu* is masculine while the subject is feminine, and in (9c), person feature is also not transmitted; *-hu* is 3 while the subject is 2.<sup>4</sup> Thus, the theoretical ground on which feature transmission in general, and NEA in particular, was based, loses its motivation by such structures which are very much documented in the language.

From an empirical perspective, one postulation in favor of expletive *pro* in VS order is perhaps EPP feature of T. One such piece of evidence, which SV proponents have perhaps based their arguments on, is manifested by contexts like (10b), where the expletive *pro* is spelled out as *-hu* in embedded clauses.

(10) a. ?iddaʕa xaalid-un ?anna ʕali-an faqada l-mihfadat-a  
claimed Khalid-NOM that-it Ali-ACC lost the-purse-ACC  
'Khalid claimed that Ali lost the purse.'

b. ?iddaʕa xaalid-un ?anna-**hu** faqada ʕali-un l-mihfadat-a

<sup>3</sup> I use “?” symbol as the glottal stop known as ‘hamza.’

<sup>4</sup> It should be noted that I am assuming, following Fassi Ferhi(1993), that lexical DPs have a person feature. There are actually some proposals in the literature that nominal DPs are personless (see e.g. Danon,2011; Sigurdsson,1996; Kayne,2000; Rezac,2003). Although the verb appears inflected for 3 person feature, these authors argue, this 3 person inflection is default, and that nominal (but not pronominal) DPs lack such a feature.

claimed Khalid-NOM that-it lost Ali-NOM the-purse-ACC  
 ‘Khalid claimed that Ali lost the purse.’

Comparing (10a) to (10b), we observe that in the former, the embedded clause is a SV order, while in the latter it is a VS. The obligatory occurrence of the overt expletive *-hu* attached to the C *?anna* is taken by Mohammad (1990, 2000) as evidence that SA is basically a SV language, on the one hand, and that a null expletive should occupy Spec-IP in VS order, on the other hand, given the ungrammaticality of (11).

(11) \*?iddaʕa xaalid-un ?anna faqada ʕali-un l-mihfadat-a  
 claimed Khalid-NOM that lost Ali-NOM the-purse-ACC

However, the question is: is this piece of evidence empirically sufficient to postulate the presence of an expletive *pro* in Spec-TP in VS? It is presumably not, given the fact that some overt expletives do not have null counterparts at all. For instance, in verbless sentences (those where T is presumably null), the existential expletive *hunaaka* (there) does not have a null (or otherwise *pro*) counterpart as (12) illustrates.

(12) a. *hunaaka walad-un fii ʕ-ʕaariʕ-i*  
 There boy-NOM in the-street-GEN  
 ‘There is a boy in the street.’

b. \**pro walad-un fii ʕ-ʕaariʕ-i*  
 boy-NOM in the-street-GEN

The grammatical version of (12b), and perhaps the only one, is (13), where there is some kind of preposing movement the PP-comment undergoes.

(13) *fii ʕ-ʕaariʕ-i walad-un*  
 in the-street-GEN boy-NOM  
 ‘There is a boy in the street.’

It is clear, as illustrated by the contrast between (12b) and (13), that it is the PP-preposing that renders the sentence grammatical, and not a null expletive (cf. Fassi Ferhi, 1993). Here also, there is another structure-specific complication: expletives in verbless sentences behave differently from those in verbal sentences, which is not allowed by minimalism.

Another strong piece of evidence against NEA in VS is perhaps the full agreement between the verb and the postverbal pronominal subjects in structures like (14).

- (14) a. jaa?-uu      hum      faqat  
 came-3MPL they.3MPL only  
 ‘They came only.’
- b. \*jaa?-a      hum      faqat  
 came-3MS they.3MPL only
- c. ji?-na      hunna      faqat  
 came-3FPL they.3FPL only  
 ‘They came only.’
- d. \*jaa?-at      hunna      faqat  
 came-3FS they.3MPL only

The ungrammaticality of (14b&d) lies in the fact that the verb does not agree with the pronominal subject in number, though they agree in gender, i.e. masculine and feminine, respectively.<sup>5</sup> Here, too, there is another construction-specific complication: when the postverbal subject is a pronominal DP, agreement behaves differently from when it is a nominal DP. In the former case, agreement is full while it is partial/null in the latter case.

In addition, there is also some sort of ‘dialect-specific’ complication if we assume NEA for VS orders. There is good evidence, in almost all nonstandard varieties of Arabic, that no null expletive is allowed in VS structures. Consider (15) from Yemeni Arabic (YA).

- (15) a. raqd-uu      l-ʕiaal  
 slept-3MPL the-boys  
 ‘The children slept.’
- b. \*raqd      l-ʕiaal  
 slept-3MS the-boys

<sup>5</sup> There is also good evidence against NEA from subject coordination phenomenon in VS, where the first element in the coordinated subject is a pronoun as in (i).

- (i) a. jaa?-uu      hum      laa      ?ixwat-u-hum  
 came-3MPL they.3MPL not brothers-NOM-their  
 ‘They came only.’
- b. \*jaa?-a      hum      laa      ?ixwat-u-hum  
 came-3MPL they.3MPL not brothers-NOM-their

The ungrammaticality of (ib) indicates that there is strict agreement, though the subject occurs postverbally (see also Fassi Ferhi, 1993, Soltan, 2007).

c. raqd-ain l-banaat  
 slept-3FPL the-girls  
 'The children slept.'

d. \*raqd-uu l-banaat  
 slept-3MPL the-girls

In (15), the YA data strongly support our claim that NEA is not well-founded. The verb must agree with the subject in all  $\phi$ -features, though the subject occurs postverbally, else the sentence is ungrammatical, as evidenced by the ungrammaticality of (15b) and (15d) (see Aoun et al,1994, for MA and LA, Fassi Ferhi,1993, for MA and Mohammad 2000, for PA). This seems to be a serious problem encountering NEA. I think all these problems and complications disappear if we just assume the nonexistence of such a null expletive in Spec-TP, which is what minimalism is all about.

I turn now to ALA, showing how it also encounters similar problems. Aoun et al (1994) have argued in favor of ALA based on data from an English dialect reported by Kayne (1989) as illustrated in (16) (see also Aoun et al,1994: 205).

- (16) a. The people who Clark think are in the garden  
 b. The people whose cars John think are beautiful

Under the standard assumption of Spec-head agreement, structures like (16) are ungrammatical. However, Kayne (1989) claims that such structures are grammatical in some dialect of English. The grammaticality of (16) leads Kayne to argue that agreement cannot always be retained. In (16a), for instance, the subject DP *Clark* does not agree with the verb *are*. The same thing can be said about (16b). According to Kayne, in these relative clauses the expected agreement on the verb *think* is missing (or lost in Aoun et al's sense), which he attributes to movement of the Agr head to C (where it agrees with the wh-operator in Spec-CP).

Based on Kayne's arguments, Aoun et al suggest that only intrinsic features may be retained. They argue that Num feature is not intrinsic of nouns, and hence, it is not retained in English which is somehow similar to the situation in SA. For why this agreement loss is selective, and not allowed in general, they adapt a suggestion made by Bahloul and Harbert (1992) who assume that even VS structures full agreement is obligatory when the subjects are pronominals, but not nominal DPs as the contrast between (17a) and (17b) shows.

- (17) a. jaa?-uu hum  
 came-3MPL they.MPL

‘They came.’

- b. \*jaa?-a hum  
came-3MS they.MPL

In fact, (17) is itself against their claim. In that there is no agreement loss, but rather ‘agreement preservation,’ i.e. full agreement must be retained. This is, in fact, another structure-specific complication, again within the same language, which is not supposed to be, and which simply disappears if we just reject ALA.

Summarizing, taking the examples in (16) into consideration, there seems to be “agreement overwriting,” and not agreement loss. According to Aoun et al (1994) and Kayne (1989), employing Spec-head agreement, agreement loss mechanism is as follows: first, a head X agrees with a singular DP in its Spec, and then, when X moves to another head Y, X agrees with a plural DP in Y’s Spec. What this implies is that there is an agreement overwriting rather than agreement loss. This means that the later agreement overwrites the previous one, which is actually hard to maintain, given the fact that in Arabic VS constructions the verb does not raise higher than T (see Fassi Ferhi,1993), as we will see in section 4, even in the presence of negative and modality projections, which are virtually higher than TP (see e.g. Fassi Ferhi,1993, 2012; Mohammad 2000; Benmamoun 2000). Thus, it is unreasonable to postulate an “agreement loss” assumption in the grammar of Arabic, based mainly on verb-raising, specifically, if this raising is never motivated, on the one hand, and it actually does not take place, on the other hand (see also Soltan 2007).

As for VS-analysis, almost the same theoretical and empirical problems are encountered. This is due to the fact that even in VS-analysis the same theoretical assumptions are made use of, specifically, the assumption that subject-verb agreement obtains in Spec-head configuration. In addition, the theory adopted here does not allow for AGR; it is no more available in the grammar of natural languages (see Chomsky,1995, chapter 4).

#### **4. Syntactic evidence**

The evidence presented in this section includes Case properties, floating quantifiers, weak crossover, wh-extraction, clitic arguments, pro-drop property, negation and modality and aspectuality.

##### **4.1. Case Properties**

In this section, I argue, based on Case properties, that SA is a VS language. Recall that in P&P the subject movement from Spec-VP to Spec-IP/TP cross-linguistically was partially motivated by Case requirement. In minimalism, however, this

movement is no more motivated, simply because Case is a feature and is valued at a distance via *Agree*. Under minimalism, then, should we allow this movement, we need a mechanism of Case overwriting, whereby Nom Case assigned earlier to the subject DP gets overwritten, for instance, by the Acc Case assigned later by the C or ECM verbs as (18&19) show. This is in fact an undesirable assumption. Case valuation takes place as follows: the subject DP enters the derivation with an unvalued (and uninterpretable) Case feature, along with valued (interpretable)  $\phi$ -features. But T enters the derivation with a valued Case feature, along with unvalued (uninterpretable)  $\phi$ -features. According to (2), thus, an *Agree* relation is established between T and the subject DP, the result of which is valuing T's unvalued  $\phi$ -features and the Case feature of the subject DP.

Further, given the standard assumption that subjects of finite I/T are (always) assigned Nom Case by I/T cross-linguistically (see Jonas,1992; Pollock,1997; Fassi Ferhi,1993; Chomsky,1986; Koopman and Sportiche,1988,1990; Speas,1990; Diesing,1990; Kitagawa,1986; Borer,1986; McCloskey,1997; Kuroda,1986; Kratzer,1989; Plunkett,1993; Hulk and Kemenade,1993, among many others), but since preverbal DPs in Arabic can be assigned nonNom Case, it follows that VS is the only order which satisfies this assumption.<sup>6</sup> Consider (18).

(18) a. kataba  $\zeta$ ali-**un** qiṣṣat-an  
wrote Ali-NOM story-ACC  
'Ali wrote a story.'

b. \*kataba  $\zeta$ ali-a/in qiṣṣat-an  
wrote Ali-ACC/GEN story-ACC

c.  $\zeta$ ali-un kataba qiṣṣat-an  
Ali-NOM wrote story-ACC  
'Ali wrote a story.'

(19) a. ?inna  $\zeta$ ali-**an** kataba qiṣṣat-an  
that Ali-ACC wrote story-ACC  
'Indeed, Ali wrote a story.'

b. ḏanan-tu  $\zeta$ ali-**an** kataba qiṣṣat-an  
Thought-I Ali-ACC wrote story-ACC

<sup>6</sup> For instance, describing the subject position, McCloskey (1997: 203) asserts that it is "the nominative position; it is the position reserved for those elements which trigger agreement on the main inflectional element; it is the position in which a certain subset of semantic role-types are characteristically realized."

‘I thought Ali wrote a story.’

c. ?aʕjaba-nii kaw-n-u ʕali-**in** kataba qiṣṣat-an  
satisfied-me being Ali-GEN wrote story-ACC

‘It satisfied me that Ali wrote a story.’

In (18a), the postverbal DP-subject *ʕali-un* is Case-marked as Nom and no other Case would be possible as illustrated by the ungrammaticality of (18b). However, (19) shows that the preverbal DP *ʕali-an* is assigned Acc by C *?inna* in (19a), and the matrix verb in (19b) and Gen in (19c). This suggests that such a DP is not a subject. If this is true, the question, then, is: why does such a DP occur with Nom Case in (18c)? One possible answer is that since there is no external head that could assign it any Case other than Nom, it is presumably possible that the Nom Case of the preverbal DP in (18c) is just a default Nom Case (see Fassi Ferhi, 1993; Mohammad, 1990, 2000; Plunkett, 1993; Yateem, 1997; Soltan 2007; Balushi 2011, just to name a few).

The fact that postverbal subjects in SA are always assigned Nom Case is also supported by Nom Case assigned to the subjects even in embedded clauses as (20) shows.

(20) tawqaʕa ʕali-un ?an yaḏhaba t-tullaab-u  
expected Ali-NOM C go the-students-NOM  
‘Ali expected the students to go.’

In (20), the postverbal subject *t-tullaab-u* is assigned a Nom Case in Spec-vP of the embedded clause via *Agree* established between the embedded T and this DP-subject.

Recall that SV proponents claim that in embedded clauses like (21a), where the preverbal DP is absent, an overt expletive is obligatorily attached to the C *?anna*. And even if the subject occurs postverbally, an expletive is attached to the C *?anna* as (21b) shows.

(21) a. ?iddaʕa xaalid-un ?anna-**hu** faqada l-mihfadat-a  
claimed Khalid-NOM that-it lost the-purse-ACC  
‘Khalid claimed that Ali lost the purse.’

b. ?iddaʕa xaalid-un ?anna-**hu** faqada ʕali-un l-mihfadat-a  
claimed Khalid-NOM that-it lost Ali-NOM the-purse-ACC  
‘Khalid claimed that Ali lost the purse.’

In (21a), for instance, I think that the obligatory occurrence of the expletive *-hu* has nothing to do with the structure being of a VS or SV order. It is presumably to satisfy Case Criterion (see Chomsky,1986). That is to say, the expletive *-hu* attached to the C *?anna* is presumably necessitated by a property of *?anna*, namely the ability of assigning a Case to a constituent, which necessitates the lexicalization of *-hu*.

Further, if the main reason behind the postulation that SA is a SV language is structures like (21), then, it would be difficult (and perhaps impossible) to account for the grammaticality of ECM structures like (22), where the embedded clause appears in VS order, after *?an* which is also a C.<sup>7</sup>

- (22) *tawqaʕa ʕali-un ?an yaðhaba t-tullaab-u*  
 expected Ali-NOM C go the-students-NOM  
 ‘Ali expected the students to go.’

In (22), the postverbal subject occurs in a *?an*-structure in embedded clauses. Such structures are in fact productive in the language, and that if VS cannot occur after the C *?anna*, it can occur after *?an* which is again a C.

Thus, I conclude this section claiming that *Agree* Case stipulations support our claim that SA is a VS language. This lies in the potential *Agree* has, which is valuing and deleting the unvalued Case feature of the subject at a distance.

#### 4.2. Floating quantifiers

In this section, I argue, based on floating quantifiers, that SA is a VS language. According to *Internal Subject Hypothesis* (=ISH) developed in Koopman and Sportiche (1985) and Kuroda (1986), and employed cross-linguistically (see e.g. Koopman and Sportiche,1988,1990; McCloskey,1997; Fassi Ferhi,1993; Speas,1990; Diesing,1990; Kitagawa,1986; Borer,1986; Kuroda,1988; Kratzer,1989; Plunkett,1993), subjects originate inside the thematic domain, i.e. *vP* here, and from there they may or may not move. The ISH was based on the behavior of floating quantifiers in languages like English and French, where a floated quantifier like *all* in (23) occurs sandwiched between an auxiliary and the main verb (from Sportiche,1988: 426).

- (23) The students<sub>i</sub> have [<sub>i</sub>] all studied hard.

- (24) a. **Tous** les enfants ont vu ce film.  
 all the children have seen this movie

<sup>7</sup> See fn. (19).

‘All the children have seen this movie.’

- b. Les enfants ont *tous* vu ce film.  
 the children have all seen this movie  
 ‘All the children have seen this movie.’

Differing from earlier analyses of the phenomenon (see e.g. May, 1977), Sportiche (1988) considers the floated quantifiers *all* and *tous* in (23) and (24), in English and French, respectively, not the result of an operation which ‘floats’ the quantifier to the right of its associate, but rather the result of stranding such a quantifier in situ. In (23) and (24), the floating quantifiers *all* and *tous* are left stranded in situ after subject-raising to Spec-TP applies. That these quantifiers remain in situ is said to be indicative evidence of a movement of the subject over it, which, otherwise, points out that there is a difference between a base-generating position and a landing site.

However, it seems that FQ’s behavior in SA differs considerably from that of English and French as (25) shows.

- (25) a. ?ata kull-u t-tullaab-i  
 came-3MS all-NOM the students-GEN  
 ‘All the students came.’

- b. ?ata t-tullaab-u kull-u-hum  
 came-3MS the-students-NOM all-NOM-them  
 ‘The students all came.’

The difference lies in the fact that the movement of the quantified DP over its quantifier results in resumption. For instance, comparing (25a) to (25b), there seems to be some sort of movement, whereby the DP raises to a position leaving the quantifier stranded in situ in a way similar (but not identical) to that of English or French. However, the question is: is the landing site of the moved quantified DP in Arabic out of  $\nu$ P (similar to that of English, for instance)? (25b) states that it is not, simply because this movement does not bring about a change to the sentence word order, i.e. the sentence is still a VS pattern. Alternatively, where is the landing site of the moved DP? In fact, earlier analyses have provided some sort of answer to this question. For instance, Plunkett (1993) argues that the DP may optionally raise to Spec-AgrsP (assuming TP to be higher than AgrP) while the stranded quantifier remains in Spec-VP. However, according to the theory adopted here (which almost completely differs from such an analysis, because AGR is no more available), I assume that the landing site could be: either i) Spec- $\nu$ P, given the

*Multiple Specifier Hypothesis* (=MSH, see e.g. Radford,1997), or ii) Spec-QP (see e.g. Shlonsky,1991).

However, (ii) is not uncontroversial. One such controversy lies in the fact that it is not clear whether Q is a modifier to the DP or a head, prior to DP movement. Another controversial point is with respect to the resumptive pronoun attached to the stranded Q. For instance, Shlonsky assumes a Construct State (=CS) analysis, where Q is a head, based mainly on the correlation between the CS in (25a) and the resultant structure in (25b). He assumes that the latter is derived from the former by the DP movement over the quantifier. He argues that both reflect one structure, assuming that “Q-initial and Q-final QP’s are both expressions of the same category ... since they can both appear in all argument positions” (p. 164). He also considers the resumptive pronoun attached to the stranded Q merely an agreement element. However, unlike Shlonsky, Benmamoun (1998) argues that both structures are completely different from each other. Benmamoun argues that Shlonsky’s assumption cannot be maintained because of the impossibility of extraction out of a CS (qua an island). Instead, Benmamoun proposes that the stranded Q is a modifier similar to any other modifier (APs in particular) in the language, which agrees with the head it quantifies/modifies in all features. As for the resumptive pronoun, Benmamoun assumes that it is an element agreeing not with the moved DP, but rather with *pro* to its left. He bases his argument on the assumption that no extraction is possible out of an island. Given this controversy, I ignore (ii), and adopt (i), for its reliability and adequacy, as we will see.

One important factor favoring (i) over (ii) perhaps concerns Case phenomenon. In other words, in (25), the DP *t-tullaab* originates with a Gen Case but surfaces with Nom. In the former case, the DP is assigned Gen Case by the Q *kull* (by virtue of being a head of a CS), and in the latter, it appears with Nom Case, while Q maintains its Nom Case in both cases. However, this imposes two questions: first, what assigns/values Nom Case on both constituents?, and second, what is the nature of the resumptive pronoun attached to Q?

As for the first question, I assume that since the Case manifested on both constituents is Nom, and since the word order, remains constant, i.e. VS after the DP movement, the only expected assigner is T, but how? Alternatively, how exactly is this unvalued Case feature is valued twice by T? If we assume that Case valuation is a by-product of *Agree* (see Danon,2011; Pesetsky and Torrego,2007), we should expect that not only does the Q *kull* agree with the quantified DP (*t-tullaab-u*, for instance) in Case, but also in all  $\phi$ -features, which is exactly the case. This full agreement is manifested by the resumptive pronoun *-hum* attached to

*kull*.<sup>8</sup> If this is true, there seems to be multiple *Agree*. But this is straightforwardly accounted for if (i) is made use of. In other words, given our assumption that both the quantified DP and the quantifier are in Specs of *vP*, assuming that the former is in a higher Spec than the latter, it is quite possible to argue that the *Agree* relation established between T and these two Specs results in some sort of *multiple valuation* of Case and  $\phi$ -features, perhaps similar in scope to what has been proposed by Bobaljik and Branigan (2006: 50f).<sup>9</sup> However, unlike them, I hypothesize that it is multiple *Agree*, but not MCCH, which values all the unvalued features of both the quantified DP and the stranded Q, including Case.

Another perhaps more important factor in favoring (i) over (ii), as noted by Boeckx (2003), is that in QF chains “[f]loated quantifiers typically agree with their antecedents in Case and  $\Phi$ -features” (p.53) as shown in the French example below (from Boeckx,2003:54).<sup>10</sup>

- (26) Les étudiantes ont été envoyées toutes en chine.  
 the students.3FPL have been sent.3FPL all.3FPL in China  
 ‘The students have all been sent to China.’

Further, given the fact that the movement of the DP *t-tullaab-u* over its quantifier preserves the VS order in (25b), I claim that the quantified DP-subject raises to a higher Spec-*vP*, leaving the quantifier stranded in situ. If this is true, it follows that the postverbal DP in Arabic VS can move (cf. Demirdache,1991; Fassi Ferhi,1993, see also Boeckx,2003), but it cannot cross the *vP* boundary (contra Aoun et al,1994; Fassi Ferhi,1993; Mohammad,2000), which in turn suggests that SA is a VS language, on the one hand, and that in SA, subjects do move (contra Soltan,2007; Balushi,2011).

Still, however, structures like (27) cast some doubts on our postulation, where the quantified DP seems to raise crossing the *vP* boundary.

- (27) t-tullaab-u            ?at-uu            kull-u-hum

<sup>8</sup> In SA, *kull* is singular and plural depending on the singularity/plurality of the DP it quantifies. In other words, when the quantified DP is singular, *kull* has a singular reading, but when such a DP is plural, it has a plural reading.

<sup>9</sup> In their proposal of MCCH, Bobaljik and Branigan argue that T checks Case on/of two arguments, i.e. the subject and object. In fact, Bobaljik and Branigan’s proposal capitals on a fact from Chukchi where *v* cannot check the Acc Case of the object.

<sup>10</sup> Unlike QF, in resumption, there are no such agreement constraints. Consider (i, from Demirdache,1991: 46)

(i) [?ayy-u/\*a rajulin] ra?ayta-hu.  
 which-NOM/-ACC man-GEN saw-you-him(ACC)  
 ‘Which man did you see?’

the students-NOM came-3MPL all-NOM-them  
 ‘The students all came.’

However, the fact that the quantified DP in (27) is an instance of base-generation out of the thematic domain comes from SA embedded clauses as (28-30) show.

(28) ?arad-tu ?an ya?ati-a kull-u t-tullaab-i  
 want-I C come-3MS all-NOM the-students-GEN  
 ‘I want all the students to come.’

(29) ?arad-tu ?an ya?atia t-tullaab-u kull-u-hum  
 want-I C come-3MS the-students-NOM all-NOM-they  
 ‘I want all the students to come.’

(30) \*?arad-tu t-tullaab-a ?an ya?ti-a kull-u-hum  
 want-I the-students-ACC C come-3MS all-NOM-they

In (28), the quantified DP occurs in the form of a CS. In (29), however, it raises, but it does not cross the  $vP$  boundary. In (30), the quantified DP raises and crosses the  $vP$  boundary of the embedded clause, but the sentence is ungrammatical. However, the ungrammaticality of (30) might lie in crossing Spec-TP and landing in Spec-CP, which does not rule out the possibility that the subject can cross Spec- $vP$  and land in Spec-TP. However, this possibility disappears by the ungrammaticality of (32), where the expected landing site is Spec-TP.

(31) ḏanan-tu ?an ya?tia t-tullaab-u kull-u-hum  
 though-I C come-3MS the-students-NOM all-NOM-they  
 ‘I thought that the students have all come.’

(32) \*ḏanan-tu t-tullaab-a ya?ti-a kull-u-hum  
 though-I the-students-ACC come-3MS all-NOM-they

Note that in (32), the resumed Q occurs in Spec- $vP$  of the embedded clause, which suggests that it functions as the subject of the verb of the embedded clause *ya?tia*. If this is true, we should expect that it cannot cross  $vP$  boundary, which is borne out, given the ungrammaticality of (33).

(33) \*?ayy-u tullaab-in ?arad-ta kull-a-hum ?an ya?ati-a  
 which students-GEN want-you all-ACC-they C come-3MS

In (33), the quantified DP raises (along with the wh-word *?ayy*), out of the  $vP$  boundary (possibly to Spec-CP), and the resumed DP raises also and crosses the

vP boundary of the embedded clause. And like (32), the construction is still ungrammatical.<sup>11</sup> Thus, the ungrammaticality of (32) and (33) obviously indicates that quantifier floating is impossible in SV, in both matrix and embedded clauses.

Still, however, it remains to account for the ungrammaticality of structures like (33). For instance, the ungrammaticality of (32) may have to do with agreement. However, the ungrammaticality of (33) is presumably due to Minimized Chain Links Condition (see Chomsky,1995, see also Takahashi,1994; McCloskey,2001; Boeckx,2003). In that a link of a chain must be as short as possible.

As I have already shown, the subject in SA raises, but it cannot cross vP boundary, and that the preverbal DP is presumably an instance of base-generation. In fact, the idea that the preverbal DP is a result of movement is argued for in the literature (see e.g. Boeckx,2003; Aoun et al,2010). On the other extreme, Soltan (2007), for instance, completely rules out such a movement, arguing that SA does not have an A-movement. He perhaps bases his argument on LBC (=Left-Branch Condition, see Ross,1976) claiming that extraction out of an island is impossible. However, if Soltan's claim is on the right track, then, it would be difficult (and perhaps impossible) to account for the grammaticality of structures like (25b), where extraction does take place. The fact that our story lies in-between of the two contradictory analyses sounds reasonable. Our analysis adequately accounts for the (un)grammaticality of structures in (25-33), whereas Soltan's and Aoun et al's analyses, for instance, do not.

Let us now turn to the second question posed above, concerning the nature of resumption in QF structures. Within the vP boundary, the quantified DP does move, and this movement results in a chain. I assume, following (Boeckx,2003), that since the extracted DP is linked to the stranded Q, resumption is perhaps a result of spellout of the tail of the chain. Thus, once resumption has taken place, LBC/island violation is repaired. However, unlike (Boeckx,2003), I assume that the movement the quantified DP undergoes takes place under *Agree*, but not *Match*, at least in quantified subject DPs like the ones under discussion. This is perhaps due partly to the fact that this movement is optional, however, once it takes place, resumption is obligatory, which is true, given the ungrammaticality of (34), where resumption does not take place.

<sup>11</sup> Note that the ungrammaticality of (34) has nothing to do with number agreement. This is clear from the ungrammaticality of (i) even if the verb is plural.

(i)?\* ?ayy-u tullaab-in ?arad-ta kull-a-hum ?an ya?at-uu  
which students-GEN want-you all-ACC-they C come-3MPL

As it turns out, then, the ungrammaticality of (i) lies mainly in the fact that the Q raises and crosses the vP boundary.

- (34) \*ʔata t-tullaab-u kull-u  
 came-3MS the students-NOM all-NOM

To conclude, then, it could be generalized that the fact that quantifier floating is possible in VS, but not in SV structures, adds support to our claim that SA is a VS language.

#### 4.3. Weak crossover

Weak crossover (WCO) effect can be best understood in Lasnik and Stowell's (1991: 690) generalization in (35) (see also Postal, 1993; Ruys, 2000).

- (35) In a configuration where a pronoun P and a trace T are both bound by a quantifier Q, T must c-command P.

To understand how (35) works, consider (36) from English.

- (36) \*Who<sub>i</sub> did his<sub>i</sub> mother call t<sub>i</sub> a taxi?

Lasnik and Stowell (1991) propose that the extracted element in (36), for example, is a "true quantifier phrase" -that is, a phrase containing an element that semantically quantifies over a set with > (or =) 2 members. They argue that this QP is available in (36). Thus, the ungrammaticality of (36), according to Lasnik and Stowell (1991) and Postal (1993), is due to the fact that it violates the WCO in (35). In that the T(trace) (possibly in Spec-VP), does not c-command the P *his* (in Spec-TP), which are both bound by the *wh*-operator *who* (in Spec-CP), an instance of A'-binding. Along these lines, Ruys (2000: 688) argues that "pronouns that are coindexed with operators must be locally A-bound, or alternatively, operators must not locally A'-bind pronouns." However, consider the SA example in (37).

- (37) a. man<sub>i</sub> yuhibb-u [t<sub>i</sub>] ʔumm-a-hu?  
 who love-3MS mother-ACC-his  
 'Who<sub>i</sub> loves his<sub>i</sub> mother?'

- b. [<sub>CP</sub> man<sub>i</sub> [<sub>TP</sub> t<sub>i</sub> yuhibb-u [<sub>VP</sub> t<sub>i</sub> ʔumm-a-hu<sub>i</sub>...]]]

- (38) \*man<sub>i</sub> ʔumm-u-hu tuhibb-u [t<sub>i</sub>?  
 who mother-ACC-his love-3FS

The grammaticality of (37a) suggests that (35) is satisfied, and that the ungrammaticality of (38) indicates that it violates (35), which is true. In other words, T in (37a, possibly in Spec-vP) c-commands the pronominal clitic *-hu* in

?umm-a-hu, while this is not the case in (38). Note, however, that (37a) is different from (38), in that the letter is a SV while the former is a VS structure. This otherwise indicates that wh-movement in VS does not give rise to WCO, but it does in SVs. However, attaching the resumptive pronoun –hu to the verb *tuhibb-u* in (38) as in (39) renders the construction grammatical.

- (39) man<sub>i</sub> ?umm-u-hu<sub>i</sub> [t<sub>i</sub>] tuhibb-u-hu<sub>i</sub> ?  
 who mother-ACC-his love-3FS-him  
 ‘\*Who<sub>i</sub> does his<sub>i</sub> mother love him<sub>i</sub>?’

Thus, the grammaticality of (39) could have to do with a property of resumption in the language, what I call *Resumptive Pronoun Doubling* (=RPD). In other words, there are two resumptive pronouns in (39), and they are both linked coreferentially to the wh-operator *man*. Comparing, thus, (38) to (39), it might well be argued here that RPD is what rescues (38) in SV structures. However, this RPD is not needed in VS structures. I will not discuss RPD any further here because it relates to SVs more than VSs (for more about similar notions to RPD, see Dobrovie-Sorin,1990; Boeckx,2003).

Another piece of evidence that wh-movement in VS structures does not give rise to WOC comes from matrix clauses like (40), where raising structures with verbs like *yabdu* (seem) are involved.

- (40) a. man<sub>i</sub> yabdu li-?umi-hi<sub>i</sub> ḏaki-an?  
 who seems.3MS to-mother-ACC-his clever-ACC  
 ‘Who seems clever to his mother?’

- b. [<sub>CP</sub> man<sub>i</sub> [<sub>TP</sub> [t<sub>i</sub>] [yabd-u [<sub>VP</sub> [t<sub>i</sub>] [<sub>PP</sub> li-?umm-a-hi<sub>i</sub> [<sub>TP</sub> [t<sub>i</sub>] [<sub>AP</sub> ḏaki-an]]]]]]]

Hence, if wh-movement does not give rise to WOC in VSs, then, we expect that in (40), the wh-operator *man* raises (cyclically) from within the verbless sentence *man ḏaki-an* (roughly: who clever?), through Spec-TP, to Spec-CP as shown in (40b). One direct stipulation is that Spec-TP is an A<sup>-</sup>-position. In fact, Spec-TP as an A<sup>-</sup>-position has been argued for cross-linguistically (see Mahajan,1990,,2003 for Hindi; May,1977; McCloskey,2000, for Irish; Borer,1995, for Hebrew; Plunkett,1993; Soltan,2007; Balushi,2011 for SA, among other authors and languages). If this is true, however, it otherwise indicates that in SA wh-chains are A<sup>-</sup>-bound. This perhaps indicates that like Irish ‘resumptive wh-chains’ in Arabic are immune to WCO (cf. May,1977; Mohammad,2000).<sup>12</sup> Note also that there is

<sup>12</sup> See also Dobrovie-Sorin (1990) who considers this resumption doubling a clitic doubling, an assumption based on Romanian relative and interrogative structures. This has in fact been observed by Kayne (1994: 165)

nothing preventing us from claiming that in SVs, the wh-operator is base-generated in Spec-TP, and then moves to Spec-CP, given the fact that in SA, C has [+Q] feature which is satisfied by (re)merging the wh-operator in its Spec.

To conclude, I have shown that wh-movement gives rise to WCO in SV, but not in VS orders, which indicates that SA is basically a VS language. Note that the discussion involved in this section centers only on the wh-operator *man*; the question, then, is: what about wh-extraction as a whole? The section to follow tries to provide an answer to this question.

#### 4.4. Wh-extraction

Perhaps, one of the striking pieces of evidence against SV and in support of VS in SA is wh-extraction, either short- or long-distance. Let us look at the contrast between (41) and (42); VS and SV wh-questions, respectively, where the wh-word *maaḏaa* undergoes a short movement to Spec-CP.

(41) a. *maaḏaa<sub>i</sub> qara?a ṣali-un [t<sub>i</sub>]?  
 what read Ali-NOM  
 ‘What did Ali read?’*

b. [<sub>CP</sub> *maaḏa* [<sub>TP</sub> [<sub>T</sub> *qara?a* [<sub>VP</sub> [<sub>ṣali-un</sub> [<sub>VP</sub> [<sub>v</sub> [<sub>t</sub>]]]]]]]]?

(42) a. \**maaḏaa ṣali-un qara?a [t] ?  
 what Ali-NOM read*

b. [<sub>CP</sub> *maaḏaa* [<sub>TP</sub> [<sub>ṣali-un</sub>] [<sub>T</sub> *qara?a* [<sub>VP</sub> [<sub>VP</sub> [<sub>t</sub>] [<sub>v</sub> [<sub>t</sub>]]]]]]]]?

Note that in (41), the wh-word *maaḏaa* moves cyclically from its canonical position through Spec-VP, Spec-TP and finally Spec-CP (for minimality, see Rizzi,1990, or Shortest Move, see e.g. Chomsky,1993;Zwart,1996). In (42), however, it raises from its canonical position to Spec-VP and then to Spec-CP, a question arises, however: is it the DP occupying Spec-TP that makes (42a) ungrammatical? Observing the difference between (41b) and (42b), it seems that this is the only reason. In other words, while in its successive cyclicity the wh-word *maaḏaa* ‘passes’ through Spec-TP in (41b), it does not in (42b), and it could be inferred that this is perhaps the only reason for the ungrammaticality of (42a). This can also be taken to be other empirical evidence that Spec-TP is an A`-position.

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stating that there are some languages where “resumptive pronoun relatives result from the usual raising to SpecCP, with the input being a clitic-doubling structure.”

Note that the ungrammaticality of (42a) disappears if we add the copular *kaana* as (43) illustrates.

(43) a. *maaḏaa<sub>i</sub> kaana ḡali-un yaqraʔu [t<sub>i</sub>] ?*  
 what was Ali-NOM read  
 ‘What was Ali reading?’

b.  $[_{CP} \text{maaḏaa}_i [_{TP} [t_i] [_T \text{kaana} \dots [_{TP} [\text{ḡali-un} [_T [\text{yaqaraʔ-u}] [_{VP} \dots [t_i]]]]]]]$ ?

c. \* *maaḏaa<sub>i</sub> ḡali-un kaana yaqraʔu [t<sub>i</sub>] ?*  
 what Ali-NOM was read

But again, (43a) is a VS pattern. As such, the wh-word is allowed to raise cyclically, through Spec-TP, to Spec-CP.<sup>13</sup> However, once the subject is, say, extracted to Spec-TP, which results in SV order, the wh-extraction is not allowed, as the ungrammaticality of (43c) shows.

There is also good evidence for this in matrix clauses, where wh-extraction is allowed in VS embedded clauses of *ʔaraad*-type. Consider (44).

(44) a. *ʔarad-tu ʔan yaqraʔa ḡali-un kitaab-an*  
 want-I C read Ali-NOM book-ACC  
 ‘I want Ali to read a book.’

b. *man<sub>i</sub> ʔarad-ta ʔan yaqraʔa [t<sub>i</sub>] kitaab-an ?*  
 who want-you C read book-ACC  
 ‘Who did you want to read a book?’

c. *maaḏaa ʔarad-ta ʔan yaqraʔa ḡali-un [t<sub>i</sub>] ?*  
 what want-you C read Ali-NOM  
 ‘What did you want Ali to read?’

d. *ʔayy-a kitaab-in ʔarad-ta ʔan yaqraʔa(-hu) ḡali-un [t<sub>i</sub>] ?*  
 which book-GEN want-you C read-it Ali-NOM  
 ‘Which book did you want Ali to read?’

In (44a-d), both the matrix and embedded clauses are of a VS order. The wh-words/phrases *man*, *maaḏaa* and *ʔayy-a kitaab-in* are extracted from within the

<sup>13</sup> In fact, structures like (43a) are examples of what is so called *double tense constructions* or *bi-clause structures*, structures that are perhaps peculiar to Arabic. For more about such constructions, see e.g. Fassi Ferhi(2012).

embedded clause to Spec-CP of the matrix clause (cyclicity is maintained), and the result is a grammatical structure in each.

However, consider (45), where the extraction is from within a SV embedded clause.

- (45) a. *hasib-tu ?anna t-tullaab-a jaa?-uu*  
 thought-I that the-students-ACC came-3MPL  
 ‘I thought that the students come.’
- b. \**man hasib-ta ?anna [t] jaa?-uu*  
 who think-you that came-3MPL
- c. \**?ayy-u tullaab-in hasib-ta ?anna [t] jaa?-uu*  
 which students-GEN think-you that came-3MPL?’

The ungrammaticality of (45b&c) indicates that wh-extraction is not possible in SV structures. However, consider (46).

- (46) a. *man hasib-ta ?anna-hum jaa?-uu?*  
 who think-you that-they came-3MPL  
 ‘Who did you think came?’
- b. *?ayy-u tullaab-in hasib-ta ?anna-hum jaa?-uu*  
 which students-GEN think-you that-they came-3MPL?’  
 ‘Which students did you think they came?’

The grammaticality of (46a) indicates that wh-extraction is possible in SV structures. But note that (46a&b) are not identical to (45b&c). The difference is that while the resumptive pronoun *-hum* is attached to C *?anna* in (46), it is not in (45).

However, even if resumption rescues structures like (45), it does not mean that wh-extraction is possible in SV embedded clauses. If it were, then, we should expect that it also rescues structures like (47), where the matrix clause is of a SV order.

- (47) a. \**man ʕali-un hasib-a ?anna-hum jaa?-uu*  
 who Ali-NOM thought that-they came-3MPL
- b. \**?ayy-u tullaab-in ʕali-un hasib-a ?anna-hum jaa?-uu*  
 which students-GEN Ali-NOM think that-they came-3MPL?’

Given this, I claim that even in SV embedded clauses, wh-extraction is not possible (contra e.g. Fassi Ferhi,1993; Mohammad,2000; Soltan,2007). That wh-extraction takes place in SV embedded clauses in structures like (46), I think, is due to the matrix clauses themselves being of a VS order, which is strongly supported by the fact that when the matrix clauses are of a SV order, wh-extraction is not possible as (47) shows.<sup>14</sup>

To conclude this section, I would like to provide further evidence that even in those matrix clauses, where wh-extraction is possible, wh-extraction can be thought as an instance of left dislocation (or otherwise base-generation in the left-periphery). This is supported by relative clause structures like (48) (cf. Demirdache,1991: 43; Boeckx,2003).

- (48) a. raʔay-tu t-taalib-a llaḏii qaraʔa l-kitaab-a  
 saw-I the-student-ACC who read the-book-ACC  
 ‘I saw the student who read the book.’
- b. ʔayy-u kitaab-in raʔay-ta t-taalib-a llaḏii qaraʔa-hu.  
 which-Nom book-GEN saw-you the-student-ACC who read-it  
 ‘Which book that you saw the student who read it.’
- c. \*ʔayy-a kitaab-in raʔay-ta t-taalib-a llaḏii qaraʔa-hu.  
 which-Acc book-GEN saw-you the-student-ACC who read-it

Note that the difference between (48b) and (48c) is that while in the former the wh-operator ʔayy occurs with Nom Case, in the latter, it occurs with Acc Case. This otherwise indicates that (48b) is an instance of base-generation rather than extraction. If it were an instance of wh-extraction, we would expect that ʔayy would have preserved and surfaced with its Acc Case.

#### 4.5. Clitic arguments

Cliticization is perhaps one of the core properties that distinguish Arabic, both SA and modern varieties, from languages like English, for instance. A clitic is said to be incorporated onto its c-commanding head (see Baker,1988; Shlonsky,1997; Fassi

<sup>14</sup> Fassi Ferhi(1993: 66) himself admits that wh-extraction is impossible in structures like (ib), where the topic is a pronominal clitic attached to the verb.

(i) a. hasib-ta ʔanna l-walad-a ḏarab-a-hu r-rijaal-u  
 thought-you that the-boy-ACC beat-3MS-him the-men-NOM  
 ‘You thought that the boy the men beat him.

b. \*ʔayy-u rijaal-in hasib-ta ʔanna l-walad-a ḏarab-uu-hu  
 which-NOM men-GEN thought-you that the-boy-ACC beat-3MPL-him

Thus, it seems that what makes wh-extraction possible in embedded SV structures like (46) is that these structures are embedded within VS matrix clauses, and that it is these VS matrix clauses that allow such extraction.

Ferhi,1993; Shormani,2014, among many others). Clitic arguments, specifically subjects, have been taken as direct evidence for the position of subjects. For instance, Brandi and Cordin (1981) and Safir (1985) provide good evidence in support of this from Trentino, based on the fact that in Trentino, clitic subjects are always nominative, which holds true for Arabic. They argue that clitic subjects in Trentino are cliticized postverbally and the objects follow them. Borer (1986) also provides good evidence for this phenomenon from Hebrew in what she calls I-subject (i.e. INFL-subjects). In this section, I argue that clitic arguments (clitic subjects and objects) provide strong (and perhaps the strongest) evidence for the claim that SA is a VSO language. Consider (49).

(49) a. *darab-tu-haa*  
 beat-I-her-ACC  
 ‘I beat her.’

b. \**darab-haa-tu*  
 beat-her-ACC-I

In (49a), for instance, the clitic *-tu* (I), i.e. the subject, is cliticized to the verb and the clitic *-haa*, i.e. the object, follows it, hence, resulting in a VSO order. Any other order renders the sentence ungrammatical as (49b) shows. Not only does this take place in monotransitive, but also in ditransitive structures as (50) shows (see also Shormani,2014).

(50) *zawaj-na-ka-ha*  
 marry-we-you-her  
 ‘We marry her to you.’

In (50), the verb *zawaj* occurs sentence-initial and there are three clitics, namely *-na*, *-ka* and *-ha* (we, you and her, respectively), functioning as a subject, indirect and direct object, respectively. Again, any other order renders the construction ungrammatical, as the ungrammaticality of (51) illustrates (see also Shormani,2014).

(51) \**zawaj-ka-na-ha*  
 marry-you-we-her

Thus, there seems to be a linearizing (or otherwise ordering) constraint holding between a clitic subject and a clitic object. This linearizing constraint, what I name *Clitic Subject-Object Constraint* (=CSC) can be formulated in the following statement.

(52) CSC

When the subject and the object(s) of a verb are clitics, the subject must precede the object.

Now, under (52), the ungrammaticality of (49b&51) is straightforwardly accounted for. Note that VOS structures like (53) fall out of the scope of (52), simply because the subject is a nominal DP.

(53) *kataba-haa ʕali-un*  
wrote-it Ali-NOM  
'It is Ali who wrote it.'

Apparently, though, VOS order seems to compete with our postulation. In fact, structures like (53) were taken by Majdi (1990) to be crucial evidence that SA is a VOS language. He bases his arguments on the fact that VSO in such cases is not possible as the ungrammaticality of (54) shows.

(54)\**kataba ʕali-un -haa*  
wrote Ali-NOM it

However, I think that the ungrammaticality of (54) has nothing to do with SA as a VOS language, but rather, it has perhaps to do with Baker's (1988) generalization concerning incorporation, the fact that a clitic must be cliticized/incorporated onto the host (N, V, C, etc.) by which it is c-commanded.

Although VOS structures like (53) above or (55) below also fall out of the scope of (52), again, because there is no clitic functioning as the subject of the verb, I would like to provide crucial evidence against VOS order. The first is that structures like (55) are just instances of object shift, which is at all optional. The second is that VOS is not even an option in some contexts. Consider first (55), where both the subject and the object are nominal DPs that can be Case-marked.

(55) *ḍaraba zaid-an ʕamr-un*  
beat Zaid-ACC Amr-NOM  
'Amr beat Zaid.'

In (55), the word order is VOS, where the DPs *zaid-an* and *ʕamr-un* function as the object and subject, respectively. However, unlike clitic objects in structures like (53), where the VOS order seems to be obligatory, in structures like (55), it seems to be optional as (56) shows.

(56) *ḍaraba ʕamr-un zaid-an*

beat Amr-NOM Zaid- ACC  
 ‘Amr beat Zaid.’

The fact that (56) is grammatical indicates that VOS is no more than an instance of object shift. Still, however, the very optionality also casts doubts on our postulation. In that VOS is really competing with VSO.

One way out of this is, perhaps, to consider the second evidence mentioned above, which consists in structures involving ambiguity and anaphoric expressions. As for ambiguity, it will be discussed in more detail in (section 5.3). Anticipating, consider (57).

(57) *daraba musaa iisaa*  
 beat Musa Issa  
 ‘Musa beat Issa.’

The proper names *Musa* and *Issa* cannot take Case markers because they end in the long vowel *aa*. That the order here is obligatorily VSO, traditional Arab grammarians assert, is because if we change the order, say, as in structures like (58), the subject will be *Issa* (but not *Musa*). In structures like (56), Case is made use of as a distinguishing property of DPs (cf. El Yasin, 1980: 112f), but this is not the case in (57&58).

(58) *daraba iisaa musaa*  
 beat Issa Musa  
 ‘Issa beat Musa.’

In fact, (58) is not equivalent to (57), as illustrated by English translation. Thus, it turns out that ambiguity structures indicate that VSO is the only word order, and that the apparent VOS is nothing but some sort of object shift.

Now, let us turn to anaphoric structures. In fact, anaphoric structures like (59), where the reflexive pronoun *nafs-a-haa* must occur after the subject, perhaps provide a crucial piece of evidence against VOS.

(59) a. *qatala l-jundi-u nafs-a-hu*  
 killed the-soldier-NOM self-ACC-his  
 ‘The soldier killed himself.’

b. \**qatala nafs-a-hu l-jundi-u*  
 killed self-ACC-his the-soldier-NOM

Assuming a Binding Theory perspective, the ungrammaticality of (59b) lies in violating the condition C of the binding theory, where the antecedent of the anaphoric expression, namely *l-jundi-u*, is c-commanded/bound in its governing category by the reflexive pronoun *nafs-a-hu*, which must be free (cf. Majdi,1990; Mohammed,2000). Assuming linearization, however, the ungrammaticality of (59b) is due perhaps to violating a precedence principle whereby the antecedent must precede the reflexive pronoun it c-commands (cf. Fassi Ferhi,1993: 22).

To sum up, it turns out that cliticization in SA (clause structure) provides us with strong evidence that VS is the only possible order. As noted above, SA in this aspect resembles Trentino (see Brandi and Cordin,1981; Safir,1985), and Hebrew (see e.g. Borer,1986), where clitic subjects provide crucial evidence for the position of subjects.

#### **4.6. pro-drop property**

In this section, I argue, based on pro-drop property, that SA is a VS language. *pro* is seen as the thematic subject occupying Spec-vP (see e.g. Frascarelli,2007). In fact, pro-drop property is perhaps one of the striking features distinguishing null subject languages (=NSLs) like Arabic, Italian, Irish, Turkish, Spanish, etc. from nonnull subject languages like English, French, etc. In NSLs, a subject can be null, i.e. *pro* (or unpronounceable pronoun), which is not possible in nonnull subject languages like English and French, for instance. Consider (60) and (61), from English and French, respectively.

- (60) a. He read a book  
b. \**pro* read a book

- (61) a. Il lit un livre  
He read a book  
b. \**pro* lit un livre  
read a book

The ungrammaticality of (60b) and (61b) lies in the fact that English and French do not allow *pro* subjects. However, consider pro-drop examples from Italian and SA in (62) and (63), respectively.<sup>15</sup>

- (62) a. Maria e` tornata?  
Maria is returned? ('Has Maria returned?')

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<sup>15</sup> The Italian examples are taken from Radford (2009: 92).

b. S<sub>1</sub>`, pro e` tornata  
 ‘Yes, pro is returned (‘Yes, she has returned’)

(63) a. ḍahab-a pro ?ila l-madrast-i  
 went-3MS to the-school-GEN  
 ‘He went to school.’

b. ḍahab-a ʕali-un ?ila l-madrast-i  
 went-3MS Ali-NOM to the- school-GEN  
 ‘Ali went to school.’

Comparing (62a) to (62b), it is clear that the evidence that the null subject in the Italian example in (62b) is *she* is the agreement manifested by inflections carried by the Aux *e`* (is) and the participle *tornata* ‘returned.’ Just as the form of the (3 singular) auxiliary *e`* (is) is determined, the (feminine singular) participle *tornata* is determined via agreement with the overt subject Maria, which is 3, feminine singular in (62a). In the Arabic example in (63a), the subject is not present in the sentence. As the English translation indicates, the null subject is *huwa* (he). The question is how do we know that *pro* is *huwa* (he) and not any other pronoun? Compare (63a) to (63b) and observe the inflection *a* attached to the verb in both (qua a hybrid category, see e.g. Giorgi & Pianesi, 1996). If we look at the verb *ḍahab-a* (went) and the agreement features it exhibits, it is likely to find that it carries all  $\phi$ -features and tense, which indicate that *pro* is identified as 3 masculine singular pronoun which is *huwa* in (63a).

As can be observed in (62&63), there seems to be a difference between Italian and SA concerning the position of *pro*. Informally, in SA, *pro*’s must be positioned to the right of the verb and never to the left of it, as the ungrammaticality of (64) shows.

(64) \**pro* ḍahab-a ?ila l-madrast-i  
 went-3MS to the-school-GEN

More formally, it is clear that *pro* is merged in Spec-vP, and given the ungrammaticality of (64), *pro* remains in situ throughout the derivation (see also Frascarelli, 2007), which in turn lends us strong support that SA is a VS language.

#### 4.7. Negation

In this section, I mainly focus on sentential negation. In Arabic, there are three sentential negation particles, namely *lam*, *laa* and *lan*.<sup>16</sup> It is argued in the literature that these particles are variants of the same particle, namely *laa*. These particles are used according to the tense of the sentence, i.e. *lam* is used in the past, *laa* in the present and *lan* in the future. In addition to the syntactic evidence that SA is a VS language discussed in the previous sections, here I will also provide strong empirical evidence that SA is a VS language, based on the position of the negative particle. Consider (65,66&67) illustrating sentential negation with *lam*, *laa* and *lan*, respectively.

(65) a. *lam* *yaktub-ø* *ʕali-un* *qiṣṣat-an*  
 not write Ali-NOM story-ACC  
 ‘Ali did not write a story.’

b. \**lam* *ʕali-un* *yaktub-ø* *qiṣṣat-an*  
 not Ali-NOM write story-ACC

(66) a. *laa* *yaktubu* *ʕali-un* *qiṣṣat-an*  
 not write Ali-NOM story-ACC  
 ‘Ali does not write a story.’

b. \**laa* *ʕali-un* *yaktubu* *qiṣṣat-an*  
 not Ali-NOM write story-ACC

(67) a. *lan* *yaktuba* *ʕali-un* *qiṣṣat-an*  
 not write Ali-NOM story-ACC  
 ‘Ali will not write a story.’

b. \**lan* *ʕali-un* *yaktuba* *qiṣṣat-an*  
 not Ali-NOM write story-ACC<sup>17</sup>

<sup>16</sup> Note that there is another sentential negative particle, i.e. *maa* but it exhibits free occurrence (see also fn.17&18).

<sup>17</sup> Unlike the above assumption, Fassi Ferhi(1993) claims that the Neg *laa* can precede the preverbal DP in structures like (i).

(i) *laa* *ʔahad-an* *jaaʔ-a*  
 Not one-ACC came  
 ‘No one came.’

However, I hypothesize here that *laa* in (i) is not an independent negative particle like the ones used in (65-67). But rather, it is part of the polarity item *laa* *ʔahad* (no one). My claim is based on the impossibility of such a negative particle to occur in structures like (ii), where the preverbal DP is not the indefinite pronoun *ʔahad* (one).

(ii) \**laa* *r-rajul-u* *jaaʔa*  
 no the-man-NOM came

The ungrammaticality of (b) examples in (65-67) indicates that SV structures cannot be negated with *lam*, *laa*, and *lan*, respectively. However, their (a) counterparts, which are all VS negative structures, are grammatical. This means that sentential negation can only be formed in VS structures, which in turn adds some sort of support to our postulation that SA is a VS language.

Still, however, it remains to explain why (b) examples are ungrammatical. One way to explain the ungrammaticality of (b) examples is to consider the structural positions in which these negative particles occur. The fact that the preverbal DP occurring sandwiched between the negative particle and the verb (or otherwise Neg and V) renders (b) examples ungrammatical perhaps suggests that there is some sort of adjacency constraint holding between the negative particle and the tense, which I call *Negative-Tense Adjacency Constraint* (NAC) and formulate it in (68).

(68) NAC

In SA sentential negation, Neg must be adjacent to T

Given (68), the ungrammaticality of (b) examples in (65-67) is straightforwardly accounted for, in that the NAC is violated by the preverbal DP.<sup>18</sup> Note that structures like (69) do not violate (68).

(69) ʕali-un lam yaktub-ø qiṣṣat-an

In addition, in structures like (iii), *laa* is not a sentential negative particle, but rather a nominal one. It is almost similar to the English *no*, which is a determiner.

(iii) *laa rajul-an jaaʔa*  
no man-ACC came  
'No man came.'

The fact that *laa* in (iii) is a determiner comes from the complementary distribution between it and *al-* (the) as (iv) shows.

(iv) \**laa r-rajul-a jaaʔa*  
no the-man-ACC came

Note that (iv) is similar to (iii). The only difference is that while in the former the DP *r-rajul-a* occurs with *al-* (assimilated into *r*), in the latter it does not. But (iv) is ungrammatical while (iii) is grammatical. This perhaps indicates that *laa* in such structures is not a sentential negative particle.

<sup>18</sup> Still, however, NAC might encounter structures like (ia), where *maa* occurs separated from T (or otherwise the verb).

(i) a. *maa ʔata rajul-un*  
Not came man-NOM  
'A man did not come.'  
b. *maa rajul-un ʔata*  
not man-NOM came  
'No man came.'

However, it is possible to argue that that the negative particle *maa* can be separated from T has nothing to do with NAC violation. But rather, it has to do with the fact that *maa* is potentially different from *laa* in structures like (67), for instance. In that unlike the latter, *maa* is neither sensitive nor even inflected for tense. It is presumably a determiner, perhaps similar to *laa* in (fn. 18, Case assignment aside).

Ali-NOM not write story-ACC  
 ‘Ali did not write a story.’

(69) does not, though, indicate that SA is a SV language, but rather it raises two interrelated points: i) the preverbal DP is an instance of base-generation (and not movement), and consequently, ii) this base-generating position is presumably not Spec-TP, but rather Spec-NegP (=negative phrase).

To conclude, sentential negation in SA provides another syntactic piece of evidence that SA is a VS language.

#### 4.8. Modality and Aspectuality

Modality and aspectuality are widely believed to be two features of Arabic sentences. As far as modality is concerned, SA has two types of modals, viz. particles and verbs. The former includes three particles, the assertive *qad* and the future *sa-* and *sawfa* (see also Fassi Ferhi,1993; Mohammad,1990,2000; Bahloul,2008). The latter, however, includes verbs like *yajib* (must), *yanbayi* (should), etc. Note that there is one substantial difference between both types. While the first type (i.e. particles) selects a TP as complement, the second (i.e. verbs) selects a CP. Hence, the latter type must always be accompanied by the C *?an* (but not *?anna*).<sup>19</sup> Consider (70&71) representing the first type and (72&73) the second type. For simplicity, I will gloss *qad* as *may*, and *sa-* and *sawfa* as *will*.

(70) a. *qad ya?ti ?ali-un*  
 may come Ali-NOM  
 ‘Ali may come.’

b. *\*qad ?ali-un ya?ti*  
 may Ali-NOM come

(71) a. *sa-ya?ti ?ali-un*  
 will-come Ali-NOM  
 ‘Ali will come.’

b. *\*sa- ?ali-un ya?ti*  
 will-Ali-NOM come

(72) a. *sawfa ya?ti ?ali-un*

<sup>19</sup> The difference between *?an* and *?anna* could perhaps be captured by the fact that *?an* is [+V, -N] while *?anna* is [-V, +N]. Informally, *?an* selects a verb while *?anna* a noun. In traditional literature, the former is often referred to as a jussive marker while the latter emphasis.

will come Ali-NOM  
 ‘Ali will come.’

b. \*sawfa ʕali-un yaʔti  
 will Ali-NOM come

(73) a. yajib-u ʔan yaʔti ʕali-un  
 must C come Ali-NOM  
 ‘Ali must come.’

b. \*yajib-u ʔan ʕali-un yaʔti  
 must C Ali-NOM come

(b) examples in (70-73), which are SV structures, are ungrammatical, and as it turns out, their ungrammaticality indicates that Arabic is a VS language. Such ungrammaticality is due presumably to an adjacency condition holding between a modal, be it a particle or a verb, and the verb, perhaps similar to that holding between the negative particle and the verb discussed in the previous section.

As for aspectuality, there is also good evidence that can be obtained from aspectual structures that SA is a VS language. As a particle, perhaps *laqad* is the only element that is used to indicate aspectuality.<sup>20</sup> It conveys the meaning of ‘already,’ but for simplicity, I will gloss it as “*have*.” Consider (74).

(74) a. laqad ʔata ʕali-un  
 has came Ali-NOM  
 ‘Ali has come.’

b. \*laqad ʕali-un ʔata  
 has Ali-NOM came

The ungrammaticality of (74b) provides another piece of support that SA is a VS language. If it were a SV language, then, explaining this ungrammaticality remains a mystery.

To recapitulate, I have provided empirical evidence from syntax of the language that SA is basically a VS language. It is true, though, that sometimes SVO (or VOS) order competes with VS; the syntactic empirical evidence presented in this section makes VSO the most logical order of SA, given the

<sup>20</sup> It is often claimed that Aspect is also marked by inflections. For instance, in singular verbs it is claimed that *-a* indicates perfective aspect while *-u* indicates imperfective aspect (see also Fassi Ferhi, 2012; Bahloul, 2008).

ungrammaticality/marginality of SVO/VOS structures discussed throughout this section. Further, most evidence presented in this section is syntactically shared by subject DPs cross-linguistically, specifically, the assumption that subjects are base-generated in Spec-vP. In this aspect, it may well be argued that base-generating the subject in Spec-vP is a principle of UG (=Universal Grammar), and that remaining in situ or raising to Spec-TP is parameterized cross-linguistically. For instance, in VSO languages like SA, the subject parametrically stays in situ while in SVO languages like English the subject parametrically raises to Spec-TP.

**5. Semantic Evidence**

In this section, I present some semantics-based evidence in support of VS order in SA. This evidence will be discussed in relation to idiomaticity, discourse interpretation, ambiguity, (in)definiteness and exclamation.

**5.1. Idiomaticity**

In this section, I argue, based on the way the clause structure of idioms is brought to us, that SA is basically a VS language. Since an idiom has at least two interpretations: literal and idiomatic, and since what concerns us here is the structure that maintains the idiomatic interpretation, there is good evidence that idiomaticity is retained in VS but not in VS structures (see Fassi Ferhi,1993: 90. fn.14; contra Mohammad,2000: 74, see also Soltan,2007).<sup>21</sup> Consider (75).

(75) balaya s-sail-u z-zuba  
reached the-water-NOM the end

Lit: ‘the water reached the end.’

Idm: There is no patience after now.

In (75), we notice that both literal and idiomatic readings are available. However, in SV such reading is not available as illustrated in (76).

(76) s-sail-u balaya z-zuba  
the-water-NOM reached the end

Lit: ‘the water reached the end.’

But this raises a question, i.e. why is it that idiomatic reading is available in VS, but not in SV? One way to think of answering this question perhaps lies in the notions ‘left-periphery’ or ‘base-generation,’ which perhaps hold cross-

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<sup>21</sup> I have also conducted a small informal survey in three newspapers, namely Al-Thawra, Al-Methaq and Al-Jumhuria. I found that about (%96) of the sentences involved are of a VS order, and that only about (%4) are of a SV order.

linguistically. In languages like English, for instance, idioms retain their idiomaticity after raising as (77b) shows (cf. Soltan,2007), but this idiomaticity is not retained in instances of base-generation as in (77c):

- (77) a. The cart is before the horse. (both lit. and idm. Readings are available)  
 b. The cart seems to be before the horse. (both lit. and idm. Readings are available)  
 c. The cart, it seems that it is before the horse. (only lit. reading is available)

In (77c), only the literal reading is available since the subject *the cart* is left-dislocated, and not moved to its surface position, unlike (77b), where both literal and idiomatic readings are available. Note that (77b) is an instance of A-chain. This suggests that that movements of A-chains maintain the idiomatic interpretation of an idiom, but not A'-chains (see also Aoun and Benmamoun,1998; Soltan,2007). If, thus, analogy is to be assumed, it could be argued that the preverbal subject in Arabic SV structures is base-generated possibly in Spec-TP, rather than moved to that position.

The conclusion that could be drawn in this juncture is that idioms in SA, specifically, sentential ones, presumably invariably appear to be a property of VS order. Along these lines, Soltan (2007) argues that idiomatic interpretation is not maintained in SV because they occupy the same interpretation domain, and that idioms that occur in such structures seem to be unnatural.

However, one encounters some idioms which are actually of a SV-type as in (78).

- (78) yadaa-ka                    ?aukataa wa fuu-ka                    nafax-a  
 Hand-NOM.DL-your tied-DL and mouth-NOM-your blew-3MS  
 Lit: 'your hands tied and your mouth blew.'  
 Idm: 'don't blame others for your faults.'

Though idioms of the type in (78) are few, it remains to account for such structures, and how idiomatic interpretation is retained. As far as I can tell, there is some sort of unnaturalness arising if we convert (78) into VS as (79) shows.

- (79) ?? ?aukat yadaa-ka                    wa nafax-a fuu-ka  
 tied-3FS hand- NOM.DL-your and blew-3MS mouth-your

The unnaturalness manifested in (79) stems from the fact that this idiom is basically of a SV order. But this may not indicate that SA is a SV language. Rather, I assume, following Soltan (2007: 57. fn. 17), that there is some sort of "a marked process of interpretation [that] would widen the interpretation domain to include materials adjacent to [that] domain." That is to say, in examples like (78), though

very few, interpretation domain may also include SV, where the preverbal DP is adjacent to the idiomaticity domain. But it is implausible to argue that transformation is involved in such a structure, as we will see. If it were an instance of movement, it would be difficult to account for the deficiency involved in such structures as (76), given the fact that transformation renders such structures deficient, or even in English structures like (77), where transformation leads to some sort of deficiency.

Strong support of our claim that idiomaticity is maintained only in VS structures perhaps comes from pro-subject structures. Consider (80).

(80) darab-a      kaf-an      bi-kaf-in  
hit-3MS    pro    hand-ACC    by-hand-GEN  
Lit: 'he hit a hand by (the other) hand.'  
Idm: 'he regretted.'

This idiom cannot occur in any other form due to the fact that pro cannot precede the verb as has been seen in section 4.6.

Thus, to conclude this section, the fact that idiomaticity is maintained only in VS structure is perhaps another piece of evidence in support of our postulation that SA is basically a VS language.

## 5.2. Discourse interpretation

Apart from idiomaticity and idioms, there is some sort of difference between VS and SV orders in terms of discourse interpretation. The former is interpreted as *thetic* and the latter *categorical* (Kuroda,1973, Sasse,1987, see also Yateem,1997; Soltan,2007). In that the *psotverbal* DPs are said to have some sort of unmarked interpretation. This interpretation is said to be *neutral*, because the event does not specify any entity to carry out such an event, and the *postverbal* DP only represents the entity involved. The *preverbal* DP, however, is said to have a *topic* interpretation in "the discourse against which the event is presented" (Soltan,2009:50).<sup>22</sup> Consider (81a) and (81b) representing VS and SV, respectively.

(81) a. kataba Gali-un    risaalat-an  
wrote    Ali-NOM    letter-ACC

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<sup>22</sup> In fact, this property has long been noted by traditional grammarians. They hold that in VS order the speaker's intention is focusing on the action regardless of the entity (the *psotverbal* DP) involved. However, in SV order, the speaker is focusing on naming an entity (the *preverbal* DP), and the verbal predicate is associated with a property given to it.

‘Ali wrote a letter.’

- b.  $\zeta$ ali-un kataba risaalat-a  
 Ali-NOM wrote letter-ACC  
 ‘Ali wrote a letter.’

In (81a), for instance, the focus is on the action, i.e. the writing of the letter, and the postverbal subject  $\zeta$ ali-un is just involved in it. This involvement may well include some other entity like *Ahmed*, *Khalid*, etc. However, in (81b), the preverbal DP  $\zeta$ ali-un is selected and the verbal predicate *katab-a risaalat-an* is given about him.

### 5.3 Ambiguity

In this section, I argue, based on ambiguity, that SA is a VS language. The term ‘ambiguity’ in this context is taken to be a factor affecting the clause structure of SA. To figure out how ambiguity works, consider (82a-f).

- (82) a. ra?at ?arwaa salmaa  
 saw Arwa Salma  
 ‘Arwa saw Salma.’

- b. ?arwaa ra?at salmaa  
 Arwa saw Salma  
 ‘Arwa saw Salma.’

- c. \*?arwaa salmaa ra?at  
 Arwaa Salma saw  
 ‘Arwa saw Salma.’

- d. \*ra?at salmaa ?arwaa  
 saw Salma Arwa  
 ‘Arwa saw Salma.’

- e. \*salmaa ra?at ?arwaa  
 Salma saw Arwa  
 ‘Arwa saw Salma.’

- f. \*salmaa ?arwaa ra?at  
 Salma Arwa saw  
 ‘Arwa saw Salma.’

As can be seen, only two structures, namely (82a&b) are grammatical. The ungrammaticality of the structures (82c-f) arises from ambiguity. That these

structures are ambiguous comes from the fact that it is not understood ‘who saw who?’ since both the subject and the object are not Case marked. In fact, traditional grammarians take ambiguity which arises from Case nonmarking phenomenon to equate ungrammaticality (Mohammad,2000: 3f, fn.6).

Note also that ambiguity rules out the possibility of VOS as in (82d), claimed by Majdi (1990) to be the unmarked order of SA clause structure. I claim here that VOS is not a possible order in SA even with Case-marked arguments. Evidence supporting this comes from matrix clauses as (83) shows.

(83) a. ?araad-a    ʕali-un    t-tullaab-a    ?an yaxruj-uu  
 wanted-3MS Ali-NOM the-students-ACC C leave-3MPL  
 ‘Ali wanted the boys to leave.’

b. \*?araad-a    t-tullaab-a    ʕali-un    ?an yaxruj-uu  
 wanted-3MS the-students-ACC Ali-NOM C leave-3MPL

The ungrammaticality of (83b) indicates (though ambiguity is not involved), VOS is impossible in matrix clauses.

Apart from this, it seems that the ambiguity data presented in (82) add some sort of support that SV is also a possible order of SA, specifically, given the grammaticality of (82b). However, this possibility disappears when we form a wh-question as (84) shows.

(84) \*man ?arwaa ra?at?  
 who Arwa saw

If, however, we form wh-question from (82a), the result is a grammatical construction as (85) shows.

(85) man ra?at ?arwaa?  
 who saw Arwa  
 ‘Who did Arwa see?’

The grammaticality of (85) indicates that VS is the only possible order in SA, given the fact that VS is the only order which ‘accommodates’ and accounts for all the facts in SA clause structure. Given these facts, I conclude that ambiguity as presented in (82) adds strong support that SA is basically a VS language.

#### **5.4. (In)definiteness of the subject**

It is widely assumed (see e.g. Fassi Ferhi,1993; Soltan,2007; Benamamoun,2000; Aoun et al,2010, to name a few) that while postverbal subjects can be either definite or indefinite, preverbal DPs must be definite. Compare and contrast (86) with (87).

(86) a. kataba rajul-un risaalat-an  
wrote man-NOM letter-ACC  
'A man wrote a letter.'

b. kataba r-rajul-u risaalat-an  
wrote the-man-NOM letter-ACC  
'The man wrote a letter.'

(87) a. ar-rajul-u kataba l-risaalat-a  
the-man-NOM wrote the-letter-ACC  
'The man wrote the letter.'

b. \*rajul-un kataba risaalat-an  
man-NOM wrote letter-ACC

The grammaticality of both (86a&b) indicates that postverbal DP can be either indefinite as in (86a) or definite as in (86b). However, the ungrammaticality of (87b) indicates that the preverbal DP must be definite, hence, it is not a subject, but rather some sort of topic/CLLD element, given the fact that a topic/CLLD element must be definite cross-linguistically. It also provides another piece of support that SV order is not derived from VS via movement, but rather an instance of base-generation out of the thematic domain. If it were an instance of movement, then, it would be difficult (and perhaps impossible) to explain the ungrammaticality of (87b) (see also Fassi Ferhi,1993). Thus, I assume, following Fassi Ferhi(1993), that the ungrammaticality of (87b) has mainly to do with semantics perhaps more than syntax. In other words, there is some sort of specific/nonspecific interpretation in VS order while this interpretation is lacking in preverbal DP structures, where only specificity is maintained.

The fact that the preverbal DP must be definite arises from the pro-theorem or pro-identification (see McCloskey,1986; Rizzi,1982,1986). In other words, if we assume that in topic/CLLD structures, pro is in vP, and that pro is referentially strong, having the feature [+specific], an indefinite or nonspecific DP, coreferentially linked with it, would not match this feature at the semantic interface. If this is true, we would expect that such an unmatching relation results in the ungrammaticality of structures like (78b), or more formally, in the derivation to crash at LF (see also Holmberg,2005,2008; Fassi Ferhi,1993, 2009).

Concluding this section, it is clear that unlike postverbal DPs, preverbal ones are sensitive to definiteness, or otherwise they must be coreferentially strong. This is in fact a property of topic/CLLD elements cross-linguistically (see e.g. Rizzi,1997; Cinque,1990, for Italian (and French); Fassi Ferhi,1993, 2009: Ouhalla,1997; Aoun and Benmamoun,1998; for Arabic; Shlonsky,1997; Demirdache,1996, for Hebrew; Holmberg,2008, for Finnish, among other authors and languages).

### 5.5. Exclamation

Exclamative expressions in SA (like in English) are used to express surprise, admiration, love, etc. as presented in (88). Exclamative constructions perhaps provide another semantic piece of evidence in support of VS order.<sup>23</sup>

(88) a. *maa ?aʃʃaba n-najaaħ-u*  
 what looked-difficult the-success-NOM  
 ‘How difficult success is!’

b. *maa ?ajmala s-smaa?-u*  
 what looked-beautiful the-sky-NOM  
 ‘How beautiful the sky is!’

c. *maa ?aħaba l-ħayaat-u*  
 what looked-lovable the-life-NOM  
 ‘How lovable life is!’

In (88a), for instance, the wh-operator *maa* is an exclamative particle, *?ajmal-a* is the verb and *s-smaa?-u* is the subject. All the structures in (88) are formed in VS structures. However, exclamative constructions in SV order are not possible as (89) shows, for instance, which is the SV equivalent to (88a).

(89)\* *maa n-najaaħ-u ?aʃʃaba*  
 what the-success-NOM looked-difficult

The ungrammaticality of (89) has perhaps to do with the fact that wh-extraction over a topic/CLLD element is not possible, perhaps similar to the phenomena discussed in section 4.4.

<sup>23</sup> Note that I am assuming Kufiis’s postulations about the DP status after the exclamative verb *?aʃʃal* as a subject/predicate. Kufiis’s position is built on some Arabic structures like *maa ?aʃʃam-a ?allah-u/(\*)a*. This assumption is in fact minimalist in nature, because it is not construction-specific. It rather parallels the second exclamative structure formed by the verb *?aʃʃil*.

## 6. Conclusion

In this article, I have sought to provide evidence from the syntax and semantics of the language in support of VSO as the basic word order in SA. As for the former, evidence centers on Case properties, WOC, FQs, pro-drop property, clitic arguments, negation and modality and aspectuality. The latter, however, includes idiomaticity, discourse interpretation, ambiguity, (in)definiteness of the subject and exclamation. Almost all the evidence examined indicates that SA is mainly a VS language. To examine the evidence provided, I have employed an *Agree*-based approach. The *Agree*-based approach solves one of the most important requirements for Spec-head configuration that was assumed to be the trigger of agreement intrinsic features, hosting the subject and its verb. In that an *Agree* operation can be established between T and the subject DP which is base-generated in Spec-vP, the result of which is valuing the unvalued features of both at a distance. It has also been suggested that sometimes multiple *Agree* takes place in structures where FQs are involved. Throughout the article, it is implied that SV sentences are topic/CLLD structures.

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