Broken plural subjects in partial agreement with the verb in SVO order in Standard Arabic.
Abstract:
This paper focuses on the partial agreement relation in broken plurals in Standard Arabic in SVO order. Broken plurals are considered to be fully agreed with the predicate verb in interpretable features in literature. However, some DPs with [-human] feature represent a different scenario. The [-human] interpretable feature selects partial agreement with the verb in SVO order in Standard Arabic. This type of Broken plural has a third person singular value rather than the third person plural one.

Keywords: Full agreement- partial agreement-broken plural- SVO order- OSV order.

1. The problem of the squib:
In Standard Arabic (SA), all Broken Plurals (BPs) are supposed to agree with the predicate verb in interpretable semantic features similar to other regular plural nouns in SVO order. On the contrary, I found out that there is a variation group in BPs that does not obey the full agreement relation between the specifier and the predicate. Some of these BPs obey the partial gender agreement represented by prefixes on the predicate verb. For instance,

1. a- Ѳimar-u Ta-nduju
   D.Art.-Fem.BP.S.fruit –nom Fem.- Pres.ripe
   The fruit Ripe
   "The fruit ripe"

In this example, the fruit is a BP that does not fully agree with the predicate verb in the nominal sentence. In sentence (2), although the specifier the children is a BP, there is full agreement between the subject and the verb.

2. ❁fal-u Ya-l?fab-una fi l-hadiqati.
   The children play in the garden
   "The children play in the garden"

There are other examples in the squib that reflect how these DPs have a third person singular feature as in (1), rather than a third person plural feature as in sentence (2). These two different realizations of the BP have an impact on the agreement relation between the specifier subject and the predicate verb in SVO sentences. I think the main reason behind this variation lies within the DP [+/- human] feature. It determines the path of agreement between the subject and the verb. I also believe that this feature is active in the head T in SA sentence derivation.

Ouhalla (1999) used the boys [l-?awlaadu], which is a BP noun, in his discussion about VSO derivation, and described how it allows SVO as an alternative order in a finite clause. Surprisingly, this
Partial agreement in broken plural

BP has a [+ human] feature which does not cause any strict agreement problem in the SVO order as with the fruit in sentence (1).

3.  l-ʔawlaad-u raʔa-w Zayd-an
   the-boys-Nom. saw-3PL. Zayd-Acc.
   "The boys saw Zayd" Ouhalla(1999:338)

Therefore, the present squib will highlight the partial agreement in some BP nouns in SA. I would like to map the geography of the squib. A brief background section about Broken Plurals in SA and collective nouns in particular are presented in the second section. The third section discusses SVO and VSO orders in SA in relation to agreement. Fourth, agreement relations relevant to word orders in SA are presented. Afterwards, analysis of the data problem and some tests are given in the fifth section. Finally, I will conclude with a discussion about the mismatch agreement in some collective nouns in SA.

2. **Plurals in SA:**

Plural nouns in SA are categorized into sound plural and broken plural. The former accepts the association of the masculine third person plural suffix [-un] or the feminine one, [-at]. The root of the noun does not change when associated with these two gender suffixes. On the contrary, BPs change the root of the noun when they are pluralized and do not accept the gender suffixes (Algillani, 2009). The latter group of nouns is also subdivided into paucity that expresses small numbers from 3 to 10, and a second group, multiplicity one that expresses large quantities (Ratcliffe, 1998). Both types of BPs can have singular, countable, and uncountable nouns. In classical Arabic grammar, each category has a number of prosodic structures in singular that build up BPs. Based on these prosodic structures, the first type of BP has four prosodic structures while the second one has sixteen of them (Algillani, 2009).

Further to this, I find that within a single prosodic structure, some BPs have a [-/+ human] feature that affects the strict agreement relation between the subject and the verb in SVO clauses. The prosodic structure does not provide a syntactic interpretation for the different agreement behaviors of BPs within a single weight. Examples include ʔimaar (fruit) and rijal (men), ʔawlaad (boys) and ʔazhaar (flowers), ʔinaaθ (females) and jiaad (horses), and junuuḍ (soldiers) and quruud (monkeys). Some have a [+human] feature that guarantees full agreement between the subject and the verb in SVO whereas others have a [-human] feature which causes a partial kind of agreement. These BPs can be either third person singular nouns or third person plural nouns depending on the human feature value on the related noun (Acquaviva, 2008).

3. **Word order in SA:**
Before I start analyzing the data problem, it is important to give a bird's-eye view of how a DP specifier is merged in VSO and SVO clauses in SA under the Minimalist umbrella. In fact, there are two different perspectives regarding the merge of the DP specifier in VSO order. The first perspective claims that after the verb checks interpretable features (gender, person, and number) in the head inflectional phrase, it raises to $C^0$ (Carnie, Harley, & Pyatt, 2000). In this case, the DP subject is moved from its second merge position into the specifier position of a TP. That is, the EPP [uD*] feature is checked between a T, and the DP. Consequently, both the EPP and the Raising to C Hypothesis are satisfied in this structure.

The Extended Projection Principle Condition (Radford, 2009):

An uninterpretable EPP feature on a probe is deleted by movement of the closest active goal of the relevant type to become the specifier of the probe.

The Raising to C Hypothesis (Carnie, & et al, 2000):

VSO order is derived via head movement of the verb to $C^0$. There is a requirement in VSO language that $C^0$'s be filled, but the specifier of CP need not be filled.

This proposal is not applicable to SA in the sense that SA is similar to Old Irish in which the $C^0$ is filled with a complementizer (Carnie et al, 2000). For instance,

4. ŧhanant anna ad-dars-a sahlun.

Pas.Think- I that the lesson easy.

"I thought that the lesson is easy"

I also think that if the verb checks some interpretable features in T, it is not necessary for the verb to raise into $C^0$. The sentence order is symmetrical to the linear order in PF, and there are no further features attracting the verb in $C^0$. Therefore, I prefer to apply the second perspective proposed by Carnie et al (2000, 2010) in Old Irish, Doron (2000) in Hebrew, and Aoun, Benmamoun,& Choueiri, (2010) in Moroccan and Lebanese Arabic.

Doron claimed that the DP does not check the EPP feature with the head T in Semitic languages, but it rather remains in the specifier position of a vP (2000). The verb is the only syntactic category that is raised into the tense inflectional head T to check gender feature in the T domain. This perspective not only has the characteristics of the VP-Internal Subject Hypothesis (VPISH) in which the DP subject is merged lower in the tree, but also it has characteristics of the little vP (Carnie, 2010). I will not go into further details of VSO word order analysis since it is not in the scope of the present squib.

On the other hand, SVO derivation starts when the verb and its complement occur at the first merge whereas the specifier subject occurs at the second one. The head V is moved upward with the little v to check a present or a past inflectional feature, and then it stops its movement journey into the head T to
be glued with the gender, person, and number affixes. Variation in the behavior of some BPs is noticed in this alternative word order.

**4. Agreement relations relevant to word orders in SA:**

There is a distinctive harmony between the specifier subject and the predicate verb in terms of interpretable $\phi$ features in Standard Arabic. This harmony can be either partial or full depending on the sentence word order since agreement is very sensitive to the word order in SA. However, the orders most relevant to agreement are SVO and VSO. Moreover, it is essential to present the core principles and conditions that are generally obeyed in SA subject-verb agreement structure. The inflectional tense head of a finite clause is the domain of agreement between the subject DP and the predicate verb, and it reflects the c-command condition between the TP and DP (Chomsky, 1993, 1995) and (Baker, 2008). The uninterpretable features on the probe T attract the interpretable features on the subject DP goal. Chomsky (1993) defined the governing category by:

i. AGR is coindexed with the NP it governs.

ii. $B$ is a governing category for $a$ if and only if $B$ is the minimal category containing $a$, a governor of $a$, and a SUBJECT accessible to $a$.

Since there is no intervening syntactic object between the probe and the goal, the goal DP is moved upward into the specifier of the TP. Accordingly, two simultaneous conditions are involved later in the derivation. The Probe Condition allows for the Feature Deletion Condition to be applied. However, not all of the uninterpretable $\phi$-features are necessarily to be checked between the probe and the goal in some specific structures, and we will see later in the fourth section how the VSO order checks gender feature without number and person.

**The Probe Condition (Radford, 2009):**

A head probes only as far as is needed in order to find a goal which can value any unvalued features on the probe, and delete any uninterpretable features on the probe.

**Feature Deletion (Radford, 2009):**

An interpretable feature is deleted immediately any operation it is involved in applies, and is thereafter invisible in the syntactic and semantic components (but visible in the PF component).

The successfulness of these two conditions allows for the checking of the Extended Projection Principle Condition (EPP) between the head T and the specifier DP. I will use the [$uD^*$] feature throughout the squib to refer to the uninterpretable [EPP] feature on the head T. The DP subject cannot be moved into the specifier position of TP unless the [$uD^*$] feature is checked with the functional head.
T in SVO. In contrast, the DP remains in its base canonical position to yield the VSO order as the \([uD^*]\) feature is not checked.

Baker (2008) revised the conditions on agreement to include different configurations. According to him, agreement conditions are:

F agrees with XP, XP a maximal projection, only if:

i. F c-commands XP or XP c-commands F (the c-command condition).

ii. There is no YP such that YP comes between XP and F and YP has \(\phi\)-features (the intervention condition).

iii. F and XP are contained in all the same phases (the phase condition).

iv. XP is made active for agreement by having an unchecked case feature (the activity condition).

Let us start with the VSO order; agreement is partial between the verb and the subject in terms of gender feature. If the DP is a third person plural noun that has a [-una] masculine suffix or a [-at] feminine suffix, the verb is realized with the [ya-] masculine prefix or [tu/ta-] feminine prefix. Number and person suffix markers are absent on the verb in VSO. For example:

**Masculine specifier:**

5. ya-ktubu l-mo\(\delta\)allimo-un a-ddars-a


write the teachers the lesson

"The teachers write the lesson"

**Feminine specifier:**

6. ta-ktubu l-mo\(\delta\)allim-at-u a-ddars-


write the teachers the lesson

"The teachers write the lesson."

On the other hand, if the word order is reversed into the alternative SVO order, a full agreement relation between the specifier subject and the predicate verb has to take place. In other words, full agreement occurs when the person, gender, and number features between the specifier and the verb in the inflectional tense domain T, for example:

7. Al- mo\(\delta\)allim-at-u tu-ktub-na a-ddars-a


The teachers write the lesson

"The girls write the lesson."
8. Al-mo=allim-uun       ya-ktub-uun      a-ddars-a
   The teachers write the lesson
   "The teachers write the lesson."

In examples (7) and (8), the verbs have to be fussed with gender prefixes like [ya-] for a masculine specifier and [ta-] for a feminine specifier whereas number and person suffixes are presented simultaneously on the verbs by [-na] for third plural feminine and [-un] for third plural masculine specifiers.

Extensive syntactic studies have discussed full versus partial agreement relation between the subject and the verb in SA. Doron (2000) proposed that if the [uD*] feature is strong, it attracts the DP in the specifier position of TP in Hebrew and in SA. Consequently, a full gender, number, and person feature checking takes place in the T domain, and the verb is realized with a gender prefix and with person and number suffixes. In contrast, if the [uD*] feature is weak, the subject remains in the base generated position, and only the gender prefixes are realized on the raised verb. According to Doron, the [uD*] feature is not part of the lexical specification in VSO order whereas the SVO order has a different derivation in which [uD*] is added to the numeration. However, there are some BP agreement counter-examples in SVO in SA that cannot be interpreted using the strong/weak [uD*] feature view. These counter-examples will be the focal point of this squib.

5. Analysis of the data problem:

Aoun et al. (2010) and Ouhalla (1999) have thoroughly analyzed how agreement is licensed in SA, but the regular and the broken plurals that were used in their examples have a [+human] feature. Therefore, agreement is either licensed partially or fully depending on the word order. Sentence 6 has a strict agreement relation.

   The teachers go to the school
   "The teachers go to school."

   On the other hand, there is a group of BPs that do not behave symmetrically. For instance,

10. l-jiaad-u           t-ajri       (SVO)
    D.Art.-BP.S.horses -nom. Fem.- Pres.run
    The horses run
"The horses run."

11. t-ajri l-jiaad-u` (VSO)
    Fem.- Pres.run D.Art.-S.horses BP.-nom
    Run the horses.

"The horses run."
There is an interesting phenomenon in SA in which the adjective agrees with the noun in $\phi$ features and behaves similar to third person plurals and BP nouns. Acquaviva (2008) tackled the deflected agreement between the noun and the adjective and traced it to the role of [+/- human] feature. The adjective has a feminine third person feature with nonhuman nouns, but it has the symmetrical features if the noun is [+human]. For instance, consider the examples of wuzzaraa' judud (new ministries) versus kutub jaded-ah (new books) and sayyaar-aat jadiid-ah (new cars). The former example has a strict agreement between the noun and the adjective while the last two examples have a deflected agreement.

Accordingly, I use this phenomenon to test whether the birds, the horses, and the fruit have a third person singular feature or a third person plural one. Sentences 12 and 13 express identical feature values between the BP noun and the adjective:

12. A-ţţullaab-u al-mustajid-una ya-hḍur-una
    The students freshmen attend

    l-ijtIma²-a
    D.Art.-O.meeting-Acc.
    the meeting

"The freshman students attended the meeting."

13. Al-ʕulama-u al-mutamaiz-un kurrim-u
    The scientists the distinctive were honoured

    fi l-hafli
    Prep. D.art.-Party
    in the party.

"The distinctive scientists were honoured in the party."
Partial agreement in broken plural

14. A-Θīmaar-u a-ṭṭazajat-u biʕat bi-suhulah

   The fruit the fresh were sold easily.

"The fresh fruit were sold easily."

15. A-Θīmaar-u *a-ṭṭazaj-aat-u biʕat bi-suhulah

   The fruit the fresh were sold easily.

"The fresh fruit were sold easily."

Notice that adjectives in sentences (13) are pluralized as with the noun and the verb also displays complete agreement with the gender and number of the specifiers and their adjectives. In contrast, a partial adjective agreement occurs in 14. The adjective has a singular form, and would be considered ungrammatical if it has a plural form. Based on these two examples, I agree with Acquaviva (2008) that these BPs have a [-human] feature, and I think this is the main reason for such a partial agreement. The ϕ features of these nouns may determine the type of agreement the verb of the sentence should have.

The second test that I used is the use of PRO in the second clause. This type of PRO is what Carnie (2007) called the non-arbitrary obligatory PRO. Sentence 16 has two parts in which the first sentence has a BP in the specifier position while the second sentence has a PRO structure. The PRO is c-commanded by the antecedent al-jiad-u in the first sentence. This PRO is realized in Arabic as invisible third person singular pronoun like:

16. Al-jiad-u l-ʕarabiat-u tu-shaarik-u

   The horses Arabian participate

Fi a-ssibaaqi Wa tu-darrabu Pro4 bi-ḥtiraaf.


6. Conclusion:

To conclude, gender, person, and number affixes on the verb represent full agreement between third person plural subjects and predicates in SVO-order. It turns out that some BPs with [-human] feature have partial agreement in the nominal sentence. There are extensive works that focus on agreement relevant to sentence word order dissociated from human feature. I argue that this feature is active in T and
is checked between the subject DP and the functional head T in SVO-order in Standard Arabic. If the human feature is not checked in SVO-order sentences, the derivation will crash. Non-human BPs in SVO sentences have a third person singular feature that does not require full agreement with the predicate verb,

References:


Partial agreement in broken plural