Verbal Agreement in Arabic: A Phase-Based Approach
Mamdouh A. Alenazy and Ahmad M. Saidat

This paper addresses the issue of agreement in Modern Standard Arabic by adopting the most recent version of Chomsky's Minimalist Program. Under Chomsky's assumptions, phase heads carry Agree-features and when these features, which are responsible for the derivational processes, are valued and deleted, the derivation ceases. Agreement alternation in different word orders is not expected if verbal Agreement is determined by the Agree-features on the phase head. Thus, the paper argues against the view that SVO word order is an alternative to VSO. Rather, it claims that the subject in SVO is a topic which undergoes movement from a postverbal position to the specifier of TP to satisfy an Edge Feature on T. The moved subject leaves a pronounceable pronominal copy in its original position; this pronominal element does not exist in VSO because the subject does not undergo any type of movement.

1. Introduction

The interaction between word order and agreement in Modern Standard Arabic (MSA) is one of the phenomena that have attracted attention. The issue has been subject to various analyses within different theoretical frameworks of the syntactic theory. Some studies have been concerned with the relative positions of subject with regard to the verb (Ouhalla 1997; Doron & Heycock 1999). Other studies have investigated extensively the interpretation of the postverbal and the preverbal subjects assuming the preverbal are best analyzed as left dislocated items (Plunkett 1993; Ouhalla 1997). Between these two streams, many authors have attempted to account for the correlation between subject positions and agreement (Fassi Fehri 1993, 2005; Shlonsky 1997; Mohammad 2000; Benmamoun & Lorimor 2006, among others). This correlation is the topic discussed in this paper.

Due to its morphological system that marks the subject and the object differently, MSA allows diverse word orders. Generally speaking, the two prevalent word orders that have constituted an intriguing topic of discussion are VSO and SVO. As the following examples show, the masculine and feminine subjects can appear postverbally as in (1a) and (1c) or in preverbal positions as in (1b) and (1d).

(1)   a.   qabala   aT-Talib-u   al-mudares-a
            met.3MS   the-student-NOM   the-teacher-ACC
            'The student met the teacher.'

       b.   aT-Talib-u   qabala   al-mudares-a
            the-student-NOM   met.3MS   the-teacher-ACC
            'The student met the teacher.'

     c.   qabal-at   aT-Talibat-u   al-mudares-a
              met-3FS   the-student.F-NOM the-teacher-ACC
              'The female student met the teacher.'

     d.   aT-Talibat-u   qabal-at   al-mudares-a
              the-student.F-NOM met-3FS   the-teacher-ACC
              'The female student met the teacher.'

The behavior of these examples is straightforward because the verb shows the same agreement pattern whether the subject precedes or follows the verb. Nonetheless, agreement is sensitive to the position of the plural subject:
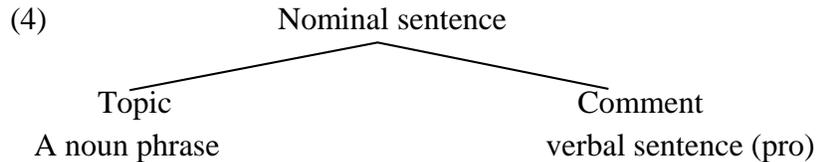
(2)   a.   qabala   aT-Tulab-u   al-mudares-a
              met.3MS   the-students-NOM   the-teacher-ACC
              'The students met the teacher.'

     b.   aT-Tulab-u   qabal-uu   al-mudares-a
              the-students-NOM   met-3MP   the-teacher-ACC
              'The students met the teacher.'

These examples show that when the plural masculine subject follows the verb as in (2a), the verb shows singular agreement while it shows plural agreement when the subject appears in a preverbal position as in (2b). The same contrast is observed with feminine subjects; the plural feminine subject is associated with the marker *-na*. Consider:

(3)   a.   qabal-at   aT-Talibaat-u   al-mudares-a
              met-3FS   the-students.F-NOM the-teacher-ACC
               'The female students met the teacher.'

     b.   aT-Talibaat-u   qabal-na   al-mudares-a
              the-students.F-NOM met-3FP   the-teacher-ACC
               'The female students met the teacher.'

The appearance of the suffixes like *-uu* and *-na* in SV word order is the most significant issue that has attracted a lot of attention. Two strands of analysis have generally dominated the literature on the word order of Arabic to explain the agreement alternation demonstrated by examples like (2) and (3) above. The first strand is represented by the work of the traditional Arab grammarians (cf. Ibn Hisham 1964; Alafghani 1974; Alghalayyini 1994). In their analyses, traditional grammarians exclude the possibility of having the subject in a preverbal position. According to their view, the Arabic sentence is verbal in the sense that it starts with a verb that is followed by the subject. If the sentence starts with a noun phrase, it is considered nominal and the preverbal noun phrase is not conceived of as a subject. Rather, it is analyzed as a topic that is

followed by a complete verbal sentence that functions as a comment. Consequently, they consider the suffixes *-uu* and *-na* as pronominal clitics (which are co-referent with the preverbal noun phrases) that function as subjects. When the preverbal noun is singular as in (1b) and (1d), it is associated with a null pro in a postverbal position, which is not marked morphologically because the verb in MSA exhibits default masculine singular agreement (cf. Fassi Fehri 1993 among many others). The Arab grammarian's view is schematized by the following diagram:

(4)   Nominal sentence

            Topic   Comment
      A noun phrase   verbal sentence (pro)

A piece of evidence supporting this view comes from the possibility of having the (topicalized) object in a preverbal position with an objective pronominal clitic on the verb. As the sentence in (5) below shows, the preverbal noun phrase which functions as a topic is followed by a comment which is a complete sentence.

(5)   al-mudares-u   qabal-at-hu   aT-Talibaat-u
         the-teacher-NOM   met-3FS-him   the-students.F-NOM
         'The female students met the teacher.'

Despite the fact that the preverbal noun phrase here is nominative, it cannot be treated as the subject as the postverbal nominative subject is available. Moreover, the transitive verb takes an accusative object which appears as a pronominal clitic attached to the verb.

Many modern linguists have built on the traditional grammarian's view and analyzed the preverbal noun phrases as topics (or foci as in Ouhalla 1991). Plunkett (1993) and Ouhalla (1997), for example, argue that the preverbal noun phrases are topics. Following the Arab grammarians, Alenazy (2009) assumes also that the preverbal noun phrases cannot be treated as subjects. Rather he suggests that they are topics. He argues extensively in favor of analyzing the plural markers in SVO sentences as resumptive pronouns and proposes four different tests to prove their status as pronominal elements. He has found that the phenomena of relativization, coordination, reflexivization and passivization, which he calls RCRP tests, prove clearly that these markers in SVO word orders are in fact real pronouns.

The second strand of analysis is undertaken by, among many others, Mohammad (2000), Fassi Fehri (1993, 2005), Shlonsky (1997), Aoun et al. (1994) and Demirdache (1991). These authors assume that the preverbal noun phrases in sentences such as those in (2b) and (3b) above are actually subjects and they consider the suffixes *-uu* and *-na* plural number agreement markers. Therefore, they distinguish between two agreement patterns: full agreement in SVO word orders which is contrasted with impoverished agreement in VSO word orders; the latter word order lacks number marking.

Most of the discussion on the difference between VS and SV word orders has centered on whether the preverbal noun phrases are base-generated or moved from lower positions. Various

analyses have been proposed depending on whether these noun phrases are interpreted as subjects or topics. For example, Fassi Fehri (1993) and Aoun et al. (1994), who treat the preverbal noun phrases as subjects, assume that the preverbal subjects achieve their surface position in SVO word orders by movement from lower positions. By contrast, Ouhalla (1991, 1997) claims that the preverbal noun phrases, which he considers as topics, are base generated in preverbal positions. In this paper, we adopt the latest advances within the minimalist framework of the linguistic theory introduced in Chomsky (2008) to account for how agreement is established under a probe-goal configuration and to explain how the preverbal and the post verbal noun phrases achieve their surface positions.

We start from where AL-Shorafat (2012) ends his paper wondering about the adequacy of Chomsky's Phase Theory. We take issue with him and suggest that his phase-based analysis is partial as it excludes the feature inheritance system, which is argued for in Chomsky (2008, 2013). Also, we assume, contra AL-Shorafat, that VSO word order is straightforward and it does not raise any challenge for Chomsky's phase based model. Rather, we claim that it is SVO word order that admits discussion. However, before we embark on the discussion of Arabic data and the proposed analysis, a review of Chomsky's Phase Theory is presented in the next section.

2. Chomsky's Phase Theory

Since its introduction in Chomsky (1993, 1995), the Minimalist Program (MP) has been subject to revision and improvement. Economy of derivation is the basic assumption that underlines this framework of linguistic theory; MP comprises the idea of being minimal in two senses. First, the process of language structuring has "no machinery beyond what is needed to satisfy minimal requirements of legibility and it functions in as simple way as possible" (Chomsky 2000: 112–13). Second, Minimalism is based on the economy considerations of derivation and representation; Chomsky (1995: 92) assumes that "derivations contain no superfluous steps, just as representations contain no superfluous symbols."

Accordingly, Chomsky dispensed with all the unnecessary functional phrases. He eliminated Agr (i.e. Agreement) phrases which were assumed to suit the Case-driven movement; the specifier positions of theses phrases were used to check features. The idea of feature checking process was pursued in the earliest version of MP (cf. Chomsky 1995). In this version, the specifier positions of the TP and vP were the positions where the subject and the object check their Case feature. However, after the introduction of the notion of phase in Chomsky (2000), the model of feature checking was abandoned in favour of feature matching that takes place under a probe-goal configuration. At the heart of the Phase Theory is the system of formal features that fall into two classes depending on their semantic contribution. Chomsky classifies the features gender, number and person (which are referred to as phi-features) and case feature as interpretable and uninterpretable. Case feature on nominals has no semantic contribution; therefore, it is uninterpretable. However, phi-features can be interpretable or uninterpretable depending on which element they appear. While these features are interpretable on nominals, they are uninterpretable on functional heads. Therefore, all interpretable features are introduced

in the lexicon with their values. Uninterpretable features, on the other hand, are introduced unvalued.

Since the uninterpretable phi-features cannot be handled by the LF and PF interfaces, these features have to be valued and deleted during the course of derivation before they reach PF and LF. In order to achieve this goal, the phase head that is endowed with unvalued phi features functions as a probe that searches for an active goal (i.e. a nominal which has an unvalued case feature) in its c-commanding domain. The unvalued phi-features of the probe are matched with their valued counterparts on the nominal. This phase-based operation that is called feature matching paves the way for the operation Agree to take place, the latter results in valuation and deletion of all the unvalued features including Case on the nominal. If the functional head is T, case is valued as nominative. If Agree is initiated by the functional head v, case is valued accusative. It is worth mentioning that Chomsky (2001) argues that Case feature is derivative in the sense that it renders the nominal active as a goal and its valuation and deletion is a 'byproduct' of the operation Agree.

The notion of phase (i.e. the Phase Theory) constitutes a major revision of Chomsky's MP and can be seen as a further improvement that limits the scope of syntactic operations. The main concept of the Phase Theory is locality. The phase, according to Chomsky's view, is close and impenetrable and defines a syntactic domain, which means that operations such as Move and Agree apply at the phase level. Cross-phasal operations are not allowed unless they are established via the edge of the phase. Chomsky clarifies that "it is necessary to distinguish the interior of a phase from its edge. If H is a phase head with complement Z, then Z is the interior of the phase; the edge is H along with anything merged to {H, Z}" (Chomsky 2013: 42). According to his view, the interior of the phase differs from the edge in that edge elements "can be modified in the next higher phase; for example, they can raise, as in V-to-T or successive cyclic A'-movement. While Z is immune from further changes" (ibid).
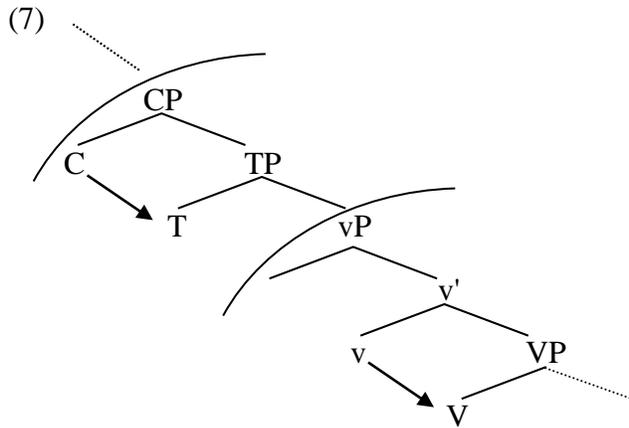
The idea that the phase is a unit of computation, which cannot be accessed by higher heads, is captured by the so-called *Phase Impenetrability Condition (PIC)* defined in (6) below:
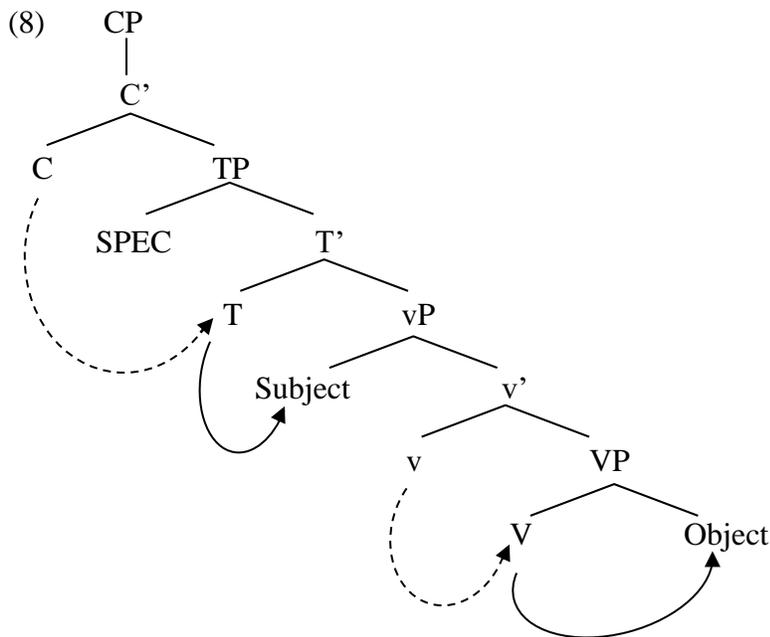
(6)   Phase Impenetrability Condition:
        In phase α with Head H, the domain of H is not accessible to operations outside α, only H
        and its edge are accessible to such operations.

                                                                      (Chomsky 2000: 108)

Chomsky (2008) assumes that the phases are CP and (transitive) vP, but not TP. He argues that TP is not a phase because its head lacks phi-features and tense feature unless it is selected by C. When selected by C, T inherits phi-features and tense feature from C; C and T form a complex where the features of C are transmitted to T, a process which is referred to as *feature-inheritance* model (cf. Chomsky 2007, 2008). Chomsky's notion of phase and the feature inheritance model are schematized in (7) below:

6

(7)

```
                    CP
          C                  TP
              →  T        vP
                          v'
                    v           VP
                       →  V
```

The phase, as a domain, and the feature inheritance model are crucial for the operations of Agree and Move. Both Agree and Move are local operations and are phase-based in that they are subject to PIC in (6) above. Put differently, Agree is the outcome of a feature-matching process between the head of the phase, which functions as a probe that initiates Agree, and a goal within the c-commanding domain of the head. The operation Move is also feature triggered and it observes PIC. It is worth mentioning that movement to a specifier position is triggered by a feature on the phase head; according to Chomsky (2008), movement to the specifier position of a given phrase is motivated by the Edge Feature (EF), which corresponds to the EPP feature. However, EF is more consistent with the assumptions of the Phase Theory. To illustrate how Chomsky's feature inheritance model works, consider the tree diagram (8) below which depicts the structure of an SVO sentence.

(8)   CP
        |
        C'
     C   TP
          SPEC   T'
               T   vP
                   Subject   v'
                            v   VP
                                 V   Object

The dashed arrows show that phi-features are transmitted from the phase heads v and C to the heads of their VP and TP complements. Having inherited phi-features, V and T agree with the object and the subject respectively, as the solid arrows show. Being affixal, the phase heads attract the lexical verb; v attracts V and the complex v-V moves to T. In an SVO sentence, the subject is attracted by an EF that T inherits from C.

It should be noted that vP and CP phases are not constructed simultaneously. Rather, the process of derivation is cyclic. The syntactic operations at the level of the phase have a semantic contribution. Therefore, the phase head, which triggers the semantic interpretation, requires the phonological spell-out of the syntactic structure (i.e. the phase) that has been built. Once a phase is constructed, it is sent to the PF and LF components for interpretation. At this stage, the domain of the phase becomes immune and unavailable for further syntactic operations. However, the edge of the phase remain accessible by higher heads, as condition (6) above suggests.

As the schematic structure (8) above shows, Chomsky's phase theory seems to account for SVO as well as VSO sentences. The former word order is derived by subject movement from the specifier of vP to the specifier of TP. In VSO word order, on the other hand, the easy assumption is to assume that T lacks an EF, hence the subject remains in situ. The next section discusses the difference between these word orders in Arabic.

3. Word order and agreement

In his phase-based analysis of agreement in Arabic, AL-Shorafat (2012) claims that SVO word order does not raise a problem for the Phase Theory. According to his view SVO is straightforward and the subject is attracted from its postverbal position (i.e. the specifier of vP) to the specifier of TP to satisfy the EPP feature.[1] On the other hand, he claims that VSO word order is problematic and poses a challenge for Chomsky's model. He builds his view on the idea that the EPP feature always exists on T. This feature triggers subject movement, which complicates the discussion of VSO. He also builds his argument on the idea that the phase is a unit of computation that becomes inaccessible at a certain point of derivation. However, he overlooks that fact that the phase, as a unit of computation, is subject to condition (6) above. AL-Shorafat (2012: 47) concludes the discussion claiming that "[n]o matter what analyses within Chomsky's phase-based model we could think of, we will not be able to get the VS order in SA [Standard Arabic]. Of course, this represents a problem to Chomsky's recent framework that has to be addressed and solved."

In this paper, we argue that it is the SVO word order that requires a carful investigation while VSO is straightforward under the recent assumptions of the Phase Theory (Chomsky 2008). In fact, the structure in (8) above suggests that the Phase Theory is applicable and can account for word order variation in MSA (i.e. VSO as well as SVO word orders). An easy assumption to make is to suppose that the subject in SVO structures is attracted by an optional EF on T; such a feature does not exist in VSO (see the discussion below), therefore, the subject remains in situ. However, there remains the question: *why does agreement change?*

---

[1]AL-Shorafat (2012) uses the old term EPP that is referred to as Edge feature (EF) in Chomsky (2008).

In order to answer this question and to place our analysis on a concrete footing, a distinction has to be made between SVO and VSO word orders. Based on empirical as well as theoretical evidence, SVO and VSO word orders are not really equivalent and the motives behind these word orders are different.

Empirically, VSO is the basic and unmarked word order in MSA; Arab grammarians observed that in VSO there are no restrictions imposed on the subject. For example, definite and indefinite noun phrases alike are allowed to function as postverbal subjects. In SVO on the other hand, the preverbal noun phrase, which is conceived of as a topic or focus, is generally required to be definite, hence the ungrammaticality of (9d) below.[2]

(9)   a.   zaara   rejaal-un   al-madrasat-a
             visited.3MS   men-NOM.INDF   the-school-ACC
             'Men visited the school.'

       b.   zaara   ar-rejaal-u   al-madrasat-a
             visited.3MS   the-men-NOM   the-school-ACC
             'The men visited the school.'

       c.   ar-rejaal-u   zaar-uu   al-madrasat-a
             the-men-NOM   visited-3MP the-school-ACC
             'The men visited the school.'

       d.   *rejaal-un   zaar-uu   al-madrasat-a
             men-NOM.INDF   visited-3MP the-school-ACC
             'Men visited the school.'

The comparison shows that the postverbal subject can be indefinite (9a) or definite (9b). However, the preverbal subject has to be definite as (9c) illustrates. Arab grammarians' distinction means that SVO is dependent on VSO. Actually, this fact about word order conforms to the process of derivation outlined in (8) above which suggests that SVO is derived from VSO.

Theoretically, if SVO is an identical alternative to VSO, then it contains a superfluous step under the assumptions of Chomsky's (1995) minimalist framework. This basically means that it does not conform to the economy principle (cf. § 2). It is easy to assume that the subject in SVO is raised from the specifier of vP to the specifier of TP by EF and in VSO this feature does not exist. However, this assumption means that EF optionally exists on T, which is not acceptable if we adhere to the minimalist assumptions. In other words, the optionality of EF is not predicted and when EF exists it has a function.

Another theoretical issue concerns the agreement pattern on the verb. Assuming that the preverbal subject moves from its canonical position in the specifier of vP to the specifier of TP complicates the discussion of agreement because subject movement takes place after all the phi-features of the probe have been valued and deleted. This means that, whether the subject is

---

[2]According to traditional Arab grammarians, topicalization of an indefinite subject is allowed in certain contexts when the speaker exaggerates, warns or attracts attention to an eccentric situation (cf. Hassan 1961).
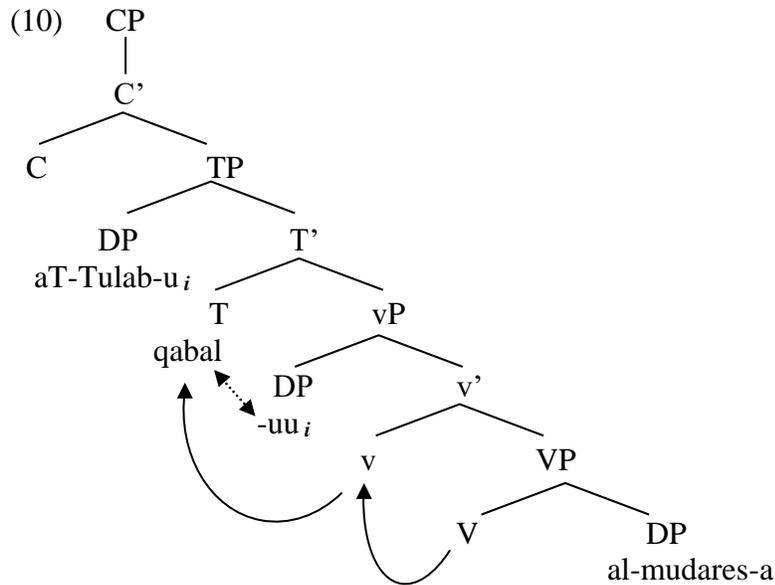
preposed or left in its postverbal position, agreement is expected to remain intact. This line of reasoning implies that the postverbal pronominal elements in SVO sentences, which are associated with preverbal noun phrases, cannot be treated as number markers, as they are not the outcome of Agree.

Based on the empirical as well theoretical evidence discussed so for, the equivalence of VSO and SVO word orders is rejected and the possibility of analysing the postverbal pronominal clitics as number markers is excluded. Alternatively, we argue that these markers are best analysed as pronominal elements in line with the traditional Arab grammarians (cf. Sibawayeh 1936; Ibn Hisham 1964; Alafghani 1974; Alghalayyini 1994). However, the correlation between these elements and the preverbal noun phrases has to be accounted for; one possible scenario is to assume that the preverbal subject is base generated in the specifier of TP and it is coindexed with the pronominal element in the specifier of vP.[3] The head T (with its feature inherited from C) agrees with the pronominal element which attaches to the verb in T, as the doubled headed arrow illustrates.
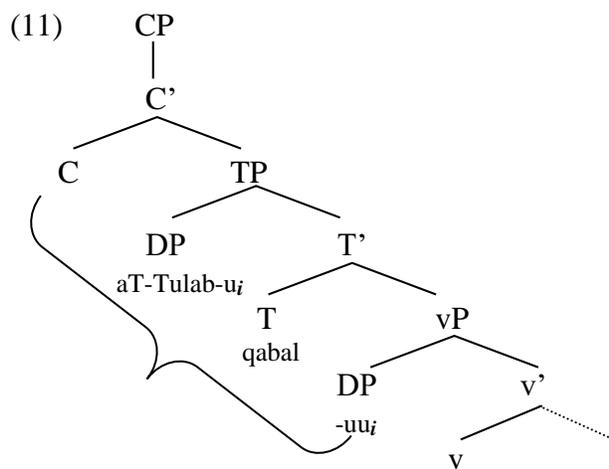
With regard to Case value on the preverbal noun phrase, it is assigned by C, the phase head. On the surface, the claim that Case values on the postverbal pronominal element and the preverbal noun phrase are valued by two distinct heads may sound unreasonable. However, if we adhere to the notion of phase as discussed in Chomsky (2008), we find that T is unable to initiate agreement unless it has inherited its Agree features from C. This amounts to saying that it is C that (indirectly via T) determines the value of Case in VSO structures.

In SVO structures, the postverbal element receives Case under Agree with the features of C on T while the preverbal noun phrase receives Case under Agree with C itself (see footnote number 4, and cf. Ouali 2008 and Alenazy 2009 for a detailed discussion of the relation between C and T). The structure in (10) below represents this view. It shows the possible derivation of the SVO sentence (2b) above.

---

[3] For the sake of clarity and ease of reference, we use the terms of the original version of Binding Theory to show the invalidity of the idea of coreference between a base-generated (preverbal) subject and a (postverbal) coreferential pronominal element. It should be noted, however, that coindexing is not allowed under minimalist assumptions. The inclusiveness Condition (cf. Chomsky 1995: 228) bars the addition of indices during the course of derivation. Coindexing is replaced by what Chomsky (1995) calls the "interpretive version of binding theory". According to this version, an anaphor is interpreted coreferential with a c-commanding phrase within the same domain. A pronominal element, on the other hand, is interpreted as disjoint from a c-commanding phrase within the same domain (cf. Chomsky 1995: 211).

(10)   CP
         |
         C'
        / \
       C   TP
           / \
         DP   T'
    aT-Tulab-u$_i$ / \
                   T   vP
                 qabal / \
                      DP   v'
                     -uu$_i$ / \
                            v   VP
                                / \
                               V   DP
                                 al-mudares-a

However, this proposition seems to be an ad hoc solution and it does not really answer the question that concerns the motive behind this word order. Furthermore, this line of analysis conflicts with the accepted view that the argument position of the subject is within the structure of the vP phase; This view, which is referred to as VP-internal Subject Hypothesis (cf. Koopman & Sportiche 1991), claims that the thematic subject is originally base generated in the specifier position of vP before it undergoes movement to a higher position. Also, this assumption (i.e. that the preverbal subject is associated with a pronominal element) induces a violation of principle B of Binding Theory (cf. Chomsky 1981), which forbids a pronoun (the post verbal pronominal element in SVO sentences such as (2b) an (3b) above) to find an antecedent within its binding domain. The structure in (11) below shows that the subject in the specifier of TP and the coreferential pronominal element in the specifier of vP are both contained within the same domain.

(11)   CP
          |
          C'
         / \
        C   TP
            / \
          DP   T'
      aT-Tulab-u$_i$ / \
                     T   vP
                   qabal / \
                        DP   v'
                       -uu$_i$ / \
                              v

11

In what follows, an alternative analysis that is free of these limitations and restrictions is presented. The analysis we propose draws on the assumption that SVO is a derived word order and that the subject moves from its base position in the specifier of vP to the specifier of TP, and on the basic idea of the Agree Theory that subject-verb agreement is obtained under a probe-goal configuration with the goal being c-commanded by the probe. Put it differently, the probe T c-commands the goal (the subject) in the specifier of vP and after the operation Agree takes place, the subject is raised to the specifier of TP. If this speculation is valid, then two important questions arise. The first: *how is the postverbal pronominal element generated without violating condition B of Binding theory*? The second: *why does the subject move to the specifier of TP?*

With regards to the first question, we assume, adopting the copy theory of movement (Chomsky 1993), that a moved item leaves behind a copy in its original position. Accordingly, we argue following Alenazy (2009) that the postverbal element in SVO sentences is the remnant of movement (or a pronounceable trace using another term) of the fronted subject. In the sense of Kerstens (1993), who assumes that a pronoun lacks a lexical core and it represents phi-features only, we further argue that the left copy embodies the phi-features of the subject. Once agreement between the probe T and the postverbal subject is established and all the phi-features have been valued and deleted the subject moves to satisfy the EF leaving behind the pronominal copy which represents its phi-features. Under the assumptions of the copy theory of movement, the pronounceable trace does not induce violation of principle B of Binding Theory.

Concerning the second question, it appears that the existence of an EF is not convincing unless it performs a function. Since the phase head determines all the properties of the phase, we assume that C, the head of CP phase, is endowed with a mechanism that allows it to check a topic (Top) feature carried by any nominal within the CP domain. Adopting the view that the preverbal noun phrase is a topic, we argue that C transmits an EF to T, which attracts the subject from its postverbal position to the specifier of TP. This claim amounts to saying that VSO and SVO structures are introduced by different types of C. The data strongly supports this view; MSA recognizes two overt complementizers which introduce embedded SVO and VSO structures. As (12a) and (12b) below illustrate, the complementizer *anna* requires a sentential complement with topicalized noun phrase in an initial position (i.e. SVO). The complementizer *an*, on the other hand, requires a VSO complement.

(12) a. Danan-tu **anna** aT-Tulab-u   qabal-uu   al-mudares-a
          thought-I Comp the-students-NOM met-3MP   the-teacher-ACC
          'I thought that the students met the teacher.'

      b. Sarra-ni   **an**   qabala   aT-Tulab-u   al-mudares-a
          pleased-me   Comp met.3MS   the-students-NOM   the-teacher-ACC
          'It pleased me that the students met the teacher.'

The contrast between (12a) and (12b) entails rather clearly that the main clause complementizers are different. Therefore, these different complementizers decide the different VSO and SVO word orders. In fact, this assertion is not completely without empirical support. SVO sentences can be introduced by *inna*, a main clause overt complementizer which does not change the intended reading of the SVO word order as (13) below illustrates.
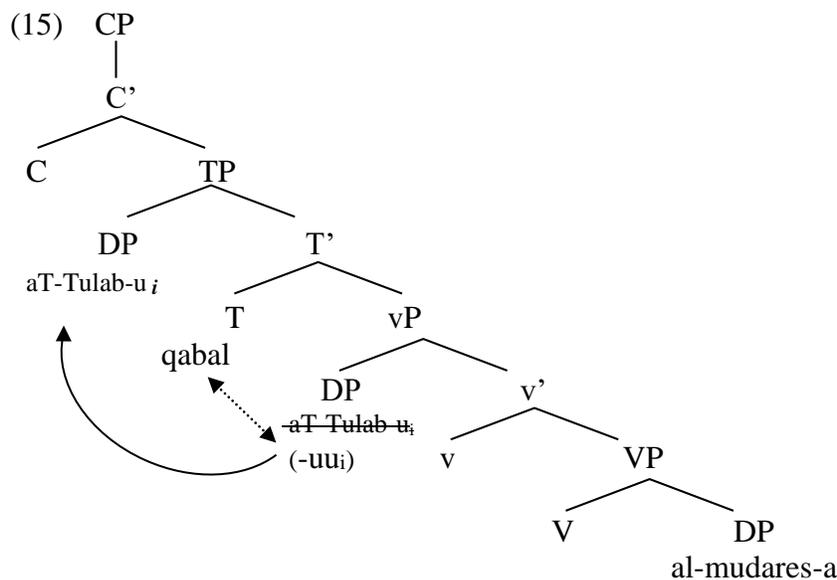
(13) **inna** aT-Tulab-a   qabal-uu   al-mudares-a
      Comp the-students-ACC   met-3MP   the-teacher-ACC
      'Indeed, the students met the teacher.'

However, the complementizer *inna* cannot introduce VSO sentences:

(14) ****inna** qabala   aT-Tulab-u   al-mudares-a
      Comp met.3MS   the-students-NOM   the-teacher-ACC
      'Indeed, the students met the teacher.'

The contrast between (13) and (14) suggests that SVO and VSO are introduced by different C elements; if SVO and VSO structures were introduced by the same C elements, we would expect *inna* to be used with both word orders.[4]

Subject movement in SVO structures can be thought of as an instance of Agree because the moved subject satisfies EF and, in return, it satisfies its own Top feature. Thus, the structure in (10) above is revisited as (15) below which shows that the preverbal subject achieves its surface position by movement as discussed above; the pronominal element that is left behind the fronted subject attaches to the verb. Notice that the verb movement from V to v and then to T is the same as the one observed in (10) above.

(15)

While the proposed analysis observes the economy considerations in that movement applies only when it has to, it shows that VSO and SVO orders are derived in different ways. It represents the

---

[4] It should be noted that the complementizer *inna* assigns accusative Case to the preverbal noun. The use of this complementizer provides direct evidence in favor of the claim that in SVO structures two Case values are assigned by two distinct heads. The preverbal noun is accusative while the postverbal pronominal element is nominative.

idea that VSO is the basic word order and SVO is derived as it has a topicalized subject that moves to a preverbal position.

Thus, assuming that the preverbal noun phrase is a topic, SVO does not raise a problem for a phase-based analysis, which means that the Phase Theory can account adequately for word order and agreement facts in MSA.

4. Conclusion

In this paper, we have shown that SVO structures should not be treated on a par with VSO structures. While the latter word order is straightforward, the former is derived by movement of the topicalized subject to a preverbal position. This movement leaves behind a pronominal form that represents the phi-features of the moved subject, hence the difference between the two word orders.

We argued that the phase head determines the word order. C, the head of the CP phase, transmits an EF to T in order to provide the landing site (i.e. the specifier of TP) for the fronted subject that carries a Top feature. We further argued that once agreement is established under a probe-goal configuration a preverbal subject cannot dictate a new agreement pattern on the verb. The analysis we proposed implies that the verbal agreement has only one pattern regardless of whether the subject is postverbal (i.e. VSO) or preverbal (i.e. SVO). Actually, this proposal rests on theoretical reasoning; it is predicted under Chomsky's assumption that the phase-based Agree, which is dependent on the availability of unvalued phi-features, applies one time only. Once phi-features are valued and deleted (i.e. agreement is determined), Agree operation cannot apply.

In conclusion, on the basis of the discussion presented in this paper, we claim that the Phase Theory can adequately account for subject positions and agreement facts, providing that the difference between VSO and SVO word orders is explained carefully.

References

Alafghani, Sa'eed. 1974. *Al-mujaz fe qaua'ed allughah ala'rabiyah.* Damascus: Darul feker.

Alenazy, Mamdouh. 2009. *Case, agreement and movement in Arabic: A minimalist approach.* Saarbrücken, Germany: VDM Verlag Publishing Company.

Alghalayyini, Mustafa. 1974. *Jame' ad-durus al-arabiyah.* Beirut: Al-maktaba al-asriyya. First published 1912.

AL-Shorafat, Mohammad. 2012. Subject-verb agreement in Standard Arabic: A minimalist approach. *SKASE Journal of Theoretical Linguistics* 9 (1). 33–49.

Aoun, Joseph & Benmamoun, Elabbas & Sportiche, Dominique. 1994. Agreement, word Order, and conjunction in some varieties of Arabic. *Linguistic Inquiry* 25 (2). 195–220.

Benmamoun, Elabbas & Lorimor, Heidi. 2006. Featureless expressions: When morphophonological markers are absent. *Linguistic Inquiry* 37. 1–23.

Chomsky, Noam. 1981. *Lectures on government and binding.* Dordrecht, Holland; Cinnaminson, N.J.: Foris Publications.

Chomsky, Noam. 1993. A Minimalist program for linguistic theory. In Hale, Kenneth & Keyser, Samuel Jay (eds.), *The view from Building 20: Essays in linguistics in honor of Sylvain Bromberger*, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam. 1995. *The minimalist program.* Cambridge, Mass: MIT Press.

Chomsky, Noam. 2000. Minimalist inquiries: the framework. In Martin, Roger & Michaels, David & Uriagereka, Juan (eds.), *Step by step. Essays on minimalist syntax in honor of Howard Lasnik*, 89–155. Cambridge, MA: MIT Press.

Chomsky, Noam. 2001. Derivation by phase. In Kenstowicz, Michael (ed.)*, Ken Hale: A life in language*, 1–52. Cambridge, MA: MIT Press.

Chomsky, Noam. 2007. Approaching UG from below. In Sauerland, Uli & Gärtner, Hans-Martin (eds.)*, Interfaces + Recursion = Language? Chomsky's minimalism and the view from semantics*, 1–29. Berlin: Mouton de Gruyter.

Chomsky, Noam. 2008. On phases. In Freidin, Robert & Otero, Carlos P. & Zubizarreta, Maria Luisa (eds.), *Foundational issues in linguistic theory: Essays in honor of Jean-Roger Vergnaud*, 133–166. Cambridge: MIT Press.

Chomsky, Noam. 2013. Problems of projection. *Lingua* 130. 33–49.

Demirdache, Hamida. 1991. Resumptive chains in restrictive relatives, appositives, and dislocation structures. Doctoral Dissertation. MIT.

Doron, Edit & Heycock, Caroline. 1999. Filling and licensing multiple specifiers. In Adger, David & Pintzuk, Susan & Plunkett, Bernadette & Tsoulas, George (eds.), *Specifiers,* 69–89. Oxford: Oxford University Press.

Fassi Fehri, Abdelkader. 1993. *Issues in the structure of Arabic clauses and words*. Dordrecht: Kluwer Academic Publishers.

Fassi Fehri, Abdelkader. 2005. The Arabic case for a CP phase. Ms. Rabat: Mohammad V University.

Hassan Abbas. 1961. *an-nahw al-wafi*. Cairo: dar al-ma'aref.

Ibn Hisham, Jamaluddin (13th century). 1964. *Mughni al-labeeb.* Damascus: Darul feker.

Kerstens, Johan. 1993. *The syntax of number*, *person and gender*: *A theory of phi–features*. Berlin: Mouton de Gruyter.

Koopman, Hilda & Sportiche, Dominique . 1991. The position of subjects. *Lingua* 85. 211–58.

Mohammad, M.A. 2000. *Word order, agreement and pronominalization in Standard and Palestinian Arabic*. Amsterdam: John Benjamins.

Ouali, Hamid. 2008. On C-to-T φ-features inheritance: the nature of agreement and anti-agreement. (Paper presented at GLOW Colloquium, Newcastle University).

Ouhalla, Jamal. 1991. *Functional categories and parametric variation.* London: Routledge.

Ouhalla, Jamal. 1997. Remarks on focus in Standard Arabic. In Eid, Mushira & Ratcliffe, Robert R. (eds.), *Perspectives on Arabic linguistics X: Papers from the tenth annual symposium on Arabic linguistics,* 9–45. Amesterdam: John Benjamins.

Plunkett, Bernadette. 1993. The position of subjects in Modern Standard Arabic. In Eid, Mushira & Holes, Clive (eds.), *Perspectives on Arabic linguistics V: Papers from the fifth annual symposium on Arabic linguistics,* 231–60. Amsterdam: John Benjamins.

Shlonsky, Ur. 1997. *Clause structure and word order in Hebrew and Arabic: an essay in comparative Semitic syntax.* New York: Oxford University Press.

Sibawayeh, Abu Bisher. (8th century). 1938 . *al-kitaab.* Cairo: Bulaaq.

Mamdouh A. Alenazy
Department of English Language and Literature
Al-Hussein Bin Talal University
Ma'an – Jordan
mamdoua@gmail.com

Ahmad M. Saidat
Department of English Language and Literature
Al-Hussein Bin Talal University
Ma'an – Jordan
a.m.saidat@gmail.com