

# The Syntax of Yes/No Questions in Modern Standard Arabic

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## Abstract

Interrogative structures have been investigated in wide range of languages including but not limited to English, Italian, French, and Mandarin Chinese. Thus, this paper presents an analysis of the syntactic structure of yes/no questions based on feature-checking analysis (i.e., [Q], phi-features, [T], [Polarity], and EPP). First, I briefly discuss the feature-checking analysis in the declarative clauses in Modern Standard Arabic. Then, I analyze the interrogative structure in main clauses (hal, ?a-) and in embedded clauses (idhaa) in MSA. Finally, this paper displays and discusses the findings showing that there are three types of feature-checking in yes/no particles in Modern Standard Arabic.

**Keywords:** yes/no questions, feature-checking, word order, feature movement hypothesis, [Polarity], [Q].

## 1. Introduction

Modern Standard Arabic (MSA) (Note 1) is derived from Classical Arabic and is one of the most widely spoken languages in the world. Both MSA and Classical Arabic share morphological and syntactic structures, however, each exhibits some differences from the other in respect to vocabularies and stylistic features.

During the past two decades, numerous research papers discussing issues in Modern Standard Arabic or its many dialects have been written on topics such as word order, agreement, negation, and case theory, yet little attention has been paid to yes/no questions. In this paper I address the structure of yes/no questions in Modern Standard Arabic. I also analyze yes/no questions based on feature-checking analysis using Q-feature, phi-feature, EPP, tense, and mood (Note 2). I present my analysis of yes/no questions in Modern Standard Arabic in three parts. First, in Section 2, I show and discuss the structure of declarative clauses based on feature-checking which explains and helps to analyze the structure of yes/no questions in MSA. Second, in Section 3, I investigate and analyze the syntactic structure of yes/no questions in main clauses containing one the interrogative particles hal or ?a-, and in embedded clauses containing the interrogative particle idhaa. Third, in Section 4, I conclude by summarizing the three types of feature-checking mechanisms in interrogative structures in Modern Standard Arabic.

## 2. Clause Structure in Modern Standard Arabic

In this section I present and discuss the ways in which verb movement, EPP, and phi-features impact feature-checking mechanisms and derivations in Modern Standard Arabic. Furthermore, I argue that the deep structure word order of interrogative clauses in Modern Standard Arabic is subject-verb-object (SVO) while the surface structure has a verb-subject-object (VSO) word order that is a result of strong features which derive the VSO word order in the surface structure.

Scholars such as Doner (2013), Aoun, Benmamoun, and Choueiri (2010), Rouveret (2010), Al-Horais (2009), Soltan (2007), McCloskey (2001) Carnie, Harley, and Pyatt (2000), Ouhalla (1994, 1996), AL-Shorafat (1998), and Aoun, Benmamoun, and Sportiche (1994) and Mohammed (1989) have investigated verb movement in a variety of languages having VSO word order. Their studies examine feature-checking systems such as EPP, phi-features, T, and case in order to determine the surface word order for each of the languages considered. Mohammed (1989), Ouhalla (1994), Benmamoun, and Sportiche (1994), Soltan (2007), and Aoun, Benmamoun, and Choueiri (2010) claim that Modern Standard Arabic has both a VSO word order and an SVO word order. This indicates some differences in the feature-checking system or the presence of a strong/weak feature which is responsible for the two-word orders in MSA. Additionally, Alsaedi (2015) asserts that MSA exhibits both VSO

and SVO word orders with the basic word order being SVO while the VSO word order is the grammaticalized form.

Four different linguistic approaches have been used to analyze the structure of declarative clauses in Modern Standard Arabic and its dialects. The first approach relates to verb movement. Benmamoun and Sportiche (1994), and Carnie et al. (2000) agree that there is a strong feature higher than the tense phrase (TP) which requires the verb to move from the head of the verb phrase (VP) to the head of the TP to get the tense feature (iT). In their analyses the verb then needs to move to a higher head to check this strong feature (i.e., V-to-T-to-X/F/C). Also, in their analyses, there is an EPP feature which requires an argument to appear in the spec of the TP. In Benmamoun (1994) the higher head is identified as a head of the focus phrase (FocusP) which is located between the complementizer phrase (CP) and the TP and aims to fulfill the semantic differences between VSO and SVO word order. Carnie, et al. (2000) examines Irish and concludes that in order to derive the VSO word order in Irish there must be a strong feature (+Finiteness) which is located in the head of the CP. This causes the verb to move from V-to-T-to-C to check the finiteness feature in the head of the CP. Consequently, the finiteness feature in the head of the CP is reason for VSO word order in Irish.

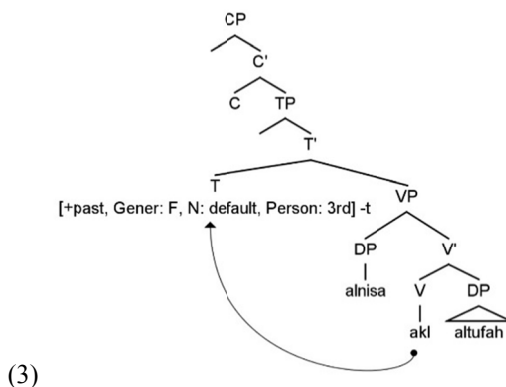
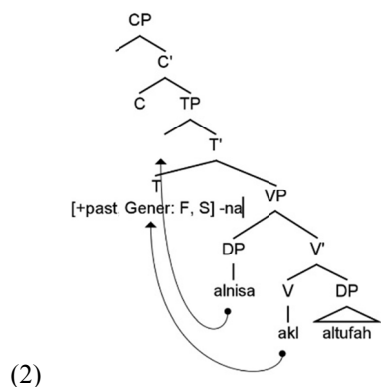
The second approach uses in analyzing the declarative clause structure argues for the presence of a weak EPP feature. This approach is supported by Mohammed (1989) and Fassi Fehri (1989) for Modern Standard Arabic and McCloskey (2001) for Irish. Their research indicates that neither Arabic nor Irish requires the subject to move from the spec of the VP to the spec of the TP because the EPP is a weak feature. The weak EPP does not motivate the subject to move, thus, the weakness of the EPP causes the VSO word order.

The third approach uses the split of the TP in MSA. Ouhalla (1994) introduces the idea that the TP could be split into Agreement Phrases (i.e., AgrPs and AgrPo) rather than being minimalist. He claims that in VSO word order the AgrPs is lower than the TP and derives the VSO word order. However, in SVO languages such as English the AgrPs is higher than the TP with SVO word order as the result.

The fourth approach uses in analyzing the declarative clause structure is the assertion that there are two syntactic structures in MSA. Soltan (2007) discusses the existence of two different syntactic structures with two different feature-checking systems. According to Soltan (2007), since the SVO word order is a subject-complement structure, then the subject is base-generated in the spec of the TP and satisfies EPP feature while the verb moves from VP-to-TP in order to check the tense feature [iT] and to be in spec-head agreement with the subject in order to get the full set of phi-features (i.e. full agreement between the subject and the verb in person, number, and gender). Furthermore, Soltan (2007) states that VSO word order has a different feature-checking system than the SVO structure. He claims that in VSO structure there is no EPP, so there is no requirement for the subject to move to the spec of the TP. Soltan (2007) designed his analysis based on Mohammed’s (1989) analysis, and Ouhalla’s (1994) analysis.

Examples (1), (2), and (3) illustrate the different syntactic structures as presented by Soltan (2007) to show the two feature-checking systems.

- (1) a. alnisa            akl-na            altufah  
       the-women    ate-3PIF        the-apples
- b. akl-t            alnisa            altufah  
       ate-3defaultF    the-women      the-apples



The feature-checking systems in the two syntactic structures are different from one another which results in MSA having both an SVO and a VSO word order. In SVO word order, there is a strong EPP which requires an argument to move to the spec of the TP to fulfill this feature. Also, the phi-features (i.e., gender, number, and person) are satisfied through the spec-head relationship. However, in VSO word order, in Soltan’s (2007) analysis, there is no EPP, so there is no need for an argument to show in the spec of the TP, and the phi-features are modified to have only gender and a default feature which he defines as third person singular.

From the approaches presented in this section, I chose two to apply to my analysis of the syntax of yes/no questions in Modern Standard Arabic: 1) Mohammed’s (1989) analysis of feature checking in MSA, and 2) McCloskey’s (2001) analysis of Irish showing that the EPP feature is weak in VSO word order with no motivation for the subject to move from the spec of the VP to the spec of the TP. Examples (4)a and (4)b illustrate verb movement in VSO and SVO as presented in Mohammed’s and McCloskey’s analyses:

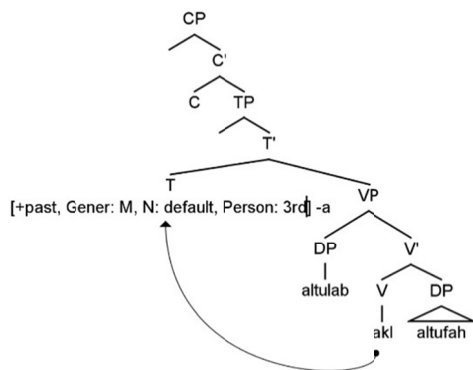
(4) a. In VSO word order, the V moves from the VP to the TP, and there is a weak EPP.

b. In SVO word order, the V moves from the VP to the TP, and there is a further movement for the S to move to the spec of the TP to check the strong EPP.

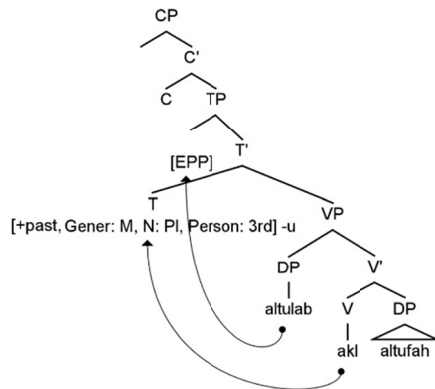
The feature-checking system in Mohammed’s (1989) analysis has interpretable tense (iT) which requires the verb element to move from the head of the VP to the head of the TP to give value to the uninterpretable tense (uT) feature on the verb element. The EPP feature is weak in VSO word order; thus, the subject remains in the spec of the VP. However, in SVO word order the EPP is strong; therefore, the subject must move to the spec of the TP to check the EPP feature.

Additionally, Mohammed (1989) discusses phi-features and the agreement system in MSA. He asserts that in SVO word order in MSA the subject and the verb are in the spec-head relation; therefore, there is full agreement on the verb which means that verbs in SVO word order show the full set of phi-features—person, gender, and number. However, in MSA, the VSO word order has partial agreement on the verb element because the verb is in the head of the TP while the subject is in a lower position (i.e. the head of the VP), and they are not in spec-head relation. In this case the default phi-features – third person, singular, and gender – appear on the verb. Examples (5) through (8) show the feature-checking system as outlined by Mohammed (1989) in VSO and SVO word order in MSA.

(5) ak1-a                      altulab                      altufah    {VSO}  
 ate-3defaultM      the-students                      the-apples



(6)  
 (7) altulab                      ak1-u                      altufah    {SVO}  
 the-students      ate-3PIM                      the-apples



(8)

I chose the weak feature approaches by Mohammed (1989) and McCloskey (2001) because these analyses are clear and do not require many layers or movements to satisfy the feature-checking system and derive the surface word order. In contrast, Benmamoun's (1994) and Ouhalla's (1994) analyses of the feature-checking system in MSA have unnecessary movements and too many layers. Furthermore, the analyses by Benmamoun (1994) and Ouhalla (1994) present a challenge in explaining the partial agreement and the VP-to-TP-to-Foc/Agr movement. Soltan (2007) presents a more promising analysis in that it has the advantage of distinguishing the meaning of the two-word orders by the two syntactic structures, however, explaining the dual agreement is problematic. Also, Soltan (2007) introduces two mechanisms for the phi-features which is unnecessary because he divides the phi-features into two sets, one containing person and number, and the other containing gender.

Thus, I chose Mohammed (1989), Fassi Fehri (1989) and McCloskey (2001) who claim that the EPP feature in VSO languages is weak. Accordingly, there is no need for the argument to show in the spec of the TP and the raising of verb element to the head of the TP to check the phi-features and tense is what derives the surface VSO word order. Furthermore, Mohammed (1989) and Fassi Fehri (1989) agree with Alsaeedi (2015) in asserting that the basic word order in MSA is VSO due to the weakness of the EPP feature, as well as that the EPP feature has been grammaticalized to a strong feature which derives the SVO word order in late MSA or the vice versa. Consequently, according to these authors, the existence of both VSO and SVO word orders in Modern Standard Arabic is the result of the grammaticalization of the EPP feature.

In Section (3), I present the yes/no particles *hal*, *ʔa-*, and *idhaa* in Modern Standard Arabic with the possible analysis for their syntactic structure.

### 3. Yes/No particles in MSA

The interrogative structure of MSA has not been discussed widely. Researchers such as Ouhalla (1994, 1996), Ryding (2005) and Soltan (2011) have analyzed *wh*-movement, word order, and/or the CP layer, however, these analyses only briefly discuss interrogative particles. The structure of yes/no questions in MSA varies depending on the syntactic location of the interrogative particles as well which lexical items may be used to check the question feature [Q] in main and embedded clauses.

Traditional Arabic grammar books such as *Alkitab* (Sibawayh, between 700–796), *Almojam Alwaf* (Alhamd & Alzoabi, 1993), and *Jama Alduros* (Galayin, 1993), present two strategies for formulating interrogative clauses. In the first strategy, the interrogative structure uses interrogative pronouns such as *min* (who), *kam* (how), *mata* (when), and *ayan* (where). These pronouns ask for specific information and are informative complementizers. The second strategy uses interrogative particles which ask for agreement or disagreement, resulting in the yes/no question. This second strategy is the focus of this paper.

There are three interrogative particles in Modern Standard Arabic which are used to produce the yes/no structure. The first two, *hal* and *ʔa-*, are used in the main clause of the interrogative structure and must be located at the beginning of the clause. In embedded clauses, the interrogative particle *idhaa* is used. This particle also must appear in the initial position of the embedded clause.

Chomsky (1995, p. 289) argues that in interrogative clauses there is a strong feature [+Q/Wh] in the head of the CP that is an interpretable feature, or Q-feature, that has semantic content. This strong feature requires a lexical item to check it (+Q/+Wh) in order to have a well-formed interrogative structure. Chomsky (1995, p. 291) argues that there are two approaches to check the Q-feature. The first approach is by T-raising (i.e., T-to-C movement) as in (9b). The second approach is by *wh*-movement and is not addressed in this paper. Radford (1997, p. 108) agrees with Chomsky (1995, 2001) that there should be a strong feature (i.e., Q-feature/Wh-) in the interrogative clause

which triggers a lexical item to Merge/Move which in turn satisfies the strong feature [+Q]. He also asserts that the Q-feature could be checked by the T-movement as in (9b.), or by the base-generated complementizer as in (9c.). For example, in yes/no questions in English, there should be a lexical item to check the strong feature [+Q] which is an auxiliary (AUX) element in English as in the following example (9):

- (9) a. Sarah ate the apples.  
 b. **Did** Sarah eat the apples?  
 c. I wonder **if/whether** Sarah ate the apples?

Applying Chomsky's and Radford's analyses, I assert that MSA has in fact two approaches for checking the Q-feature. The first is the base-generated approach found in *idhaa* and *ʔa-* clauses similar to the complementizer *whether/if* in English. The second is the raising approach found in *hal* clauses which move from the head of the Polarity Phrase (PolP) to the head of the CP. In Section 3.1. I discuss the syntactic structure and the possible analysis based on Mohammed's analysis (1989) for the interrogative particles *hal* and *ʔa-* in main clauses. In Section 3.2. I present and discuss the syntactic structure of the interrogative particle *idhaa* in embedded clauses.

### 3.1 Interrogatives *hal* & *ʔa-*

The interrogative particles *hal* and *ʔa-* are defined in Almojam Alwaf as question particles which ask for agreement (yes) or disagreement (no). Interrogative *hal* is a free morpheme, while *ʔa-* is a bound morpheme, in this case a prefix. Both particles must be located at the beginning of a main clause. One difference between these two interrogatives is that interrogative *hal* must not appear in any sentence which has a negative phrase (NegP) or any complementizer, while the interrogative prefix *ʔa-* may appear in any sentence even if that sentence has a complementizer or NegP, Why? Another difference between *hal* and *ʔa-* is that *hal* must be followed by a verb-element with a full agreement on the verb (i.e. *hal* + VSO with full agreement), while *ʔa-* could be followed by the subject or the verb-element with a full agreement (i.e., *ʔa-* + SVO/VSO with full agreement in SVO/VSO word order). The following examples show the structure of *hal* in MSA.

- (10) a. *hal* *akl-t* Sarah *altufah*  
 Q ate-3SF Sarah the-apples  
 "Did Sarah eat the apples"  
 b. *hal* *akl-n* *albannat* *altufah*  
 Q ate-3PIF the-girls the-apples  
 "Did Sarah eat the apples"  
 c. \**hal laa* *akl-t* Sarah *altufah*  
 Q Neg ate-3SF Sarah the-apples  
 d. \**hal ʔin* *akl-t* Sarah *altufah*  
 Q if ate-3SF Sarah the-apples

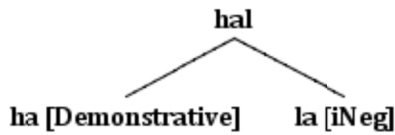
As mentioned previously, the first difference between interrogative *hal* and the interrogative prefix *ʔa-* is that interrogative *hal* must not appear in a sentence containing a NegP or a complementizer, while the interrogative prefix *ʔa-* may be used in any sentence. I propose that this difference in usage can be attributed to grammaticalization. Grammaticalization is defined by van Gelderen (2011, p. 5) as "a process whereby lexical item loses phonological weight and semantic specificity and gain grammatical functions". Example (11) from van Gelderen (2011, p. 7) schematizes grammaticalization from a historical linguistics point of view, (11):

- (11) a. phrase > word/head > clitic > affix > zero  
 b. adjunct > argument > (argument) > agreement > zero

Using this schematic, I traced the grammaticalization of the interrogative *hal* to determine why *hal* could not show up with NegP or complementizers such as *ʔin*. In fact, I found that *hal* can be divided into the *ha-*element and the *l-*element. *ha* could be traced to the demonstratives in MSA such as *hatha* (meaning *this* for singular masculine), *hathih* (meaning *this* for singular feminine), and *hawlaii* (meaning *these* for plural masculine or feminine). In Hebrew, Eid (1989) pointed out that *hu* is used as a copula as in (12):

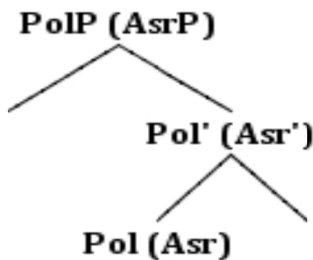
- (12) David *hu* *ha-more*  
 David he the-teacher-MS (Eid, 1989)  
 "David is the teacher"

Therefore, using my observations as well as the copular in Hebrew, I argue that *ha* is reanalyzed from being a phrase to a head as in van Gelderen’s schematic (2011, p. 7). In other words, *ha* is reanalyzed from being demonstrative in the specifier position to an affix in the head position. Furthermore, the *l*-element can be traced back to the negator *laa* in MSA. Example (13) shows the grammaticalization of *hal*:



(13)

This grammaticalization of the interrogative *hal*, can be used to explain why *hal* must not appear in NegP or with complementizers such as *ʔin*. First, *hal* can not be in a sentence with a NegP because we can not have two interpretable negators [iNeg]. Second, the interrogative *hal* starts its derivation from the head of PolP, so the head [PolP] is occupied and other negators can not also appear; thus, the two interpretable negators explain why (10c.) is ungrammatical. Third, Bahloul (1996) and Shlonsky (2000) discuss that negators are in complementary distribution with the assertive modals such as *qad*, *ʔin*, and *ʔinna* in MSA. This also explains why (10d.) is ungrammatical since MSA can have either the negative polarity item of *hal* or the positive polarity item of *ʔin*. Bahloul (1996) discusses that the Assertive Phrase (AsrP = PolP) with its head must be either affirmative or negative. This is similar to PolP which needs to be either affirmative or negative as in (14).

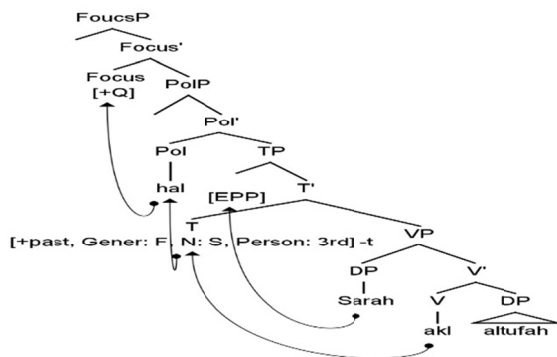


(14)

As noted previously, the second difference between *hal* and *ʔa-* is that *hal* must be followed by a verb-element with a full agreement on the verb (i.e. *hal* + VSO with full agreement), while *ʔa-* may attach to the subject or the verb-element with a full agreement (i.e. *ʔa-* + SVO/VSO with full agreement in SVO/VSO word order). This difference can be explained by Chomsky (1995, 2001) and Mohammed (1989).

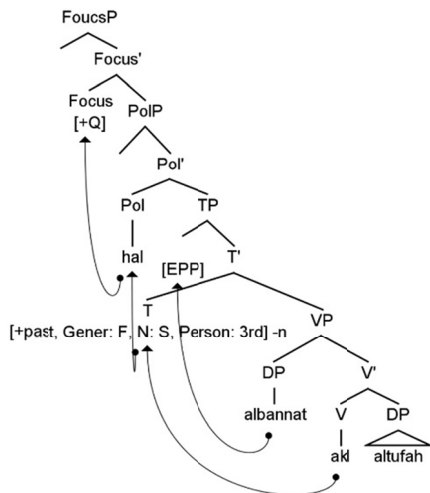
The syntactic structure of *hal* clauses based on Mohammed’s (1989) analysis for the two-word orders of SVO and VSO as in (10a-b.) can be analyzed as in examples (15) through (18).

- (15) a. *hal akl-t Sarah altufah*  
 Q ate-3SF Sarah the-apples  
 “Did Sarah eat the apples?”



(16)

- (17) b. *hal akl-n albannat altufah*  
 Q ate-3PIF the-girls the-apples  
 “Did Sarah eat the apples?”



(18)

Examples (15–18) show that the deep structure for the interrogative *hal* is SVO because of the full agreement which appears on the verb-element and the strong EPP. At the same time, the surface structure is *hal* + VSO because the verb needs to move from the head of the TP to the PolP head to support the feature that *hal* left before its movement to the CP head which checked the Q-feature. I claim from the grammaticalization of *hal* that the interrogative *hal* is a clitic and it needs a verb to move from V-to-T-Pol to support the interrogative clitic *hal*. Rizzi (1990) discusses the Feature Movement Hypothesis (FMH). An example of FMH is that *wh*- features originate in the head of the TP and these *wh*- features need to move to the head of the CP to check the [+Wh]. Similarly, FMH explains the cause for the movement of the verb-element from the TP head to the PolP head to support the interrogative feature of *hal*.

On the other hand, the interrogative *ʔa*- appears more flexible than *hal* since it seems to have lost its features and its only role is to check the Q-feature. Furthermore, I assert that *ʔa*- originated as the demonstrative *ha* and reanalyzed as an affix in the head position. Thus, it is grammatical for the NegP or the complementizers such as *ʔin* to show up with the interrogative *ʔa*- as in (19).

- (19) a. *ʔa*-akl-t Sarah altufah  
 Q-ate-3SF Sarah the-apples  
 “Did Sarah eat the apples?”
- b. *ʔa*-akl-n albannat altufah  
 Q-ate-3PIF the-girls the-apples  
 “Did Sarah eat the apples?”
- c. *ʔa*-laam ta-akul Sarah altufah  
 Q-Neg.past 3SF-eat Sarah the-apples  
 “Didn’t Sarah eat the apples?”
- d. *ʔa*-ʔin akl-t Sarah altufah, ta-foz fii almusafqah  
 Q-if ate-3SF Sarah the-apples, 3SF-win in the-competition  
 “If Sarah ate the apples, would she win the competition?”

An additional aspect of *hal* is that it is similar to *laysa* in its grammaticalization process (i.e., *x* + negator, or negator + *x*). However, *hal* differs from *laysa* as to its features and which lexical item should follow each one of them to support their features. Example (20) shows the grammaticalization changes for *hal* and *laysa* and which lexical item can follow. In MSA, *hal* must always be followed by a verb element while *laysa* must be followed by the subject.

- hal**

└───┬───┘

**ha [Demonstrative]    la [iNeg]**

**laysa**

└───┬───┘

**la [iNeg]    ?aysa [verb]**
- (20) a.
- c. hal    ta-akl    Sarah    altufah  
 Q    3SF-eat    Sarah    the-apples  
 “Does Sarah eat the apples?”
- d. \*hal    Sarah    ta-akl    altufah  
 Q    Sarah    3SF-eat    the-apples
- e. laysa-t    Sarah    ta-akl    altufah  
 Not-3SF    Sarah    3SF-eat    the-apples  
 “Sarah does not eat the apples?”
- f. \*laysa-t    ta-akl    Sarah    altufah  
 Not-3SF    3SF-eat    Sarah    altufah

As illustrated in (20)a, the demonstrative is not reanalyzed as a copula which means it cannot support the negator’s feature [iNeg] as Rizzi (1990) discussed in Feature Movement Hypothesis. Therefore, *hal* needs to be followed by a verb-element in order to support this feature (Note: In Arabic dialects *hal* can be followed by the subject because either *ha* is reanalyzed as a copula so it satisfies the feature of *l*-element or the *l*-element has lost its [iNeg] feature. In each case the subject can follow the interrogative *hal*). However, in (20b.) *laysa* has the verb-element *laysa* which checks the [iNeg] feature of *l*-element. This means *laysa* must be followed by an argument (i.e. subject) and must not be followed by a verb-element, otherwise it would be ungrammatical.

In summary, there are currently two types of feature-checking in the interrogative structure in Modern Standard Arabic. The first one is the negative polarity interrogative *hal*. It starts its derivation in the head of the PolP. It triggers the verb to move from the head of the TP to the head of the PolP to support its feature (i.e. the verb needs to move from V-to-T-Pol to support the interrogative clitic *hal*) in the head of the PolP. The second type is the dummy interrogative particle *laysa*. This particle lost its features in the grammaticalization process and now has only one role which is to check the Q-feature in the head of the CP. In Section 3.2. I discuss the interrogative particle *idhaa* in embedded clauses in Modern Standard Arabic.

### 3.2 Interrogative *idhaa*

The interrogative particle *idhaa* is a free morpheme in MSA. It formulates a yes/no question in an embedded clause and must occur in the initial position of the clause. Example (21) illustrates the yes/no structure in embedded clauses in MSA.

- (21) a. la    ʔadri    idhaa    akI-t    Sarah    altufah  
 not    know.1S    Q    ate-3SF    Sarah    the-apples  
 “I don’t know if Sarah ate the apples?”
- b. la    ʔadri    idhaa    kana-t    alfatiat    taakul-na    altufah  
 not    know.1S    Q    be-3SF    the-girls    eat-3PIF    the-apples  
 “I don’t know if Sarah is eating the apples?”
- c. la    ʔadri    idhaa    kana-t    Sarah    sa-t-akul    altufah  
 not    know.1S    Q    be-3SF    Sarah    FUT-3SF-eat    the-apples  
 “I don’t know if Sarah will eat the apples?”
- d. la    ʔadri    idhaa    ma    akI-t    Sarah    altufah  
 not    know.1S    Q    Neg    ate-3SF    Sarah    the-apples  
 “I don’t know if Sarah did not eat the apples?”
- e. la    ʔadri    idhaa    ma    kana    Sarah    t-akul    altufah



not know.1S Q Neg be-3SF Sarah 3SF-eat the-apples

“I don’t know if Sarah is not eating the apples?”

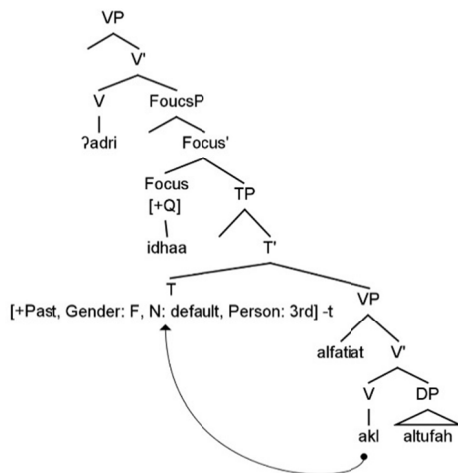
Example (21) shows that the syntactic structure of embedded clauses containing the interrogative *idhaa* are in SVO and VSO word order. This means that the verb-element has full agreement with the subject as shown with *kana* in examples (21b), (21c), and (21e). However, in examples (21a), and (21d) the *idhaa* structure is VSO word order as a result of the feature-checking system. In fact, the interrogative *idhaa* selects the perfective to follow it, so if there is no perfective, a *kana*-insertion is required to satisfy *idhaa*’s feature (i.e. [perfective]). The interrogative *idhaa* selects:

- [perfective] tense to move to T to check [subjunctive mood].
- Elsewhere condition: *kana*-insertion to check [subjunctive mood].

Thus, in (21a) the verb moves from the head of VP to TP head to check the tense and to check the [subjunctive mood] of *idhaa*. Because *idhaa* can see/search in the embedded clause, *idhaa* forces the EPP feature to be weak, so the verb shows the partial set of the phi-features. Furthermore, if there is no perfective item in the embedded clause, *kana*-insertion must occur as a condition for checking the subjunctive mood of the interrogative *idhaa*. Because *idhaa* insert *kana* to check its [subjunctive mood] feature, *idhaa* can’t see/search in the embedded clause; thus, the EPP becomes strong and we will have spec-head configuration which would result a full set of the phi-features on the verb. Examples (22) through (25) show the syntactic tree for the interrogative *idhaa*.

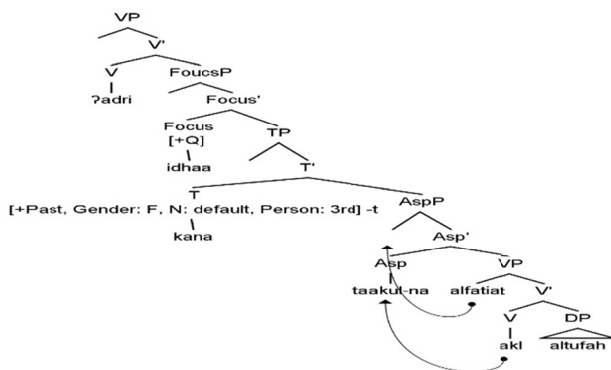
(22) la ʔadri idhaa akl-t alfatiat altufah  
not know.1S Q ate-3SF the-girls the-apples

“I don’t know if Sarah ate the apples?”



(23)  
(24) la ʔadri idhaa kana-t alfatiat taakul-na altufah  
not know.1S Q be-3SF the-girls eat-3PIF the-apple

“I don’t know if Sarah is eating the apples?”



(25)  
The syntactic trees in (23) and (25), show that the interrogative particle *idhaa* is base-generated in the head of the

embedded CP and selects [+perfective] tense to check its subjunctive mood in the [head, TP]. If there is no perfective tense to check this feature, there must be *kana*-insertion to check the [+perfective] feature. In (23), the verb element in the lower clause is a perfective, and in this case the verb moves to the head of the TP to check the tense and to check the [subjunctive mood] of the interrogative *idhaa*. And because the *idhaa* can see/search in its embedded clause it forces the EPP feature to be weak; thus, the verb shows the partial set of the phi-features. On the other hand, (24) and (25) show that the verb element which is [-perfective], and in this case the interrogative *idhaa* would go with the elsewhere condition *kana*-insertion, so the verb *kana* would check the [subjunctive mood] of *idhaa*; thus *idhaa* can't see/search because there is a barrier which is *kana*, and therefore the EPP feature would be strong and we will have spec-head relation in the lower CP which would result a full agreement on the verb.

In summary, the interrogative *idhaa* is generated in the head of its CP, and requires a perfective verb to follow it in order to check the subjunctive mood of *idhaa*. There are two ways to check the subjunctive mood: first, by moving the perfective verb to the head of TP, which would result a weak EPP. The other way is by inserting *kana* which would result a strong EPP because the interrogative *idhaa* can't see/search in the lower CP. Furthermore, *kana* and the perfective verb always show a partial set of phi-features because it is agreeing with an empty subject.

#### 4. Conclusion

In this paper, I investigated the syntactic structure of the interrogative particles in Modern Standard Arabic in both the main and embedded clauses. First, I presented the four analyses which are used in studying the clauses in Modern Standard Arabic, and I adopted Mohammed's (1989) analysis in investigating the structure of clauses in Modern Standard Arabic. In the interrogative structure, Chomsky (1995, p. 291) claims that there is a strong feature [Q] which requires a lexical item to check this feature. In MSA, I have shown that there are three approaches for checking this strong feature [Q]. First, the interrogative affix *ʔa-* which is base-generated in the head of the CP to check the Q-feature. The interrogative *ʔa-* may appear in VSO or SVO word order with full agreement on both. The second approach is the negative polarity interrogative which starts its derivation in the head of the PolP and requires the verb to move from VP-to-TP-to-PolP to check *hal'*s feature in the head of the PolP which creates VSO word order in *hal'* clauses. As in *ʔa-* clauses, the verb shows the full set of phi-feature even if it is in VSO word order. The final approach is the interrogative *idhaa* which is base-generated in the head of its CP. This interrogative requires a perfective verb or *kana* to move/merge to check the subjunctive mood of *idhaa*. Finally, more study is needed on the historical changes in the interrogative particles in order to further understanding of their function in MSA. Also, I am looking to do a study on wh-questions in MSA to see if they behave as the interrogative particles or if they have a different feature-checking system.

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## Notes

Note 1. I define Modern Standard Arabic as a language which is used in newspapers, official speeches, and in education which is derived from the Classical Arabic. It is the language which is used in official occasions/events. My grammaticality judgments of sentences in MSA are based on traditional grammarians' books and King Abdulaziz City for Science and Technology Arabic Corpus (<http://www.kaestac.org.sa/>).

Note 2. Abbreviations used: Verb Phrase (VP); Tense Phrase (TP); Complementizer Phrase (CP); Polarity Phrase (PolP); Negative Phrase (NegP); Agreement Phrase (AgrP); Question Feature (Q); and Extended Projection Principle (EPP).

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