The Structure of Arabic Verbless Sentences in Contemporary Syntactic Theories

بنية الجمل العربية اللافعلية في النظريات النحوية المعاصرة

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Abstract:

Modern theories of syntax seek a universal account that helps explain the structural patterns in a minimalist fashion. However, languages are distinct with respect to the typological features that warrant the surfacing of distinct canonical structures. The structure of Arabic verbless sentences in unique as it involves no apparent verbal predication. This has spilled a lot of ink in contemporary theories. Such theories are primarily influenced by their initial analysis of Indo-European languages, which contain verbal predication. As Arabic contains structures with no overt verbal constituents, the projection of such models on Arabic may be challenging. The present study highlights the theoretical complications of the three main outcomes of this applications which consider verbless sentence as: (a) small clauses with no functional projection, (b) containing an erased copula that is null in present and (c) containing a functional tense projection but no copula.

Keywords: verbless sentences; null copula hypothesis; predication.

ملخص:

تهدف النظريات النحوية المعاصرة إلى ضبط نموذج تحليلي عام يمكن من تحليل البنيات النحوية في كل لغات العالم. ولكن اختلاف اللغات من حيث بنياتها الأولية يجعل التراكيب الظاهرية جد مختلفة. في هذا السياق، تتميز اللغة العربية بتراكيب لا فعلية لا تتضمن أي إسناد فعلي على الظاهر مما جعل الكثير من الباحثين يحاولون مقاربة هذه التراكيب من منظور نظري معاصر أساسه النظريات الناتجة عن دراسة اللغات الهندية الأروبية.

تسلط الدراسة الحالية الضوء على الإشكاليات التطبيقية في تحليل الجمل العربية اللافعلية على أنها: (أ) بدون بنى وظيفية، (ب) بأفعال مساعدة محذوفة في الحاضر. (ج) ببنى وظيفية خاصة بالمضارع ولكن دون فعل مساعد.

كلمات مفتاحية: الجمل اللافعلية.، فرضية الفعل المساعد المحذوف، الإسناد.

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1. INTRODUCTION

How human natural languages achieve predication (known in Arabic grammar as ʔisnaad or ʔixbaar) is central to the Arabic medieval theory of grammar and even in contemporary linguistics. Predication is generally achieved by verbs or, in some languages, any other grammatical category. However, languages differ in their typological features and marked syntactic properties that warrant the surfacing of different predication structures. In view of that, Arabic allows for verbal predication both in SV and VS structures. Such sentences are referred to as verbal sentences. However, many Arabic sentences achieve predication without the overt materialisation of verbal predicates in sentences that are commonly referred to as nominal sentences.

Verbal sentences do not constitute analytical challenges to modern theories of syntax inasmuch as these theories are often modelled with reference to Germanic and Indo-European languages which are typologically verbally predicative. These theories, however universal, can be challenging when accounting for some Semitic Languages that are marked by both different sentential canonical orders and distinct markedness properties. In light of that, the present study acknowledges the need to examine how the modern theories of syntax account for Arabic sentences that contain no overtly spelled verbal predicates, a task that serves as a sine qua non for the development of explanatorily adequate theories of syntax that are modelled after Semitic languages and are equally as universal.

2. Medieval Arabic Theory of Sentence Types

The categorization of sentences in the early Arabic theory of grammar was based on the first occurring predicative constituent. Two types of sentences are recorded:

a. dʒumla fiʕliyya (verbal sentence): starting with a verb.

1. dʒaaʔ-a rrajul-u
   came the-man-Nom
   The man came

b. jumla ismiyya (nominal sentence): starting with a nominative noun:

2. ʔaṭṭifl-u saʕiid-un
   the-boy-Nom happy-Nom
   The boy is happy

This binary categorization of Arabic sentences is based on the principle of *"ʕamal"* (government)[1] in which the governor *"ʕaamil"* must always precede the governee *"maʕmuul"* (Obeidat & Ferghal, 1994; Peled, 2007). In this view, the verb is the governor affecting the complement in the verbal sentence whereas the inception *"ʔibtidaaʔ"* is the abstract operator in the nominal sentence (Sībawayh Al-Kitāb, 1: 239). One major issue in this categorization is that some constructions fall within neither of the aforementioned types. For example, a sentence can start with a definite propositional phrase (3) or an adverbial phrase (4):

3. fi ddaar-i radjul-aani
   In the-house-Gen men-Dl-nom
   There are two men in the house

4. hunaak-a radjul-un waaħid-un
   there man-nom one-nom
   There is one man

Some later grammarians specified the conditions under which a non-verbal (specifically participial) predicate is analogous to verbal predication (see Talmon, 1993; Peled, 2007). Ibn Hisham (1360) discusses Arabic sentence types in a way that is close to that of Sibawayh; he identified a third sentence type to account for the problems in (3) and (4), that is, the "Jumla ḍarfiya" "adverbial sentence" (494). A forth type was introduced by Zamaxshari "Jumla ʃarṭiyya" "conditional Phrase". Ibn Hisham, however, rejects this categorization based on the premise that conditional sentences are a specific case of verbal sentences.

3. Arabic Verbless sentences in the Contemporary Theory of Grammar

Languages like English always have an overt spell-out of the verb. Tense in these languages has [+D] and [+V] features; the former determining the relationship between the tense and the subject [EPP], and the latter determining its relationship with the verb (Chomsky, 1995). Sentences in such languages are not problematic in that the principle of feature-checking can account for the order of constituents. The [+D] feature causes the subject to raise from the spec-VP to spec-TP in order to check the [+D] feature; the [+V] causes auxiliaries and light verbs to move to the T-head position (Benmamoun, 2000).

Arabic allows of structures where there is no phonological spell-out of the verb/copula. In fact, Arabic verbless sentences have been analyzed in the literature in different ways[2]; the most paramount of which are Bakir (1980), Fehri (1993), Mouchaweh (1986, cited in Benmamoun, 2000), Benmamoun (2000 and 2008) and Jelinek (1981). One analysis posits that verbless sentences contain a verbal copula that is deleted (Bakir, ibid) or phonologically null (Fehri, 1993), another analysis regards verbless sentences as small clauses with no functional projection; i.e. matrix small clauses (Mouchaweh, ibid, cited in Benmamoun, 2000). A more recent analysis views verbless sentences as having functional tense projection but no copula. In other words, verbless sentences contain a functional tense projection that is marked for present tense only but no verbal copula (Jelinek, 1981; Hazout, 1995; Benmamoun, 2000; Al-balushi, 2012).

The following section presents the analyses of Arabic verbless sentences as follows:

- Verbless sentences are small clauses with no functional projection (Mouchaweh, 1986, cited in Benmamoun, 2000).
- Verbless sentences contain an erased copula that is null in present (Fehri, 1993).
- Verbless sentences contain a functional tense projection but no copula (Jelinek, 1981; Benmamoun, 2000).

3.1 Verbless sentences with no functional projection

Mouchaweh (1986: cited in Benmamoun, 2000: 39) argues that Arabic verbless sentences are matrix small clauses in that they do not contain any functional projection. The same analysis is applied to verbless sentences in Hebrew by Rapaport (1987). This type of sentences contains only a lexical projection with no functional projection above it. This lexical projection contains a subject and a non-verbal predicate which can be an AdjP (adjectival Phrase) (5), NP (Noun Phrase) (6), PP (Prepositional Phrase) (7) or, not mentioned in Benmamoun (2000), AdvP (Adverbial Phrase) (8).

5. al-bayt-u waasiʕ-un
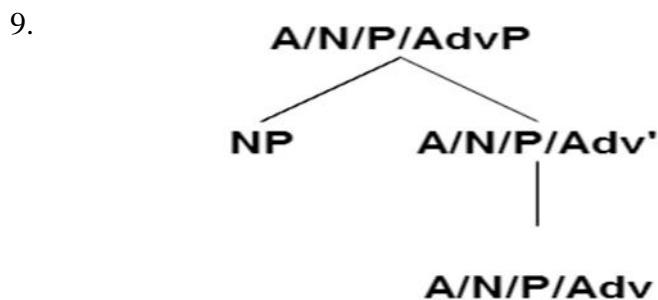   the-house-Nom large-Nom
   The house is large

6. Aħmed-u muʔallim-un
   Ahmed-Nom teacher-Nom

Ahmed is a teacher

7. Aħmed-u fi ddaar-i
    Ahmed-Nom in house-Gen
    Ahmed is in the house

8. Aħmed-u hunaa
    Ahmed-Nom here
    Ahmed is here

In this analysis, sentences of this type (sometimes termed predicational sentences) can be introduced as in the following diagram:

9.

According to this analysis, there is no functional category to hold the tense head. This means that there is a predication relationship between constituents without any functional head. In this regard, verbless sentences are adjunction structures having a subject in a specifier position adjoined to a maximal projection of a lexical head (Moro, 1995; Rothstein, 1995). Benmamoun (2000) considers this analysis to be comparable to structures such as "I saw [John sad]". In fact, there are a number of problems that arise with this analysis:

The first problem arises from the fact that verbless sentences can be coordinated with a CP. For example:

10. al-baytu waasiʕun wa laakin hal sayakuunu dʒamiila(n)?
     the-house-Nom large-Nom and but whether will-be.3PMS beautiful-Acc
     The house is large but will it be beautiful?

According to the Coordination Condition (Radford, 2009: 59): "Only constituents of the same category can be coordinated".

The first part of (10) is a verbless sentence while the second part (in bold) is a CP introduced with the interrogative complementiser hal "whether". It follows from (10) and the coordination condition that the two coordinated phrases are structurally parallel. Therefore, it follows that verbless sentences are fully-fledged complementiser phrase CP.

The sentence problem can be obserbed in the structure (11) where verbless sentences can contain a temporal adverb, for example:

11. al-dʒaww-u dʒamiil-un al-yawm(a)
     the-weather-Nom nice-Nom today
     The weather is nice today

According to the anchoring rule (Harper and Charniak, 1986):

> *If the time period of the event associated with the first verb of a sentence can overlap the time period associated with an adverb, then the adverb can modify that event and can potentially modify the other events in the sentence (based on the overlap rule). The utterance event cannot be modified using the anchoring rule. (p.05)*

This means that temporal adverbs have to be anchored by the tense of the same clause (Eisele, 1988; de Saussure, 2007). In other words, anchoring adverbs have a semantic field that has to be concordant with the syntactic tense of the functional category of the clause. This implies that Standard Arabic structures like (11) contain a functional category that has tense configurations. This is further substantiated by the examples (12) and (13):

12. *al-dʒaww-u dʒamiil-un ʔams
    the-weather-Nom nice-Nom yesterday
    The weather is nice yetserday

13. *al-dʒaww-u dʒamiil-un ɣad-a(n)
    the-weather-Nom nice-Nom tomorrow
    The weather is nice tomorrow

The asterisk is indicative of ungrammaticality. The fact that (12) and (13) are ungrammatical is strongly suggestive of the existence of a tense head that would, otherwise, anchor the temporal adverb.

It is clear now that verbless sentences are not mere lexical projections of the lexical head but rather fully-fledged structures with a CP-layer and a functional tense projection. This alternative analysis is adopted by a number of researchers but not without some theoretical complcations.

3.2 Verbless sentences contain an erased copula that is null in present

The early works on Arabic verbless sentences all agreed that there is no verb in this type of sentences and, hence in contemporary terminology, no functional verb projection (VP) . Such a claim is challenged by some contemporary linguists such as Bakir (1980), Fehri (1993) and Bahloul (1993) who all argue that there is a copula in verbless sentences but it is null/ deleted. The latter draws on cross-linguistic analyses of Hebrew and Russian by Falk (2004) and Babby (1981).

Fehri (1993) argues that the copula is present in the syntactic representation of seemingly verbless sentences, yet it fails to lexicalize because it carries unmarked Tense Feature [-past]. On the other hand, the copula has [+past] feature in verbal sentences, which forces it to lexicalize. This suggests that there is a functional head for the tense projection. In the same vein, Bakir (1980) suggests that the noun phrase preceding the copula is the topic of the projection and the subject is a deleted pronominal constituent occurring after the copula. For a sentence such as (5), he proposes the following analysis:
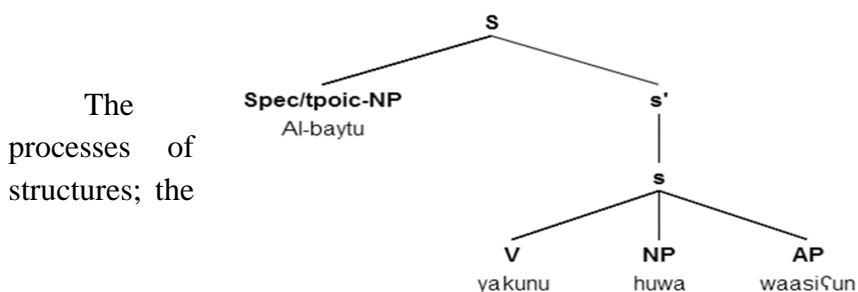
14.

The diagram implies that there are two processes of deletion that apply to verbless structures; the pronominal subject deletion and the

copular deletion. One reason for the pronominal subject deletion is that it is "co-referential with the topic-NP" (Bakir, ibid: 176).

One reason for considering the pre-copular phrase as a topic rather than a subject comes from wh-questions. According to Bakir (ibid), the fact that the pre-copular phrase appears on the left of wh-word and not on the right proves that it is a topic:

15. al-djaww-u kayfa yakuun-u fi ʃʃitaaʔ?
      the-weather-Nom how is in the-winter-Gen
      The weather, how is it in winter?

Fehri's analysis differs from Bakir's in two aspects: first, it assumes that there is a functional projection to hold tense; second, the copula is null rather than deleted. He proposes "aspectuo-temporal" and modal constraints for copula nullification:

> *Spell out the copula as kwn when Mood, Aspect, and/or Tenses are specified, otherwise spell it out as zero*. (p.156)

Benmamoun (2000) attributes this analysis to mere quest for analytical consistency. However, such a view is theoretically beneficial in that it provides a unitary characterization for structures with copular and verbal predicates.

The anchoring rule is a strong evidence that there is a functional head to hold the tense in verbless sentences. Examine the following:

16. ʔaṭṭifl-u katab-a ddars-a ʔamsi
     the-boy-Nom Wrote.3PSM the-lesson-Acc yesterday
     The boy wrote the lesson

17. *ʔaṭṭifl-u Katab-a ddars-a ɣada(n)
     the-boy-Nom Wrote.3PSM the-lesson-Acc yesterday
     The boy wrote the lesson tomorrow

The temporal adverbs"ʔamsi" and "ɣada(n)" in (16) and (17) must have the same time reference as the verb in the same clause. Examine the following:

18. *al-dʒaww-u dʒamiil-un ʔams/ ɣada(n)
     the-weather-Nom nice-Nom yesterday/tommorw
     The weather is nice yesterday/tomorrow

19. al-dʒaww-u dʒamiil-un ʔalʔaan
     the-weather-Nom nice-Nom now
   The weather is nice now

The fact that (18) is ungrammatical and (19) is grammatical suggests that the temporal adverbs are anchored by a functional element with an appropriate time reference. Note that when the past copula "kaana" is added to (18); the structure becomes grammatical:

20. kaan-a al-dʒaww-u dʒamiil-an ʔams
      was the-weather-Nom nice-acc yesterday
      The weather was nice yesterday

The lexicalized past copula and the temporal adverb in (20) are compatible in time reference, and the clause is thus grammatical. The analyses of Bakir (1980) and Fehri (1993) fall short with respect to two main issues. First, the analysis considering that there is a null copula in verbless sentences does not account for the case assignment asymmetry in that an overt copula assigns an accusative case to the predicate while the predicate of a null copula is assigned a nominative case. Déchaine (1993) points to the fact that it is not clear why a null copula and an overt one assign two different cases. Al-Liheibi (1999) points that null and elliptical elements retain their function, and their effect on other constituents remains clear. Second, Bakir and Fehri's analyses (1980; 1993 respectively) do not offer clear specifications under which the deletion of the copula is obligatory or optional.

3.3 Verbless sentences with functional tense projection

This stance of analysis is adopted by Jelinek (1981) and developed by Benmamoun (2000, 2008). Jelinek (1981: 47) argues that there is an auxiliary phrase node specified for the present tense feature as follows:

21.
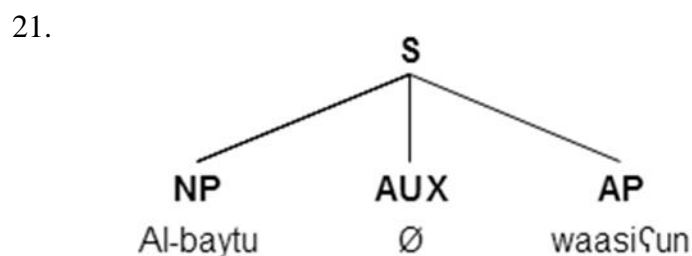
Aoun et al. (2010) agree with Benmamoun (2000) in that verbless sentences contain "no verbal copulas and no element carrying tense" (p4). What is new about Benmamoun's analysis (2000) is that, while the previous analyses discuss whether or not there is a copula in verbless sentences, his analysis attributes differences to fundamental differences between present and past tense. In other words, verbs in present and past tenses are not in the same position. He argues that, even in verbal sentences, the verb is in a position lower than negation in present tense and higher than negation in past tense. That the verb is in a high position in past is what forces the presence of a verbal copula in past tense.

According to Benmamoun (2000), having [+V] feature, the past tense has to be paired with a verbal element causing the verb to be in a higher position in verbal sentences and forcing the presence of a copula in verbless sentence. Since, he argues, present tense does not have [+V] feature, it remains in a position lower than negation in verbal sentences and has no copula in verbless sentences. Aoun et.al (2010: 4) carry out in the same vein arguing that: "there is no verbal copula and no element carrying tense" in verbless sentences and "a tense projection may not require the projection of a VP".

Benmamoun's account proposes a theory of categorical features of tense in that the heads of the tense projection in present, past and future have different categorical specifications:

- Present [deictic] [+D]
- Past [+D, +V]
- Future [+D, +V]

Jelinek's and Benmamoun's analyses (1993; 2000 resectively), however different, share the contention that there is neither verbal nor copular constituents in Arabic verbless sentences. However,

reasons for the categorical features differences between tenses are far-fetched and not fully developed in the analysis. Moreover, for economy purposes, it is more yielding to regard verbal and verbless sentences as having the same D-structure.

4. CONCLUSION

The structure of Arabic verbless sentences is a central issue in the study of Arabic syntax albeit no unequivocal framework of analysis has been proposed as of yet. The scrutinizing of literature reveals a main dispute and a sub-dispute. The main dispute is whether Arabic verbless sentences are matrix clauses or fully-fledged clauses with functional categories. This dispute is resolved in that there is a good deal of empirical evidence in favor of analyzing verbless sentences as clauses with functional categories. The second dispute revolves whether these functional categories include a tense head and a verbal projection or a tense head specified for present tense but no verbal copula.

The analysis of Arabic verbless sentences as containing a functional tense projection but no copula does not explain the conditions behind the overt spell-out of the projection into a verbal copula in the past and future tense and when negated. That is, assuming that a functional tense projection that contains no verbal projection changes its underlying structure when in different temporal or propositional settings is not conceivable given the minimalist objectives of analysis. Finally, the analysis of verbless sentences as containing a verbal projection that is null in present is more concomitant with the syntactic theory. However, the present study highlight the prominent shortcoming of Fehri's analysis (1993) which is that it did not account for case assignment asymmetries and did not thoroughly explain the conditions of copula nullification. Given that, accounting for arabic verbless sentences under the contemporary syntactic models needs to justify case-assignment asymmetries and provide well-demarcated specifications for the condition of copula deletion.

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6. Endnotes

1. The Arabic term *ʕamal* has a number of corresponding terms in western linguistics: **government** (Zwartjes, 2007), **grammatical effect** and **operation** (Levin, 1979; Versteegh, 1994; Talmon, 1993).

2. The works of Bakir (1980), Jelinek (1981), Fehri (1982), Eid (1983), Mouchaweh (1986), Fassi Fehri (1993) and Bahloul (1994) are recommended for more details on the structure of Arabic verbless clauses. Also, for cross-

linguistic investigation see the works of Berman and Grosu (1976), Doron (1986), Rapapport (1987) and Shlonsky (1997) on Hebrew.

3. See Sibawayh, 796 [1977]; Ibn Jinni, 1010 [1993]; Abo Hian, 1377 [2001] and Ibn Hesham 1590 [1994])

4. for more details on the conceptual argumentation against the deleted copula hypothesis See Moutawakil (1987) and Benmammoun (2000) and Shlonsky (1997).

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