Verb Agreement in Standard Arabic : An Analysis in the Minimality Program

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Abstract

This paper, which studies verb agreement in Standard Arabic, presents two hypotheses that deal with sentences involving a preverbal noun: The Topicalization Hypothesis and the Subject Hypothesis. The former claims that the preverbal nominal in a noun-first sentence is a topic; the latter claims that it is a subject. The paper shows that the Subject Hypothesis is superior to the Topicalization hypothesis. Two other Hypotheses concerning the agreement between the verb and the subject in a VSO order have been proposed: the Singular Verb Analysis and the Zero Agreement Analysis. Using the Checking Theory as a frame of reference, I argue that the Zero Agreement Analysis is more adequate in accounting for the agreement anomaly in Standard Arabic. Other analyses (i.e. Hamou 1989, Mohammad 1990, Al-Seghayar 2002, Mahfoudhi 2002) are shown to be inadequate in handling the agreement asymmetry in Standard Arabic.

Introduction

Agreement is a term "commonly used to cover the relationship between verbs, nouns, pronouns...and adjectives." (Wickens 1980:46). The function of agreement affixes is "to index the participants in the state or event described by the verb and has nothing to do with the inherent meaning of the verb." (Bybee 1985:22-23). Khalil

(1999) points out that "Arabic has the following types of agreement: verb-subject, Topic-verb, Topic-Comment, noun-pronoun, and noun-number agreement." (p. 244). This paper is concerned with subject-verb/verb-subject agreement in Standard Arabic (SA). Verb agreement in SA involves different problems that have engaged linguists for a long period of time. These problems include issues such as the analysis of the preverbal nominal as a topic or subject. Also, there is an agreement asymmetry in SA: the verb agrees with the following subject in gender but not in number; but the preverbal subject would agree with the verb in person, number, and gender.

1. The Purpose and Significance of the Study

The paper aims at testing some hypotheses that are related to verb agreement in SA. First, two hypotheses have been proposed regarding SA sentences: the Topicalization Hypothesis and the Subject Hypothesis. The former deals with the preverbal noun as topic which agrees with the verb in person, number, and gender (cf. Khalil 1999; 2000). The latter handles the preverbal noun as a subject rather than a topic (cf. Wickens 1980; Wright 1995). The Subject Analysis is shown to be more adequate in dealing with the agreement phenomenon in SA.

Two analyses are also compared regarding verb agreement in a VSO order: the Singular Verb Analysis and the Zero Number Agreement. The Singular Verb Analysis deals with the verb as singular regardless of the number of the following third person subject. The Zero Number Agreement Analysis claims that the verb is indeterminate for number and compatible with either singular or plural subject. The Checking Theory (cf. Chomsky 1995 and the most recent works in Chomsky 1999; 2000) will be shown to account for the agreement anomaly in SA. I will also employ the Checking Theory in such a way that it will help

us make a comparison between the Singular Verb Analysis and the Zero Agreement Analysis. It will be shown that the Zero Number Agreement Analysis is superior to the Verb Singular Analysis, which is incompatible with the Checking Theory.

Furthermore, the paper presents some analyses (Hamou 1989; Mohammad 1990; Al-Seghayar 2002; Mahfoudhi 2002) that have been proposed to account for the agreement asymmetry in SA. These approaches will be shown to fail to account for the agreement anomaly that arises in SA.

2. Review of Literature

Scholars differ as to the analysis of SA sentences. Some Arab grammarians (cf. Dayf 1986; Fareh 1995; Khalil 1999; Khalil 2000) consider every sentence that begins with a noun as a nominal sentence, regardless of the presence of a verb. In contrast, a verbal sentence is a sentence that begins with a verb. Thus *Zaydun maata* is a nominal sentence, whereas *maata Zaydun* is a verbal sentence. The difference between them is that the nominal sentence gives a description of a person or thing, whereas the verbal sentence expresses an act or event (cf. Dayf 1986; Wright 1995). Moreover, the Arab scholars differ from Western grammarians in the status assigned to **Zaydun** in *Zaydun mataa*. Khalil (1999:245) argues that the preverbal nominal is not the subject but the topic with which the verb agrees in number and gender. Mohammed (1990) has argued that noun-first sentences like *zaydun mata* involve the left dislocation of Zaydun. Also Khalil (2000:143) claims that

> The basic word order in a nominal sentence is TOPIC al-mubtada' ('al-musnad 'ilah) and COMMENT 'al-xabar ('al-musnad). The Topic is a nominal element while the Comment may be either sentential or non-sentential. The sentential may be either verbal or verbless.

This is called the Topicalization Hypothesis.

Another group of scholars (Cowan 1958; Wickens 1980; Benmamoun 1989; Ouhala 1994; Wright 1995; Holes 1995) of Arabic language propose a different hypothesis— the Subject Hypothesis. They recognize two types of sentences in SA: nominal and verbal sentences. The nominal sentence is expected to have no verb; instead it has two components: a subject and a nominal predicate: *?al-bayt-tu kabiirun*. In this verbless sentence the subject is? **albaytu** and the nominal predicate is **kabiirun**. In contrast, any sentence containing a verb is called verbal sentence irrespective of the position of the verb in the sentence. Thus *Zaydun maata* is analyzed as a verbal sentence in which **Zaydun** is the subject (not the topic) that agrees with the verb in number, person and gender.

The analysis of agreement in SA has also attracted considerable disagreement among scholars. As Holes (1995) puts it : "number agreement between a free-standing S[ubject] and its V[erb] depends on their position relative to each other in the sentence." (p.213). According to scholars of Arabic language (Wickens 1980; Holes 1995; Wright 1995; Fayaad 1996; Versteegh 1997), in the third person a verb preceding the subject will always be singular (and often singular masculine) irrespective of the number of the subject, whereas in a noun-first sentence, the verb agrees with the subject in person, number, and gender. Hamou (1989) has argued that in a sentence like *daraba l-waladu- l-binta* , the last segment of the verb (i.e. ...a) is not part of the verb; rather, it is a suffix that signals a third person singular subject. Also, Homeidi (1994) discusses case assignment and government and binding in Arabic sentences. He does not deal with number or gender agreement in his analysis. However, he assigns the [+singular] feature to the verb-INFL complex

Most of the approaches that tackle agreement in SA have focused attention on "the complementary distribution between full agreement and a postverbal lexical NP" (Benmamoun 1998:1). The preverbal NP is discussed as "a topic or left-dislocated NP related to an incorporated pronominal" (cf. Benmamoun 1998:2). The verb–first sentences are claimed (cf. Al-Seghayar 2002; Mahfoudhi 2002) to be derived by generating the subject in the Spec-VP and moving the verb to I. A subsequent movement of the subject to Spec-IP would result in SVO order (Al-Seghayar 2002). Another analysis—the Agreement Analysis—"takes both partial and full agreement as an agreement relation between the lexical NP or a null pronominal and the verb" (Benmamoun 1998:2). Thus the latter approach sheds light on "the agreement asymmetry that arises in VSO and SVO order ..[which is] attributed to the structural conditions on the agreement relation or the point in the derivation (Pre-Spell-Out/Post-Spell-Out) where agreement checking takes place." (Benmamoun 1998:2). Other accounts of the agreement asymmetry are in order: Mohammad (1990) has argued that the VSO order does not manifest agreement because the verb, which is raised to I, is not c-commanded by the subject which stays in Spec-VP. In contrast the SVO order shows number agreement because the verb lowers from I to V; therefore, it is c-commanded by the subject in Spec-VP. Mahfoudhi (2002) argues that the no-agreement situation arises in VSO because the verb is pronounced first and the "noun has the number feature that the verb lacks." (p.24). According to Mahfoudhi (2002) in an SVO order agreement is important for interpretation because "dropping/changing the agreement after uttering the subject will very likely lead to a problem of processing."(p.24).

3. The Verb Agreement System in SA

The subject agreement markers in SA occur in portmanteau morphemes expressing person, number, and

gender and are attached to the verb stem in SA. The following table contains SA subject agreement markers:

Table 1: Subject agreement markers in SA

	1st	2nd M	F	3rd M	F
Sg	-tu	-ta	-ti	---	-t
Dual		-tuma		-aa	-ataa
Pl.	-na	-tum	-tunna	-uu	-na

Before we discuss the type of agreement that holds between the verb and its controller, let us determine what controls verb agreement in Standard Arabic. The agreement on the verb can be controlled by different elements or components in a clause, depending on language-particular factors (cf. Aissen 1990:280). Languages differ as to the adoption of the following generalizations about predicate agreement controllers (Aissen 1990:279): (1)

(1) If A controls agreement on verb B. then A is a 1 [subject], 2 [direct object], or 3 [indirect object] at the relevant superficial level.

(2) If verb B agrees with A. A and B are sisters (dependents) of the same node.

The following sentence shows clearly the sentence element that cues agreement on the verb:

(3)
?a9Ta l-walad-u kitaab-an li-l-bint-i
gave the-boy-nom book-acc to-the-girl-obl
'The boy gave a book to the girl.'

It seems that the subject ?al-waladu controls agreement for if it is replaced with a feminine noun, agreement marker -t appears on the verb, as in:

(4)

    ?a9Ta-t ?al-mudarrisat-u kitaab-an lil-bint-i
    gave-F the-teacher-F-nom book-acc to-the girl-obl
    'The teacher gave a book to the girl.'

Having established the subject as a controller of agreement, we need to prove that other nominals do not control agreement. Returning to our sentence in (3), we notice that if the indirect object **binti** were a controller of agreement, a gender agreement marker would appear on the verb. Since there is no agreement on the verb, we can posit that indirect objects do not control agreement. Now let us check the possibility of the direct object being an agreement controller. Even if the direct object is a feminine noun, it cannot manifest any agreement on the verb:

(5)

    ?a9Ta(*t) l-?awlaad-u l-bint-a kitaab-an
    gave the-boys-nom the-girl-acc book-acc
    'The boys gave the girl a book.'

Thus in SA the subject is the only agreement controller.

In SA, a postverbal subject does not agree with its third person subject in number. The verb remains intact regardless of the number of the subject, as in:

(6)

    a. Daraba l-walad-u l-binta
       hit the-boy-nom the-girl-acc
       'The boy hit the girl.'

    b. Daraba l-walad-aan l-bint-a
       hit the-boy-3du/nom the-girl-acc
       'The (two) boys hit the girl.'

    c. Daraba l-?awlaad-u l-bint-a
       Hit the-boys-nom the-girl-acc
       'The boys hit the girl.'

In contrast, the verb agrees with its (postverbal) subject in gender. Thus if the masculine subject is replaced with a true feminine subject in the above clauses, the verb should manifest gender agreement:

(7)

    a. Daraba-t ?al-bint-u l-kalb-a
       hit-3F the-girl-nom the-dog-acc
       'The girl hit the dog.'

    b. Daraba-t ?al-bint-aan l-kalb-a
       hit-3F the-girl-2d the-dog-acc
       'The (two) girls hit the dog'

    c. Daraba-t ?al-banaat-u l-kalb-a
       hit-F the-girls-nom the-dog-acc
       'The girls hit the dog.'

Similarly, all non-human plural nouns (e.g. animals) are grammatically treated as feminine singular:

(8)

    a. 9aDDa-t ?al-kilaab-u l-walad-a
       bit-F the-dogs-nom the-boy-acc
       'The dogs bit the boy.'

    b. waqa9a-t ?al-kutub-u 9ala l-?arD-i
       fell-F the-books-nom on-the-ground
       'The books fell on the ground.'

Now we are in a position to examine the agreement status in noun-first sentences. In such sentences, the verb agrees with the preverbal subject in number, person and gender:

(9)

    a. ?al-walad-u Daraba l-bint-a
       the-boy-nom hit the-dog-acc
       'The boy hit the girl.'

    b. ?al-walad-aan Darab-aa l-bint-a
       the-boy-2dnom hit-2d the-girl-acc
       'The (two) boys hit the dog.'

    c. ?al-?awlaad-u Darab-uu l-bint-a
       the-boys-nom hit-3pl the-girl-acc
       'The boys hit the dog.'

    d. ?al-bint-u Darabat-t al-kalb-a
       the-girl-nom hit-3sgF the-dog-acc
       'The girl hit the dog.'

    e. ?al-bintaan Daraba-taa l-kalb-a
       the-girl-2nom hit-3dF the-dog-acc
       'The girl hit the dog.'

    f. ?al-banaat-u Darab-na l-kalb-a
       the-girls-3pnom hit the-dog-acc
       'The girls hit the dog.'

Also note that the verb with other persons may be plural or dual only "if it contains a plural subject within itself (i.e. when the subject is not expressed)" (Wickins 1980:43)

3.1 The Topicalization Hypothesis vs. The Subject Hypothesis

    Two hypotheses have been proposed for the characterization of the preverbal nominal in SA: the Topicalization Hypothesis and the Subject Hypothesis. The former is addressed first. Most western (cf. Wickens 1980; Wright 1995) and western-trained (cf. Fareh 1995; Aziz 1999) scholars deal with sentences containing a verb as a verbal sentence which may involve a preverbal or postverbal subject. Thus **Zaydun** is a subject in *maata Zayudn* and in *Zaydun maata*. The Arab grammarians (cf. Dayf 1986; Fayaad 1996) regard sentences that begin with a noun as different from sentences that begin with a verb. The verb-

first sentences are considered verbal sentences and noun-first sentences as nominal sentences. The noun that appears at the beginning of a sentence is not considered a subject. Rather, it is regarded as a Topic that agrees with the verb in number and gender (cf. Dayf 1986:254; Fareh 1995:128-129; Aziz 1999:245; Khairi (1996 cited in Mahfoudhi 2002:7))

Thus according to the Arab grammarians, in a sentence like (10b):

> (10)
> a. Daraba l-waladu l-bint-a
>   Hit the-boy-nom the-girl-acc
>   'The boy hit the girl.'
>
> b. ?al-waladu Daraba l-bint-a
>   The boy-nom hit the-girl-acc
>   'The boy hit the girl.'

?al-waldu is not the grammatical subject of the sentence in (10b). Rather it is the topic. According to Fareh (1995) **?al-waladu** in sentences like (10b) "is no longer analyzed as the grammatical subject but it is the logical agent that occupies the position of the topic."(p.129). In contrast, the Western grammarians (Cowan 1958; Wickens 1980; Wright 1995). who adopt the Subject Hypothesis, regard these sentences as of the same type: both are regarded as verbal sentences containing a preverbal or a postverbal subject. Versteegh (1997:79) regards these sentences (10a-b) as "the stylistic alternatives of the same verbal sentence."

Note that we are confronted with two hypotheses: the Topicalization Hypothesis and the Subject Hypothesis. It seems that the Subject Hypothesis is more plausible than the Topicalization Hypothesis. Evidence for this claim comes from gender agreement. Recall that both noun-first and verb-first sentences involve gender agreement between the

verb and the preceding or following nominal. This gender agreement is expressed by the marker-t if the nominal component is a third person feminine as in:

(11)
    a. Daraba-t ?al-bint-u l-kalb-a
         hit-F the-girl-nom the-dog-acc
         'The girl hit the dog.'

    b. ?al-bint-u Daraba-t ?al-kalb-a
         The-girl-nom hit-F the-dog-acc
         'The girl hit the dog.'

According to the Subject Hypothesis, **?al-bintu** is a subject in both sentences and the rule can be stated in such a way that agreement in the two sentences are accounted for in a minimal formulation: the subject agrees with the verb in gender. In contrast, The Topicalization Hypothesis treats these sentences as having different structures. Khalil (1999:245) and Fareh (1995:128-129) would claim that in the (b) sentence the agreement in gender is between the topic and the verb; in the (a) sentence, the agreement is between the subject and verb. Thus (Khalil (1999) and Fareh (1995) would need to have two rules to account for the same phenomenon, which is considered a complication of grammar. Thus the Subject Hypothesis meets Chomsky's minimalism "(i.e. the requirement to minimize the theoretical and descriptive apparatus used to describe language." (Radford 1997:6). Another problem for the Topicalization Hypothesis is suggested by Mahfoudhi (2002:11). He claims that the analysis of preverbal subjects as topics "seems counterintuitive for indefinite NPs."

3.2 The Verb Singular Analysis vs. The Zero Number Agreement Analysis

This section is concerned with the analysis of verb agreement in verb-first sentences. Two analyses have been

proposed to account for the agreement anomaly in such sentences: the Verb Singular Analysis and the Zero Number Agreement Analysis.

The Western scholars have analyzed both verb-first and noun first-sentences as involving agreement between the subject and the verb. There is an agreement anomaly in the agreement system of verb-first sentences.

(12)

    a.   Daraba l-walad-u l-bint-a
          Hit the-boy-nom the-girl-acc
          'The boy hit the girl.'

    b.   Daraba l-?awlaad-u l-bint-a
          hit the-boys-nom the girl-acc
          'The boys hit the girl.'

Wright (1995) considers the nominal ?al-waladu and ?awlaadu in (12) as subjects. Versteegh (1997:79) claims that "in examples [like 12] the agreement relation between verb and subject are identical, both being singular.". But they recognize that the replacement of the subject ?al-waladu with a feminine noun will result in gender agreement between verb and subject :

(13)

    Daraba-t ?al-mudarrisat-u l-walada
    hit-F the-teacher-F/nom the-boy-acc
    'The (female) teacher hit the boy.'

These scholars also admit that in a noun-first sentence the verb agrees with the subject in person, number and gender. Wright (1995) considers the nominal ?al-waladu/?al-?awlaadu/?al-mudarrisatu in the above sentences as a subject. But he argues that "When the predicate …follows the subject, they agree strictly in gender and number." (Wright 1995:296)

(14)

    a.   ?al-walad-u Daraba l-bint-a
           the-boy-nom hit the-girl-acc
           'The boy hit the girl.'

    b.   ?al-?awlaad-u Darab-uu l-bint-a
           the-boys-nom hit-3p the-girl-acc
           'The boys hit the girl.'

    c.   ?al-mudarrisat-u Daraba-t ?al-bint-a
           the-teacher F/nom hit-F the-girl
           'The teacher hit the girl.'

There are Arab scholars who also posit a singular verb in (12). Hamou (1989) agues that in a verb like **Daraba** the last element (i.e. –a) should be analyzed as a suffix indicating a singular subject. Also Benmamoun (1998) assigns the singular agreement feature to the verb that is followed by a plural subject

(15)

    ?akala-t iT-Taalibaat-u
    ate-3FS the-students FPNom
    The students ate.   (Benmamoun 1998)

He, however, does not attempt to justify the presence of a singular feature on the verb that is in agreement with a plural subject.

Another analysis—the Zero Number Agreement—might claim that the verb in verb-first sentences like (12) is indeterminate for number, either compatible with a singular or plural third person subject. Put differently, there is no number agreement in the verb-first sentences if the subject is third person. This analysis is in sharp contrast to the Verb Singular analysis of SA agreement phenomena, which claims that in the third person the verb preceding a singular or a plural subject is generally masculine singular (cf.

Wickens 1980; Holes 1995; Versteegh 1997). That the pre-subject verb is masculine can be verified by using a feminine subject: *Daraba-ti l-mudarrisat-u –l-bint-a*. Thus the presence of —t indicates that the subject is feminine; its absence indicates that the subject is masculine. By way of contrast, the verb does not manifest any number agreement if a singular subject is replaced with a plural one; therefore, there is no justification for arguing that the verb in the third person is singular even if its subject is plural. Such a situation is cross-linguistically attested: Davies (1983) argues that in Choctaw, a Muskogean language, "[t]hird person nominative and accusative agreement is ? ; therefore there is no overt manifestation of agreement with **towa** 'ba'"" (p.65).

3.3 Other Analyses of Verb Agreement Anomaly in SA

The Checking Theory as proposed by Chomsky (1995) in his Minimality Program can definitely help us determine which of the two analyses is more adequate: the Singular Verb Analysis or the Zero Number Agreement Analysis. But before we undertake this task let us eliminate the adequacy of the other analyses that offer explanations for the verb agreement asymmetry in SA : the analyses of Hamou (1989), Mohammad (1990), Al-Seghayar (2002), and Mahfoudhi (2002). First, note that Hamou (1989) argues that the last segment (i.e... a) in a verb like **Daraba** is a third person singular agreement marker. If –a were an agreement marker, we would expect it to disappear in the presence of a plural subject as in

(16)

Daraba l-?awlaadu l-binta

The fact that it remains intact in the absence of a third person singular subject is evidence that it cannot be an

agreement affix. It is part of the verb stem. Thus Hamou (1989)'s analysis is not plausible and should be disregarded.

Second, Mohammad (1990) admits that the verb agrees with its subject in number, person and gender only if it follows the subject (cf.18a-b); if the verb precedes the subject, there is only gender agreement, as shown in (17a-b):

(17)

    a. kasara l-walad-u z-zujaj-a
       broke the-boy-nom the-glass-acc
       'The boy broke the glass.'

    b. kasara l-?awlaad-u z-zujaj-a
       broke the-boys-nom the-glass-acc
       'The boys broke the glass.'

    c. kasara-t ?al-bint-u z-zujaj-a
       broke-F the-girl-nom the-glass-acc
       'The girl broke the glass.'

(18).

    a. ?al-walad-u kasara z-zujaj-a
       the-boy-nom broke the-glass-acc
       'The boy broke the glass.'

    b. ?al-?awlaad-u kasar-uu z-zujaja
       the-boys-nom broke-3p the-glass
       'The boys broke the glass.'

Mohammad (1990) argues that the SVO/VSO sentences would have a d-structure in which the subject is in the Spec-VP position. The VSO order is obtained by raising the verb to I at s-structure; the SVO is derived by lowering the verb from I to V at s-structure. Mohammad (1990) claims that there is no agreement in VSO because the verb that has raised to I is not c-commanded by the subject in Spec-VP. In contrast, the SVO order manifests subject-verb agreement because the subject lowers from I to V; therefore, it is c-

commanded by the subject in Spec-VP. The analysis offered by Mohammad cannot account for the data coming from Tunisian Arabic in which a preverbal or a postverbal subject has number agreement with the verb, as in (Mahfoudhi 2002:12):

(19)

    a. l-awlaad kla-uu a-ttufaH-a
       the-boys ate 3mp the-apple-fem
       'The boys ate the apple.'

    b. kl-uu l-awlaad a-ttufaH-a
       ate3mp the-boys the-apple-fem
       'The boys ate the apple.'

For instance; in the VSO order the verb, which raises to I, is not c-commanded by the subject in Spec-VP (cf. Mohammad 1990): yet, it agrees in number with the subject.

Third, Al-Seghayar (2002) offers a different analysis of SA sentences. He would posit (20a-b) as the d-structure representations of clauses like 17a-b, respectively

(20)

    a. [IP [I' [VP ?al-waladu[V' ksara [NPazzujaj]]]]
    b. [IP[I'[VP?al?awlaadu[V'kasara[NPazzujaja]]]]

Al-Seghayar (2002) argues that the VSO order (17a-c) is obtained by raising the verb to INFL and the subject remaining in Spec-VP. The sentences in (18) with SVO word order are obtained by virtue of raising the subject NP to Spec-IP at s-structure, which triggers the obligatory agreement of the verb with preverbal subject in number. person, and gender. The problem with Al-Seghayar's analysis is that it cannot explain why the verb moving to INFL while the subject remaining in Spec-VP should agree in gender but not in number. Furthermore, it cannot explain the agreement facts in Tunisian Arabic as given in (19a-b).

Fourth, Mahfoudi (2002) offers explanations for the verb agreement asymmetry in SA. Mahfoudi (2002) suggests that the economy principle is responsible for agreement anomaly attested in SA. The lack of agreement between a verb and a following subject does not affect interpretation. Mahfoudi (2002) claims that the noun has the number feature that the verb agreement lacks." (p.24) If, however, the subject comes first, "[the lack of] agreement will very likely lead to a problem of processing."(ibid.). Although Mahfoudi (2002)'s analysis seems elegant, it fails to explain why the verb in Tunisian Arabic manifests number agreement with a preverbal or a postverbal subject (Mahfoudhi 2002:12):

3.4 The Checking Theory and the Verb Agreement in SA

The major concern of the Checking Theory is to show "how to ensure the grammatical features carried by different words in a sentence are compatible with those of other words in the same sentence." (Radford 1997:69). We are now in a position to compare the two analyses that approach the status of agreement in the third person: the Singular Subject Analysis and the Zero Number Agreement Analysis . According to the Singular Verb analysis, the pre-subject verb in the third person is singular whether its subject is singular, dual or plural, as in (17), repeated here for convenience:

(21)
    a. kasara l-walad-u z-zujaj-a
          Broke the boy-nom the-glass-acc
          'the boy broke the glass.'

    b. kasara l-walad-aan z-zujaj-a
          broke the-boy-2nom the-glass
          'The (two) boy broke the glass.'
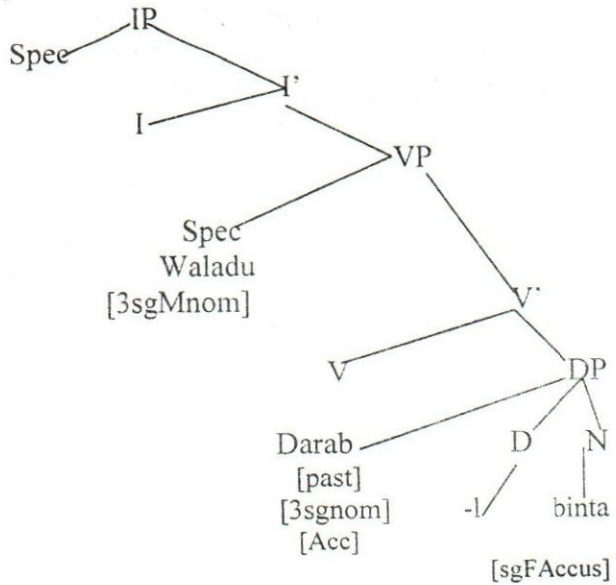
    c. kasara l-?awlaad-u z-zujaj-a

broke the-boys-nom the glass
'The boys broke the glass.'

These sentences can be accounted for by using the Checking
Theory. Accordingly, each lexical node will have a set of
features. Thus the verb is expected to have head features,
specifier-features, and complement features. The subject
?al-walad-u has head features, and the object has head-
features. The specifier-feaures of the verb **kasara** will be
checked against the head-features of **?al-walad-u** in (21a).
The complement features of the verb will be checked
against the complement-head features of **?az-zujaj-a**. If
there is a match between checker and checked, the matched
features that play no role at LF interpretation are erased.
According to the recent development in the Checking
Theory (cf. Chomsky 1999: 2000) only the uninterpretable
features are checked and erased. Let us examine how we
account for the agreement features in clauses like (6a) of
which the structure is given in

(22):

(22)

```
                    IP
          Spec          I'
           I               VP
                    Spec          V'
                    Waladu
                  [3sgMnom]           V'
                              V            DP
                          Darab       D    N
                          [past]
                          [3sgnom]    -l/   binta
                          [Acc]
                                      [sgFAccus]
```

I claim, with Al-Seghayar (2002), that the VSO order is obtained by raising the verb to INFL and the subject stays in the Spec-VP. Note that in (22) both the verb and the specifier are in the VP projection; the specifer features of the verb do not have to perlocate from V to INFL in order to be checked against the head features of the specifer. The specifier features of the verb are checked against the head-features of **?alwaladu** before raising occurs; the same thing can be said about checking the complement features of the verb against the head features of **?albinta**.
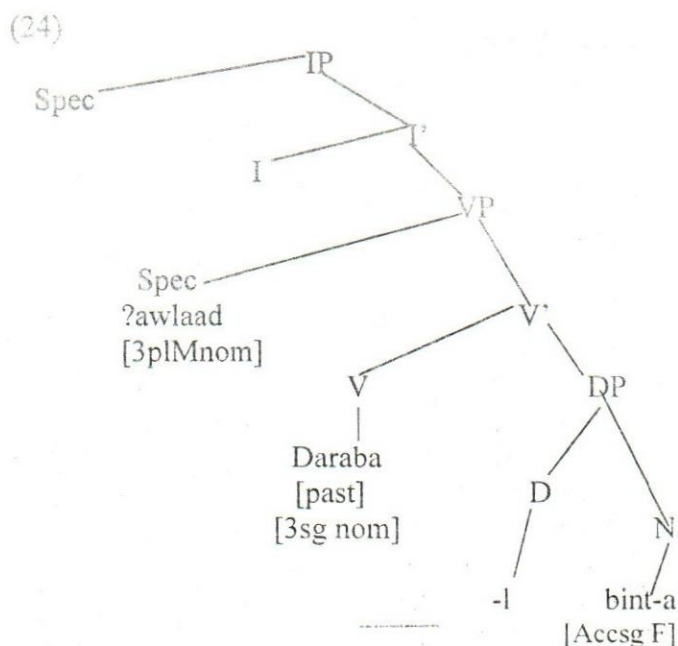
Let us show how checking works in the above structure: the [Nom] specifier-feature of **Daraba** will be checked against the [Nom] head-feature of **waladu**, and both case-features are erased since they are uninterpretable at LF. The [3sg] specifier-features of **Daraba** will be checked against the [3sg] head-features of **waladu**.; since the relevant features play no role in the interpretation of **Daraba**, they are erased. These features are significant for the interpretation of **waladu** (e.g. compare the selection of **he** and **they**); therefore it is not erased. Finally, the [Acc] complement feature of **Daraba** will be checked against the [Acc] head-feature of the object **binta** and both case features are erased: they are uninterpretable. All unerased head features remain.

Now suppose the Checking Theory is directed to account for sentences like (6c), repeated as 23 for convenience, where the subject is plural and the verb is singular:

(23)

Daraba l-?awlaad-u l-bint-a
Hit the-boys-nom the-girl-acc
'The boys hit the girl.'

According to the Verb Singular Analysis, the verb in sentences like (23) is singular, whereas the subject is plural. This sentence can be represented along the following lines:

(24)

```
                                    IP
              Spec
                                         I'
                    I
                                            VP
              Spec
              ?awlaad
              [3plMnom]                          V'
                                V                      DP
                              |
                            Daraba
                            [past]              D
                            [3sg nom]                    N
                                           -l       bint-a
                                                   [Accsg F]
```

There is no difference in checking operations between this
structure and the structure in (22) except that the [sg]
specifier-feature of **Daraba** does not match the [pl] head-
feature of **?awlaad**, which is a violation of the Principle of
Full Interpretation (cf. Chomsky 1995). Thus this derivation
is said to crash at LF, wrongly predicting that the sentence
will be ungrammatical. Thus the analysis of sentences like
(12) as having a singular verb and a plural subject is
disqualified by the Checking Theory. In contrast the Zero
Number Agreement Analysis posited by our analysis does
not encounter problems encountered by the Verb Singular
Analysis; for example, the specifier features of the verb
Daraba in (23) will accordingly be [3 nom]. Thus the
[Nom] specifier feature of **Daraba** will be checked against
the [Nom] head-feature of **?al?awlaadu**. Since case is
uninterpretable, it is erased from both. The [3] specifier-
feature of **Daraba** matches the [3] head-feature of **?awlaad**;
this feature plays no role in the interpretation of **Darab** and

it is erased at LF, but it has a role in the semantic interpretation of **?awlaadu** and therefore, it is not erased at LF.

It has been claimed that in the noun-first sentence, the verb agrees with a third person in number and gender. Thus in a sentence *like ?al-waladu Darab l-bint-a*, the verb **Daraba** is different from the verb **Daraba** in a verb-first sentence. In the former case, the verb can be said to be singular. This is because if it is replaced with a plural noun, the agreement marker should appear on the verb as in: *?al-?wlaadu Darab-uu l-binta*. Thus the verb in a noun-first sentence is to have different specifier features (i.e. [3sgnom] from the specifier features (i.e. [3nom]) required by the verb in a verb-first sentence.

The question is: how can the Checking Theory account for Noun-first sentences where a verb agrees with the subject in person, number and gender? Al-Seghayar (2002) would claim that such sentences are derived by raising the subject to the spec-IP position, but the verb stays in the VP. Note that the raised subject does not share the projection site with the verb. Al-Seghayar (2002)'s analysis does not explain why the verb is in full agreement with the specifier of IP. According to the analysis adopted here the SVO order is derived from the following d-structure (cf. Al-Seghayar 2002:175):

(24)
$$[IP [I'[VP NP[V'[NP]]]]$$

by raising the subject NP to Spec-IP. Now the verb requires a specifier with which it agrees in number, person and gender. The specifier features of the verb are [3plnom]. These features perlocate from V to I so that they can be checked against the head features of the specifier. Thus it can be said that the specifier features required by the verb depends on the status of the specifier: the verb requires

partial agreement (i.e. agreement in gender only) with Spec-VPs (i.e. VSO order) and a full agreement with Spec-IP (i.e. SVO). It can also be said that the preverbal subject is a prototypical subject (Huddleston 1984) occupying the first position of the sentence; therefore, it demands full agreement with the verb. In contrast, a postverbal subject is not prototypical; it is relegated to a second position in the sentence; hence partial agreement (i.e. gender agreement only) with the verb.

4. Conclusion

This paper has argued for the Subject Hypothesis; it has been shown that the Topicalisation Hypothesis is cumbersome in handling Subject-Verb agreement in SA. Also I have used the Checking Theory to prove that the Zero Number Agreement Analysis is superior to the Singular Verb Analysis. Furthermore, it has been shown that other analyses (e.g. Hamou 1989; Mohammad 1990; Al-Seghayar 2002; Mahfoudhi 2002) are not as adequate as the Checking Theory in handling all aspects of verb agreement in SA, especially the agreement anomaly that is attested in SA verb sentences.

Notes

1

For instance, in English, the controlling agreement contains subjects. In Tzotzil and K'ekch it contains subjects and direct objects. Number agreement in Georgian (Aissen 1990:280) involves subjects, and 1st and 2nd person direct objects and indirect objects.

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Appendix

Consonants:

/D/ voiced dental emphatic stop
/T/ voiceless dental emphatic stop
/q/ voiceless uvular stop
/?/ voiceless glottal stop
/g/ voiced uvular fricative
/x/ voiceless velar fricative
/9/ voiced pharyngeal fricative
/H/ voiceless pharyngeal fricative
/Z/ voiced dental emphatic fricative
/z/ voiced dental fricative
/s/ voiceless dental fricative
/S/ voiceless dental emphatic fricative
/š/ voiceless palato-alveolar fricative
/j/ voiced alveopalatal fricative
/đ/ voiced dental fricative
/? / voiceless dental fricative

Vowels:

/i/ high front.	/ii/ its long counterpart
/u/ high back	/uu/ its long counterpart
/a/ low central	/aa/ its long counterpart