# Word Order, Functions and Morphosyntactic Features of Adverbs and Adverbials in Arabic

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**Abstract.** The paper discusses adverbs and adverbials in two spoken varieties of Arabic: Hijazi (HA) and Palestinian (PA) with the occasional reference to Standard Arabic (SA), within the recent version of the Minimality Program (MP). Functional properties along with hierarchical ordering, morphosyntactic features and case are implemented throughout the discussion to identify adverbs and adverbials in Arabic. Adverbials, like adverbs, are optional specifiers. They are discussed along with adjuncts as a restricted sub-class of adverbs. Conclusions show that all the above features and properties are significant in identifying the class of adverbs and adverbials in Arabic with their flexibility order and their dependence which is mainly on their semantic scope.

# 1. Introduction and Framework

## 1.1. General remarks

Adverbs and adverbials have not been given much attention in the field of linguistics in Arabic compared to the quite rich literature in other languages such as Germanic and Romance. This paper may be viewed as a contribution to the field and an attempt to fill this gap. The subject of the paper is restricted to two spoken varieties of Arabic: Palestinian (PA) and Hijazi (HA), with an occasional reference to written Standard Arabic (SA). However, the word 'Arabic' may appear sometimes in the discussion as a variant of PA and HA with no implications for other forms of the spoken varieties of Arabic. The views expressed here are to a large extent applicable to other varieties of Arabic. I believe that they are equally applicable to SA with some modification or restriction, depending on the formal nature of rules. I will restrict myself mainly to HA and PA with an occasional reference to SA, in order to reach a conclusion that will be useful for research with the required adjustments to accommodate other

forms of Arabic. Reference to English is made only when some points seem best presented before reporting on their counterparts in Arabic.

#### 1.2. Framework

The argument in this paper is syntactic and specifically within the context of the recent version of the Minimality Program (MP). The discussion also includes some morphosyntactic description of adverbs in SA, HA and PA in order to identify their class in the language. Functional properties are implemented as it is believed that the flexibility of the order of adverbs depends on the semantic scope of the adverbs themselves [1]. It is useful to adopt such functional properties as they include distributional alternations in a non-congruent language typology as Arabic.

However, at the semantic level, which involves the Logical Form (LF) level within the same theoretical MP framework, it is known that all materials in syntactic structure which lacks a semantic interpretation must be eliminated. This is because the end point of the syntactic derivation is the level which interfaces within semantics. The sentence is ungrammatical when any sentence head component lacks semantic properties even if it survives the level of syntax [2]. Thus, according to MP, heads in phrases within the sentence are interpretable at the level of LF because their abstract morphosyntactic features function with other logical categories in the sentence<sup>(1)</sup>. If the adverbs' syntactic distributional as well as semantic interpretational properties are adequately accounted for by the topic of this paper, then 'Checking Theory' is extended to adverbs. Formally, in MP, Checking Theory is a procedure which determines whether a lexical element has the appropriate features before it is used in a certain position in a certain sentence structure [4-6].

# 1.3. Functional and morphosyntactic classification, case and ordering of Arabic adverbs

Adverbs in Arabic are those words whose function is to express a mode of action of the verb. They are optional or secondary elements in all types of sentences except those with copulas where they are necessary [7]. The latter type is excluded from the topic of this paper. An adverbial phrase is a phrase with an adverb as its head with the above mentioned function, such as the English adverbial phrases "very slowly" or "perfectly well", where "slowly" and "well" are the heads of their phrases.

But, a question such as "Are there adverbs in Arabic?" may be asked mainly because, unlike English, adverbs in Arabic are not a 'heterogeneous' group, or one without structural identity. They are found in three main syntactic categorical varieties: NPs, AdjPs or PPs classified according to their semantic functions: manner and temporal, intensifiers, and time and place specifiers.

The following are examples from SA:

<sup>(1)</sup> For more elaboration on the involved framework of MP, see inter alia Martin *et al.* [3], Roberts [2] and Payne [1].

```
1. a.
       (?anaa) ?a9rif-u
                                                                  (NP/manner)
                            -huu
                                    tamaam -an
                 know-Nom -him
                                     completely-Acc
       "I know him perfectly."
   b. (?anaa) ra?ayt-u
                                                                 (NP/temporal)
                            -huu <u>l-baariHa</u>
                saw -Nom-him
                                   the-yesterday
       I
       "I saw him yesterday"
2.
       (?anaa) ?a9rif-u
                           -huu <u>jayyid-an</u>
                                                                (NP/intensifier)
                  know-Nom-him well
            "I know him well."
3.
       (?anaa) kallam-t
                                       -huu <u>bi -sur9at-in</u>
                                                                  (PP/manner)
```

I talked-1<sup>st</sup> person – Nom-him with-hurry-Genitive
"I talked to him rapidly."

When the adverbs underlined in the above examples are analyzed morphosyntactically, there is no specific or unifying characteristic to categorize them, unlike the English –ly suffix. When the adverbs are classified functionally, this also must involve their: (a) functional properties; (b) various categorical morphosyntactic characteristics; (c) distributional ordering within the sentence structure i.e. hierarchical ordering, and finally (d) case [8-10]. These classificational properties are followed throughout our analysis.

The words underlined in examples 1 (a & b), 2 and 3 above exhibit the function of adverbs, which specify the verb mode. Their functional properties are VP-adverbs of manner, temporal and intensifier. But, sentence-adverbs (S-adverbs) have a wider scope to specify the whole action of the sentence, as shown in (5) below. In terms of their morphosyntactic features, adverbs in Arabic are not derived from any other syntactic class. Thus, they are not heterogeneous; i.e. they do not have specific categorical characteristics to identify them as adverbs. This leaves the functional distributional hierarchical ordering in structure and case as necessary properties to identify this class in Arabic.

For their distributional hierarchical ordering in the sentence, VP-adverbs occur as adjuncts within the VP following the verb head in the main sentence (as in examples 1 a & b, 2 and 3 above). Being optional and secondary elements in the sentence, adverbs have no fixed order, and thus can occur before or after the verb-head within the VP as described in the following VP-adverb rule:

4. 
$$VP \longrightarrow (ADV) V (NP) (ADV)$$

Adverbs are added (or adjoined) to the verb rather than to the VP. This means that they are adjoined to an existing projection of the verb even though they may occupy different linear positions [11]. VP-adverbs can be either left-adjoined or right-adjoined to the verb.

The following is an example from SA which exhibits the option of S-adverb's linear order in the sentence, followed by a PS-rule describing the linear order of S-adverbs:

```
5. a. (Tab9-an), (?anaa) ?a9rif-u -huu (Tab9-an) (SA) (evidently-ACC.), I know-Nom-him (evidently-ACC.) "Evidently, I know him."
```

S-adverbs occur alternately in initial or final position, and share a similar PS-rule as the VP-adverb rule in 4 above, but with reference to S rather than the VP. The PS-rules of VP-adverb and S-adverb apply also to PA & HA.

# 2. Data and Analysis

**2.1. Our data** are collected from natural settings in various spoken Arabic contexts, (PA) and (HA). As for SA, an occasional reference is made to identify some basic contexts of adverbs in the standard from where it best illustrates some of the classificational properties. The three main Arabic references to SA data used for our study are: Al-Jirjaani [12], Siibawayhi [10] and Hassan [13]. These references are selected from among many works in Arabic for the purpose of our topic.

## 2.2. Adverbs in Arabic

Adverbs, as mentioned in 1.3 above, are classified according to the distributional functions and properties that are found necessary to identify them in Arabic. Functional properties such as manner, temporal and intensifier properties are discussed along with the morphosyntactic features, hierarchical ordering and case. Within this analysis, adverbs are typically found in at least three positions, depending on the category they modify. First, the VP-adverbs; second, S-adverbs; and third, stacked or adjoined adverbs. Each category is discussed under a separate sub-section below with the relevant data from the three varieties of Arabic.

## 2.3. Analysis and discussion

The following discussion of data involves VP-adverbs, S-adverbs and stack-adverbs.

# 2.3.1. VP-adverbs

The adverbs occur either before or after head-verb, as PS-rule (4) above illustrates. They are adjoined to the existing projection of the verb as optional or secondary elements. For example, manner adverbs occur around, and modify, the verb and its complements. They are structurally presented as constituents of the VP. That is why manner adverbs are also called VP-adverbs. They can be 'displaced' [11] along with the constituents of the VP in terms of lines or hierarchical ordering. That is another

structural reason of naming this type VP-adverbs. VP-adverbs appear either between the subject and the main (or matrix) verb or after the matrix verb:

```
6. a. [S [NP/Subj saa9a -ti (l-yoom) waagf-a (l-yoom)]] (HA)
watch-my (the-today) stopped (the-today)
"My watch(today) stopped (stopped).
b. [S [NP/subj l-muHaaDara][VP/Pred. khallalSat badri]] (HA)&(PA)
the-lecture finished early
"The lecture has finished early."
```

VP-adverbs are generated by rule 4 above, which implies the structures of 6, a & b above, depending on the linear position of the adverb in the VP [11]. The above adverbs of the VP are identified as temporal adverb because they specify both the verb and the structure. They are represented as constituents of VP and thus VP-adverbs.

The temporal adverb (of time) *l-yoom* "today" is used similarly in SA, HA and PA with the same lexical form. It can be used both as VP-adverb and as a S-adverb, as is discussed in sub-section 2.2.2. For the sake of comparison, both are presented together in the following examples:

```
7.a. jooz-ha 9ind-u muraabaTa <u>l-yoom</u>
husband-her has -3<sup>rd</sup> Sing duty the-day
"Her husband has (night) duty, today."
b. saa9a-ti <u>l-yoom</u> waagf-a
watch-my the-day stopped-Fem
"My watch has stopped, today."

S-Adv.(PA)&(HA)

VP-adv.(HA)
```

*l-yoom* in 7.a is a sentence time-adverb with a wider scope of function whereas *l-yoom* in 7.b has more limited scope that only specifies the action of the verb. As a VP-adverb, *l-yoom* is adjoined (or added) to the projection of the verb within the main VP of the main sentence. The term 'adjoined' from GB-theory is useful in this analysis where it is applicable to all VP-adverbs.

Similar functional properties are implemented in the analysis of the Arabic adverb corresponding to (very), which has three different forms in the three varieties of Arabic under discussion. *Jidd-an* is the SA form with the accusative *-an* case, *ktiir* is the PA form, and *marrah* is the form used in HA. The last two adverbs exhibit no inflectional ending for case. This adverb frequently occurs with respect to our data, it has the functional property of the intensifier of the matrix (or main) verb of the main sentence. This adverb of degree can occur repeatedly to enhance the main verb-manner of intensification, such as *jidd-an jidd-an in* (SA), and *ktiir ktiir* in (HA) & (PA).

As a conclusion, VP-adverbs modify the verb within the VP in terms of an

adjunction structure. This is determined structurally on the basis of VP-adverbs in relation to the matrix verb that they modify. The adverb at the level of hierarchical ordering juxtaposes its verb and enjoys the more limited scope of function to modify the verb action.

#### 3.3.2. S-adverbs

Sentence-adverbs (S-adverbs) is the second basic class of adverbs because of the main functional property they have, which refers to the context of the whole sentence. S-adverbs are distinguished from VP-adverbs mainly by their functional property when both occur in sentence final position. Thus, unlike VP-adverbs that are identified as manner-adverbs, S-adverbs do not complement the verb. The following are examples of two S-adverbs:

```
8.a.[S[S' Ha-aji ?ana], [S-adv Tab9 -an]] (PA)&(HA) will-come I , obviously-ACC "I will come, obviously."
b. [S[S'-adv ?aSl-an , [S kull haadi l-muzaakara maa la-ha faayda]] basically-Acc, all this the-study not to -it use "Basically, all this study is useless."
```

S-adverbs occur in both sentence types in Arabic<sup>(2)</sup> verbal 8.a and equative 8.b. *Tab9-an* and *?aSl-an* can alternate in the linear order of the sentence i.e. initially or finally. There is a pause in the verbal interaction following the initial S-adverbs, or preceding the final ones, which are substituted by a comma in writing as shown in 8.a and b, above. Morphosyntactically, most S-adverbs have in common the `fixed` bound morpheme *-an* of the accusative (Acc) case; also in *Tab9-an* in 8.a and *?aSl-an* in 8.b.

Other S-adverbs that end with the Acc case inflectional bound morpheme —an are: jidd-an 'extensively/very, ?aSl-an 'basically'; haQQ-an 'verily'; Tab9-an 'certainly'; daaym-an 'always'; 9umum-an 'generally'; ?akhiir-an 'finally'; ?awwal-an 'firstly', among others. These lexical forms are found to be uninflectional, i.e. fixed Acc case, and occur in PA and HA as well as most, if not all, dialect varieties of Arabic.

There are S-adverbs that do not have the accusative suffix -an, yet are adverbs of time (as in 9.a), and of manner (as in 9.b & 9.c), in the sense that they describe the time and the manner denoted by the sentence main verb. The following are examples from HA and PA:

<sup>(2)</sup> Arabic sentence types and word order is extensively discussed by Mohammad [14]. See also Wright [9] and Al-Jirjaani [12], among others.

```
b. [S-Adv <u>?akiid</u>], [S' <u>kh</u>allaS-t waajibaat -i]] Verbal-S(HA(&)PA)
certainly, finished-I homework-my
"Certainly, I finished my homework"
c. [S [S' laazim ynaam-u badri, [S-adv <u>min jidd</u>]]] Verbal-S(HA)
must , sleep-they early, really
"They must sleep early, really."
```

The above sentences structure is also generated by PS-rule 5.b above, which applies to both sentence types: Verbal and Equative. Similar structure is used in SA, the lexical forms are morphosyntactically fully inflected.

## 2.3.3. Coordinated or "stacked' adverbs

Adverbs parallel adjectives in that the former can be 'stacked', but to a lesser degree than adjectives [11, 15]. Adverbs can be 'stacked' in Arabic (standard and dialects) in that more than one adverb can be found in a single phrase or sentence. The following examples include at least two VP-adverbs or S-adverbs:

- 10. gul -t kilmat-een min <u>hina w hina</u>
  Said –I word –two from here and here
  "I said two words from here and there."
- 11. <u>?aSl -an, min jidd, dool laazim inaam-u badri</u> (HA) basically-Acc, truly, those must sleep –Pl early "Basically, truly, those must sleep early."
- 12. *l -bint bitim<u>sh</u>i <u>min jidd bishweesh</u> the-girl walks truly slowly
  "The girl truly, walks slowly."*

In 10 above, the underlined adverbs are coordinated with the coordinator w "and", and may be referred to as "coordinated adverbs". But, it seems that there are few usages in our data where adverbs occur stacking together, as in 11 above, and where the three adverbs are underlined. The initial two are not coordinated, and the same sentence ends with a temporal VP-adverb. The two adverbs stacking are also underlined in sentence 12 above, where they occur finally.

Adverbs of this type are structurally adjoined (or added) to an existing VP-projection or S-projection, in terms of X-Bar theory. Here, adverbs are adjoined to a given category in terms of an adjunction structure. The term 'adjunction' can be understood to mean extension where in the case of VP-adverbs, the VP can be seen as an extended category to illustrate the stacked adverbs, as in 10 and 12 above. The verb is the extended category whereas the extended category in 11 above is the sentence, where S is extended for the two stacked S-adverbs occurring initially.

The following sentences reflect the structural description for VP-adverbs and S-adverbs:

13. [VP gul-t kelmat-een min [adv-P [adv hina] w [Adv hina]]]

14. [S[S-Adv I-mafruuD] [S-Adv min jidd] dool [VP ynaam-u [VP-Adv badri]]]

In example 14 above, two initial S-adverbs are adjoined to the sentence structure, and one VP-adverb occurs finally and is adjoined to the VP structure. In 13 above, the two adverbs are stacked and adjoined to the VP structure and occur finally.

Stacked adverbs also occur in English and the following examples are adapted from Ouhalla [11, p. 119]. They illustrate their usage and structure:

15. John [VP [ADV repeatedly] [ADV viciously] attacked Bill]

16. Mary [VP [ADV clearly] [ADV partially] solved the problem]

As a conclusion to this section, the order of adverbs in relation to the sentence and the VP structures suggests that they can be adjoined either to the V' (or VP), or to the S (or S' extended). Stacking adverbs can either join the same type of functional properties, as in 10 above where both adverbs are of place, or different type as in 11 above where an intensifier and temporal adverbs occur, respectively. 12 above shows two successive adverbs that occur finally, and they are of different functional properties, those of intensifier and of manner, respectively.

These stacked adverbs have various hierarchical ordering as they occur finally or initially, where their scope is wider as functional specifiers in case of S-adverbs than VP-adverbs. Morphosyntactically, the Acc case -an inflectional morpheme is found as in ?aSl-an in 11 above only when the special group of adverbs with -an Acc inflection is involved.

# 3. Syntactic Categories with Adverbial Function

Linguists talk about categories which have adverbial functions in addition to the adverbs of manner of both VP-adverbs and S-adverbs discussed above [4, 5, 11, 16-18]. The most prominent examples of these adverbials in Arabic functions relate to time and place.

Adverbials in the forms: PP, NP, S' and Adv denoting place and time are constituents of the VP, as in the following examples in (HA):

17.a *l -?awraag mantuur-a <u>fi kull jiha</u>* (PP)-of place

the-papers scattered-Fem in every direction "The papers are scattered everywhere." 17.b l-bawwaab-a tiftaH essaa9a tis9a (NP)-of time the-gate-Fem opens o'clock nine "The gate opens at nine o'clock". bass?awwal l-kitab 17.c daras-na (S)-of place studied-we only beginning the-book "We studied only the beginning of the book" 17.d ?ana maashya kamaan shewayya (S)-of time leave after little while "I am leaving after a little while". 17.e ?iHna hinaak (Adv)-of place there we "We are there." mikattim <u>hina</u> 17.f *l-jaww* the-weather stuffy (Adv)-of place here "The weather is stuffy here."

In an unmarked context, the position of adverbials is mostly at the end of the sentence, whether these adverbials are constituents of the S or the VP is difficult to answer. However, the context always helps to identify them although this is irrelevant here.

Morphosyntactically, adverbs in the above examples 17 (a-f) do not have the Acc suffix –an, though still syntactically they occur in the accusative. These adverbs are also manner adverbs in the sense that they describe the manner in which the event denoted by the verb is carried out. As such, they are constituents of the VP.

## 4. Adjuncts and Adverbials

This section is important to our discussion in that it identifies the function of the embedded adverbial clauses or adverbial PPs that are not governed by the matrix verb of the main sentence (see 4.2, below). The discussion also deals with the function of the adverbial embedded clauses that are overtly governed by the matrix verb of the main sentence VP.

# 4.1. Definition of adjuncts and adverbials

The topic of adverbials and adjuncts has been of great importance and is discussed by many linguists in languages other than Arabic [11, 19, 20]. Adverbs discussed so far have in common: an accusative case ending (except in 17), links to the main VP, and links to the main sentence.

Categories such as PPs or embedded clauses with an 'adverbial function' are also discussed by linguists and are also relevant to discuss here. Two main types of

adverbials are involved in terms of morphosyntactic and functional relations: adverbial clauses governed by the main sentence, and, its VP matrix verb. Both of these types are discussed in separate sub-sections below.

The following examples are illustrations from PA and the HA:

```
18.a daras-t [PP-adv-al fi l-maktaba]
studied-I in the-library
"I studied in the library."

b. rayhH-iin [S'-adv-al lamma yi- wSal khaalo]
leave -we when will-arrive uncle
"We will leave when my uncle arrives."

19.a (?ana) banaam katiir [S'-adv-al min ?awwal ma khallaS-t imtiHa -naat-i]
I sleep alot from beginning of finish -I exam -Pl -my
"I sleep a lot ever since I finished my exams."
b. shuf-t-ha [S'-adv-al lamma kun-t Taal9-a]
saw-I-her when was-I out -1 Pers Fem
"I saw her when I was out."
```

18.a and b above involve adverbials in the categorical groups as either a PP or an embedded clause (S'), respectively. These adverbials are not governed by the matrix verb of the main sentence VP. 19 a and b are complex sentences that involve embedded adverbial clauses governed morphosyntactically by the matrix verb. In 19 a above, -t "I" in  $\underline{khallaS-t}$  and -i "my" in  $\underline{imtiHan-aat-i}$  are the morphosyntactic allomorphs that refer to first person singular. 19.b contains the morphosyntactic references : -t "I" in  $\underline{kun-t}$ , and -a (1st Pers Fem) in  $\underline{Taal9-a}$  that inflects for the first person singular "I", and goes in conformity with the morphem -t "I" attached to the matrix verb of the main sentence  $\underline{shuf-t-ha}$ .

Before presenting a discussion of our data on adverbial clauses, a brief definition of adverbials and adjuncts is provided. Adverbials appear to be discussed together with adjuncts especially in Quirk *et al.* [21]. An adjunct is restricted to a sub-class of adverbials. In X-bar syntax of Chomsky, an adjunct is one of the major components of the phrasal category (the others being head, complements and specifiers) [7].

In both the American and the British views, adverbials and adjuncts are elements used as optional or secondary in a construction and can be removed without the structural identity of the construction being affected. But, in X-bar theory, many adjuncts can also be analyzed as modifiers attached to the head (XH) of an XP, (as with adjectives and some adverbs) [11, 16, 17, 22].

However, for our discussion, one particular sense of the term 'adjunct' is selected: that which refers to a sub-class of adverbials. 'Adverbial' is used here to apply to optional elements that relate to adverbs. Where adverbs are those groups of words (or other items) whose function is to specify a mode of action of the main verb, the

adverbials are those items that adjoin to their main verbs (other than the auxiliaries) and other than the head, complement and specifier [11, 19].

# 4.2. Adverbials of place, time and manner, not governed by the matrix verb

The most important examples of these adverbial functions relate to place and time. English examples (adapted here from Ouhalla [11, p. 36] may involve PPs and embedded clauses, as in the following, where adverbials are the bracketed constituents:

```
20.a. John fixed the car [PP-adverbial in the garage]
```

- b. John fixed the car [PP-adverbial in the morning]
- 21.a. John fixed the car [S-adverbial where Bill had left it]
  - b. John fixed the car [S-adverbial where Bill was still sleeping]

The above bracketed categories are constituents functioning as adverbials that modify the main sentence. But, whether they modify the matrix verb in the main sentence as in the above examples 20 (a & b) and 21 (a & b), is an empirical question that can be determined by applying constituency tests. This requires consideration of some more relevant data to test and analyze, but this would take us outside the main domain of this paper.

In SA Arabic, a PP-adverbial is found in the following sentence:

"I am going where the library is."

```
22. ?akal-a [PP bi -l -?aSaabi9] ate -Sing Masc with the fingers "He ate with his fingers." (see Fassi-Fehri [8])
```

Where manner is expressed by the PP-adverbial. Similar examples are found in HA and PA:

```
23.a. Walad-ha ta9baan [pp-adverbial fi- l- mustashfa]
                                                                         (HA)
      son -her ill
                                   in- the-hospital
      "Her son is ill in hospital."
   b. l-mafruuD t-
                                      [S-adverbial leen essaa9a khamsa] (HA)
       the-supposedly FemSing- stay -you
                                                          until clock five
       "Supposedly, you have to stay until five o'clock."
   c. ?ana maashy-a
                           [S-adverbial ween ma fi
                                                        l-maktaba]
                                                                          (HA)
             going-1<sup>st</sup>Sing
                                    where that there the-library
       T
```

24.a. rayH-iin [PP-adverbial 9a-l -malaahi] (PA) going-1<sup>st</sup> pl to-the-funfair "We are going to the funfair."

```
b. rayH-iin [adverbial ba9d l-maghrib] (PA)
```

```
going-1<sup>st</sup> pl after the-sunset
"We are going after sunset"
c. sakn-iin [S-adverbial ween ma n- naadi fataH] [PA]
living-1<sup>st</sup> pl. where that the-club opened
"We are living where the club opened."
```

The bracketed constituents, in 23 and 24 are phrases with an adverbial function. 23 a, b and c are adverbials used in HA, with various structures namely: PP, an embedded clause that relates to time and to place, respectively. 24 a, b and c are adverbials in PA with the structural elements also as PP, and an embedded clause for time and place, respectively. Sentences 23.c and 24.c have been uttered by native speakers, although not as frequently heard or used as the rest.

Structurally, adverbs and adverbials adjoin to their main VPs/Ss rather than occupying the specifier position where, according to a minimality condition, the VP containing an adverbial PP can be defined as follows:

where the V does not govern NP. Minimality prevents the verb head from governing another head category where government is the core condition, which regulates case assignment in general [11, 19, 23]. This analysis is also valid for the embedded adverbial sentences related to the main (head) sentence. The phrase-structures rule in 25 above is applicable to both English and Arabic (standard and dialect) structures.

As a conclusion here, there is no overt syntactic government by the matrix verb of the embedded adverbial clauses, but potentially and functionally they complement the situation of the verb adjacent to the embedded adverbial-clause. These embedded clauses are assigned potentially the accusative case by the main verb. The NP has a closer governor, which is its HP rather than the V, which is prevented according to the minimality condition from being a distant governor<sup>(3)</sup>.

#### 4.3. Adverbial categories/clauses embedded in a main sentence

These adverbials mainly consist of embedded clauses with the overt syntactic relation agreement governed by the matrix verb in the VP of the main sentence. Agreement between the V-head and the head in the embedded adverbial clause is syntactically determined by features such as case, person and number. The term "Case Assignment" is used in such contexts. The following example presented in 19 above is structurally applicable to SA, HA and PA data:

26. ?ana ba-naam katiir [min ?awwal ma khallaS-T imtiHan-aat-i]

<sup>(5)</sup> For more elaboration on 'government, adjacency and specifier-head agreement', see Ouhalla [11] (Chapters six and eight).

The inflectional bound suffixes in the bracketed adverbial clause above: -T in <u>khallS-T</u>, and -i in <u>imtiHan-aat-i</u> that both inflect for the  $1^{st}$  person singular, are governed by the main verb of the main sentence <u>ba-naam</u>, where <u>ba-</u> is the prefix present inflected for the  $1^{st}$  person singular as well.

According to the minimality condition, the main matrix verb in 26 above: *ba-naam*, extends its syntactic function to govern the embedded clause verb: *khallaS-T* and its object *imtiHan-aat-i*. The matrix verb incorporates a distant government to these categories. More examples are found in SA, HA and PA:

- 27. *yu- fakkir-u T- Taalib-u* [ ?athnaa ?a shurbi -hi 9aSiir-an ] (SA) Pres-think-Nom the-student-Nom during drinking-his Juice-Acc "The student thinks while he is drinking juice."
- 28. bada?-t ?a-HuTT shaTTa fi l-?akil [min ?awwal ma t9allam-t ?-Tbukh] (HA) started-I put chilli in the-food from first that learned -I I-cook "I started to put chilli on food since I learned how to cook."
- 29. shuf-t-ha [lamma kun-t Taal9-a] saw-I-her [when was-I out -I)
  "I saw her when I went out"

The above examples 27, 28 and 29 contain embedded clauses where they are bracketed, and have their verbs underlined. Significantly, all the bracketed embedded adverbial clauses above show syntactic case, where *-hi* in *shurbi-hi*, *-t* in *t9allam-t* and *-t* in *kun-t* are the explicit syntactic inflections that are related to the matrix verbs in the main sentences.

What is clear from our data is that the adverbial clauses embedded in the main sentence with the verb case government of the matrix verb is as significantly and frequently used as the covert type in standard and dialects of Arabic.

# 5. Conclusion

We have discussed adverbs and adverbials in Arabic dialects, with the occasional reference to SA. Functional properties of adverbs, such as place and manner, intensifiers, and temporal adverbs, have been discussed along with their morphosyntactic characteristics, hierarchical ordering (either in the S-initial or final position, or before or after the head verb within its VP). Case is also discussed where the Acc inflected bound morpheme -an determines certain group of adverbs such as the quantifiers (?wwal-an, kathiir-an, the intensifier jidd-an, the adverb of frequency daaym-an) and many more. But, this is only one type of Arabic adverbs that is not identified by its case characteristics, thus, not heterogeneous. Accordingly, it is found that adverbs in Arabic,

unlike English, are not heterogeneous. That is they have no fixed class to identify as such, but other features discussed such as the functional properties at the semantic level as well as other morphosyntactic ordering and case features are essential for this optional class to be analyzed and identified.

Adverbs are found mainly in three types in Arabic. First, VP-adverbs that are found to modify the matrix verb of the VP in the main sentence, and in this case they modify the verb action with a limited scope. Second, adverbs with a wider scope, namely, the S-adverbs that occur either before or at the end of the main sentence. In case of VP-adverbs occurring also finally, they are justified from S-adverbs as adverbs as manner-adverbs and are structurally constituents of the VP. In terms of their linear or hierarchical ordering, VP-adverbs are found to occur juxtaposed to the matrix head verb either to the right or left branching specifiers. The third type of adverbs discussed is the coordinated or stacked adverbs that are common to Arabic. They are found to modify the whole sentence with their wider scope of modification.

Section 3 above discusses syntactic categories with an adverbial function; these structural categories can be adverbials of time or place. They are found in the various syntactic categories as: PP, NP, S or even Adverbs. They occur finally, but whether these categories are constituents of the S or of the VP is a question left for more empirical analysis. However, context and suitable constituency tests help. This point is left here with no further analysis as more data is required for this purpose and it is outside the scope of our paper.

Finally, adverbials and adjuncts are discussed in section 4, where two basic categories are functionally identified. The first is in sub-section 4.2 with PP or S' embedded and have adverbial functions, but are not governed by the main or matrix verb. The second categorical function is in sub-section 4.3 where embedded sentences are syntactically and overtly governed by the main sentence matrix verb.

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ملخص البحث. يعرض البحث دراسة لغوية للحال في اللغة العربية المكتوبة، ولهجتين من لهجاتها: الحجازية والفلسطينية من خلال تطبيق الهيكل النظري اللغوي الحديث، وهو البرنامج اللأدنى :MPM. ويقوم البحث بتحليل الخصائص الوظائفية والترتيب المتدرج، والسمات الصرفية - النحوية والحالة الإعرابية للظرف أو الحال وجمل الحال في العربية. ويعتبر الحال وجمله وصفاً اختيارياً (أي يمكن الإستغناء عنه دون الإخلال بالتركيب النحوي للجملة الأساسية). وتم تحليل الحال وملحقاته والتوابع الأخرى باعتبارها نوعا محدودا من الأحوال (أو الظروف). وتوضح نتائج هذا البحث أهمية جميع الخصائص والصفات النحوية والوظائفية السابق ذكرها في تحليل ودراسة الحال وجمله في العربية حيث وجد أن للحال وجمله حرية التنقل في مواقع الجملة الأساسية، وأن السمات الدلالية هي المقياس المهم في تحديد ذلك.

Word Order, Functions and Morphosyntactic Features of  $\dots$