Multiple and Conjoined Wh-Questions in Najdi Arabic

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ABSTRACT

This thesis investigates the syntax of Conjoined Question Phrase Construction (such as *when and where do you….?*) in Najdi Arabic (NA). NA allows such questions under certain constraints, which are sensitive to the categorial status of the fronted conjoined wh-phrases, i.e. argumental wh-phrases vs. adjunct wh-phrases. With the first constraint, when the subject and the object are wh-phrases, the subject wh-phrase is what should be fronted, whereas the object wh-phrase remains in situ (as in *who saw what*?). The second constraint concerns cases when the multiple wh-phrases are an argumental wh-phrase and an adjunct wh-phrase. The argumental wh-phrase should not be a subject here but rather an object wh-phrase, which in turn should remain in situ, while the adjunct wh-phrase is fronted (as in *when did John see whom*?). The third constraint pertains to instances with fronted conjoined adjunct wh-phrases. Here the two wh-phrases should be fronted, separated by the coordinating conjunction *wa* 'and' (not any other coordination conjunction as in *when and where did you see the man*?). Using the main theoretical assumptions of the Minimalist Program (henceforth MP) (Chomsky, 1995 and subsequent work), Phase Theory (Chomsky, 1999, 2000, 2001 and subsequesnt work), Rizzi's (1997) split CP-system and Nunes` (2001, 2004) Sideward Movement, this thesis provides a unified analysis of the three constraints mentioned above. As for the first constraint, the study argues that the head of CP is endowed with an EPP feature. C° attracts the first wh-phrase it c-commands to its Spec. This implies that argumental wh-phrases do not need to move to the left periphery driven by their own requirements. This accounts for why the second object wh-phrase remains in situ, which I assume moves at LF. As for the second constraint, the study argues that adjunct wh-phrases move to the left periphery because they have a strong [Q] feature. When the subject is a wh-phrase, it is the closest wh-word to the head of the CP and it will be attracted by the EPP feature on C °, something that leads to the ungrammaticality of the question. Even if C°'s need to have its Spec filled would be fulfilled by the subject wh-phrase, the question remains ungrammatical because the adjunct wh-phrase (having a strong [Q] feature) is banned (by the subject wh-phrase) from moving to CP. This accounts for why questions with an adjunct wh-phrase and an object wh-phrase (which has a

low position in the derivation) are grammatical. As for the third constraint, the study argues that this is a consequence of two factors: the strong featural content of adjunct wh-phrases and CP not being recursive. In order to solve the apparent tension (of moving two wh-phrases into one structural position), NA devises what I label as *pseudo-coordination*. The two wh-phrases are conjoined under one XP, i.e. &P. The implementation of this combination and insertion is executed through sideward movement (à la Nunes 2001, 2004).

This thesis also investigates questions starting with a wh-word *leiʃ* "why" followed directly by another wh-word. The discussion reveals that the wh-word *leiʃ* "why" in such context is not a wh-word but a discourse particle which reflects the speaker`s surprise at the question at hand.

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Declaration

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Abbreviations

*	Ungrammatical
?	Marginal reading
1	First person
2	Second person
3	Third person
BWD	Backward Deletion
COMP	complementizer
D	Discourse element
Def	definite article
EA	Egypian Arabic
EPP	Extended Projection Principle
F	Feminine gender
FI	Full interpretation principle
Foc	Focus feature
FWD	Forward Deletion
iF	Interpretable feature
IA	Iraqi Arabic
IMPRV	Imperative
LF	Logical form
M	Masculine gender
MP	Minimalist Program
MSA	Modern Standard Arabic

NA	Najdi Arabic
Neg	Negative marker
P	Plural
PAST	Past tense
PF	Phonetic form
PIC	Phase Impenetrability Condition
PRES	Present tense
PRT	Particle
Q	Question feature
S	Singular
SA	Syrian Arabic
SAP	Speech Act Phrase
uF	Uninterpretable feature
v	Little verb
V	Lexical verb
Φ features	phi-agreement features

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CHAPTER ONE: Introduction

1.1   Introduction

This thesis aims to explore Conjoined Question Phrase Construction (such as *when and where do you….?*) in Najdi Arabic (NA, henceforth). It aims to investigate the constraints that delimit the use of such constructions, and the syntactic accounts of such constraints. Hence, this work has both descriptive and analytic values. It first provides descriptive statements on the occurrence of wh-phrases and their interaction with one another. It is clear that NA allows multiple wh-phrases but at the same time imposes certain constraints; some apply to in situ wh-phrases, while some apply to fronted wh-phrases, as I will show later in detail (e.g. the fronted wh-phrases should be conjoined with the coordination conjunction *wa*). Secondly, this work analyses such constraints, attempting to provide a unified account of them in light of the current syntactic theory, i.e. the Minimalist Program (Chomsky, 1995 and subsequent work) and Phase Theory (Chomsky, 1999, 2000, 2001 and subsequent work)

This chapter aims to provide descriptive data about the clause structure in NA and primary information pertaining to multiple wh-phrase occurrences in this dialect. This chapter is organized into seven sections. The second section introduces NA. In the third section, I discuss that NA is a pro-drop language. Section four discusses question formation in NA. It explains how questions with only one wh-phrase are formed and provides a classification of wh-phrases into argument wh-phrases and adjunct wh-phrases. Section four also investigates the instances of multiple wh-phrases (both the cases where wh-phrases should be fronted and conjoined, i.e. when the two wh-phrases are adjunct wh-phrases, and the cases where one of the two wh-phrases should remain in situ, i.e. one wh-phrase is an adjunct whereas the other is the object wh-word). In section five, I provide data comparing between NA, Modern Standard Arabic (MSA), Syrian Arabic (SA), Iraqi Arabic (IA) and English. This comparison is called for to show how NA differs from other Arabic varieties and English in terms of wh-movement. Before the end of this chapter, I spell out the main questions that this work attempts to answer in section six. Section seven is dedicated to providing an outline of this work.

1.2 Najdi Arabic (NA): An introduction

Alongside Modern Standard Arabic (MSA), a number of Arabic varieties are spread throughout the Arab World, which spans from the Arabian Gulf to the Atlantic Ocean in North West Africa (Zughoul, 1980; Fehri 1993, 2012). These varieties are classified into four main groups according to their geographical areas. The dominant varieties include Maghreb, Egypt, Levant and Gulf (Brustad, 2000; Versteegh, 2001). Najdi Arabic is a variety of the Gulf dialects (see mainly Ingham, 1994).

The word Najdi refers to the Najd region, an area located in the centre of modern Saudi Arabia. Najdi as a vernacular is acquired at home. It is widely used in daily life communication. On the other hand, it is not used in the media, education or the courts, as is the case with other Arabic countries where diglossia is evident. According to Ferguson (1959), among many others, MSA and spoken Arabic appear to be in a diglossic situation.

According to Ingham (1994), there are sub-varieties of NA which can be classified into four main varieties, as follows (p. 5):

(1)

   a.   Central Najd: The dialects of Central Najd and the central Bedouin tribes.

   b.   Northern Najdi: The dialects of Jabal Shammar and the Shammar tribes of Northern Najd and the Jazirah.

   c.   Mixed Northern-Central: The dialect of Qasim and of the Dhafir tribe.

   d.   Southern: The dialect of Najran, the Ghtan tribe of the south, and the Al Murrah and Ajman tribes of the east.

It is important to mention that this research aims to analyse questions with fronted conjoined wh-phrases in one of the sub-varieties of NA, namely the one spoken in Hail city and its surroundings (Northern Najdi).[1]

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[1] The main reason behind this selection is that this sub-variety is the researcher's native Arabic dialect. This is actually motivated by Brustad's (2000) suggestion that the study of all syntactic aspects of Arabic dialects should ideally be done by native speakers of their mother-tongue. It should be noted here that there is no difference between this sub-variety and other NA varieties regarding the formation of questions with conjoined fronted wh-questions. I consulted forty native Najdi speakers coming from different towns and regions where NA is spoken. All of the consulted speakers fully agreed on the grammatical status assigned to all NA sentences used in this thesis.

1.3 NA as a null-subject language

One of the grammatical properties of NA is the possibility of (referential) *pro* in the subject position. Although several researchers question how *pro* interacts with other elements in a clause (Aoun *et al.*, 1994; Ouhalla, 1994b; Soltan, 2007), its existence in Arabic sentences is not debatable. In (2a), the post-verbal subject *alʕj:al* 'the boys' appears as a full lexical DP following the verb *raħaw* 'went'. In (2b), the subject *alʕj:al* is dropped (being possible to retrieve form the previous discourse of the sentence), and the resulting sentence is still grammatical.

(2)

    a. raħ-aw   al-ʕj:al   li-l-madrasah
      go.PAST-3SPL.M.   DEF-boys   to-DEF-school
      'The boys went to the school.'

(The speaker asks his wife about his sons; the wife says the following sentence as an answer.)

    b. raħ-aw   li-l-madrasah
      go.PAST-3SPL.M   to-DEF-school
      'They went to the school.'

The φ-content of the subject can be determined through the morphological form of the verb that expresses this content. For instance, the suffix *-aw* refers to the identity of *pro* as a third, masculine plural category. In such situations, the listener has an idea about the subject during the course of the ongoing conversation between him/her and the speaker. In other words, the subject can be dropped when it is salient in discourse (see Moutaouakil, 1989).

Having introduced NA, let us move now to show how wh-questions are formed in this Arabic dialect. It will become clear that NA is not a wh-in-situ language, as a wh-phrase should leave its position and move to the CP. However, when there are two wh-phrases, this rule is no longer respected and other constraints come into play. The main thrust of the following section is to explore these constraints. These constraints include the need to keep the object wh-phrase in situ (in the overt syntax) when there is an adjunct wh-phrase, which in turn should be fronted. Additionally, I ultimately reach a descriptive statement concerning the formation of the questions that include two fronted wh-phrases; conjoined fronted wh-phrases in NA should be adjunct wh-phrases, separated by the coordinating conjunction *wa* "and".

1.4   Question formation in NA

In this section, I explore the formation of wh-questions in NA. I begin first with questions with a single wh-phrase, and then I explore the formation of questions with multiple wh-phrases. My exploration here aims to provide an initial picture of question formation in NA without detailing how they are syntactically derived, as the latter point is the main object of subsequent chapters.

1.4.1   Wh-questions with a single wh-phrase

Before exploring how questions with a single wh-phrase are formed, one remark about the distinction between adjunct wh-phrases and argumental wh-phrases is in order. As is the case with other natural languages, NA wh-phrases fall into two different categories: argumental wh-phrases (that are affiliated with an argument position or theta roles) and adjunct wh-phrases (that are affiliated with an adjunct position) (cf. Wahba, 1992; Aoun and Li, 1993). Argument wh-questions include *min* "who", *wiʃ/wiʃu* "what", and *ʔey* "which", whereas adjunct wh-phrases include *meta* "when", *wein* "where", *keif/wʃloon* "how" and *leiʃ/leih*[2] "why".

Back to formation of questions with a single wh-phrase; to derive a question in NA, a wh-element should be fronted (see 3a, b). Here, the wh-phrase must be followed by the verb, otherwise the resulting question would be ungrammatical (see 3c). I provide evidence in Chapter Three for the fact that (3a) is not a wh-in-situ question, as the subject (wh-word) is base-generated in Spec,vP, then it moves to Spec,TP. In questions, the subject wh-word moves to the CP domain, particularly in Spec, CP. Consider the following examples:[3]

(3)

    a. min   kisar   al-koup?
        who   break.PAST.3SG.M   DEF-cup
        'Who did break the cup?'

    b. wiʃ   kisar   Salim?
        what break.PAST.3SG.M.   Salim
        'What did Salim break?'

---

[2] Note that the difference between *leih* and *leiʃ* is purely phonological, as I can tell.
[3] When the wh-phrase is discourse-linked (connected to the previous discourse of the question, and the set of alternatives which includes the possible answer is already known to the hearer; see Pesetsky, 1987), the word *illi* is used between the wh-phrase and the verb. Note here that there is no difference in word order when *illi* is used; the subject wh-word remains to the left of the verb. However, I leave such cases aside, but see Shlonsky (2002) for a proposal for the derivation of such questions.

    c. *wiʃ   Salim   kisar?
         what   Salim   break.PAST.3SG.M.
         'What did Salim break?'

Sentence (3c) is ungrammatical because the verb does not follow the wh-word directly. Sentence (3c) would become grammatical if *Salim* is positioned after the verb, or the sentence uses the *pro*-drop strategy where *Salim* is dropped.

The wh-in-situ strategy is rarely used in NA, an observation that implies that NA is not a wh-in-situ language, unlike, for example, Iraqi Arabic (Wahba, 1992), Egyptian Arabic (Gad, 2011), and Chinese (Huang, 1982).

(4)

    a. #kisar   Salim   wiʃ?
         break.PAST.3SG.M.   Salim   what
         'What did Salim break?'

    b. #Salim   kisar   wiʃ?
         Salim   break.PAST.3SG.M.   what
         'What did Salim break?'

    c. #kisar   min   al-koup?
         break.PAST.3SG.M.   who   DEF-cup
         'Who broke the cup?'

This should not imply that the wh-phrase must be the first element in the relevant question. The fronted wh-phrases can be fronted with other elements that precede it. For instance, the subject can precede the adjunct wh-phrase as the latter is followed by the verb, as the following examples show:

(5)

    a. wein   raħ   Salim
         where   go.PAST.3SG.M.   Salim
         'Where did Salim go?'

    b. Salim   wein   raħ
         Salim   where   go.PAST.3SG.M.
         'Where did Salim go?'

    c. Salim   leih   kisar   al-koup
         Salim   why   break.PAST.3SG.M.   DEF-cup
         'Why did Salim break the cup?'

I will show in the following chapters that *Salim*, in questions like (5b) and (5c), is a topic that is situated in the Topic Phrase that dominates the Focus layer where

wh-words move in NA. Note the subject in such situations should express old, given information. I return to this point in Chapter Three, arguing that wh-phrases in NA can be preceded by topics which are discourse-given categories, a matter that essentially points to the richness of the left periphery of NA.

In the next section, I shed light on how questions with more than one wh-phrase are formed. I focus on the constraints on the formation of such questions.

A note on terminology is in order here. Questions with multiple wh-phrases refer to questions that involve two wh-phrases, whereas questions with fronted conjoined wh-phrases refer to questions that involve two fronted and conjoined wh-phrases. So, questions with fronted conjoined wh-phrases are a subset of questions with multiple wh-phrases.

1.4.2 Questions with multiple wh-phrases in Najdi Arabic

NA allows questions that involve two wh-phrases. One important remark here is that the occurrence of two wh-phrases is subject to strict constraints. For example, when the two wh-phrases are argumental (i.e. a subject wh-word and an object wh-word), the subject wh-word should appear at the beginning of the question, while the object wh-word must remain in situ:[4]

(6)

    a. min   ʃaf   wiʃ?
         who   see.PAST.3SG.M.   what
         'Who saw what?'

    b. *wiʃ   ʃaf   min?
         what   see.PAST.3SG.M.   who
         Intended: 'Who saw what?'

    c. * wiʃ min   ʃaf ʕend   al-bab
          what who   see   at   DEF-door
         Intended: 'who saw what at the door?'

    d. * min   wiʃ   ʃaf ʕend   al-bab
          who   what   see at   DEF-door
         Intended: 'Who saw what at the door?'

---

[4] For clarity, purpose and ease of exposition, the morphological inflection on the verb will not be shown in a gloss, like in example (6c). In general, in almost all NA examples in this work, the morphological inflections attached to the verb are tense, person and gender (PAST.3PS.M.). If there is any change to these morphological inflections, they will be shown in glosses.

The question in (6a) is grammatical because only one wh-phrase (which is here the subject wh-word *min*) appears at the beginning of the question. (6b) is ungrammatical because the object wh-word is what is fronted at the beginning of the question rather than the subject wh-word. On the other hand, the questions in (6c) and (6d) are ill-formed because the two argumental wh-phrases *min* "who" and *wiʃ* "what" appear at the beginning of the question. Note here the relative order between the two wh-phrases is irrelevant. In fact, when the subject and the object are wh-phrases, the object must remain in situ.

Another important constraint on the occurrence of two wh-phrases in the same clause is that in the context where one of the two wh-phrases is an adjunct and the other is a subject wh-phrase, the resulting question would be ungrammatical, irrespective of which wh-phrase comes first. Consider the different questions in (7) which involve a subject wh-phrase and different wh-adjuncts:

(7)

    a. *min   raħ   meta
        who   go.PAST.3SG.M.   when
        Intended: 'Who went when?'

    b. * meta   min   raħ
        when   who   go.PAST.3SG.M.
        Intended: 'Who went when?'

    c. *min   meta   raħ
        who   when   go.PAST.3SG.M.
        Intended: 'Who went when?'

    d. *min   saafar   wein?
        who   travel.PAST.3SG.M   where
        Intended: 'Who travelled where?'

    e. * wein min   saafar ?
        where who   travel.PAST.3SG.M
        Intended: 'Who travelled where?'

    f. *min   wein   saafar?
        who   where   travel.PAST.3SG.M
        Intended: 'Who travelled where?'

    g. *min   dʒa   keif?
        who   come.PAST.3SG.M.   how
        Intended: '*Who came how?'

h. * keif   min   ʤa?
   how   who   come.PAST.3SG.M.
   Intended: '*Who came how?'

i. * min   keif   ʤa?
   who   how   come.PAST.3SG.M.
   Intended: '*Who came how?'

The ungrammatical questions in (7) demonstrate that the adjunct wh-phrases cannot occur in the same sentence where the subject is also a wh-phrase.

On the other hand, a question with an object wh-phrase and an adjunct wh-phrase can be grammatical if the adjunct wh-phrase is placed at the beginning of the question, and the object wh-phrase remains in situ, as demonstrated by the following examples:

(8)

a. meta   ʃaaf   Ali   min?
   when   see.PAST.3SG.M. Ali   who
   'When did Ali see whom?'

b. *min   ʃaaf   Ali   meta?
   who see.PAST.3SG.M.   Ali   when
   Intended: "When did Ali see who?"

c. *min   meta   ʃaaf   Ali?
   who when   see.PAST.3SG.M.   Ali
   Intended: 'When did Ali see whom?'

d. * meta   min   ʃaaf   Ali?
   when   who   see.PAST.3SG.M.   Ali
   Intended: 'When did Ali see whom?'

e. *min   meta   Ali   ʃaaf?
   who   when   Ali   see.PAST.3SG.M.
   Intended: 'When did Ali see whom?'

f. * meta   min   Ali   ʃaaf?
   when   who   Ali   see.PAST.3SG.M.
   Intended: 'When did Ali see who?'

The question in (8a) is grammatical because the fronted adjunct wh-phrase co-occurs with the in-situ object wh-phrase. On the other hand, (8b) is ungrammatical because the object wh-phrase is fronted at the beginning of the question, while the adjunct wh-phrase remains in situ.

In the next chapters, I will provide a comprehensive, unified account of these observations, showing that the wh-phrase subject moves to the left periphery of the relevant clause because it is closer (more local) to the head of CP; hence, it bans other wh-words from moving to the left periphery in the overt syntax.[5] On the other hand, the object wh-phrase does not move to the left periphery in the presence of other wh-words due to its low position relavant to the head of the CP. This account is essentially paired with the need of the adjunct wh-phrase to move to the left periphery in the overt syntax, a matter that gives rise to cases of conjoined question word constructions. An additional important point related to question formation in NA is that this language allows for questions with two adjunct wh-phrases only in the context where the two wh-phrases are fronted at the beginning of the sentence, separated by a coordination conjunction *wa* "and". I discuss such questions in the following sub-section.

1.4.3 *Conjoined question word construction in NA*

NA exhibits multiple 'fronted' wh-questions whose occurrence is also subject to certain constraints. The two wh-phrases must be adjuncts and coordinated by the coordinating conjunction *wa* "and". Consider the following examples, which include conjoined fronted wh-phrases:

(9)

    a. wein   wa-meta   ʃaaf   Ali   al-baas
       where and-when   see   Ali   DEF-bus
       'Where and when did Ali see the bus?'

    b. meta   wa-wein   ʃaaf Ali   al-baas
       when   and-where   see   Ali   DEF-bus
       'When and where did Ali see the bus?'

    c. *wein ʃaaf Ali   al-baas   meta
       where see   Ali   DEF-bus   when
       Intended: 'Where and when did Ali see the bus?'

    d. *meta ʃaaf   Ali   al-baas   wein
       when see   Ali   DEF-bus   where
       Intended: 'Where and when did Ali see the bus?'

    e. *wein meta   ʃaaf   Ali   al-baas
       where when   see   Ali   DEF-bus
       Intended: 'Where and when did Ali see the bus?'

---

[5] What I mean by the overt syntax is the pre-Spellout level (Kayne, 1998; Ko 2005a, b;).

The question in (9a) is grammatical because the fronted conjoined two wh-phrases are adjuncts. The questions in (9b-c) are ungrammatical because one of the wh-adjuncts remains in situ. The question in (9e) is ungrammatical because the two fronted wh-adjuncts are not separated by the coordination conjunction *wa* "and". In view of this, the descriptive statement which I can formulate here in connection with the examples in (9) is the following:

(10)

      Conjoined fronted wh-phrases in NA should be adjunct wh-phrases,

      separated by the coordinating conjunction *wa* "and".

On the other hand, what challenges the statement in (10) at face value is the observation that fronted wh-phrases can appear at the beginning of the question without the coordination *wa* "and" when the first wh-phrase is an adjunct wh-phrase *leih/leiʃ* "literally; why". Here there is no condition on the type of second wh-phrase, which may be an adjunct wh-phrase or an argumental wh-phrase. I will argue that the adjunct wh-phrase *leiʃ* "why" in such contexts is not a wh-phrase (with a [Q] feature) but an expression used to reflect the speaker`s point of view (surprise, anger, resentment, etc.) towards the event that serves as a background to the question. This is supported by the fact that the answer to the question that involves the wh-phrase *leiʃ* "why" does not include information about the reason of the event[6]. Consider the answers provided to all grammatical examples with *leiʃ*+wh-phrase in (11). (11a) and (11c) are questions, and (11b) and (11d) are felicitous answers to them, respectively.

(11)

      a. leiʃ   wiʃ   t-abbi?
          why   what   PRES.2.M-want.SG.
          "Oh! What do you want?"

      b. ʔ-abbi   al-garar
          PRES.1.M.-want.SG.   DEF-decision
          'I want a copy of the decision.'

          *abi   al-garar   lʔin….
          'PRES.want.1PS.M   . the decision, because …….'

---

[6] In Chapter Six, I will provide syntactic and semantic details about the discourse particle *leiʃ* "why" and the wh-word *leiʃ* "why".

c. leiʃ　　meta　　sˤar-t　　　　　　　　al-ssalfah?
why　　when　　happen.PAST-3SG.FEM.　　DEF-story?
"Oh! When did the story happen?"

d. al-j:oom
DEF-day
'Today'

*alj:oum　lʔin…
'Today, because ……'

The speaker in example (11a) is surprised of the behaviour of the addressee, so he/she asks the question. Likwise, the speaker in example (11c) is surprised of the the event, so he/she asks the question.

It is clear that there is no information about the reason of the event, as a contrast to the questions which include *leiʃ* "why" as a true wh-phrase, as seen in the following example:

(12)

a. leiʃ　　sˤar-t　　　　　　　al-ssalfah?
why　　happen.PAST-3SG.FEM　　DEF-story?
"Why did the story happen?"

b. liʔinna-ha　　　　kaant　　　　dˤaroorijjah
because-it　　　　was　　　　　necessary
'Because it was necessary'

Given that the felicitous answer to the question in (12a) should include reason-related information, required by the use of the wh-phrase *leiʃ* "why", I can assume that *leiʃ* "why" in this question is a true wh-phrase.

Another property that may constitute evidence that *leiʃ* "why" is not a true wh-phrase when it precedes another fronted wh-phrase is that *leiʃ* "why" should go first, regardless of the type of the second wh-word (an adjunct wh-word or an arguemental wh-word). The data shows that any violation to this constraint would yield question ungrammaticality, as illustrated in (13).

(13)

a. * wein/meta　　leiʃ　　　　reħt?
where/when　　why　　　　go.PAST.2SG.M.
Intended: "Where/when did you go?"

b. *min/wiʃ   leiʃ   qal-l-k?
    who/what   why   say.PAST-to-.2SG.M.
    Intended: "Who told you/what he told you?"

In Chapter Six, I will argue that the wh-phrase *leiʃ* "why" is not a wh-phrase in *leiʃ* + wh-phrase constructions, but rather a discourse particle that is used to express the speaker's surprise, resentment or anger to the background of the question. As such, the statement in (10) still holds.

1.5   Wh-movement in Arabic varieties and in English

This section aims to provide a comparison between wh-movement in Najdi Arabic and wh-movement in other Arabic varieties, as well as wh-movement in English. The purpose behind such a comparison is to show how NA differs from other Arabic varieties and from English in terms of wh-movement at the descriptive level. It will begin with an overview of wh-movement in Modern Standard Arabic (MSA) compared to NA. Then, it will give a descriptive background about the behavior of wh-words in certain Arabic dialects compared to Najdi Arabic. These Arabic varieties include Syrian Arabic (SA), Egyptian Arabic (EA) and Iraqi Arabic (IA). Besides this, comparative data regarding wh-movement in the English language will be discussed in this section.

1.5.1   Modern Standard Arabic

It can be argued that the behavior of wh-movement in MSA and in NA is similar. In MSA, interrogative clauses are introduced by an argument wh-word. These arguments wh-words include *man* "who", *maða/maa* "what", *kam* "how much/many" and *ayy* "which". Also, questions can be introduced by adjunct wh-words such as ayna "where", *li-maða/li-ma* "why", *kayfa* "how" and *mata* "when". The extraction of subject and object are shown by the following examples:

(14)

a. man   yaʕrif-u   al- tˤareeq-a ʔla   Mecca?
    who   know   the-way-ACC   to   Mecca
    'Who knows the way to Mecca?'

b. maða   katabt-a ?
    what   write.PAST.2PS.M.
    'What did you write?'
                                                    (Gad, 2011: 29)

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In MSA, when adjuncts introduce interrogative clauses, they appear in the left periphery. Consider the following examples:

(15)

    a. li-ma   kunt-a   tulaħiqun-i
       why   be.PAST-2PS.M   chase-me
       'why have you been chasing me?'

    b. ayna   j:ku:nu   Ɂi-jtimaʕu-na
       where   be.PRES.3PS.M.   meeting-3PL.M.
       'when will be our meting?'

                             (Badawi et al., 2004: 696-699)

In a parallel way, recall that interrogative clause with a single wh-word, argument/adjunct wh-word is moved to the left periphery in NA, as shown by following examples (example (16a) is repeated from (3a) and example (16b) is repeated from (5a) for ease of exposition):

(16)

    a. min   kisar   al-koup?
       who   break.PAST.3SG.M   DEF-cup
       'Who broke the cup?'

    b. wein   raħ   Salim
       where   go.PAST.3SG.M.   Salim
       'Where did Salim go?'

In embedded clauses, the wh-word is moved to occupy the Spec, CP of the embedded clause in MSA and NA. Consider the following examples:

(17)

    a. saɁaltah-u   maa   I- ħall-u.
       ask.PAST.1PS.M-him   what   the-answer-NOM
       'I asked him what the answer is.'

                                 (Gad, 2011: 29)

    b. saɁaltuh   wiʃ   isma-k
       ask.PAST.1PS.M-him   what   name-you
       'I asked him what your name is.'

Wh-words can remain in situ in MSA and in NA[7]. However, their interpretation will be an echo question (Fehri, 1993). The following examples show this situation. Example (18b) is repeated from (4a) for convenience.

(18)

    a. jaʔa   man?
        come.PAST.3PS.M.   who
        'Who came?'

                           (Fehri, 1993: 67)

    b. kisar   Salim   wiʃ?
        break.PAST.3SG.M.   Salim   what
        "What did Salim break?"

In addition, both MSA and NA allow more than one wh-word in a single interrogative clause. However, the derivation of argument wh-words is constrained by locality in both MSA and NA. For example, the object wh-word cannot move across the subject, as shown in (19). Only one wh-word moves to the left periphery while the other one remains in situ (Fehri, 1993), as shown in (19a-c). It should be noted that both MSA and NA do not allow two wh-words in the left periphery, as illustrated by (19c) and (19f). The examples in (19d-f) are repeated from (6a), (6b) and (6d) for ease of exposition.

(19)

    a. man   Darab-a   man   bi-maadhaa?
        who   beat.PAST.3PS.M.   who   with-what
        'Who beat whom with what?'

                           (Fehri, 1993: 67)

    b. *bi-maaðaa   man Darab-a   man?
        with-what   who beat.PAST.3PS.M.   who
        'Who beat whom with what?'

                           (Gad, 2011: 33)

    c. *maða   man   kataba
        What   who   write.PAST.3PS.M.
        'What who wrote?'

                         (Al-Shorafat, 2013:185)

---

[7] Albaty (2013) argues that NA has wh-in-situ expressions in certain pragmatic and discourse contexts, analogous to English echo-questions (e.g. *His name is what*?). This observation does not yet cast doubt on my claim that NA is not a wh-in-situ language because they are indeed echo-questions and also rare and even categorized as ungrammatical by some speakers.

d. min ʃaf wiʃ?
   who see.PAST.3SG.M. what
   "Who saw what?"

e. *wiʃ ʃaf min?
   what see.PAST.3SG.M. who
   Intended: "What did who see?"

f. * min wiʃ ʃaf ʕend al-bab
   who what see. at DEF-door
   Intended: "Who saw what at the door?"

It is worth noting that almost all studies on wh-movement in MSA have not tested the behaviour of argument and adjunct wh-words in one clause.

Moreover, MSA and NA allow two adjunct wh-words to be coordinated in a clause initial position, as shown in (20). Example (20b) is repeated from (9a) for ease of convenience.

(20)

a. mataa wa kayfa jiʔt-a?
   when and how come.PAST.2PS.M.
   'When and how did you come?'

(Gad, 2011: 34)

b. wein wa-meta ʃaaf Ali al-baas
   where and-when see Ali DEF-bus
   "Where and when did Ali see the bus?"

In addition, MSA and NA do not allow the extraction of a wh-word over a preverbal subject. Fehri (1993) argues that the position of the subject in MSA is in Spec, TopicP; therefore it blocks the movement of a questioned object, as illustrated by (21b). Also, it is not permissible to extract adjunct wh-words across preverbal subjects in MSA, as shown in (21d).

(21)

a. man Daraba Zayd-un
   who hit.PAST.3PS.M. Zayd-NOM
   'Who has Zaydun hit?'

b. * man Zayd-un   Daraba
  who   Zayd-NOM hit. PAST.3PS.M.
  'Who has Zaydun hit?'

                 (Soltan, 2006: 249)

c. ayna   ðahab   Ali-un
  where   go.PAST.3PS.M. Ali-NOM
  'Where did Ali go?'

d. *ayna   Ali-un   ðahab
  where   Ali-NOM go.PAST.3PS.M.
  'Where did Ali go?

                (Fargal, 1986: 27-28)

In a similar situation, NA does not allow any intervening element between the wh-word and the verb. Consider the examples in (3b) and (3c), which are repeated here as (22a) and (22b).

(22)

a. wiʃ   kisar   Salim?
  what break.PAST.3SG.M. Salim
  "What did Salim break?"

b. *wiʃ Salim kisar?
  what Salim break.PAST.3SG.M.
  "What did Salim break?"

1.5.2   Syrian Arabic (SA)

SA and NA share similar syntactic behaviour when it comes to wh-extraction. In a single interrogative clause, all wh-words move to the left periphery occupying the Spec, CP in SA and in NA. Consider the following examples. Example (23c) is repeated from (3a) for convenience.

(23)

a. šw jab   john?
  What brought John
  'What did John bring'

b. *jab   john šw?
  brought John what
  'What did John bring'

                (Sulaiman, 2016: 27)

c. min kisar   al-koup?
  who break.PAST.3SG.M DEF-cup
  "Who broke the cup?"

d. *kisar   al-koup   min?
break.PAST.3SG.M   DEF-cup   who
"Who broke the cup?"

When an argument/adjunct wh-word is extracted, the wh-word is followed by the verb in both language varieties, as shown in (24). Examples in (24e) and (24f) are repeated from (3b) and (3c) for ease of exposition.

(24)

a. shw   ħaka   bassel?
what said   Bassel
'What did Bassel say?'

b. *shw bassel ħaka?
what Bassel said

c. kif ija john?
how came John
'How did John come?'

d. *kif john ija?
how John came

(Sulaiman, 2016: 32)

e. wiʃ   kisar   Salim?
what break.PAST.3SG.M.   Salim
'What did Salim break?'

f. *wiʃ   Salim   kisar?
what Salim   break.PAST.3SG.M.
'What did Salim break?'

g. keif   kisar   Salim al-koup?
how   break.PAST.3SG.M.   Salim DEF-cup
'How did Salim break the cup?'

h. *keif   Salim kisar   al-koup?
how   Salim break.PAST.3SG.M.   DEF-cup
'How did Salim break the cup?'

In addition, the wh-word is followed by the verb in embedded clauses in SA and NA. The following examples show that the extracted wh-word is moved to the Spec, CP in the embedded clauses followed by the verb.

(25)

    a. ʕam   isaʔal   [šw   tabkh-a   mama]?
       PROG   ask.1SG   what cooking-2SG.F mom
       'I am asking what mom has cooked.'

    b. *ʕam   isaʔal   [šw mama tabkh-a]?
       PROG   ask.1SG   what mom   cooking-2SG.F

                                              (Sulaiman, 2016: 33)

    c. saʔalt-uh   [wiʃ qal   Ali]?
       ask.PAST.1PS.M-him what say.PAST.3PS.M. ali
       'I asked him what Ali said.'

    d. *saʔalt-uh   [wiʃ Ali   qal]?
       ask.PAST.1PS.M-him what Ali   say.PAST.3PS.M
       'I asked him what Ali said.'

In an exception to Wh-Verb-Subject/Object order in interrogative clauses, both SA and NA show that the wh-word *leiʃ/leš* "why" behaves differently from other argument and adjunct wh-words. The wh-word *leiʃ* "why" can be followed by a verb and it can be followed by a subject, as illustrated by the following examples:

(26)

    a. leš   mary   tddayʔ-et?
       why   Mary   upsetted-3SG.F
       'What did upset Mary?'

    b. leš   tddayʔ-et   mary?
       why   upsetted-3SG.F Mary
       'What did upset Mary?'

                                              (Sulaiman, 2016: 33)

    c. leiʃ Salim   kisar   al-koup
       why salim   break.PAST.3PS.M.   the-cup
       'why did Salim break the cup?'

    d. leiʃ kisar   salim   al-koup
       why break.PAST.3PS.M..   salim   the-cup
       'why did Salim break the cup?'

Moreover, it is observed that multiple wh-words are permissible in SA and NA. However, movement of multiple wh-words in SA and NA is subject to locality, as shown in (27a) and (27b), and (27d) and (27e), respectively. Also, SA and NA do not permit movement of more than one wh-word to the left periphery, as illustrated in (27c) and (27f).

(27)

    a. miin   štara   šu
       who   bought   what
       'who   bought   what?'

    b. *šu   štara   miin ?
       what   bought   who

    c. *miin šu   štara?
       who   what   bought

                                   (Sulaiman, 2016: 60-61)

    d. min   ʃaf   wiʃ?
       who   see.PAST.3SG.M.   what
       'Who saw what?'

    e. *wiʃ   ʃaf   min?
       what   see   who
       Intended: 'What did who see?'

    f. * min wiʃ   ʃaf   ʕend   al-bab
       who   what   see   at   DEF-door
       Intended: 'Who saw what at the door?'

Moreover, SA allows coordination of adjunct wh-words in any order. However, when the wh-word *leiʃ/leš* "why" is involved, it must be the rightmost wh-word. Consider the following examples:

(28)

    a. Kif w   aymat Sar   l-ħadeth?
       how and when   happened   the-accident
       How and when did the accident take place?

    b. Aymat w kif   Sar   l-ħadeth?
       when and how   happened   the-accident

    c. Kif w   leš   Sar   l-ħadeth?
       how and   why   happened   the-accident
       How and when did the accident take place?

    d. *leš w kif Sar l-ħadeth?
       why and how happened the-accident

                                     (Sulaiman, 2016: 66)

Although NA Arabic allows adjunct wh-phrases to be conjoined by the coordinator conjunction *wa* "and", it does not hold any restriction on adjunct wh-word order, even if the wh-word *leiʃ* "why" is involved. Consider the following examples. For convenience, the examples in (29a) and (29b) are repeated from (9a) and (9b).

(29)

   a. wein   wa-meta   ʃaaf   Ali   al-baas
       where   and-when   see   Ali   DEF-bus
       'Where and when did Ali see the bus?'

   b. meta   wa-wein   ʃaaf Ali   al-baas
       when   and-where   see   Ali   DEF-bus
       'When and where did Ali see the bus?'

   c. leiʃ   wa-wiʃloon   Sar   al-ħadith?
       Why   and how   happen.PAST.3PS.M.   DEF-accident
       'why and how did the accident happen?'

   d. wiʃloon   wa-leiʃ   Sar   al-ħadith?
       how   and why   happen.   DEF-accident
       'How and why did the accident happen?'

1.5.3 Egyptian Arabic (EA)

In this brief descriptive review of wh-movement in EA and in NA, I will show that these Arabic varieties differ in terms of wh-movement. According to Soltan (2012), argument wh-words can appear either in their bare position, as shown in (30a), or in the left periphery followed by a relativized clause introduced by the complementizer *ʔilli* "that", as illustrated in (30b).

(30)

   a. ʔinta   ʃuft   miin   ʔimbaariħ?
       you   see.PAST.2PS.M who   yesterday
       'Who did you see yesterday?'

   b. Miin   ʔilli   ʔinta   ʃuft-u-h
       ʔimbaariħ?
       Who   COPULA.3PS.M   COMP   you   see.-him
       yesterday
       'Who is it that you saw yesterday?'

                                            (Soltan, 2012: 99)

In the same way, adjunct wh-words have optional positions in EA. They can appear in the left periphery, as shown in (31a), or they can appear in situ. Consider the following examples:

(31)

    a. ʕamalt   keda   leh?
        do.PAST.2PS.M.   this   why?
        'Why did you do this?'

    b. leh   ʕamalt   keda?
        why   do.PAST.2PS.M. this?
        'Why did you do this?'

                                    (El-Touny, 2011: 22)

Unlike EA, single wh-words in NA must move to the left periphery[8]. Consider the examples (3b), (4b) and (5a), which are repeated here as (32a), (32b) and (32c), respectively, for convenience.

(32)

    a. wiʃ   kisar   Salim?
        what   break.PAST.3SG.M.   Salim
        'What did Salim break?'

    b. # Salim   kisar   wiʃ?
        Salim break.PAST.3SG.M.   what
        'What did Salim break?'

    c. wein   raħ   Salim
        where   go.PAST.3SG.M.   Salim
        'Where did Salim go?'

    d. #Salim   raħ   wein
        Salim   go.PAST.3SG.M.   where
        'Where did Salim go?'

When adjunct wh-words are moved to the left periphery in EA, they are not associated with the presence of the complementizer ʔilli "that". However, when argument wh-words are moved to the left periphery in EA, they must be followed by the complementizer ʔilli "that". Consider the following examples:

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[8] As we have mentioned earlier, single wh-words can remain in situ in NA. However, they will be interpreted as echo questions.

(33)

    a. leeh   afalti   il-baab?
       why   close.PAST.3PS.FEM.   DEF-door
       'Why did you close the door?'

    b. *leeh Ɂilli   afalti   il-baab?
       Why   that   close PAST.3PS.FEM.   DEF-door

                                      (Gad, 2011: 86-87)

    c. miim Ɂilli   Salim itgawwiz-hai?
       who   that   Salim marry.3PS.M-her
       'Who did Salim marry?'

    d. *miin Salim itgawwiz-ha?
       Who   Salim marry. 3PS.M-her
       'Who did Salim marry?'

                                        (Gad, 2011: 84-85)

In embedded clauses, the behaviour of wh-words in EA continues to have two optional positions. Argument/adjunct wh-words can either remain in situ or move to the Spec, CP of the embedded clause.

(34)

    a. Mona ʕawza   teʕraf [ħasal   Ɂeh]
       Mona want.PAST.3PS.FEM.   know happen   what.
       'Mona wants to know what happened.'

    b. Mona   ʕawza   teʕraf [Ɂeh Ɂilli   ħasa]
       Mona   want   know [what that happen]
       'Mona wants to know what happened.'

                                        (El-Touny, 2011: 23)

    c. ʕirifua   [leeh afalti   il-baab]
       know.PAST.1P.   why close.PAST.2PS.F. DEF-door
       'We knew why you closed the door.'

    d. ʕirifua   [afalti   il-baab   leeh]
       know.PAST.1P.   close.PAST.2PS.F.   DEF-door   why
       'We knew why you closed the door.'

                                        (Gad, 2011: 90)

The previous examples in (34) show that EA has optionality for the position of a wh-word in an embedded clause. However, NA data show that there is only one

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position for the wh-word in embedded clause: Spec, CP. Consider (25c) and (25d), which are repeated as (35a) and (35b), respectively, for convenience.

(35)

    a. saʔalt-uh   [wiʃ   qal   Ali]
        ask.PAST.1PS.M-him what say.PAST.3PS.M. Ali
        'I asked him what Ali said.'

    b. *saʔalt-uh   [wiʃ   Ali   qal]
        ask.PAST.1PS.M-him what   Ali   say.PAST.3PS.M
        'I asked him what Ali said.'

In EA, argument wh-words can be conjoined by the coordinator conjunction *wi* "and" and fronted in the left periphery, as demonstrated by the following example:

(36)

    a. miin wi miin illi   biyilʕab   il-nahrda?
        who and who that   PROG.play.3PS.M.   today
        'Who is playing with whom today?' (lit: which two teams will play today?'

<div align="right">(Gad, 2011: 96)</div>

Although fronted conjoined wh-words are conjoined by *wa* "and" in NA, NA does not permit argument wh-words to be conjoined by *wa* "and". Consider the following example:

(37)

    a. *min wa-min   saʕaad?
        Who and who help.PAST.3PS.M.
        Lite: 'who helped who?'

Also, EA allows multiple wh-words. However, the positions of multiple wh-words are subject to locality, as explained by the following example:

(38)

    a. min   rāħ   feen?
        who   left.PAST.3PS.M.   where
        'Who went where?'

b. *feen   min   rāħ ?
   where   who   left.PAST.3PS.M.
   'where did who go?'   (Soltan, 2012: 105)

In contrast with the example in (38), NA puts constraints on the appearance of multiple wh-words in a single clause. It does not allow a subject and an adjunct wh-word in the same clause. Recall example (7d), which is repeated for convenience as (39).

(39)

a. *min   saafar   wein?
   who   travel.PAST.3SG.M   where
   Intended: "Who travelled where?"

Both EA and NA do not allow two wh-words to appear in the left periphery. Consider the following examples. Example (7e) is repeated as (40b) for ease of exposition.

(40)

a. *feen   mīn   rāħ?
   where who left. PAST.3PS.M.
   'Where did who go?'

                     (Soltan, 2012: 105)

b. * wein   min   saafar ?
   where who travel.PAST.3SG.M
   Intended: "Who travelled where?"

1.5.4   Iraqi Arabic (IA)

Iraqi Arabic and Najdi Arabic do not pattern alike in terms of wh-construction. In a similar way to wh-extraction in EA, wh-words have two optional positions in IA. They can move to the left periphery or they can remain in situ. Consider the following examples:

(41)

a. meno   Mona ʃaafat
   who   Mona see.PAST.3PS.F.
   'Who did Mona see?'

b. Mona ʃaafat   meno
   Mona see.PAST.3PS.F. who
   'Who did Mona see?'   (Wahba, 1992: 253)

Besides, wh-words can move to the Spec, CP of the embedded clause or remain in their base positions, as illustrated by the following examples:

(42)

a. Mona seʔlat   Ali   [Roʔa ishtarat   sheno]
   Mona ask.PAST.3PS.F.   Ali   Roaa buy.PAST.3PS.F. what?
   'Mona asked Ali what Ro?a bought.'

b. Mona seʔlat   Ali   [sheno Roʔa ishtarat]
   Mona ask.PAST.3PS.F.   Ali   what   Roaa buy.PAST.3PS.F
   'Mona asked Ali what Roaa bought.'

c. sh-tsawwarit   Mona [Ali raah weyn]?
   OP-thought   Mona Ali went where?
   'Where did Mona think Ali went?'

d. sh-tsawwarit   Mona [weyn Ali raah]?
   OP-thought   Mona Ali went where?
   'Where did Mona think Ali went?'

                                 (Wahba, 1992: 255-264)

The examples in (42) provide two main differences between question formation in IA and NA. First, in contrast with IA, all wh-words in NA must move to the left periphery in single or embedded clauses, as shown in (43). Consider (3a) and (17b) which are repeated here as (43a) and (43c), respectively.

(43)

a. min   kisar   al-koup?
   who   break.PAST.3SG.M   DEF-cup
   "Who broke the cup?"

b. *kisar   al-koup   min?

c. saʔalt-uh   wiʃ   isma-k

   ask.PAST.1PS.M-him what   name-you
   'I asked him what your name is.'

d. *saʔalt-uh isma-k   wiʃ

Second, IA allows the extraction of a wh-word over the subject in single and embedded clauses, as illustrated in (41a) and (42b). However, wh-words in NA must be followed by the verb in single or embedded clauses. Consider the examples in (43) with their counterparts in (41a) and (42b).

In the case of multiple wh-words, IA permits the occurrence of more than one wh-word in interrogative clauses, as shown by (44a). However, multiple wh-words can remain in situ, as illustrated by (44b). Besides, the movement of multiple wh-words to the left periphery is not constrained by locality. In (44c), the object wh-word *ʃeno* "what" is moved over the subject wh-word *meno* "who".

(44)

    a.   meno   ishtara   ʃeno   min ʔajl   meno?
       who   buy.PAST.3PS.M.   what   for   whom
       'Who bought what for whom?'

                                                      (Wahba, 1992: 253)

    b.   mona natat   ʃeno   li-meno?
       Mona give.PAST.3PS.F.   what   to-whom?
       'Mona gave what to whom?'

    c.   ʃeno   nata   meno li-Mona?
       what   give.PAST.3PS.M.   who   to-Mona?
       '*What who gave to Mona?'

                                                (Wahba, 1992: 271-272)

In contrast with IA, NA Arabic does not permit multiple wh-words to appear in their base positions, as illustrated in (45a). Also, NA does not license the movement of the object wh-word over the subject wh-word, as shown in (6b) which is repeated here as (45b) for convenience.

(45)

    a.   *Salim   ʔʕtˤaa   wiʃ   l-min
       Salim   give.PAST.3PS.M   what to-whom
       'Salim gave what to whom?

    b.   *wiʃ   ʃaf   min?
       what   see.PAST.3SG.M.   who
       Intended: "What did who see?"

Both IA and NA do not license more than one wh-word in the left periphery.
Consider the following examples:

(46)

    a. *ʃeno meno   nata   Ii-Mona?
        what   who   give.PAST.3PS.M to-Mona?
        '*What who gave to Mona'

<div align="right">(Wahba, 1992: 271)</div>

    b. *wiʃ   min   ʔʕtˤaa   l- Salim
        what   who   give.PAST.3PS.M   to-Salim
        'What who gave to Salim?'

1.5.5 English

NA and English share some syntactic features in relation to wh-movement. However, there are some slight differences between both languages in terms of verb-movement, restriction hold on multiple wh-constructions and constraint hold on fronted conjoined wh-words. In both languages, wh-words must move to the left periphery in single/embedded interrogative clauses, as shown in the (47) [9]examples.

(47)

    a. wiʃ   kisar   Salim?
        what   break.PAST.3SG.M.   Salim
        'What did Salim break?'

    b. *Salim   kisar   wiʃ?
        Salim   break.PAST.3SG.M.   what
        'What did Salim break?'

    c. saʔalt-uh   wiʃ   qal   Ali
        ask.PAST.1PS.M-him   what say.PAST.3PS.M. ali
        'I asked him what Ali said.'

    d. *saʔalt-uh   Ali   qal   wiʃ
        ask.PAST.1PS.M-him Ali   say.PAST.3PS.M what
        Intended meaning: 'I asked him what Ali said.

    e. What did Hakim buy?

    f. *Hakim bought what?

---

[9] The examples in (47e-h) are provided by the researcher.

g. I do not remember where I put my keys.

h. *I do not remember I put my keys where

In contrast with MSA, NA and SA varieties, the verb in English does not move from V to T to C in interrogative clauses. This is due to the fact that the verb in English has a weak verb feature (Haegeman, 1997). When a question is formed in English, the wh-word is moved to the Spec, CP followed by an auxiliary verb which is raised from T to C position, as shown in (48a-c). In the case of embedded questions, the wh-word occupies the Spec, CP while English does not show subject-verb inversion, as illustrated by (48d).

(48)

    a. What have you done?

    b. Who has done it?

    c. *What want you?

    d. I wonder what *{have} you {have} done.

(Ilc and Shepard, 2002: 165)

In NA, the wh-word is always followed by the main/auxiliary verb in single interrogative clauses. If we consider the declarative clauses in (49a) and (49c) and look at the extraction of object wh-words shown in (49b) and (49d) and compare it with their English counterpart in (46), we will see that there is a slight difference between NA and English in terms of verb movement[10]. NA data show that the main verb/auxiliary verb is moved from T to C, as in (49b) and (49d), whereas the main verb in English remains in situ, as shown in (48a-c).

(49)

    a. Salim kisar   al-koup
       Salim break.PAST.3SG.M.   DEF-cup
       'Salim broke the cup.'

---

[10] In Chapter Three, I will discuss in detail verb movement in an interrogative clause in NA.

b. wiʃ   kisar   Salim?
what   break.PAST.3SG.M.   Salim
'What did Salim break?'

c. ar-radʒaal   kaan   juħdˤar   al-ʕirs   ams
DEF-man   was   attend   DEF-mariage   yesterday
'The man was attending the marriage yesterday (when…).'

d. wiʃ   kaan   ar-radʒaal   juħdˤar   ams
what   was   DEF-man   attend   yesterday
'What was the man attending yesterday (when……)?'

In addition, the verb must move from T to C in embedded questions in NA while English does not show subject-verb inversion in embedded clauses. Consider the following NA example and compare it with its counterpart in (48d):

(50)

ana   mistaɣrib   wiʃ   t-sawwi   int
I   wonder   what   PRES-do.3PS.M.   you
'I wonder what you are doing.'

English allows more than one wh-phrase in a clause. However, only one wh-word is allowed to move to the left periphery. For instance, when there are two argument wh-words, the highest wh-word moves to the left periphery. Consider the following examples:

(51)

     a. Who hid what?

     b. *What did who hide?

(Cheng, 2003a: 107)

In the case of multiple wh-words with an adjunct and object wh-word, English does not put constraints on wh-movement to the left periphery. Consider the following examples:

(52)

     a. Where did you buy what?

     b. What did you buy where?

c. When did you buy what?

d. What did you buy when?

(Kuno and Robinson, 1972: 474)

We have seen that NA allows multiple wh-words to occur in one clause. However, the occurrence of more than one wh-word in NA is constrained by locality. In the case of multiple argument wh-words, the highest wh-word moves first to the left periphery while the other wh-word remains in situ. For instance, the object wh-word is not allowed to move across a subject wh-word in NA, as illustrated by (6b) which is repeated here as (53a). It is important to point out here that NA allows only a temporal wh-word to move to the left periphery when the object is a wh-word, as in (8a) (8b) which are repeated here as (53b (53c) for ease of exposition.

(53)

   a. *wiʃ   ʃaf   min?
      what   see.PAST.3SG.M.   who
      Intended: "What did who see?"

   b. meta   ʃaaf   Ali   min?
      when   see.PAST.3SG.M. Ali   who
      "When did Ali see who?"

   c. *min   ʃaaf   Ali   meta?
      who   see.PAST.3SG.M.   Ali   when
      Intended: "When did Ali see who?"

It is worth mentioning that both English and NA have only one Spec, CP which must be filled with one wh-word in interrogative clauses. This leads us to say that multiple fronted wh-words are banned from occurring in the left periphery in both languages. Consider the following examples:

(54)

   a. *where what did you do?

   b. *what who did you give to?

(Kuno & Robinson, 1972:487)

c. *min   meta   ʃaaf   Ali?
    who   when   see.PAST.3SG.M.   Ali
    Intended: "When did Ali see who?"

In addition, English permits coordinated wh-words in the left periphery. Adjunct wh-words are allowed to be conjoined by the coordinator "and" and moved to the left periphery, as shown in (55a) and (55b). Also, it is permissible to move a complex of coordination between one argument and one adjunct to the left periphery, as shown in (55c) and (55d).

(55)

    a. When and where did you see them?   (Browne, 1972: 223)

    b. When and Why did you see Kim?   (Citko, 2013: 300)

    c. What and when does John (normally) eat?   (Grosu, 1985: 232)

    d. How and what does John eat?   (Whitman, 2004: 404)

In terms of coordinated wh-words, NA permits only adjunct wh-words to be conjoined by the coordinator *wa* "and". Also, NA does not hold any restriction on wh-word order in such a construction, as shown by the examples in (57) which are repeated from (9a and b) for convenience.

(56)

    a. wein   wa-meta   ʃaaf Ali   al-baas
        where   and-when   see Ali   DEF-bus
        'Where and when did Ali see the bus?'

    b. meta   wa-wein   ʃaaf Ali   al-baas
        when   and-where   see Ali   DEF-bus
        'When and where did Ali see the bus?'

    c. * wiʃ wa-meta   j:akil   Ali?
        what and when   PRES.eat.3PS.M. Ali
        'What and when does Ali eat?'

In conclusion, this section has discussed the behaviour of wh-words in MSA, EA, SA, IA and English compared with the behaviour of wh-words in NA. The previous data from MSA, EA, IA, SA and English show that these language varieties fall into two groups. One group, which includes IA and EA, allows wh-words, adjunct/argument, to remain in situ. The second group, which includes

MSA, SA, NA and English, does not allow wh-words to remain in situ. Also, this section has looked at verb movement when a wh-question is formed in Arabic varieties and in English as well. When the question is formed in MSA, SA and NA, the verb/auxiliary verb must follow the wh-word. In an exception to this generalization, when the wh-word *leiʃ* "why" is involved, it can be followed by a subject in SA and NA. The English data show that a wh-word is followed by an auxiliary verb in single interrogative clauses. In embedded questions, English data show that the main verbs remain in situ. The data from EA show that when an argument is moved to the left periphery, it must be followed by the complementizer *ʔilli* "that". On this issue, IA data show that a subject may intervene between the wh-word and the main verb.

In addition, I have discussed multiple wh-words in Arabic varieties and in English. All Arabic varieties and English allow multiple wh-words to occur in interrogative clauses. However, the occurrence of multiple wh-words is subject to locality in NA, MSA, SA, EA and English. Although the occuerance of multiple wh-words in NA, MSA, SA, EA and English is subject to locality, English data show violation to the locality constraint when an object wh-word co-occurs with another adjunct wh-word. Data from IA show that multiple wh-words can occur in their base positions in embedded clauses. Also, in single interrogative clauses, IA data show that multiple wh-words can violate locality constraint.

This section has also investigated coordinated wh-words in Arabic varieties and in English. It has shown that NA, MSA, SA and English allow adjunct wh-words to be coordinated. However, in SA, when the wh-word *leiʃ* "why" is involved in adjunct wh-word coordination, it must be the rightmost wh-word. EA data show that two argument wh-words can be coordinated. Also, adjunct wh-words can be coordinated in English. In this regard, there are no resources on wh-word coordination in IA. This section has revealed that argument wh-words can be coordinated in Egyptian and in English where NA bans argumental wh-words from being conjoined by the coordinator *wa* "and" and fronted in the left periphery.

1.6   Research Questions

Against this background a set of questions arise, which constitute the main aims that this study will address:

When the subject and the object are wh-phrases, why must the subject wh-phrase appear only at the beginning of the question and the object wh-phrase is forced to remain in situ, as demonstrated by the examples in (6)?

When the subject is a wh-phrase, why does the relevant question become ungrammatical when there is an adjunct wh-phrase, as in the examples in (7)?

Why is it possible to have a questioned object and a questioned adjunct, as long as the adjunct wh-phrase is fronted and the object wh-phrase remains in situ (see 8)?

Why must conjoined wh-phrases be composed of adjuncts, as demonstrated by the examples in (9)?

Why can multiple wh-phrases be fronted without coordination only when the first wh-phrase is *leiʃ* "why", as demonstrated by the examples in (11) and (13)?

The rest of the thesis is dedicated to answer these questions in a systematic way, couched within the main assumptions of the so-called Minimalist Program (Chomsky, 1995, and subsequent work) and Phase Theory (Chomsky, 1999 and subsequent work), whose main aspects are introduced in the next chapter.

1.7   Outline of the thesis

Chapter Two presents the relevant assumptions and syntactic operations in the Minimalist Program (MP) (Chomsky, 1995 and subsequent work). These operations include *Select, Merge, Move,* and *Agree*, which are essential for sentence derivation. I also introduce so-called Phase Theory (Chomsky, 1999, 2000, 2001) and Rizzi`s (1997) Split CP Hypothesis. The second section reviews the proposals set for the subject position in MSA. I will discuss mainly Olarrea's (1995) proposal for the derivations of the word orders SVO and VSO and Mohammad's (1990, 2000) proposal for MSA common word orders (VSO and SVO), which appear to be able to account for NA data. In Chapter Three, I investigate NA questions with subject/object wh-phrases and adjunct wh-phrases. I will show that in questions with a subject wh-phrase, the subject wh-phrase moves to Spec, CP. I will also show that this movement is forced by the [EPP] feature on C° which demands that Spec, CP is filled. This chapter also discusses the fact that the subject wh-phrase should precede TP-related adverbs and the materials fronted to the Topic Phrase (situated below the Focus Phrase). I take this as evidence for the argument that the subject wh-phrase does move in the overt

syntax to Spec, Focus Phrase (see Rizzi, 1997). I will show that the object wh-phrase moves to Spec, CP in the overt syntax, attracted by the head of the CP.

In Chapter Four, I introduce the descriptive facts relating to the instances of multiple wh-phrases in NA. I draw two generalizations related to such intsnaces: an adjunct or argumental wh-phrase cannot move over a higher wh-phrase, and no two argumental wh-phrases can appear independently in the left-periphery. In this chapter, I examine the questions where the subject/object wh-phrase can appear fronted with another wh-phrase, i.e. with the wh-phrase *leiʃ* "why". I show that the wh-phrase *leiʃ* "why" can appear fronted with the subject/object wh-phrase as long as it is the first element in sequence and no coordinating conjunction appears between them. I provide evidence in this section that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase (when it is fronted with another wh-phrase) and does not constitute an example of multiple wh-phrases. Afterwards, this chapter investigates the examples whereby multiple adjunct wh-phrases are fronted to the left periphery. Here I show that two adjunct wh-phrases can appear fronted if they are conjoined by the coordinating conjunction *wa* "and". Additionally, this chapter accounts for the observation that when a question in NA has a subject wh-phrase and an object wh-phrase, the subject wh-phrase should move to Spec, CP, while the object wh-phrase remains in situ. I argue that the subject wh-phrase moves to Spec, CP, attracted by the [EPP] feature on the head of this projection. The object wh-phrase cannot move instead of the subject wh-phrase because of the latter being more local to the head of the CP than the former. Afterwards, I discuss questions with multiple wh-phrases (one an adjunct wh-phrase and one wh-argument). I show that such questions are not allowed in NA grammar, unless the argumental wh-phrase is an object that remains in situ.

In Chapter Five, I address the syntactic derivations of the question with fronted conjoined wh-phrases. I first show that questions with fronted conjoined wh-phrases are true questions. I discuss here Wilder's (1994) approach to questions with fronted conjoined wh-phrases. I report some problems related to this approach, as raised by several researchers, such as Zhang (2010). Afterwards, I introduce the main premise of the sideward movement analysis (Nunes 2001, 2004) which I depend on to account for questions with fronted multiple wh-phrases. The two conjuncts of the left coordinate complex in both constructions first undergo sideward movement from the gap (original) positions independently,

and form a coordinate complex with a conjunction, and later the newly built coordinate complex is integrated into the (complex) clause. Given that there is only one Spec, CP in NA clause structure on the one hand and that the two adjunct wh-phrases (unlike argumental wh-phrases) bear a strong [Q] feature, NA devises what I call pseudo-coordination where the fronted two adjunct wh-phrases are conjoined to form one single XP that is licensed in Spec,CP.

Chapter Six investigates multiple wh-phrases, which include the wh-phrase *leih/leiʃ,* "why". I will show that the discourse particle *leiʃ* "why" is base-generated in a layer higher than the Foce Phrase. In order to show the high position of the discourse particle *leiʃ* "why", I will make use of Rizzi`s (2001b) approach where he examined the base position of *Perché* "why" in Italian. The discussion of Italian data and NA data will be compared to the base position of *why* in English in similar contexts. Then, I provide the main differences between the discourse particle *leiʃ* "why" and the wh-word *leiʃ* "why" in NA. Then, I argue that *leiʃ* "why" in *leiʃ* +wh-word sequence is a discourse particle too which is base-generated higher than Force Phrase. Following Speas and Tenny (2003), Hill (2007), Haegeman and Hill (2013), and Haegeman (2014), I propose that the wh-phrase *leiʃ* "why" in such constructions is a discourse particle that expresses the point of view of the speaker. This discourse particle is externally merged into the head of Speech Act Phrase (SAP) which dominates the Force Phrase.

CHAPTER TWO: Clause structure of NA simple sentence

2.1 Introduction

The derivation of questions with multiple wh-phrases in NA will be investigated under the Minimalist Program (Chomsky, 1995, and subsequent work) and Phase Theory (Chomsky, 1999 and subsequent work). Also, I will make use of Rizzi`s (1997) Split CP hypothesis, as it provides us with a viable approach to explore the rich make-up of the left periphery in NA questions, and hence determine the exact positions the wh-phrase occupies when it is fronted to the left periphery. This chapter falls into three sections. The first section introduces the theoretical background where the relevant assumptions and syntactic operations in MP (*Select*, *Merge, Move,* and *Agree*) which are necessary for my approach to NA questions with multiple wh-phrases are presented. I also introduce Phase Theory and Rizzi`s (1997) Split CP Hypothesis. Also in this section, I will discuss wh-movement in MP and Phase Theory. The second section explores the proposals of the subject position in MSA in the word orders SVO and VSO. I will discuss mainly Olarrea's (1995) proposal, arguing that it suffers from several problems when corresponding data from NA are examined. In the same section, I address Mohammad's (1990, 2000) proposal for MSA common word orders (VSO and SVO). I show that this proposal fits NA data, arguing that the subject in the SVO word order in NA is a true grammatical subject, located in Spec, TP. As for the VSO word order, I show that the verb here adjoins to the head of the CP (Rizzi 1997). The thematic subject is located in Spec, TP. Afterwards, I discuss the derivation of the VOS word order, arguing that this word order is derived through the movement of the object to Spec, Topic Phrase. As for the verb, it adjoins to the head of the Focus Phrase under head movement. The subject is located in Spec, TP. Section 3 concludes the chapter.

2.2 Theoretical background

In this section, I introduce a very brief discussion about the main syntactic operations and minimalist ideas that are relevant to the discussion to come.

2.2.1   *The Minimalist Program: MERGE and SELECT*

The main operations playing an important role in constructing a syntactic structure within the Minimalist Program are the *Select* and *Merge* operations. Through *Select*, certain phrases are selected from the mental lexicon, based on their occurrence(s) in the sentence to form (Chomsky, 1995). Through *Merge*, a syntactic element, *a*, selects another one, *b*, to build a new syntactic structure, *k*, as shown below.

(1)

```
        k
       / \
      a   b
```
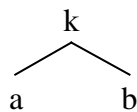
Zeijlstra (2004) defines Merge as "… the operation that takes two elements from the numeration N and turns them into one constituent that carries the same label as that of the dominating item" (p. 14). Merge is recursive, meaning that a pair of constituents can be merged with another pair of constituents to construct another complex constituent (see Chomsky, 1995). Under the MP, phrases have their own features that require specific types of complements. These features enable phrases to select other syntactic elements. For instance, the DP *the door* in (2) consists of a combination of the definite article, *the,* and the noun, *door*. The definite article, *the,* has an uninterpretable noun feature [uN],[11] whereas the noun phrase *door* has an interpretable noun feature [iN]. By means of Merge, the definite article, *the*, must select a noun phrase to build up the constituent DP. When the uninterpretable feature gets its value, the merge is completed, and all features are eliminated, as shown in (2)

(Adapted from Radford, 2004: 79)

(2)

```
           DP
          /  \
        D     NP
       the   Door
      [uN]   [iN]
```

---
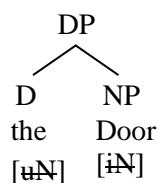
[11] Unlike interpretable features, uninterpretable features are features that do not contribute to the meaning of the element that carries them (Chomsky, 1995).

In the next subsection, I introduce the operation *Move*.

2.2.2   MOVE

Move plays a vital role in the optimal derivation (Chomsky, 1995: 229). The operation *Move* raises a lexical element from its (canonical) position to a higher position in the tree, as shown in (3).

(3)
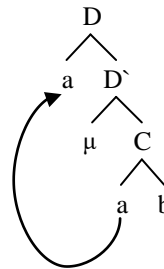
The operation *Move* raises *a* from its canonical position in C to the specifier position of D, leaving a copy behind in its base position (notice that *Move* is later viewed as a type of *Merge*, i.e. internal *Merge* (Chomsky, 2007)). In order to reach the optimal output, Chomsky (1995) suggests that *Move* is required to check the strong features on a probe head.[12] After the application of *Move*, the copy of *a* in C becomes phonologically invisible (Zeijlstra, 2004). According to Chomsky (1995), when strong uninterpretable features are checked in a Spec-head configuration, they are eliminated. Radford (2004) mentions that the operation *Move* consists of two sub-operations: *Copy* and *Delete* (see also Nunes, 2001, along these lines). For instance, the derivation of *Will you marry me*? starts by merging the verb *marry* with the pronoun *me* to build up the VP *marry me*. Then, the VP, *marry me,* is merged with the tensed auxiliary *will* to form the T` *will marry me*. Afterwards, T`, *will marry me*, is merged with the pronominal subject *you* to build up the TP *you will marry me*. Then, the TP, *you will marry me*, is merged with C°, which carries Question feature [Q], to form CP, as shown below.

---

[12] A strong feature is a feature that must be checked in the overt syntax cycle (Chomsky, 1995). This implies that strong features always trigger movement.

(4)

```
                    CP
          _____|_____
         C                     TP
         Q            _____|_____
                    DP                   T'
                    |              _____|_____
                   You           T             vP
                                 |            __|__
                                will       marry me
```
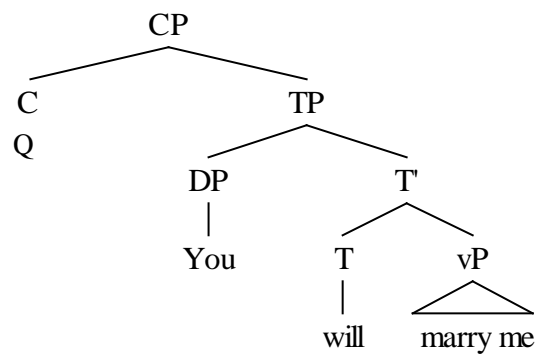
Next, a copy of *will* moves and merges with C^0 under head movement which results in a complex C^0, as it has a copy of T^0, *will*, and the feature question [Q]. A copy of the moved T° remains in situ, while its phonetic feature is deleted in the phonological components of the grammar, yielding the schematic representation of a yes/no question in English (Radford, 2004: 146).

(5)

```
                      CP
            _____|_____
           C                     TP
         __|__           _____|_____
        will   Q        DP               T'
                        |           _____|_____
                       You         T          vP
                                   |         _|_
                                  will    marry me
```
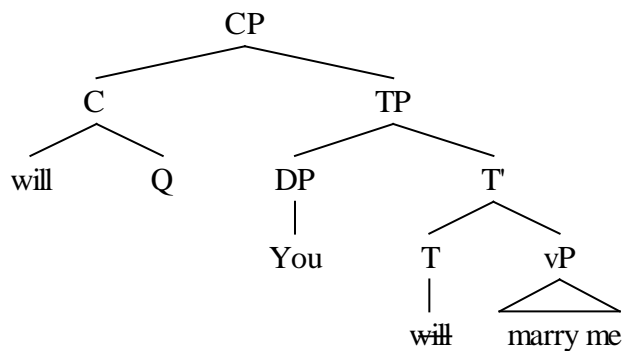
This analysis of the question derivation implies that all syntactic operations mentioned above are important for sentence building. Let us now explain the operation *Agree*.

2.2.3   AGREE

Chomsky (1995) argues that there are two kinds of abstract features: interpretable and uninterpretable. The following table illustrates the most relevant syntactic and semantic features:

Table (3): Uninterpretable and interpretable features (Al-Horais, 2013: 92).

Uninterpretable	Interpretable
Φ-features on T, *v*, C . . .	Φ-features on DPs
tense features on V	tense features on T
case features on DP	
EPP features (D) on T, C, *v*, Neg. .	

The uninterpretable features should be deleted before the sentence convergence at LF, a condition that is forced by the so-called *Principle of Full Interpretation*, which demands all uninterpretable features to be valued and deleted before the derivation is shipped to the interfaces (Chomsky, 1995). The main reason for this demand to delete the uninterpretable features is that such features do not contribute to the meaning of the sentence but are essential for sentence syntactic operations. In later works, Chomsky (2000, 2001) argues that such features are deleted through the operation *Agree*, which is a process that initiates a relationship between a probe (normally a head that has an uninterpretable feature) and its c-commanded goal (normally an XP that has a matching interpretable feature).[13] Within this model of agreement, designated checking configurations are replaced with simple c-command between a probe (which lacks feature values) and a goal (which bears the corresponding feature values and specifies these values on the probe) (Carstens, 2000). A standard version of *Agree* is given in (6) (Heck and Richards, 2010: 689):

(6)   Operation Agree

A probe α can agree with a goal β iff:

    i.   α is unvalued and seeks the value of β.

    ii.   α c-commands β.

    iii.   β is the closest goal to α.

---

[13] Here I stick to the latest version of Agree (Chomsky, 2000, 2001). For a full history of how agreement has been conceived throughout the development of the syntactic theory, the reader is referred to, among many others, Ouali (2011) for an accessible discussion.

iv.   β co-occurs with an unvalued Case feature

The notion of closeness (6iii) is structurally defined. Heck and Richards (2010: 690) provide the following formulation of closeness:

(7)   Closeness:

Goal β is closer to probe α than goal γ if a. and b. hold.

a. α c-commands both β and γ.

b. β asymmetrically c-commands γ.

The probe can access the goal only if there is no intervening element between the probe and the goal that carries the relevant features (Chomsky, 2000). When the probe and the goal enter into the derivation, the probe and the goal initiate an agreement relationship between them.

2.2.4   *Derivation by Phase (Chomsky, 1999, 2000, 2001)*

In the previous section, I have shown that the relationship between the probe and goal must not be interrupted (i.e. blocked) by any syntactic object, as a condition to occur. According to Chomsky (2001), this relationship should also be local to enable the probe to find the proper goal within its minimal domain. Chomsky (1999: 11) argues that Language Faculty requires the goal to be close to the probe in order to reduce the "computational burden". To minimize the "computational burden", Chomsky proposes that expressions are derived by *phases*, cycles of syntactic computations that are sent to LF and PF components. He argues that each phase should be processed with a small amount of structure. According to Chomsky (1999: 12), the functional categories CP and transitive *v**P are phases, as shown in the figure below.

(8)
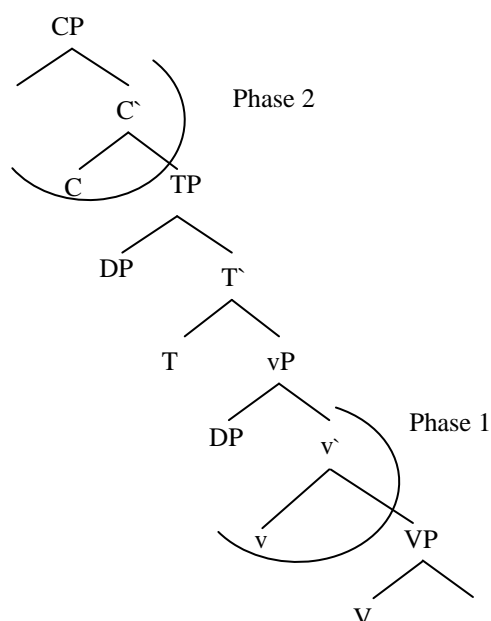
According to Chomsky (1999, 2000, 2001), the reason behind choosing CP and *v*P as phases is that the CP acts as a complete clausal complex that reflects the tense of the clause as well as the type of the clause, whereas *v**P behaves as 'a complete thematic (argument structure) complex (including an external argument)' (see also Legate, 2003, and Radford, 2009). In so doing, Chomsky excludes TP from being a phase. Additionally, Chomsky (1999, 2000) argues that when a phase has undergone all the syntactic operations, the complement of the phase will not be available for further syntactic operations, e.g. *Move* or *Merge*, from outside because it will be sent directly to the interface levels. Only the head and the edge of the phase are active for further syntactic operations by an external probe. This condition is introduced by Chomsky (2000: 108) as the *Phase Impenetrability Condition*, which is stated below:

(9)   The Phase Impenetrability Condition (PIC)

In phase α with head H, the domain of H is not accessible to operations outside α; only H and its edge are accessible to such operations.

(Chomsky, 2000: 108)

The configuration of the PIC is shown in (10). In (10), *v*P is the phase whereas *v* represents the head of the phase. Also, the VP in (10) illustrates the Spell-Out domain. The head of the phase, H (*v*) and its specifier, α (DP), are the phase edgse.

(10) Citko (2014: 32)

TP
T *v*P
Edge→ DP *v*`
Edge → *v* VP Phase
V DP Spell-Out
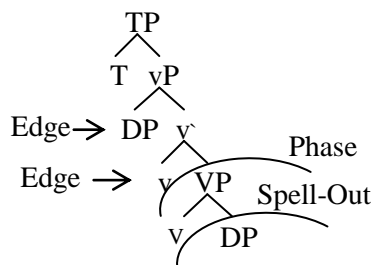
In the next section, I provide a brief overview of the articulated CP system elaborated in Rizzi (1997). This exploration is motivated by my dependence on this system to analyse the syntactic structure of questions with fronted conjoined wh-phrases in NA. As I will show below, the fronted wh-words can be preceded by topicalized elements. Rizzi's (1997) approach is a viable tool through which the structural positions of the left periphery elements, including wh-words, can be identified. This approach makes available a reliable approach for the fine structure of the left periphery of NA questions.

2.2.5 *Rizzi`s Split CP Hypothesis*

Rizzi (1997) argues that the CP is not a single functional projection but a field that hosts "topics and various operator-like elements such as interrogatives and relative pronouns, focalized elements, etc." (p. 281). Additionally, CP hosts two other functional heads: Force Phrase that types the sentence (as interrogative, declarative, exclamatory, relative, comparative, etc.) and Finiteness Phrase that provides information about the lower layer, (TP), such as mood features, conditions on subject agreement, tense specification, etc. Topic and Focus heads are sandwiched between Force and Finiteness heads and are present in the structure when needed (Rizzi, 1997). The articulated structure of the CP domain is schematized as follows:

44

(11)

```
                    ForceP
                     /\
                    /  \
                 Force`
                  /\
                 /  \
              Force   TopP
                      /\
                     /  \
                    Top`
                    /\
                   /  \
                 Top   FocP
                       /\
                      /  \
                     Foc`
                     /\
                    /  \
                  Foc   TopP
                        /\
                       /  \
                      Top`
                      /\
                     /  \
                   Top   FinP
                         /\
                        /  \
                       Fin`
                       /\
                      /  \
                    Fin   IP
```
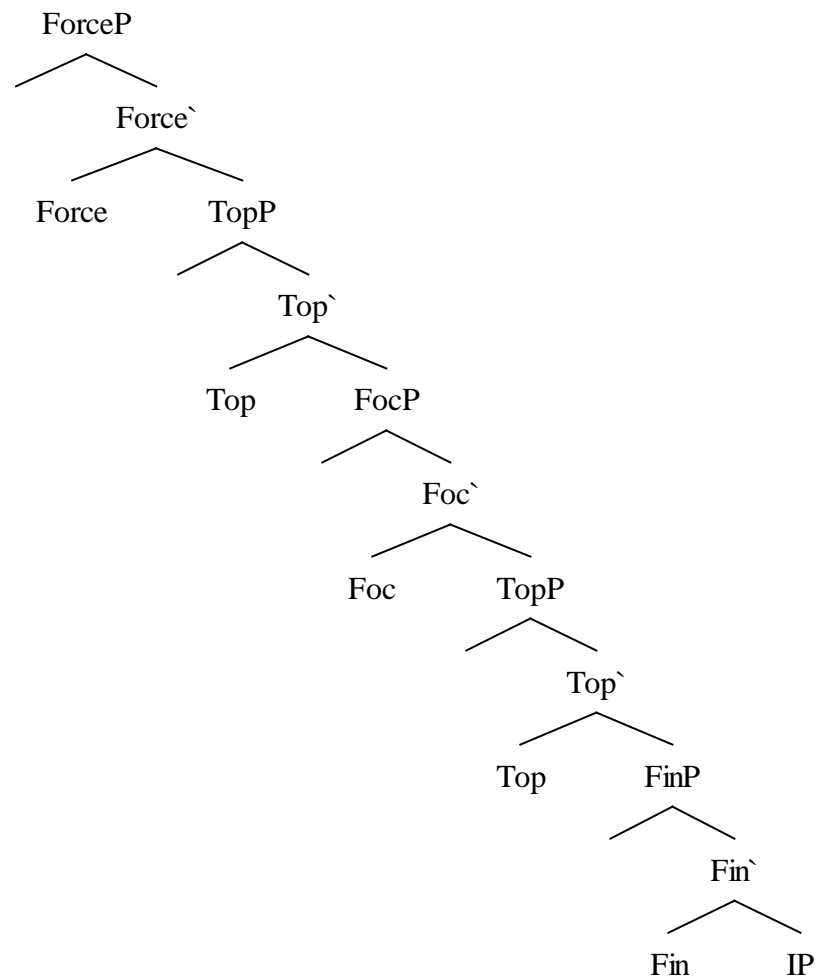
(Rizzi, 1997: 297)

In a later work[14], Rizzi (2001b) proposes an extension of the CP layer, depending on the behaviour of the Italian complementizers *se* (if) and *che* (that). Rizzi (2001b) notices that embedded yes/no questions in Italian are introduced by *se* and *che*. The two complementizers are followed by focussed phrases, as shown in the following examples taken from Rizzi (2001b: 289) (note that Rizzi does not provide gloss for his examples; this is why I left the examples in (12) and (13) without a gloss):

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[14] I introduce Rizzi`s (2001b) extended CP work because I will rely on his analysis of the base position of *Perché* "why" compared to the NA *leiſ* "why" in Chapter Six.

45

(12)

    a. Credo che QUESTO avreste dovuto dirgli (non qualcos'altro)
        'I believe that THIS you should have said to him, not something else'

    b. *Credo QUESTO che avreste dovuto dirgli (non qualcos'altro)
        'I believe THIS that you should have said to him, not something else'

(13)

    a. Mi domando se QUESTO gli volessero dire (non qualcos'altro)
        'I wonder if THIS they wanted to say to him, not something else'

    b. *Mi domando QUESTO se gli volessero dire (non qualcos'altro)
        "I wonder THIS if they wanted to say to him, not something else'

On the other hand, Rizzi shows that the two complementizers behave differently with respect to topic phrases. *se* (if) can be followed and preceded by a topic phrase, as shown in (14), whereas *che* (that) can only be followed by a topic phrase, as illustrated in (15) (examples are taken from Rizzi (2001b: 289)).

(14)

    a. Non so se, a Gianni, avrebbero potuto dirgli la verità
        'I don't know if to Gianni, they could have said the truth'

    b. Non so, a Gianni, se avrebbero potuto dirgli la verità
        'I don't know, to Gianni, if they could have said the truth'

    c. Mi domando se questi problemi, potremo mai affrontarli
        'I wonder if these problems, we will ever be able to address them'

    d. Mi domando, questi problemi, se potremo mai affrontarli
        'I wonder, these problems, if we will ever be able to address them'

(15)

    a. Credo che a Gianni, avrebbero dovuto dirgli la verità
        'I believe that to Gianni, they should have said the truth to him'

    b. *Credo, a Gianni, che avrebbero dovuto dirgli la verità
        'I believe, to Gianni, that they should have said the truth to him'

Based on these examples, Rizzi (2001b) argues that *che* 'that' occupies a position higher than *se* 'if' in the CP domain. He proposes that the former expresses Force which is higher than Focus, whereas the latter occupies a lower position which he

calls INT(errogative) as it can be preceded and followed by a topic phrase. The following representation of projections in the left periphery reflects the extended layer of the CP:

(16)

Force (Top*) Int (Top*) Foe (Top*) Fin IP

<div align="right">(Rizzi, 2001b: 289)</div>

2.2.6 Wh-movement in the Minimalist Program and Phase Theory

Chomsky (1995) assumes that syntactic operations are driven by morphological features. This means that overt/covert movement takes place in order to meet some morphological requirements. Chomsky (1995) assumes that language consists of a lexicon and computational system. According to this assumption, when lexical items enter the derivation, they are fully inflected in the lexicon. Besides, he assumes that the computational system consists of two interface levels: Logical Form (LF) and Phonological Form (PF). In order for a construction to converge, the morphological features of a lexical item must be checked off against their counterpart features on a (functional) head.

In relation to wh-movement, Chomsky (1995) assumes that the functional head C has an operator feature that is responsible for triggering the movement of wh-words. Chomsky (1995: 199) states that "the natural assumption is that C may have an operator feature and that this feature is a morphological property of such operators as [wh-]. For an appropriate C, the operators raise for feature checking to the checking domain of C: [Spec, CP]". According to this assumption, all languages have a [Q] (question) feature that is located in the functional head; C°. Under this view, languages behave differently towards the strength and weakness of the [Q] feature that is located in the functional head C°. If the operator feature is strong in a language, a wh-word is moved to the Spec, CP to check its strong feature(s) in overt syntax. Languages that have a strong [Q] feature are called English type languages, as shown by the example in (17a). On the other hand, when the [Q] feature is weak in a language, the movement of a wh-word is delayed until LF. Languages that have weak [Q] feature are called Chinese type languages, where a wh-word in an interrogative clause remains in situ in overt syntax, as shown by example (17b).

(17)

      a. What did John buy?

      b. Hufei   mai-le   shenme   (Mandarin Chinese)
             Hufei   buy-PERF   what
             'What did Hufei buy?'

                                      (Cheng, 2003a: 103)

With the introduction of Phase Theory, Chomsky (2000) modified his previous proposal which emerged from the MP. He argues that all movement operations must take place prior to Spell-Out. In this new version of derivation, Chomsky (2000: 44) states that wh-movement are derived according to the following mechanism: "the wh-phrase has an uninterpretable feature [wh-] and an interpretable feature [Q], which matches the uninterpretable probe [Q] of a complementizer". This means that the uninterpretable [Q] feature on C acts as a probe which is seeking the matching feature of an active local goal [wh-]; once the probe locates the goal, all uninterpretable features on the probe [Q] and on the goal [wh-] are checked and deleted by means of the Agree operation. Chomsky (2000) argues that the operation Agree that takes place between the probe and the goal ensures that the goal moves to the spec of the probe. In order to account for wh-movement, Chomsky (2000) proposes that the C carries an [EPP][15] feature which is responsible for triggering wh-words to the Spec, CP.

Following Rizzi's (1997) proposal, the landing site of wh-movement is Spec,FocP. Thus, when a wh-phrase is merged in the TP, there must be a Foc head merged in the left periphery. This Focus head acts as a probe that searches for the matching feature of the closest goal withing its domain. As soon as the head locates the goal which bears the matching features, everything uninterpretable on the head of Focus Phrase and on the wh-word are checked and deleted by the Agree operation. Also, it is important to point out that when agreement takes place between the probe and goal and when uninterpretable features on the probe and goal are deleted, the wh-word is not automatically moved to the Spec Focus Phrase. According to Chomsky (2001), agreement is not responsible for the dislocation of the wh-word to the left periphery. According to Chomsky`s (2001) proposal, the probe, in this case the Focus head, is endowed

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[15] Although Chomsky (2005) replaces the notion of [EPP] by Edge Feature [EF], I will use the term [EPP] feature throughout the dissertation because [EPP] / [EF] are responsible for moving a syntactic object to the specifier of the relevant head.

with an [EPP] feature. Under Chomsky's (2001) theory, wh-in situ would be the result when the Focus head probing for the wh-phrase does not have an EPP – feature, while wh-movement happens when the Focus head has an EPP-feature. Consider the the Iraqi examples in (41) in the first chapter, section 1.5.4., which is repeated here as (18).

(18)

a. Mona ʃaafat meno
Mona see.PAST.3PS.F. who
'Who did Mona see?'

b. meno Mona ʃaafat
who Mona see.PAST.3PS.F.
'Who did Mona see?' (Wahba, 1992: 253)

Having introduced the main theoretical assumptions which I will depend on to investigate the relevant observations relating to question formation in NA, let us now discuss the clause structure and the positions of the subject in NA. This exploration is important as all fronted wh-phrases must appear to the left of the subject while the verb appears immediately to the left of the subject in question, but to the right of the subject in declarative clauses.

In the next section, I will review two main proposals set primarily to examine the clause structure in MSA. I will test these proposals against NA data. I will argue essentially that Olarrea's (1995) proposal for MSA is incapable of accounting for the position of the subject in NA. This is because Olarrea's (1995) proposal for MSA depends mainly on the agreement asymmetries between VSO and SVO, an aspect that is not present in NA, where the verb agrees with its subject, irrespective of the word order used. Then, I will discuss the approach that the preverbal subject in MSA is a subject rather than a topic. I extend this approach to NA in its basic assumptions.

2.3   Clause structure and subject positions in MSA and Najdi Arabic

The position of the subject in most Arabic vernaculars has attracted a lot of attention by modern syntacticians working on Arabic clause structure. The alternation between SVO and VSO word orders is present in most Arabic dialects. Also, MSA exhibits this variation (Fehri, 1993; Benmamoun, 1992; Mohammed 1990, 2000). In order to have a closer look at the structure of the Arabic clause, I will review two proposals that examine the clause structure in MSA. The first

proposal argues that the preverbal subject is a topic that is base-generated in the left periphery, whereas the second approach argues that the preverbal subject is not a topic but a grammatical subject, occupying Spec,TP. I will test these proposals against NA data, arguing that NA data fare better within the latter approach as the preverbal subject may be indefinite and nonspecific, a matter that undermines the topicality of this preverbal subject in SVO word order. Before going into detail, I first explain the subject-verb asymmetries in MSA, which were the main trigger for proposals on the clause structure of MSA.

In MSA, the verb agrees fully in [NUMBER, GENDER, and PERSON] with the subject in SVO word order (see the examples in (19a) and (19b)), while it shows a partial agreement pattern only in [PERSON and GENDER] but not in [NUMBER] with the subject in VSO word order (see the examples in (19c) and (19d)).

(19)

     a. al-awlaad-u   ʤaaʔ-u
         DEF-boys-NOM   COME.PAST-3PL.M.
         "The boys came."

     b. *al-awlaad-u   ʤaaʔa
         DEF-boys-NOM   COME.PAST.3SG.M.
         "The boys came."

     c. ʤaaʔa   al-awlaad-u
         COME.PAST.3SG.M.   DEF-boys-NOM
         "The boys came"

     d. d*ʤaaʔ-u   al-awlaad-u
         COME.PAST-3PL.M   DEF-boys-NOM
         "The boys came"

In (19a), the verb *ʤaaʔu* ,"come", agrees in [NUMBER, GENDER, and PERSON] (i.e. ɸ-features) with the pre-verbal subject *al-awlad-u* "the boys". Ungrammaticality of (19b) is caused as the verb does not express [NUMBER] of the preverbal subject. On the other hand, when the subject appears post-verbally, as in (19c), there is a partial subject-verb agreement. The verb *ʤaaʔ-a* "come" agrees with the subject *al-awlaad-u* "the boys" only in [GENDER and PERSON], not in [NUMBER].

This interaction between word orders and the use of subject-verb agreement has attracted much attention in Arabic scholarship. In the following section, I sketch out the prominent proposals that attempted to account for this interface. I first discuss Olarrea's (1995) proposal for MSA that the preverbal subject is a topic and base-generated in its surface position. I provide evidence against the extension of this approach for the position of the subject in NA. Then, I discuss the approach that the preverbal subject in MSA is a subject rather than a topic. I show that this approach is able to account for NA data.

2.3.1   *Olarrea's (1995) proposal for MSA: The preverbal subject is a topic*

Olarrea (1995) argues that the preverbal subject is always a topic in MSA. He argues that left dislocated DPs and preverbal subjects in Arabic share certain grammatical properties (i.e. Olarrea uses several diagnostics in favour of this line of analysis. He mentions three diagnostics which I discuss here). Left dislocated NPs and the pre-verbal subject take the nominative case, as shown below (note that when the object is left dislocated (20b), the verb bears a resumptive pronoun, whereas the preverbal subject (20a) agrees fully with the verb and it does not give a resumptive pronoun to the verb).

(20)

    a.   aalim-un   ra?aa   xaalid -an
        Salim-NOM   see.PAST.3SP.M   khalid-ACC
        'Salim saw Khalid'

    b.   xaalid-un$_i$,   ra?aa-hu$_i$ saalim-un
        khalid-NOM   see.PAST.3SP.M.-him   Saalim-NOM
        'Khalid, Salim saw him'

                                    (Olarrea, 1995:154)

In (20b), *saalim-un* is a subject, whereas *xaalid-un* is a left dislocated object. Both NPs take nominative case *–un*.

Another grammatical property shared between the left dislocated NPs and the pre-verbal subject is that they should be definite and specific in MSA, as illustrated by the following example:

(21)

    a.   a-ddaar-u$_i$,   ra?aa-ha$_i$ saalim-un
        DEF-house-NOM.   see -it   salim-NOM
        'The house, Salim saw it.'

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b. a-rrajul-u   raʔaa   saalim-an
DEF-man-NOM   see.PAST.3SG.M.   salim-NOM
'The man saw Salim.'

c. *rrajul-un   raʔaa   saalim-an
man-NOM   see.PAST.3SG.M   saalim-NOM
Intended: "A man saw Salim."

(Olarrea, 1995:154)

The ungrammaticality of sentence (21c) demonstrates that when the preverbal subject is indefinite in MSA, the resulting sentence would be ungrammatical.

The third similarity between left dislocated NPs and the pre-verbal subject in MSA is that they are linked to a pronoun inside the clause. For instance, the left dislocated NPs cases in (20b) and (21a), *xaalidun* and *a-ddaar-u* "the house", respectively, are co-indexed with a resumptive pronoun on the verb, namely *hu*, 'him' and *ha* 'it', respectively. In this regard, Demirdache (1992) and Olarrea (1995) argue that the pre-verbal subject in sentences like those above is associated with a null pronominal *pro* in the subject position, as explained below (see Soltan, 2007, for a similar approach).

(22)

xaalid-un$_i$ raʔaa   *pro$_i$*   saalim-an
khalid-NOM.   see.PAST.3SP.M.   *pro*   Saalim-ACC
'Khalid saw Salim'

According to Soltan (2007), the preverbal subject is located in Spec, TP whereas the left-dislocated element (the object) is located in the CP domain, specifically in Spec, Topic Phrase. Soltan argues that there is no A-movement in Arabic Syntax, so the thematic preverbal subject should end its surface position by base-generation, not movement. Soltan postulates a little pro in Spec, vP, so the thematic subject is base-generated directly in Spec, TP.[16]

According to these similarities between the pre-verbal subject and clitic left dislocated NPs, Olarrea (1995) suggests that the pre-verbal subject and topicalized NPs are base-generated in the left periphery. This implies that the preverbal subject is generated directly in Spec, Agr-SP, and it is linked with a *pro* in the

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[16] Note in passing that there is no resumptive pronoun used in conjunction with the preverbal subject, as resumptive clitics are only restricted to elements that receive accusative or genitive case in Arabic (Mohammad, 2000) (but also see Platzack (2004) who argues that the rich agreement of the subject on the verb works as a resumptive pronoun when the subject is left-dislocated).

Spec VP. The pre-verbal subject is assigned here Nominative case by default (see Ouhalla, 1994b). Under this approach, *pro* moves to Spec TP in order to check its case feature, as illustrated below.

(23)
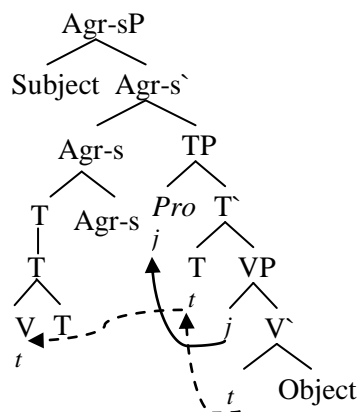
For the observation that the preverbal subject should be definite and specific, Olarrea (1995) argues that this follows from the *pro* being specific and definite by definition. According to Olarrea, (24a) is ungrammatical because the pre-verbal indefinite subject *rajul-un* 'men' does not match with that of the *pro* in specificity and features. *rajul-un* is indefinite and the *pro* being a pronoun is specific (Olarrea, 1995) (see the discussion below about the connection between this analysis and word order asymmetries). However, the subject pronoun *hum* 'they' and definite pre-verbal subject *al-rajul-un* 'the men' in (24b) and (24c) agree in [GENDER, PERSON] and specificity with the null pronominal *pro*.

(24)

    a. *rajul-un   jaaʔ-uu
         men-NOM.   come.PAST-3PL.M.
         'Men came'

    b. hum   jaaʔ-uu
         they.NOM   come.PAST-3PL.M.
         'Men came'

<ol type="c" start="3">

al-rajul-u jaaʔ-uu
DEF-men-NOM come.PAST-3PL.M.
'The men came'

Following Demirdache (1992), Olarrea (1995) argues that number agreement takes place when the subject is null or when it is base-generated in Spec Agr-SP. According to this proposal, there is a *pro* in Spec VP. Olarrea (1995: 162) argues that number agreement is reflected (i.e. morphologically realized) on the verb only when it c-commands a null pronominal, like pro in Spec,vP. When the thematic subject is a lexical NP, number affixation is displayed on the post-verbal subject, and there is no need for its realization on the verb. Note also that in SVO order, a *pro* is generated in Spec VP, moving to Spec TP to get Case assignment. According to Olarrea (1995), the base-generated NP in the Spec Agr-SP takes its nominative case by default.

As for VSO in MSA, Olarrea (1995) argues that this word order is derived through movement of the tensed verb to AgrS located above TP. Movement of the tensed verb to AgrS is accompanied by movement of the subject (base-generated in Spec, VP) to Spec,TP, motivated by case checking purposes, as shown below (Olarrea, 1995: 163).

(25)
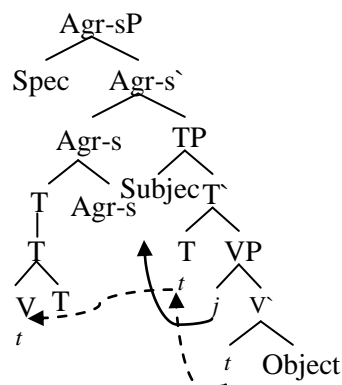
Within this analysis, Case assignment is checked by raising the lexical subject to Spec TP in VSO.

2.3.2 Against Olarrea`s (1995) Approach

The question to be asked here is whether Olarrea`s (1995) analysis of word order facts in MSA is good to account for agreement patterns and word order in NA.[17] I argue that Olarrea`s (1995) analysis of word order facts in MSA is not able to account for NA data. This is because when Olarrea`s (1995) proposal is extended to NA, a number of issues remain unsolved. First, according to Olarrea's (1995) assumption, there is a *pro* in the Spec TP, co-indexed with a pre-verbal subject. Adopting this approach, preverbal pronouns in NA will associate with a null *pro* in Spec TP, as shown below:

(26)   [Agr-sP ham [Agr-sP [Agr-s ʤa-u] [TP *pro* T [vP *ti* [v' tv]]]]]

If this analysis is true for NA, which is a pro drop language, it follows that the *pro* in Spec TP can be pronounced under emphasis, contrary to fact, as shown below (note that this problem holds also for MSA which is a pro-drop language):

(27)

*ham	ʤa-u	ham
they	come.PAST.3PL.M.	they
Intended: 'They came.'		

Furthermore, NA is different from MSA in that the pre-verbal subject need not be specific and definite as in (28a). Consider the following examples where the preverbal subject is indefinite and the sentence remains grammatical:

(28)

a.
rajjalin	j:anʃid	ʕna-k
man	ask.PRES.3SG.M.	about-you
'A man asks about you.'		

b.
*rajulin	j:sʔal	ʕna-ka
man	ask.PRES.3SG.M.	about-you
Intended: 'A man asks about you.'		

Indefiniteness of the pre-verbal subject *rajjalin* "a man" poses a problem for the extension of Olarrea's (1995) proposal to NA, simply because it is not predicted. Additionally, the mechanism of subject-verb agreement, under Olarrea's (1995) proposal, does not fit NA. This is because the verb in NA agrees fully with the

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[17] I will not discuss whether Olarrea`s (1995) analysis of word order facts in MSA is adequate for MSA because this will take us too far afield and because the purpose of my discussion here is to examine whether Olarrea`s (1995) analysis of word order facts in MSA extends to NA facts or not.

preverbal subject and postverbal subject (see the following example in (29)). Note that Olarrea depends on the asymmetries of subject-verb agreement in MSA to derive his analysis. Allocating different mechanisms to account for the subject-verb agreement pattern in NA is less theoretically motivated, as there is only one pattern, i.e. the verb always agrees with its subject.

(29)

    a. lʕaba-uu   al-ʕj:al   ku:rah
       play.PAST-3PL.M.   DEF-guy   football
       'The guys played football.'

    b. al-ʕj:al   lʕaba-uu   ku:rah
       DEF-guy   play.PAST-3PL.M.   football
       'The guys played football.'

The full match in ɸ-features between the verb and the post-verbal subject in NA (and other Arabic dialects) poses a serious difficulty for the extension of Olarrea's (1995) proposal to subject-verb agreement in NA.

In the next section, I explore the proposal that the preverbal subject is a subject rather than a topic (cf. Fehri, 1993, 2012; Mohammad, 1990, 2000; Benmamoun, 1992, 2000). I introduce the main tenets of this proposal and show that it is suitable to account for NA data. Note here that this approach does not depend crucially on the asymmetries of subject-verb agreement as a basis of its argumentation.

2.4 The preverbal subject occupies Spec,TP

Fehri (1993, 2012), Mohammad (1990, 2000) and Benmamoun (1992, 2000) adopt the Internal Subject Hypothesis by Koopman and Sportiche (1991) as a basic structure for all matrix clauses in MSA. Here the subject's base position is in the Spec,VP, where it is assigned its thematic role. Within this proposal, the main verb head-moves to adjoin to T° while the subject remains in situ in the VSO clause, as shown in (30). Here the [EPP][18] feature on T° is weak, so the subject does not move to Spec,TP in the overt syntax.

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[18] Chomsky (2000) argues that [EPP] is available on T. He argues that this feature is satisfied by moving the subject to the Spec, TP.

(30)

```
                TP
               /\
            Spec  T`
                 /\
                I   VP
               /\   /\
             Vi  I Subject V`
                         /\
                        Vi  Object
```
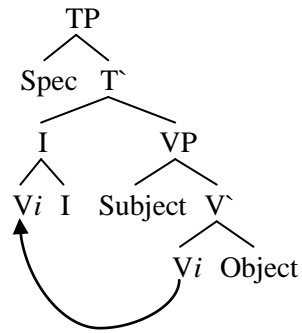
In order to derive the SVO order, the subject moves to Spec TP as in (31), derived by the [EPP] feature on T°. For these authors, the VSO is the base for SVO, not vice versa.

(31)

```
                TP
               /\
          Subject T`
             j   /\
                I   VP
               /\   /\
             Vi  I  j  V`
                         /\
                        Vi  Object
```
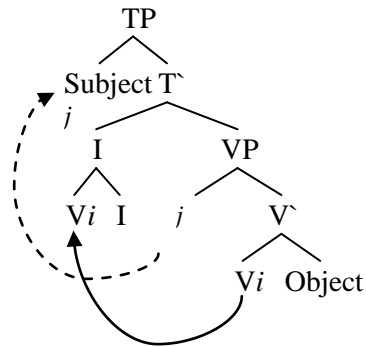
As for the subject-verb asymmetries, there are two hypotheses advanced to justify such asymmetries. According to Benmamoun (1992), these asymmetries are present because the subject-verb agreement is assigned within different mechanisms in each word order. Subject-verb agreement is obtained either by government or by the Spec-head relation. Benmamoun (1992) explains that there are two kinds of agreement in MSA. These include [NUMBER] and [GENDER] agreement. [GENDER] agreement takes place through government or through a Spec-head relation. This assumption is based on the fact that MSA permits [GENDER] agreement in both word orders SVO/VSO. As for [NUMBER] agreement, Benmamoun (1992) argues that it is obtained only through the Spec-head relation, since MSA displays full subject-verb agreement when the subject is in a Spec-head relation with the verb. Additionally, Benmamoun (1992) assumes that the subject in SVO construction receives case when it is in a Spec-head relation with the verb that adjoins to T°. In VSO, case assignment is obtained through government.

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Mohammad (1990) and Ouhalla (1994b) claim that subject-verb agreement in MSA takes place in a Spec-head relation. In order to justify [GENDER] agreement in VSO construction, these two authors propose that there is a null expletive *pro* in the Spec, TP in VSO. The verb in VSO is in a Spec-head configuration with the null expletive *pro* in the Spec TP. Within this proposal, the null expletive *pro* carries [GENDER] feature only and is co-referenced with the thematic subject in Spec VP. For Mohammad (1990: 110), occurrence of *pro* in the VSO word order is pronounced "when it is embedded under the complementizer *ʔinna*.", as shown in (32).[19] This piece of evidence supports the assumption that *pro*, in MSA, exists in VSO, and it is co-referenced with its thematic post-verbal subject. Consider the following examples taken from Mohammad (1990: 110):

(32)

    a. iddaʕa   ʔaħmad-u   ʔanna-hu
         claim.PAST.3SG.M   Ahmed-NOM   that-it

         jaaʔa   ar-rijaal-u
         come.PAST.3SG.M   DEF-men-NOM
         'Ahmed claimed that the men came.'

    b. *iddaʕa   ʔaħmad-u   ʔanna-*pro*
         claim.PAST.3SG.M.   Ahmed-NOM   that-*pro*
         jaaʔa   ar-rijaal-u
         come.PAST.3SG.M.   DEF-men-NOM
         'Ahmed claimed that the men came.'

Furthermore, within this approach case is also obtained by a Spec-head relation. In a SVO construction, the movement of the subject to Spec. TP is motivated by a syntactic requirement to obey the [EPP]. In this regard, Sportiche and Koopman (1991) argue that when there is movement of the subject to the Spec, TP, the subject enters into a Spec-head agreement relationship with T°, something that leads the latter to assign nominative case to the subject. In a VSO construction, [Case] is assigned to the base-generated *pro* in Spec, TP, and it is transmitted to the thematic subject in the Spec,VP (see Koopman and Sportiche, 1991, and Ouhalla, 1994b).

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[19] Notice that under Mohammad's approach, *pro* in Arabic should be realized when it is assigned Accusative Case, as *-uh*.

An important point to mention here is that this approach entails that the preverbal subject is a true subject located in Spec, TP, an assumption that is supported by NA facts. The assumption that the preverbal subject occupies Spec,TP is supported by the fact that the preverbal subject appears to the left of the past tense copula *kaan* (if any) which adjoins to T in Arabic grammar (see, for example, Fehri, 1993, and Benmamoun, 2000). As I have shown above, the preverbal subject in NA does not need to be a definite and specific entity to introduce the clause. An indefinite subject is fine in this variety, something that points to the fact that the preverbal subject does not have to express a certain informational value. Consider the following example:

(33)

        rajjalin   j:anʃid   ʕna-k
        man   ask.PRES.3SG.M.   about-you
        'A man asks about you.'

In the following two sections, I assume this approach and provide a syntactic account of the derivations of SVO and VSO word orders in NA in more detail. Essentially, I will argue that the subject in the SVO word order in NA is a true grammatical subject, located in Spec, TP, rather than being a topic located in some position in the articulated CP.

2.4.1 *The derivation of SVO in NA*

Following Ouhalla (1991, 1997), Shlonsky (1997), and Alshamari (2017), I assume that NA has SVO word order as its unmarked word order. The reason behind this assumption is due to the fact that this word order is used in contexts with no discourse effects, as in out of blue contexts (i.e. contexts that have no previous discourse). I assume that the subject is base-generated in Spec *v*P, following Koopman and Sportiche (1991), and then it raises to Spec, TP for [EPP] reasons. Consider the following sentence:

(34)

        al-ʕj:al   lʕaba-uu   ku:rah
        DEF-boys   play.PAST-3PL.M.   football
        "The boys played football."

Sentence (34) is derived as follows: The lexical item *ku:rah* "football" merges with a null determiner to form the DP *ku:rah* "football" which serves as the object of the sentence and which has a [+N] feature and unvalued ACC case feature.

(35)

```
          DP
         /  \
        D    NP
             |
           ku:rah
```
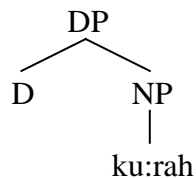
Then, the verb *lʕaba-uu* "played" merges with the object *ku:rah* "football" to form the VP *lʕaba-uu ku:rah* "played football":

(36)

```
            VP
          /    \
         V      DP
         |     /  \
     lʕaba-uu  D    NP
                    |
                  ku:rah
```
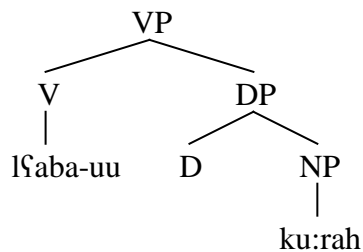
Next the VP merges with the head of the light verb v^o to form v`. At this level of derivation, v^o agrees with the object in a probe-goal fashion (cf. Chomsky, 2000, 2001). The verb *lʕaba-uu* "played" acts as a Probe and the object *ku:rah* "football" is a goal, given it is located within the c-command domain of the verb. This results in valuing the unvalued Case on the object as ACC, and the object is assigned a [THEME] theta role. Afterwards, v` merges with the subject *alʕj:al* 'the boys' which is itself formed by merging the definite article *al* "the" with the bare noun *ʕj:al* "boys". The subject enters the derivation with interpretable Φ-features specified as [3, PL, DEF and MASC]. The result of this Merge operation is vP. The verb assigns an [AGENT] theta role to the subject, *ʕj:al* 'boys'.

(37)

```
                        vP
                   ┌────┴────┐
                  DP         v`
                 ╱  ╲     ┌───┴───┐
               al  ʕj:al  lʕaba-uu+v  VP
                         ┌──────┴──────┐
                       l̶ʕ̶a̶b̶a̶-̶u̶u̶      DP
                                  ┌────┴────┐
                                  D        NP
                                          △
                                        ku:rah
```
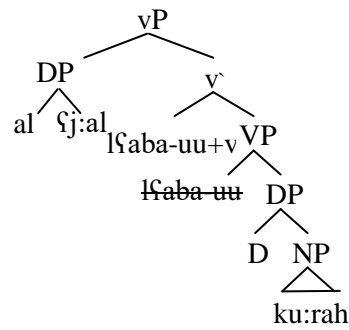
Next, *v*P merges with T°. T° here agrees now with the subject whose Case is still unvalued. T° values the Case of the subject as NOM, whereas the subject values T°'s uninterpretable Φ-features.[20] Given the EPP feature on T°, the subject moves in the overt syntax to Spec, TP, for the strong [EPP], forming TP. Additionally, because of the rich morphology the verb has in Arabic, the verb moves to T° (see Holmberg and Roberts, 2013).

(38)

```
                          TP
                      ┌────┴────┐
                    alʕj:      T`
                          ┌─────┴─────┐
                          T           vP
                    lʕaba-uu+v+Past  ┌─┴───┐
                                         v`
                                   ┌─────┴─────┐
                                   v            V
                             ʕ̶a̶b̶a̶-̶u̶u̶+̶v̶    ┌─────┴─────┐
                                        V           DP
                                   l̶ʕ̶a̶b̶a̶-̶u̶u̶   ┌────┴────┐
                                               D        NP
                                                        △
                                                      ku:rah
```
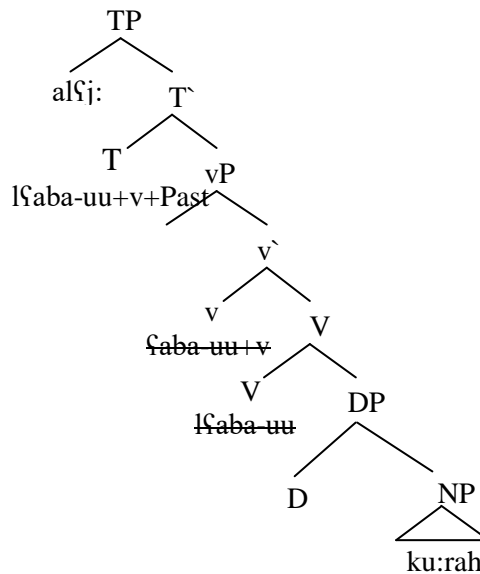
Afterwards, TP merges with C° to form CP. According to Phase Theory, *v*P has a thematic external argument, *alʕj:al* 'the boys' and it is considered a phase by itself. The complement of v*P is transferred to LF and PF once the head of the higher phase enters the derivation. When all features are checked, they are

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[20] T° agrees with the subject DP *alʕj:al* 'the boys', as the latter is c-commanded by T°, has unvalued Case, has corresponding interpretable features, and is the closest DP to T°.

deleted. Also, lower copies are deleted too and the CP is transferred to PF and LF. Consider the following schematic representation:

(39)

```
                        CP
                       /\
                  Spec    C`
                         /  \
                        C    TP
                      [[ɸ]   /\
                     [Tense] alʕj:al  T`
                      [EPP]         /  \
                                  T      vP
                                [uɸ]    /\
                                PAST] alʕj:al  v`
                                [EPP]   [ɸ]   /  \
                               lʕaba-uu [uCase]   VP
                                              /  \
                                  lʕaba-uu  Spec   V`
                                  [ɸ Feature] lʕaba-  /  \
                                  [uT]              ku:rah
                                                    [iN]
                                                    [uACC]
```
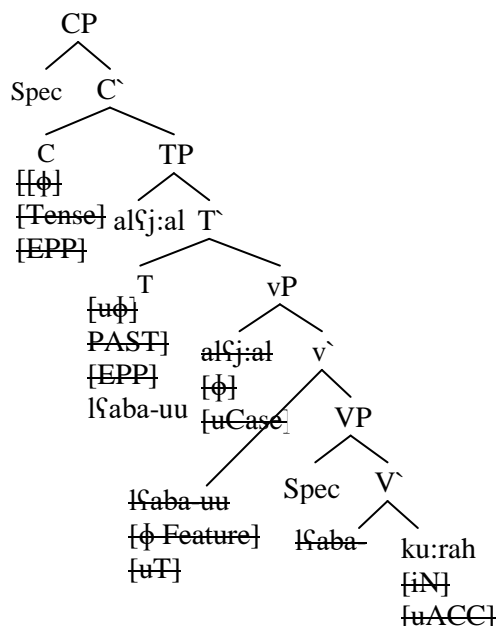
This discussion reveals the subject in the SVO word order in NA is a true grammatical subject, located in Spec, TP, rather than being a topic located in some position in the articulated CP.[21]

In the following section, I investigate the derivation of the marked VSO word order in NA. I will argue that the verb in this word order moves to adjoin to the head of the CP that is a separate layer within Rizzi's CP system. The thematic subject is located in Spec, TP. I also bring evidence that the verb in the VSO clause does not occupy the head of the Force Phrase, which can be filled with an overt complementizer in embedded contexts.

2.4.2   The derivation of VSO in NA

The previous section shows that SVO word order is derived through raising the verb to T° and raising the thematic subject to Spec, TP. On the other hand, the

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[21] This does not imply that the subject cannot be a topic. However, under these circumstances (the subject is a topic), the subject should be followed by a pronoun that is co-indexed with the subject. See the following:

     i.   al-ʕj:al   hum   lʕaba-uu   ku:rah

          DEF-guy.   they   play.PAST-3PL.M   football

       "The guys, they played football."

I leave open the question why a pronoun must be used when the subject is topicalized.

VSO word order can be used in NA when the speaker neutrally introduces an even with its involved participants (Soltan, 2011). I propose that this word order is used in NA to reflect the so-called thetic perception which focuses on eventuality of the clause (i.e. the focus is on the event of the clause which does not revolve around a specific category, as is the case when the sentence starts with the topic about which the rest of the clause predicates about. For instance, in a VSO clause, the speaker reports an event rather than predicates about a specific element). This specific use implies that discourse context determines the use of the word order. As I have shown above, when discourse is neutral, the SVO word order is used. On the other hand, when a Najdi speaker wants to draw a listener's attention to the event of the sentence, he/she prefers the VSO order to the SVO order, as shown in (40), which is spoken, e.g. when the speaker answers the question *what was happening*? To do this, a NA speaker says the sentence with contrastive stress on the verb in the VSO clause. Additionally, Ingham (2010) states another use of VSO word order in NA. Najdi speakers treat the whole sentence that begins with a verb as new information when none of its arguments have already been mentioned in a preceding discourse. This points to the fact that this word order is used as a thetic perception which focuses on the event of the clause, rather than predicating about a specific element in the clause. The structure in (40) below indicates that there is an event which is *liʕb*, playing, and *al-ʕj:al*, the boys, participating in this event as an agent, whereas *ku:rah*, football, is involved as being the [THEME]. If the arguments *al-ʕj:al* "the boys" and *ku:rah* "football" have already been mentioned in a preceding discourse, the intention of a Najdi speaker is to introduce the whole structure as new information into the discourse by having the verb *lʕaba-uu* "played" starting the clause. Note the subject in such cases can be dropped, given it is discourse-given; therefore I put it between two paranethesis in the example below.

(40)

lʕaba-uu	(al-ʕj:al)	ku:rah
play.PAST.3PL.M	DEF-boy	football

'The boys played football.'

As for the syntactic derivation of the VSO word order, I follow here Aoun *et al.* (1994) with the assumption that this word order is syntactically derived through a

further movement of the verb out of the TP to a higher position in the left periphery. For Aoun *et al.* (1994), the subject in a VSO clause is located in Spec, TP; hence the verb should be in a higher position which is the head of a functional phrase, above TP. They call this position F, as shown below (Aoun *et al.* 1994: 199).

(41)
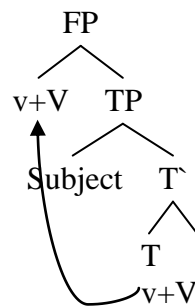
I assume that the landing site of the moved verb in the VSO word order is the head position of the CP situated in the left periphery in the sense of Rizzi (1997). This assumption has already been defended by a number of researchers in Arabic. For instance, Abd El-Moneim (1989), as cited in Bolotin (1995), argues the verb in Arabic adjoins to T°, and then the complex V+I raises to C°. Fehri (1993) proposes also that the VSO word order in MSA shares the so-called verb second languages in that the verb moves to the left periphery. Note here that I assume that the verb in the VSO word order moves to adjoin to the head of the CP. This is supported by the fact that the VSO word order is still used in embedded contexts where C^0 is filled by the overt complementizer. It is generally accepted that embedded clauses in Arabic are introduced by an overt complementizer which occupies the head of CP. This implies that the verb in the VSO word order targets a lower position than the head of the CP (recall that the subject is situated in Spec, TP). For instance, when the main clause is embedded, the verb *kitab* "wrote" may remain in its position following the subject "Sami", as shown in (42a), generating the SVO word order, or preceding the subject giving rise to the VSO word order (42b).

(42)

    a. Ali   qal   inn-uh   sami
       Ali   say   that-him   Sami

       kitab   al-wajib
       write.PAST.3SG.M.   DEF- homework
       'Ali said that Sami wrote the homework.'

    b. Ali qal   inn-uh   kitab
       Ali   say.PAST.3SG.M.   that-him   write.PAST.3SG.M

       sami   al-wajib
       Sami   DEF- homework
       'Ali said that Sami wrote the homework.'

I assume here that sentences in (42) provide us with empirical evidence for the viability of Rizzi's split CP system, as long as the subject is analysed to be located in Spec, TP (hence the verb should occupy a higher position). The complementizer that introduces the embedded clause occupies the CP that types the sentence (cf. Aoun *et al.*, 2010). The fronted verb occupies the head of the CP, hence the observation that a fronted verb can occur with (preceded by) an overt complementizer. My assumption that the verb in a VSO clause adjoins to the head of CP is motivated by the observation that the verb is said with contrastive stress which is a property of elements that move to the left periphery (see Ouhalla, 1997).

Having shown the derivation of the marked word order VSO in NA, let us now discuss the derivation of another word order, namely VOS that is frequently used in NA (but to a lesser extent than the unmarked word order SVO and the marked word order VSO). I have argued that this word order is derived through the movement of the object to Spec, Topic Phrase, while the verb adjoins to the head of the Focus Phrase under head movement. The subject is located in Spec, TP.

2.4.3   The derivation of the VOS word order in NA

This discussion provides us with a clue to the derivation of the marked word order VOS in NA. I assume that this word order is derived through the movement of the object to a higher position that c-commands the subject but is c-commanded by the verb. The occurrence of the object between the verb and the subject results in VOS order which is widely accepted in Najdi Arabic, as shown in (43).

(43)

a. legaa   *al-meftaħ*   xalid
    find.PAST.3PS.M   DEF-key   Khalid
    'Khalid found the key.'

b. xaðaa   *al-kas*   a-nnasir
    take. PAST.3PS.M.   DEF-cup   DEF-Nassir.
    'The Nassir club won the cup.'

I argue that the pre-subject object in such situations is a topicalized element that is located in the Spec position of the Topic Phrase below the Focus Phrase within Rizzi's (1997) CP system, while the verb adjoins to the head of the Focus Phrase. This implies that the subject is located in Spec, TP. The movement of the object in such situations is driven by its informational value. Evidence for the higher position of the object relative to the subject comes from sentences with the past tense copula *kaan* "was", which is assumed to occupy T°. The use of *kaan* "was" makes the lexical verb adjoin to $v°$ (Fehri, 2012) and the surface not inflected for tense which indicates the lack of V-to-T movement (Fehri, 2012). Consider the following example:

(44)

Sami   kaan   yiktub   al-wajib
Sami   was   PRES.3.M.write.SG.   DEF-homework
 'Sami was writing homework.'

In the VOS sentences, the copula past tense *kaan* "was" appears at the beginning of the relevant sentence, followed by the object which is then followed by the subject and the lexical verb.[22] Note the object leaves a resumptive pronoun on the verb; in Arabic grammar the object is paired with a resumptive pronoun on the verb if the object appears to the left of the verb and expresses old, given information (Ouhalla, 1997; Fehri, 2012).

(45)

kaan   al-wajib   Sami   yiktub-uh
was   DEF-homework   Sami   PRES.3.M.write.SG-it
 'It was the homework that Sami was writing.'

---

[22] The past tense copula *kaan* "was" can appear at the beginning of a VSO clause, but here the subject should express old, given information.

I argue that the occurrence of *kaan* "was" at the beginning of the sentence is indicative of its movement to the Focus Phrase. Note that the fronted object is a topic situated in the lower topic position (see Alshamari, 2017, for detailed discussion in this respect).[23] Further evidence for this derivation of VOS sentences comes from the fact that the object must be definite, otherwise the resulting sentence would be ungrammatical. Consider the following ill-formed sentence:

(46)

*kaan	wajibin	Sami	yiktub-uh
was	homework	Sami	PRES.3.M.write.SG -it

Intended: 'It was homework that Sami was writing (it).'

One way to render the sentence in (46) grammatical is to switch the order between *kaan* and the direct object and delete the resumptive pronoun on the verb, as follows:

(47)

wajibin	kaan	Sami	yiktub
homework	was	Sami	PRES.3.M.write.SG

'It was homework that Sami was writing .'

I claim that sentence (47) is grammatical because the fronted object is focused, located in Spec, Focus Phrase which is lexicalized here by the past tense copula *kaan* "was". Several Arabic researchers argue that focused elements are not paired with resumptive pronouns on the verb (Ouhalla, 1997). Following this line of analysis, it can be proposed that the sentence in (46) is ungrammatical because the focalized object is not located in an appropriate positon that is consistent with its informational value, namely Spec, Focus Phrase. All in all, the derivation of VOS provides us with tangible clues on how rich the left periphery of NA is (see Alshamari (2017) for discussion along these lines).

In this section, I have briefly discussed the derivation of the marked word order VOS in NA. I have argued that this word order is derived through the movement of the object to Spec, Topic Phrase that is a separate layer within the CP's system.

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[23] See Alshamari (2016) on the interpretive differences between the lower topics and the higher topics in NA. Alshamari argues that lower topics express familiar information, whereas higher topics may express contrastive information which is already established in the discourse or information about the whole sentence and accompanying discourse.

The verb adjoins to the head of the Focus Phrase under head movement, while the subject is located in Spec, TP.

2.5   Conclusion

In this chapter, I have introduced the main theoretical assumptions of the MP which I depend on in my analysis to the questions with multiple wh-phrases in NA. These assumptions include Move and Agree operations and derivation by phase. I have sketched out Rizzi's (1997) split CP system and Phase Theory. Additionally, I have presented the wh-movement in MP and Phase Theory. Also, I have discussed that wh-words in NA are moved to the Spec, Focus Phrase when a topicalized phrase is projected. Furthermore, I have introduced the basic facts regarding the clause structure and the subject positions in NA. I have discussed several works that attempted to investigate the clause structure of Arabic and test them against NA facts. The main finding that I reached here is that the subject in NA must move to Spec, TP, an assumption that is well-backed by empirical evidence, including the use of indefinite subjects in the SVO word order. As for the VSO, I have accumulated evidence that this word order is derived through movement of the verb to the head of CP in the left periphery. I have also investigated the derivation of VOS word order, assuming that it is a by-product of the movement of the thematic object to the Topic Phrase located lower than the Focus Phrase in the sense of Rizzi (1997).

CHAPTER THREE: Single wh-movement in Najdi Arabic

3.1 Introduction

My main pursuit in this chapter is to investigate the syntactic derivation of single wh-movement in NA. What I mean by single wh-movement is where only one wh-phrase moves to the left periphery in the overt syntax, as the following examples show:

(1)

    a.   min   ħadˤar al-ʕirs   ams   b-al-dirah
          who   attend marriage   yesterday   in-DEF-village
          'Who attended the marriage in the village yesterday?'

    b.   wiʃ   ħadˤar   ar-radʒaal   ams   b-al-dirah
          what   attend   DEF-man   yesterday   in-DEF-village
          'What did the man attend in the village yesterday?'

    c.   meta   ħadˤar ar-radʒaal   al-ʕirs   b-al-dirah
          when   attend DEF-man   DEF-marriage   in-DEF-village
          'When did the man attend the marriage in the village?'

    d.   wein   ħadˤar ar-radʒaal   al-ʕirs   ams
          When   attend DEF-man   DEF-marriage yesterday
          'Where did the man attend the marrigae yesterday?'

In (1a), the subject is questioned, whereas the object is questioned in (1b). (1c) and (1d) include time and place adjuncts questioned, respectively. In all examples in (1), a single wh-expression is only used and fronted to the left periphery. One clear observation the examples in (1) demonstrate is that wh-movement is possible in NA. According to the data, this Arabic variety can be classified as a wh-movement language, unlike Chinese, Japanese, and Kurdish, among others. This is because wh-expressions do not remain in their canonical syntactic positions in the overt syntax, only in some contexts with a certain pragmatic value (see Albaty, 2013).

This chapter is organized as follows. Section 3.2 investigates NA questions with subject wh-phrases. The section shows that in such questions the subject wh-phrase moves to Spec, CP (Chomsky, 1995). The subject wh-word's movement is forced by [EPP] feature on the head of CP (see Chomsky, 2007). This feature

requires Spec, CP to be filled at PF. Also, the section investigates the impossibility of inserting some element between the wh-phrase and the past tense copula *kaan* "was" and the possibility of inserting some element between *kaan* "was" and the lexical verb when there is a fronted wh-phrase. I argue that what moves to the head of CP is T°, rather than the verb. When T° is filled with the tense phrase *kaan* "was", T° moves to the head of the CP, and *kaan* "was" raises to the head of the CP. When T° is not filled with an overt tense material, the verb moves to T°, which then moves to the head of the CP. In addition, I will show in this section that wh-words are not compatible with focused phrases in NA. In section 3.3, I examine the movement of the object wh-phrase to Spec, CP in the overt syntax, which is shown to be attracted by the head of the CP. Section 3.4 explores wh-adjuncts, arguing that such elements move to the left periphery of the question, as is the case with subject/object wh-phrases in questions that include a single wh-phrase.

3.2   Subject wh-movement to the left periphery

In this section, I will investigate the main motivation for the subject wh-phrase to move to the left periphery and the syntactic conditions that govern this movement. I will begin with the question of the syntactic motivation of the subject phrase to leave its position to land in the Spec position of the CP. I also provide an account of this movement to the left periphery and of related observations such as the possible position of a fronted object between the past tense copula and the main verb in cases of subject wh-movement. I will argue that in questions with a subject wh-phrase, the subject wh-phrase moves to Spec, CP. I also show that this movement is forced by the head of the CP that has an [EPP] feature. I depend on the fact that the subject wh-phrase should precede TP-related adverbs and the materials fronted to the Topic Phrase (situated below the Focus Phrase) are evidence that the subject wh-phrase does move in the overt syntax to Spec, CP. I assume that wh-words move to Spec, CP following Chomsky`s (1995) argument that wh-words move to this position in root questions. Additionally, below I bring in some evidence based on the distribution of wh-phrases in the left periphery pointing to the assumption that wh-phrases fill Spec, CP.

I argue that the subject wh-phrase *min* "who" in (1a) is base-generated in Spec *v*P position and it has uninterpretable and interpretable features. The subject wh-word *min* "who" enters the derivation with interpretable phi [ɸ] and [Q] features. Also,

it has uninterpretable [uCase] and uninterpretable [uwh] features. If we assume that the subject wh-word moves directly from its position in Spec *v*P to the Spec CP where the uninterpretable feature [uwh] on *min* "who" is valued and deleted, therefore its uninterpretable case feature [uCase] cannot be valued and deleted.

In fact, when *v*P merges with T°, T° enters the derivation with uninterpretable phi feature [uɸ] and interpretable Tense feature [Tense]. T° acts as a probe that searches for the matcing features. It agrees with the wh-word min "who" because it is the closest DP to T° and it has matching features. As a result of this agreement, the uninterpretable feature [uɸ] on the probe, T°, and the uninterpretable [uCase] on the goal *min* "who", are valued and deleted. I argued extensively in the preceding chapter that the SVO word order in NA is derived through the movement of the subject to Spec, TP, forced by the [EPP] feature on T°. The demand of filling Spec, TP still holds in interrogative sentences. No study, to the best of my knowledge, has indicated that the demands of [EPP] are relaxed in interrogative contexts (i.e. the subject may not move to Spec, TP in questions). For instance, in English the subject moves to Spec, TP both in declarative sentences and in interrogative sentences. Consider the following examples:

(2)

a. John did not see Mary.

b. Who did John not see?

In both examples in (2) *John* appears in a preverbal and pre-negation position, irrespective of the sentence being declarative, as in (2a), or interrogative, as in (2b). The same logic extends to NA. I argue that the subject wh-phrase *min* "who" moves first to Spec, TP to satisfy the [EPP] feature on T°.

The deriviation continues by merging TP with C°. C° enters the derivation with an interpretable [wh] feature and uninterpretable [Q] feature. Also, it is endowed with an [EPP] feature which demands Spec, CP to be filled. C° probes down looking for a phrase that has matching features. It agrees with the subject wh-word *min* "who" because it is the closest DP to C° and it carries matching features on C°. When agreement takes place between C° and the the DP *min* "who", all uninterpretable features on the probe C° and on the goal *min* "who" are valued

and deleted. Next, the wh-word is left dislocated in the Spec, CP to satisfy the [EPP] feature on C°. Following this argument, the question in (1a) has the following schematic representation. (1a) is repeated below for ease of exposition.

(3)

min	ħadˤar	al-ʕirs	ams	b-al-dirah
who	attend	marriage	yesterday	in-DEF-village

'Who attended the marriage in the village yesterday?'

```
                    CP
                   /  \
               min     C`
                      /  \
                 ħadˤar   TP
                         /  \
                      min    T`
                            /  \
                       ħadˤar   AdvP
                               /   \
                            ams     vP
                                   /  \
                                min    v`
                                      /  \
                                 ħadˤar   VP
                                         /  \
                                       VP    PP
                                       |      b-al-dirah
                                       V`
                                      /  \
                                     V    DP
                                 ħadˤar   al-ʕirs
```
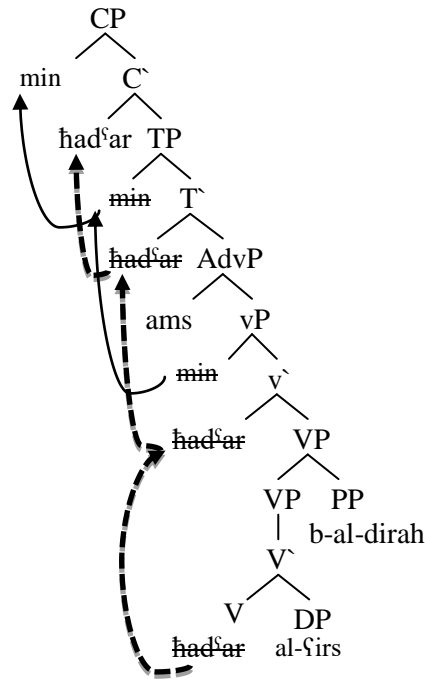
3.2.1 Verb Movement in Interrogative Clauses in NA

At this point, there is one fact which must be accounted for before addressing other related issues. As is clear from all examples in (1) above (which I repeat below for convenience in (4)), the main verb appears to the right of the wh-phrase; either the wh-phrase is the subject, object or an adjunct wh-phrase, as shown.

(4)

a.
min	ħadˤar	al-ʕirs	ams	b-al-dirah
who	attend	DEF-marriage	yesterday	in-DEF-village

'Who attended the marriage in the village yesterday?'

b.
wiʃ	ħadˤar	ar-radʒaal	ams	b-al-dirah
what	attend	DEF-man	yesterday	in-DEF-village

'What did the man attend in the village yesterday?'

c. meta ħadˤar ar-radʒaal al-ʕirs b-al-dirah
   when attend DEF-man DEF-marriage in-DEF-village
   'When did the man attend the marriage in the village?'

d. wein ħadˤar ar-radʒaal al-ʕirs ams
   When attend DEF-man DEF-marriage yesterday
   'Where did the man attend the marriage yesterday?'

If the verb does not appear directly to the right of the wh-phrase, the resulting sentences would be ungrammatical, as the ill-formed sentences in (5) demonstrate. Note also that in all of the sentences in (5), the subject intervenes between the wh-word and the verb, hence the sentence is ungrammatical.

(5)

   a. *wiʃ ar-radʒaal ħadˤar ams b-al-dirah
      what DEF-man attend yesterday in-DEF-village
      Intended: 'What did the man attend in the village yesterday?'

   b. *meta ar-radʒaal ħadˤar al-ʕirs b-al-dirah
      when DEF-man attend DEF-marriage in-DEF-village
      Intended: 'When did the man attend the marriage in the village?'

   c. *wein ar-radʒaal ħadˤar al-ʕirs ams
      when DEF-man attend DEF-marriage yesterday
      Intended: 'Where did the man attend the marriage yesterday?'

It seems that the verb moves to adjoin the head of the CP once the latter is projected. That would explain why the question becomes ungrammatical if any element appears between the wh-phrase and the verb. Consider the following examples that show that no element can intervene between the object wh-word and the verb:

(6)

   a. *min al-ʕirs ħadˤar ams b-al-dirah
      who DEF-marriage attend yesterday in-DEF-village
      Intended: 'Who attended the marriage in the village yesterday?'

   b. *min ams al-ʕirs ħadˤar b-al-dirah
      who yesterday DEF-marriage attend in-DEF-village
      Intended: 'Who attended the festival in the city yesterday?'

   c. *wiʃ ams ħadˤar ar-radʒaal b-al-dirah
      what yesterday attend DEF-man in-DEF-village
      Intended: 'What did the man attend in the village yesterday?'

d. *meta   b-al-dirah   ħadˤar   ar-radʒaal   al-ʕirs

    When   in-DEF-village attend   DEF-man   DEF-marriage

Intended: 'When did the man attend the marriage in the village?'

e. *meta   ar-radʒaal   ħadˤar al-ʕirs   b-al-dirah

    When   DEF-man   attend DEF-marriage in-DEF-village

Intended: 'When did the man attend the marriage in the village?'

In (6a) and (6b), the object *al-ʕirs* "the marriage" and *ams* "yesterday" intervene between the subject wh-phrase *min* "who" and the verb *ħadˤar* "attend", respectively, a matter that results in the ungrammaticality of the sentence. In (6c) what appears between the object wh-phrase *wiʃ* "what" and the verb *ħadˤar* "attend" is the adjunct *ams* "yesterday", a matter which leads to the ungrammaticality of the sentence as well. The sentence in (6d) includes a similar case where prepositional phrase *b-al-dirah* "in the village" appears between the adjunct wh-phrase *meta* "when" and the verb *ħadˤar* "attend", resulting in the ungrammaticality of the respective sentence. In (6e), the subject interenves between the wh-word and the verb which results in the question's ungramamticality. It appears that the wh-phrase must be adjacent to the verb, otherwise the sentence would become ill-formed.

In a related vein, there is another important observation that supports my assumption that the verb moves to the head of the CP when any wh-phrase moves to the Spec, CP. When the phrase *kaan,* "was", is used it is impossible to insert some element between the wh-phrase and *kaan*, "was", but it is possible to insert some element between *kaan,* "was"*,* and the verb. Consider the following examples:

(7)

a. min   kaan   juħdˤar   al-ʕirs   ams

    who   was   attend   DEF-mariage   yesterday

'Who was attending the marriage yesterday (when……)?'

b. wiʃ   kaan   ar-radʒaal   juħdˤar   ams

    what   was   DEF-man   attend   yesterday

'What was the man attending yesterday (when……)?'

c.* wiʃ   ar-radʒaal   kaan   juħdˤar   ams

    what   DEF-man   was   attend   yesterday

Intended: 'What was the man attending yesterday (when……)?'

d. min   kaan   ams   juħdˤar   al-ʕirs
   who   was   yesterday   attend   DEF-marriage
'Who was yesterday attending the marriage (when …….)?'

e.* min   ams   kaan   juħdˤar   al-ʕirs
    who   yesterday   was   attend   DEF-festival
  Intednded: 'Who was yesterday attending the marriage (when …….)?'

In (7a), the verb *juħdˤar,* "attend"*,* follows the past tense copula *kaan* "was". In (7b), the verb *juħdˤar,* "attend"*,* is separated from *kaan,* "was", by the subject, *ar-radʒaal*, "the man", and by the adjunct *ams*, "yesterday" in (7d). In (7c), the subject *ar-radʒaal* "the man" intervenes between the object wh-phrase *wiʃ* "what" and the verb *kaan* "was", a matter that results in the ungrammaticality of the sentence. The same observation holds for the adjunct element in (7e).

In order to account for these facts (i.e. the impossibility to insert some element between the wh-phrase and *kaan* "was" but the possibility to insert some element between *kaan* "was" and the verb when there is a fronted wh-phrase), I assume that what moves to the head of CP is the tense (T°) rather than the verb. When the tense is filled by the tense phrase *kaan* "was" (and hence the verb does not move to T°), T° moves to the head of the CP by virtue of raising *kaan,* "was", to the head of the CP. When tense is not filled by an overt tense phrase, the verb moves to T°, which in turn moves to the head of the CP (see also Benmamoun, 2000). T°-to-C° movement can be schematically represented as follows:

(8)

a.
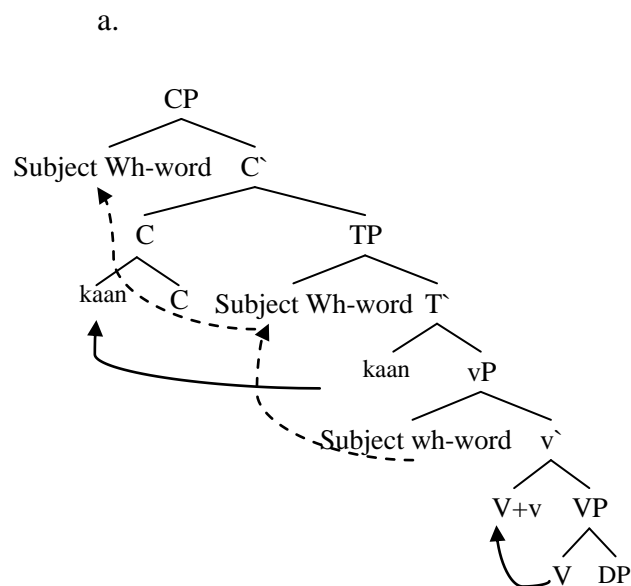
b.
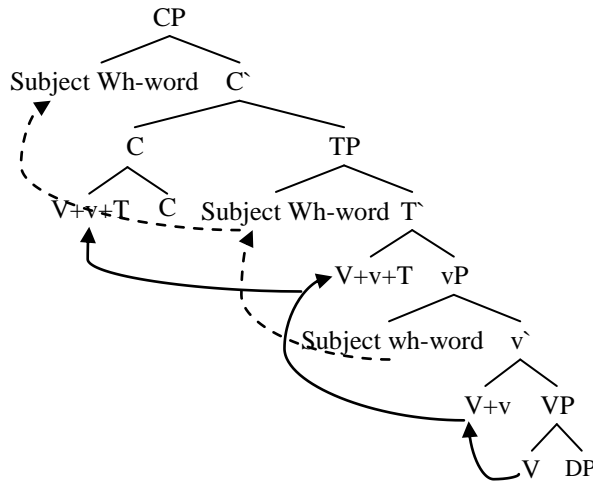
Accordingly, the movement of the lexical verb to the head of the CP is restricted to cases where T is not lexically filled by an independent element. A question that can be raised at this point (concerning the movement of the subject wh-phrase to the left periphery) is what motivates T° to move to the head of the CP. Here I assume that the head of the CP that bears a [Q] feature is affixal in nature, i.e. cannot stand alone; it needs a host. Therefore, the head of the CP attracts T° which must be filled either lexically by the phrase *kaan* "was", as in (8a), or by verb raising to it, as in (8b).[24]

Against this background, one might argue that NA is a verb second language. As we have discussed in this section, the movement of the lexical/main verb to the head of the CP is affixal in nature. A number of evidences show that NA is not a verb second language. First, recall that NA allows VSO marked order. This word order can be embedded without any change in the word order of the embedded clause, as shown in (9a) and (9b). Also, in interrogative clauses, a topicalized phrase, *Salim,* can precede the wh-word, as shown in (9c). Besides, we have seen that when the wh-word *leiʃ* "why" is involed, the subject can intervene between *leiʃ* "why" and the main verb, as shown in (9d)[25].

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[24] Note this pattern resembles, in some aspects, Shakespearian English in that the highest verbal element moves to a higher functional phrase. If there is an auxiliary it moves to this position, if not then the main verb is what moves (Radford, 1997; Blake, 2001). Additionally, NA patterns with Modern Standard Arabic where the verb should follow the wh-word, yielding what appears as V-second language (see Fehri, 1993).

[25] Chapter Six will provide analysis of the syntactic position the the wh-word *leiʃ* "why".

(9)

    a. kitab   sami   al-wajib
       write.PAST.3SG.M.   Sami   DEF- homework
       Sami wrote the homework."

    b. Ali qal   inn-uh   kitab
       Ali   say.PAST.3SG.M.   that-him   write.PAST.3SG.M

       sami   al-wajib
       Sami   DEF- homework
       "Ali said that Sami wrote the homework."

    c. Salim   wein   raħ
       Salim   where   go.PAST.3SG.M.
       Where did Salim go?"

    d. leiʃ Salim   kisar   al-koup
       why salim   break.PAST.3PS.M.   the-cup
       'Why did Salim break the cup?'

Let us now discuss the nature of the structural position that is occupied by the object or an adjunct intervening between the past tense copual *kaan "*was*"* (which, according to my analysis, should adjoin to the head of the CP while there is a fronted wh-phrase) and the lexical verb, as shown in the sentences in (7b) and (7d) above. The determination of this position is significant for my analysis of questions with a single wh-phrase because it provides us with empirical evidence for the assumption that the subject wh-phrase moves to the Spec, CP in the overt syntax rather than staying in situ. As discussed in the previous chapter, the unmarked word order in NA is SVO. Consider the following sentence:

(10)

     ar-radʒaal   ħadˤar al-ʕirs   ams   b-al-dirah
     DEF-man   attend DEF-marriage yesterday   in-DEF-village
     'The man attended the marriage in the village yesterday?'

The subject *ar-rdʒaal "*the man"* appears preverbally, while the object *al-ʕirs "*the marriage"* appears post-verbally. If the sentence in (10) is juxtaposed with sentence (1a) (repeated below as 11), which is the corresponding question when the subject is extracted, one observes that the subject wh-phrase remains, at face value, in situ, i.e. preverbally. This might indicate that there is no Spec, TP-to Spec, CP movement for the subject wh-phrase (a case known in related literature as the vacuous movement hypothesis).

(11)

	min	ħadˤar	al-ʕirs	ams	b-al-dirah
	who	attend	DEF-marriage	yesterday	in-DEF-village

'Who attended the marriage in the city yesterday?'

Despite this superficial indication that the subject wh-phrase remains in situ, I argue that the subject wh-phrase undergoes a Spec, TP-to Spec, CP movement in (11). The evidence in favour of this argument comes mainly from cases of the object topicalization and adjunct fronting (example (7d) is repeated as (12b) for ease of exposition). Under suitable contexts, the object *al-ʕirs* "the marriage" and the adjunct *ams* "yesterday" can be fronted to a position between the subject wh-phrase and the main verb, as is clear from the following sentence:[26]

(12)

a.

min	kaan	al-ʕirs	juħdˤar-uh
who	was	DEF-marriage	attend-it

ams	b-al-dirah
yesterday	in-DEF-village

'The marriage, who attended (it) in the village yesterday?'

b.

min	kaan	ams	juħdˤar	al-ʕirs
who	was	yesterday	attend	DEF-marriage

'Who was yesterday attending the marriage (when …….)?'

If we adopt Rizzi's (1997) Split CP system, the position of the fronted object in (12a) and fronted adjunct in (12b) can be readily accounted for. Following Rizzi (1997), topicalized elements may be fronted to a position lower than the Focus Phrase. I argue that this is the case in (12a) and (12b). The object *al-ʕirs* "the marriage" and the adjunct adverb *ams* "yesterday", move to Spec, Topic Phrase, located under the Focus Phrase, whose Spec is filled with the subject wh-phrase[27]. The empirical evidence for this analysis can be adduced from the fact that the object in such cases must convey old, given information, namely a topic. In other

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[26] In Arabic dialect, a resumptive pronoun of the object appears on the verb if the former gets fronted and is definite (Shlonsky, 1997; Aoun *et al.,* 2010). This presence of the pronoun is thus a diagnostic of the movement of the object in Arabic. See Shlonsky (1997) for a proposal of the derivation of such a pronoun.

[27] Recall that Top and Focus are projected when there is a topicalized / focalized phrase. Once a topiclaized phrase is projected, the landing site for the wh-word is the Spec Focus Phrase. When the probe, Focus°, agrees with the goal, *min* "who", all uninterpretable features are checked and deleted. The EPP feature on the Focus° triggers the movement of the goal to its specifier.

words, the object should be specific, otherwise the resulting sentence would be ungrammatical, as shown in the following sentence:[28]

(13)

*min	kaan	ʕirs	juħdˤar
who	was	marriage	PRES.3.M.attend.SG

ams	b-al-dirah
yesterday	in-DEF-village

Intended: 'A marriage, who attended (it) in the village yesterday?'

The ungrammaticality of sentence (13) is straightforwardly accounted for; assuming that the fronted object moves to Spec, Topic Phrase which is situated below the Focus Phrase whose Spec is filled by the subject wh-phrase. The object *ʕirs* "a marriage", being non-specific, is not licenced as a topic given its informational value. Hence its movement to Spec, Topic Phrase is disallowed. I argue that the non-specific object *ʕirs* "a marriage" can only be licensed as a focus, given its informational value expressing new information. However, the non-specific object *ʕirs* "a marriage" cannot be focalized in (13), because Spec, Focus Phrase is already occupied by the subject wh-phrase (here I follow Rizzi's (1997, 2004a) assumption that only one element can be fronted as a Focus per a clause). In conclusion, when a Topic Phrase is projected, the subject wh-phrase moves to Spec, Focus Phrase in the overt syntax, forced by the [EPP] feature on Focus°. One might wonder whether sentence (13) is a case of object shift or scrambling where the object leaves the VP but moves to some lower position (not to CP). However, this possibility is dismissed on the grounds that Arabic has no manifestations of object shift or scrambling (see Musabhien, 2009, for related discussion).

Further evidence for the high position of the fronted object (that occurs between the subject wh-phrase and the past tense copula) comes from the fact that it precedes all high adverbs (cf. Cinque, 1999). Consider the following examples:

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[28] Sentence (14) remains ill-formed even if a resumptive pronoun of the non-specific object appears on the verb.

(14)

    a.   min   kaan   al-ʕirs   basaraha   juħdˤar-uh
        who   was   DEF-marriage frankly   attend -it

        ams   b-al-dirah
        yesterday   in-DEF-city
        'The marriage, who frankly attended (it) in the village yesterday?'

    b.   *min   kaan   basaraha   al-ʕirs   juħdˤar-uh
        who   was   frankly   DEF-festival attend -it

        ams   b-al-dirah
        yesterday   in-DEF-city
        Intended: 'The marriage, who frankly attended (it) in the city yesterday?'

The difference between the sentences in (14) lies only in the position of the TP-related adverb *basaraha* "frankly" relevant to the fronted object. The ungrammaticality of sentence (14b) where *basaraha* "frankly" appears to the left of the fronted object entails that the object is situated in a high position, which I assume to be Spec, Topic Phrase.

A related issue arises when focalized phrases in NA appear initially. NA grammar does not allow focused phrases to co-occur, in their base positions, with wh-words in the left periphery. Also, a focalized phrase cannot co-occur in the left periphery with another wh-word. The reason for the incompatibility of focalized phrases with wh-words comes from the fact that the head of the CP can act only as one probe, that is endowed with [EPP], to attract either a wh-word or a focalized phrase. In other words, the head of the CP cannot act as a licensor of wh-words and focalized phrases at the same time (Simpson, 2000). Consider the following examples (focalized elements are in bold):

(15)

        a.   *Hakim   kisar   **ha-al-liʕbah**
           Hakim   break.PAST.3PS.M.   this-DEF-toy
           'Hakim broke this toy.'

        b.   **ha-al-liʕbah** (alli)   kisara-h   Hakim, fawq a-kirsi
           this-DEF-toy (that)   break   Hakim, on DEF-chair
           'The toy that Hakim broke is on the chair.'

c. *min **ha-al-liʕbah** kisara-h
who this-DEF-toy break.PAST.3PS.M.
'*Who this toy broke?'

However, in analogy with the occurrence of multiple wh-words in NA, focalized phrases are permitted to co-occur in a clause as long as only one of them moves, as shown in (16).

(16)

Hakim hu alli kisar **ha-al-liʕbah**
Hakim he that break. PAST.3PS.M. this-DEF-toy
'Hakim is the one who broke this toy.'

Having discussed the movement of the questions with a subject wh-phrase and having brought evidence to the effect that the subject wh-word undergoes movement to the left periphery in the overt syntax, let us now discuss the questions with an object wh-phrase, the topic of the next section. I will show that the object wh-phrase moves to Spec, CP in the overt syntax, attracted by the head of the CP.

3.3   Object wh-movement to the left periphery

In this section, I explore the movement of the object wh-phrase in NA. I show that the object wh-phrase should move to Spec, CP attracted by the [EPP] feature on the head of the CP.

Consider the following examples which include a question with an object wh-phrase fronted to the left periphery:

(17)

wiʃ ħadˤar ar-radʒaal b-al-dirah
what attend DEF-man in-DEF-village
'What did the man attend in the village yesterday?'

In (17), the object wh-phrase *wiʃ* "what" is moved to the left periphery. Following the main assumptions of wh-movement in Arabic varieties (Benmamoun, 2000; Shlonsky, 2002; Aoun *et al.,* 2010), it can be postulated that the object wh-phrase in (17) is base-generated as a complement of *v*P, and then it undergoes overt movement to the left periphery, filling Spec, CP. This movement is forced by the [EPP] feature of the head of the CP. Analogous to the movement of the subject

wh-phrase, the movement of the object wh-phrase to Spec, CP is said to satisfy the [EPP] feature on the head of the CP. Given that the only phrase that bears a [Q] feature in (17) is the object wh-phrase, the object wh-phrase leaves its canonical position to the left periphery. Note here that the thematic subject *ar-radʒaal* "the man" cannot fill Spec, CP since it does not have a [Q] feature within its featural bundle, hence the impossibility that the subject fills Spec, CP even if the subject is much closer to Spec, CP than the object Wh-phrase.

What might look like a problem to this line of analysis is that the object wh-phrase is part of the complement of the lower Phase (*v**P), hence, assuming Phase Theory, the head of CP would not be able to attract the object wh-phrase as the latter is not visible (this is actually a problem for all wh-movement languages). As is clear from the discussion so far, the head of the CP attracts the object wh-phrase to its Spec, given that the latter has the necessary feature to license it in Spec, CP, which is a [Q] feature. This implies that the object wh-phrase is accessible to the CP. However, if we follow Phase Theory, the object wh-phrase is not visible to the head of the CP. According to Chomsky (2000), the sentence derivation proceeds by phases. When the given phase is completed, it is sent to the PF and LF interfaces for interpretation (what is known as the Spell-Out point) (see Chomsky, 2007). Only the elements on the edge of *v*P and *v* itself are still accessible to operations outside *v*P, according to the effects of the PIC.[29] The object wh-phrase is not accessible to any further operations outside *v*P if it remains in situ; as a complement of VP. This is because the object wh-phrase is located outside the accessible domain of the head of the CP. Consider the following representation that shows the accessible domain of the head of the CP:

(18)

(Adapted from Citko, 2014: 32)

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[29] As a reminder, the Phase Impenetrability Condition (PIC) states the following:
In phase α with head H, the domain of H is not accessible to operations outside α; only H and its edge are accessible to such operations (Chomsky, 2000: 108).

CP
C`
C   TP
DP   T`
T   vP
DP   v`
v   VP
V   Object wh-word
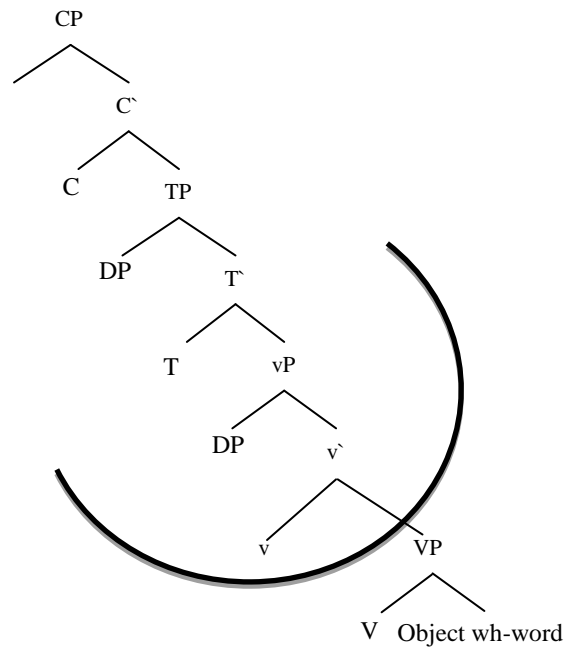
As seen in (18), the object wh-phrase is located beyond the accessible domain of the head of CP.

Assuming the PIC, the question which needs an answer here is under which mechanism the object wh-phrase moves to Spec, the CP. One possibility is that the object wh-phrase is base-generated in Spec, CP. Under this possibility, there is no need to postulate that the object wh-phrase is forced by [EPP] on C° to leave its canonical position, as a complement of vP. Additionally, under this possibility there is no violation to the PIC, given that the object wh-phrase is directly inserted in Spec, CP, as the [EPP] feature on the head of the CP is met. However, there are two problems encountering this possibility. The first problem is related to theta assignment. If we assume that the object wh-phrase is directly inserted in Spec, CP, it is not clear how the object wh-phrase gets its theta role. It is attested by several works that Spec, of the CP is an A-bar position where theta assignment does not take place (see Rizzi, 2004a). Additionally, the notion that there is no theta role assigned to the fronted object wh-phrase is problematic with respect to case assignment. The inserted object wh-phrase is now devoid of case; so it is not visible to LF operations, and no semantic interpretation can be affiliated with it.[30]. In order to account for the accessibility of the object wh-phrase to the head of the CP, I will follow Chomsky (2000, 2005). Chomsky proposes that the complement

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[30] I follow here Aoun's (1979) insights on the so-called Visibility Condition at LF. This condition states that (argumental) NPs require Case so that they can be visible for θ-role assignment at LF.

of the phase head, in this case the complement of the *v**P phase, is transferable to the edge of the phase head if it is still active for further syntactic operations. Following this proposal, I argue that the head of the *v**P, which is endowed with [EPP] feature, triggers the movement of the wh-word to the outer specifier of *v**P[31]. According to Chomsky (2000), the reason for moving the object wh-word, in this case *wiʃ* "what", from its base position to the outer specifier of the *v**P is to obtain an escape hatch for the feature-bundles of the complement. This way will allow the object wh-word in NA to move cyclically from its base-position to the left periphery. At this stage, *v**P is a phase and its complement VP will be sent to LF and PF. The null copies of the moved elements will receive null spell-out. The derivation proceeds by merging the *v**P with T to form TP. Now T° acts as a probe that searches for a goal to agree with and to assign its case to. In the domain of T°, there are two possible goals for the probe; the DP *wiʃ* "what" and the DP *ar-radʒaal* "the man". However, the wh-word *wiʃ* "what" intervenes between the T and the DP *ar-radʒaal* "the man". According to Chomsky (2000), once the case of a goal has been valued and deleted, it will not be available for further agreement relationship with another probe. Recall that the case of the wh-word *wiʃ* "what" has been valued and deleted by the head of the *v**P. This means that the moved complement of the *v**P will not be a target for the probe T°. In order to resolve this problematic issue, I will follow Boeckx`s (2007) assumption. Boeckx (2007) assumes that when a DP, such as *wiʃ* "what", has already received its case by its case assignor, it will be transparent. In other words, the outer specifier of the *v*P, *wiʃ* "what" will not block the agreement relationship between the T and the subject in the inner specifier of the *v*P. Then, T will agree with the subject DP *ar-radʒaal* "the man" and value its case as NOM, whereas the subject values the Φ features on T°. The feature [EPP] on the T° triggers the movement of the subject to the Spec TP which results in forming TP. Simultaneously, T° is affixal in nature and it has an [EPP] feature that triggers the movement of the complex V+v to check the tense feature. Derivation proceeds by merging TP with a null interrogative C° which has the [EPP] feature. C° has uninterpretable [Q] and interpretable [wh] features. Now, C° acts as a probe and searches in its c-commanding domain for the matching element. The only element that bears interpretable [Q] and uninterpretable [wh] features is the object wh-word *wiʃ*

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[31] According to Chomsky (2000, 2005), the head of the CP and *v**P have an [EPP] feature that is responsible for triggering wh-questions.

"what" which is located in the outer specifier of the *v*P. The uninterpretable features on the probe and goal are valued and deleted via an agreement operation. C° is endowed with the [EPP] feature that requires its Spec to be filled out. It triggers the movement of the objevt wh-word *wiʃ* "what" to its specifier. As mentioned in the previous section, the head of the CP is affixal in nature and it attracts the complex V+v to its head. At this level of derivation, CP is a phase and its complement TP is sent to PF and LF. After that, the head of the CP phase and its specifier are sent simultaneously to PF and LF where the clause is interpreted as interrogative. Consider the following schematic representation for the object wh-word movement in (19):

(19)
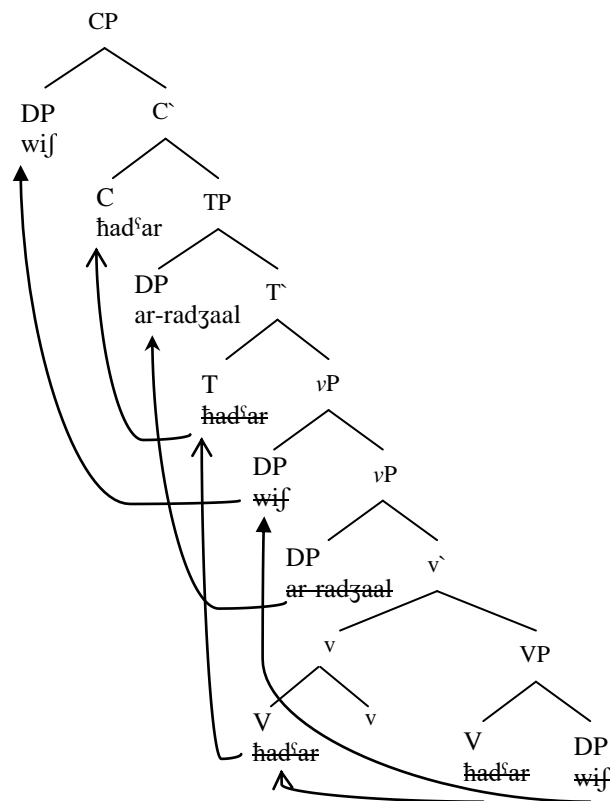
To wrap up this section, I have shown that the object wh-phrase moves to Spec, CP in the overt syntax, attracted by the head of the CP.

In the next section, I investigate the movement of the wh-phrases which function as adjuncts. I show that these elements move to the periphery as other wh-phrases do.

3.4 Adjunct wh-movement in NA

In NA, adjunct wh-phrases move to the left periphery (to the Spec, CP), as is the case with subject/object wh-phrases. Consider the following examples:

(20)

    a. meta   ħadˤar ar-radʒaal   al-ʕirs   b-al-dirah
       when   attend DEF-man   DEF-marriage   in-DEF-village
      'When did the man attend the marriage in the village?'

    b. wein   ħadˤar ar-radʒaal   al-ʕirs   ams
       when   attend DEF-man   DEF-marriage   yesterday
      'Where did the man attend the marriage yesterday?'

The sentence in (20a) includes the temporal wh-phrase *meta* "when", moving to the left periphery for its base-generated position as an adjunct of TP, whereas (20b) includes the locative wh-phrase *wein,* "where", moving to the left periphery, for its base-generated position as an adjunct of TP. The head of the CP has an [EPP] feature which demands Spec, the CP to be filled by an element with the [EPP] feature, which is here the adjunct wh-phrase.

3.5 Conclusion

In this chapter, I have investigated NA questions with subject/object wh-phrases and adjunct wh-phrases. I have shown that in questions with a subject wh-phrase, the subject wh-phrase moves to Spec, CP. I have also shown that this movement is forced by the head of the CP that has an [EPP] feature (Chomsky, 2000) which demands that Spec, CP be filled. I have also discussed the observation that the subject wh-phrase should precede TP-related adverbs and the materials fronted to the Topic Phrase (situated below the Focus Phrase). I have argued that the subject wh-phrase does move in the overt syntax to Spec, CP. I have discussed the object wh-phrase movement to Spec, CP in the overt syntax. I have proposed that this movement is attracted by the head of the CP. Here, I have proposed that this attraction is obtained by transferring the object wh-word to the outer specifier of *v*P which allows the object wh-word to be visible by the head of the CP. This chapter has also explored movement of wh-adjuncts, showing that such elements move to the left periphery of the question.

CHAPTER FOUR: Questions with multiple wh-phrases in NA

4.1   Introduction

This chapter explores three main constraints that rule the occurrence of multiple wh-phrases in NA. The first constraint relates to cases where the subject and the object are wh-phrases; the subject wh-phrase is what should be fronted, whereas the object wh-phrase remains in situ. The second constraint is related to cases where the multiple wh-phrases are an argumental wh-phrase and an adjunct wh-phrase. The argumental wh-phrase should not be a subject but an object wh-phrase, which remains in situ, while the adjunct wh-phrase is fronted. The third constraint concerns instances where conjoined adjunct wh-phrases are fronted. The two wh-phrases should be fronted and separated by the coordinating conjunction *wa* "and". This indicates that NA does not allow instances of multiple wh-phrases (attested cross-linguistically) to appear in the left periphery. For instance, NA does not allow any subject+object wh-phrases, as in *Whom who saw*? (in the sense *Who saw whom?),* unlike some languages including Hungarian or Russian (Bošković, 2002). On the other hand, two adjunct wh-phrases can be fronted under a strict condition. Before showing this, I introduce the descriptive facts relating to instances of multiple wh-phrases in NA.

4.2   Descriptive Facts

4.2.1   Multiple wh-phrases in NA: What is allowed and what is disallowed?

In NA, it is clear that no two wh-phrases can be fronted to the left periphery. There are certain restrictions which must be respected, otherwise the given question becomes ungrammatical. Let us first focus on subject wh-phrase + object wh-phrase combinations. Consider the following examples:

(1)

    a. al-radʒaal   ħadˤar   al-ʕirs
       DEF-man   attend.PAST.3SG.M   DEF-marriage
     ams   b-al-dirah
      yesterday   in-DEF-village
    'The man attended the marriage yesterday in the village'

b. min   ħadˤar wiʃ   ams   b-al-dirah?
   who   attend what yesterday   in-DEF-village
   'Who attended what yesterday in the village?'

c. * wiʃ   ħadˤar   min   ams   b-al-dirah?
     what   attend who   yesterday   in-DEF-village
   'What did who attend yesterday in the village?'

d. *min   wiʃ   ħadˤar ams   b-al-dirah?
   who   what   attend yesterday   in-DEF-village
   'Who attended what yesterday in the village?'

e. * wiʃ   min   ħadˤar   ams   b-al-dirah?
     what   who   attend.PAST.3SG.M   yesterday   in-DEF-village
   'What did who attend yesterday in the village?'

The question in (1b) includes an example of a single wh-movement where the subject wh-phrase alone moves to the left periphery, whereas the object wh-phrase remains in situ. The sentence is grammatical. The question in (1c) is ungrammatical because what moves to the left periphery is the object wh-phrase rather than the subject wh-phrase (Chomsky, 1973; Richards, 1997). The questions in (1d) and (1e) are both ungrammatical because they contain a fronted subject wh-phrase + fronted object wh-phrase combination with a different word order between the subject wh-phrase and the object wh-phrase (in (1d) the subject wh-phrase precedes that object wh-phrase, while it is the other way around in (1e)). Depending on the examples in (1), two obvious generalizations can be drawn: a wh-phrase cannot move over a higher wh-phrase, and no two wh-phrases can appear independently in the left-periphery.[32]

Additionally, the examples with fronted multiple argumental wh-phrases (subject and object) would become ungrammatical even if the two wh-phrases are conjoined by any conjunct.[33] Consider the following examples:

(2)

a. *min   wa-wiʃ   ħadˤar   ams   b-al-dirah?
   who   and-what   attend yesterday   in-DEF-village
   'Who attended what yesterday in the village?'

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[32] Sentence (1e) shows the relative order between the subject wh-phrase and the object wh-phrase does not play any role in rendering the sentence grammatical/ungrammatical. The rule is that fronted multiple wh-phrases are prohibited in NA grammar as long as they are the subject and the object.

[33] I have invoked this point because adjunct wh-phrases can be fronted if they are conjoined by the coordinating conjunction *wa* (and).

b. * wiʃ   wa-min   ħadˤar ams   b-al-dirah?

    what   and-who   attend yesterday   in-DEF-city

'What did who attend yesterday in the village?'

c. *min   aw- wiʃ   ħadˤar ams   b-al-dirah?

   who   or-what   attend yesterday   in-DEF-city

'Who attended what yesterday in the village?'

d. * wiʃ   aw-min   ħadˤar ams   b-al-dirah?

   what   or- who   attend yesterday   in-DEF-village

'What did who attend yesterday in the village?'

e. *min   wala-wiʃ   ħadˤar ams   b-al-dirah?

   Who   nor-what   attend yesterday   in-DEF-village

'Who met what yesterday in the village?'

f. *wiʃ   wala-man   ħadˤar ams   b-al-dirah?

What   nor-who   attend yesterday   in-DEF-vilage

'What did who attend yesterday in the village?'

In (2a) and (2b), the multiple wh-phrases are conjoined by the coordinating conjunction *wa* "and". The sentences remain ungrammatical, though. In (2c) and (2d), the fronted wh-phrases are conjoined by the coordinating conjunction *aw* "or". Again, the given sentences remain ungrammatical. In (2e) and (2f), the fronted wh-phrases are conjoined by the coordinating conjunction *wala* "nor" and the respective sentences remain ungrammatical. The immediate observation is that coordination does not help the sentence to be grammatical as long as the two fronted wh-phrases are argumental.

Now let us test the combinations where one of the multiple wh-phrases is either the subject or the object and the second wh-phrase is an adjunct wh-phrase (such as *wein* "where", *meta* "when", *keif* "how", etc.). Consider the following sentences which include such combinations. Let us begin with subject wh-phrase +adjunct wh-phrase combinations ((3a) is a declarative sentence).

(3)

a. al-radʒaal   ħadˤar al-ʕirs   ams   b-al-dirah?

  DEF-man   attend DEF-marriage yesterday   in-DEF-vilage

'The man attended the marriage yesterday in the village?'

b. *min   meta ħadˤar al-ʕirs   b-al-dirah?

   who   when attend DEF-marriage in-DEF-village

'Who attended the marriage in the village, and when?'

c. *meta   min   ħadˤar al-ʕirs   b-al-dirah?
   When   who   attend DEF-marriage in-DEF-village
 'Who attended the festival in the city, and when?'

d. *min   wein   ħadˤar al-ʕirs   ams?
   who   where   attend DEF-marriage   yesterday
 'Who attended the marriage yesterday, and where?'

e. *wein   min   ħadˤar al-ʕirs   ams?
   where   who   attend DEF-marriage   yesterday
 'Who attended the marriage yesterday, and where?'

In (3b) the subject wh-phrase *min* "who" and the temporal adjunct wh-phrase *meta* "when" are fronted to the left periphery. The resulting sentence is ungrammatical. The sentence would remain ungrammatical if we switch the order between the fronted wh-phrases, as (3c) shows. The same observations extend to subject wh-phrase + locative adjunct wh-phrase *wein* "where". No multiple wh-phrases are allowed (as in 3d), nor can the switch ameliorate the sentence, as (3e) shows.

Manner adjuncts are not different. They cannot be fronted with the subject wh-phrase with either word order. Consider the following examples:

(4)

a. *min   keif   ħadˤar al-ʕirs   b-al-dirah?
   who   how   attend DEF-marriage   in-DEF-village
 'Who attended the marriage in the village, and how?'

b. *keif   min   ħadˤar   al-ʕirs   b-al-dirah?
   how   who   attend.PAST.3SG.M   DEF-festival   in-DEF-village
 'Who attended the marriage in the village, and how?'

Additionally, if the multiple wh-phrases are conjoined by the coordination conjunct *wa* "and" (or in fact by any other coordination conjunct), the resulting sentences remain ungrammatical, irrespective of the order between the two wh-phrases. Consider the following examples:

a. *min   wa-meta   ħadˤar al-ʕirs   b-al-dirah?
   who   and-when   attend DEF-marriage in-DEF-village
 'Who attended the marriage in the village, and when?'

b. *meta   wa-min   ħadˤar al-ʔiħtifaal   b-al-dirah?
   When   and-who   attend DEF-marriage in-DEF-village
 'Who attended the marriage in the village, and when?'

c. *min   wa-wein   ħadˤar al-ʕirs   ams?
  Who   and-where   attend DEF-marriage yesterday
'Who attended the marriage yesterday, and where?'

d. *wein   wa-min   ħadˤar al-ʕirs   ams?
  Where   and-who   attend DEF-marriage yesterday
'Who attended the marriage yesterday, and where?'

e. *min   wa-keif   ħadˤar al-ʕirs   b-al-dirah?
  Who   and-how   attend DEF-marriage in-DEF-village
'Who attended the marriage in the village, and how?'

f. *keif   wa-min   ħadˤar al-ʕirs   b-al-dirah?
  How   and-who   attend DEF-marriage in-DEF-village
'Who attended the marriage in the village, and how?'

In light of the data above, it can be postulated that the subject wh-phrase cannot be fronted with either manner, temporal, or locative adjunct wh-phrases, regardless of the relevant word order between the two fronted wh-phrases and regardless of whether they are conjoined or not.

Let us now examine the questions with the object wh-phrase and an adjunct wh-phrase. According to the NA data, fronted wh-phrases consisting of an object wh-phrase and manner, temporal, or locative adjunct wh-phrases are not allowed. Consider first the cases with temporal and locative wh-phrases ((5a) is a declarative sentence).

(5)

a. al-radʒaal   ħadˤar al-ʕirs   ams   b-al-dirah
  DEF-man   attend DEF-marriage yesterday   in-DEF-village
'The man attended the marriage yesterday in the village.'

b. * wiʃ   meta ħadˤar   al-radʒaal   b-al-dirah?
  what   when attend   DEF-man   in-DEF-village
'What did the man attend in the village, and when?'

c. *meta   wiʃ   ħadˤar al-radʒaal   b-al-dirah?
  When   what attend DEF-man   in-DEF-village
'What did the man attend in the village, and when?'

d. * wiʃ   wein ħadˤar   al-radʒaal   ams?
  What   where attend   DEF-man   yesterday
'What did the man attend in the village, and where?'

e. *wein   wiʃ   ħadˤar   al-radʒaal   ams?
  where   what attend   DEF-man   yesterday
'What did the man attend in the village, and where?'

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In (5b) the object wh-phrase *wiʃ* "what" and the temporal adjunct wh-phrase *meta* "when" are fronted to the left periphery. The resulting sentence is ungrammatical. The sentence remains ungrammatical even if the order between the fronted wh-phrases is switched, as (5c) shows. The same observations extend to object wh-phrase + locative adjunct wh-phrase *wein* "where". No multiple wh-phrases are allowed (as in 5d), nor can the switch ameliorate the sentence, as (5e) demonstrates. Additionally, manner adjuncts hold the same behaviour with the object wh-phrases. They cannot be fronted with the object wh-phrase with either word order. Consider the following illustrative examples:

(6)

    a. * wiʃ   keif   ħadˤar al-radʒaal   ams?
      what   how   attend DEF-man   yesterday
      With the intended meaning: 'What did the man attend in the village, and how?'

    b. *keif   wiʃ   ħadˤar al-radʒaal   ams?
      How   what attend DEF-man   yesterday
      'What did the man attend in the village, and how?'

Note here that if the multiple wh-phrases are conjoined by the coordination conjunct *wa,* "and", the resulting sentences remain ungrammatical, regardless of the order between the object wh-phrase and the adjunct wh-phrase, as the following examples illustrate:

(7)

    a. * wiʃ   wa-meta   ħadˤar   al-radʒaal   b-al-dirah?
      what   and-when   attend   DEF-man   in-DEF-village
      'What did the man attend in the village, and when?'

    b. *mata   wa- wiʃ   ħadˤar   al-radʒaal   b-al-dirah?
      When   and-what   attend   DEF-man   in-DEF-village
      'What did the man attend in the village, and when?'

    c. * wiʃ   wa-wein   ħadˤar al-radʒaal   ams?
      what   and-where   attend DEF-man   yesterday
      'What did the man attend in the village, and where?'

    d. *wein   wa- wiʃ   ħadˤar   al-radʒaal   ams
      where   and-what   attend   DEF-man   yesterday
      'What did the man attend in the village, and where?'

e. * wiʃ   wa-keif   ħadˁar   al-radʒaal   ams
   what   and-how   attend   DEF-man   yesterday
   'What did the man attend in the village, and how?'

f. *keif   wa- wiʃ   ħadˁar al-radʒaal   ams?
   How   and-what   attend DEF-man   yesterday
   'What did the man attend in the village, and how?'

Given the data above, the same generalization we draw for the subject wh-phrase with adjunct wh-phrase can extend safely to the cases with object wh-phrase + adjunct wh-phrase. The object wh-phrase cannot be fronted with either manner, temporal, or locative adjunct wh-phrases.

On the other hand, when a wider data set is examined, it appears that there is one context where the subject/object wh-phrase can appear fronted with another wh-phrase, i.e. with the wh-phrase *leiʃ* "why". I discuss this case in the following section. I will show it can be generalized that the wh-phrase *leiʃ* "why" can appear fronted with the subject/object/adjunct wh-phrase as long as it is the first element in sequence and no coordinating conjunction appears between them.

4.2.2   The wh-phrase leiʃ "why" in multiple wh-phrases[34]

It is worth mentioning here that the wh-phrase *leiʃ* "why" is the only adjunct wh-phrase that can appear fronted with the subject wh-phrase or object wh-phrase. One important restriction is that the subject/object wh-phrase must follow the wh-phrase *leiʃ* "why", otherwise the sentence becomes ungrammatical. Consider the following examples (the comma after *leiʃ* "why" represents a phonological break):

(8)

a. leiʃ,   min   ħadˁar al-ʕirs   b-al-dirah?
   why   who   attend DEF-marriage   in-DEF-village
   'Oh! Who attended the marriage in the village?'

b. *min   leiʃ   ħadˁar al-ʕirs   b-al-dirah?
   who   why   attend DEF-marriage   in-DEF-village
   'Oh! Who attended the marriage in the village?'

c. leiʃ,   wiʃ   ħadˁar al-radʒaal   b-al-dirah?
   why   what   attend DEF-man   in-DEF-village
   'Oh! What did the man attend in the village?'

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[34] Chapter Six will cover the analysis of *leiʃ* 'why' in NA.

d. * wiʃ   leiʃ   ħadˤar   al-radʒaal   b-al-dirah?
   what   why   attend   DEF-man   in-DEF-village
   'Oh! What did the man attend in the village?'

e. leiʃ,   meta   Sar   al-ħadiθ
   why,   when   happen-PAST.3PS.M.   DEF-accident
   'Oh! When did the accident happen?'

Additionally, no coordinating conjunction, including *wa* "and", *aw* "or" and *wala* "nor" can appear between the subject/object/adjunct wh-phrase and the adjunct wh-phrase *leiʃ* "why", as shown in the following examples:

(9)

a. *leiʃ,   wa-min   ħadˤar   al-ʕirs   b-al-dirah?
   why   and-who   attend   DEF-marriage   in-DEF-village
   'Oh! Who attended the marriage in the village?'

b. *leiʃ   wa- wiʃ   ħadˤar   al-radʒaal   b-al-dirah?
   why   and-what   attend   DEF-man   in-DEF-village
   'Oh! What did the man attend in the village?'

c. *leiʃ,   wa-meta   Sar   al-ħadiθ
   why,   and-when   happen   DEF-accident
   'Oh! When did the accident happen?'

In light of the data, it can be generalized that the wh-phrase *leiʃ* "why" can appear fronted with the subject/object/adjunct wh-phrase as long as it is the first element in the sequence and no coordinating conjunction appears between them.

On the other hand, two significant observations are in order here. These observations undermine the analysis that *leiʃ+wh-word* multiple are genuine fronted multiple wh-phrases. Firstly, when the question with *leiʃ+wh-word* multiple wh-phrases is used, the answer must only involve information about the subject/object/adjunct wh-phrases. The answer does not have any information about the reason. These are not "why" questions at all. Consider the following examples, which include the felicitous answers (10b) and (10d) to the questions (10a) and (10c), respectively:

(10)

a. leiʃ,   min   ħadˤar al-ʕirs   b-al-dirah?
   why   who   attend DEF-marriage   in-DEF-village
   'Who attended the marriage in the village?'

b. al- radʒaal   ħadˤar al-ʕirs   b-al-dirah
   DEF-man   attend DEF-marriage   in-DEF-village
   'The man attended the marriage in the village.'

c. leiʃ,   wiʃ   ħadˤar al-radʒaal   b-al-dirah?
   why   what   attend DEF-man   in-DEF-village
   'What did the man attend in the village?'

d. al-ʕirs   al-radʒaal   ħadˤar-uh   b-al-dirah
   DEF-marriage   DEF-man   attend   in-DEF-village
   'The marriage, the man attended in the village.'

As is obvious from the examples in (10), the felicitous answers to questions with *leiʃ+wh-word* multiple wh-phrases do not involve any information about the reason why the man attend the marriage in the village. This observation gives rise to the assumption that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase in the sense that it has a [Q] feature. This is because it does not trigger the answer to add information about the reason. In this way it contrasts with all other wh-phases in NA. Consider the following examples:

(11)

  a. leiʃ,   b-al-dirah   min   ħadˤar   al-ʕirs ?
     why   in-DEF-village who   attend.PAST.3SG.M   DEF-marriage
     'Who attended the marriage in the village?'

  b. leiʃ,   b-al-dirah   wiʃ   ħadˤar al-radʒaal?
     why   in-DEF-village   what   attend DEF-man
     'What did the man attend in the village?'

The locative adjunct *b-al-dirah* "in the village" appears between the wh-phrase *leiʃ* "why" and the subject wh-phrase *min*, "who", in (11a) and between the wh-phrase *leiʃ* "why" and the object wh-phrase in (11b). This analysis indicates strongly that the wh-phrase *leiʃ* "why" is not in Spec, Focus Phrase, given that the locative adjunct *b-al-dirah* "in the village" must be in a position higher than the Focus Phrase. According to Rizzi's (1997) split CP system, the locative adjunct *b-al-dirah* "in the village" can be assumed to dwell in the Spec position of the higher Topic Phrase which c-commands the Focus Phrase. Therefore, the wh-phrase *leiʃ* "why" must be in a position higher than the Topic Phrase that c-commands the Focus Phrase. Notice here that the locative adjunct *b-al-dirah* "in the village" cannot precede the wh-phrase *leiʃ* "why". Consider the following examples:

(12)

    a. *b-al-dirah   leiʃ,   min   ħadˤar   al-ʕirs ?
      in-DEF-village   why   who   attend   DEF-marriage
     'Who attended the marriage in the village?'

    b. *b-al-dirah   leiʃ   wiʃ   ħadˤar   ʔl-radʒaal?
      in-DEF-village   why   what   attend   DEF-man
     'What did the man attend in the village?'

The ungrammaticality of both sentences (12a) and (12b) indicates the high position that is filled with the wh-phrase *leiʃ* "why". I provide a syntactic account of the combination of *leiʃ+wh-word* in Chapter Six. I will show mainly that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase in the sense that it does not ask for new information. I argue that the wh-phrase *leiʃ* "why" in such constructions is a discourse particle, base-generated in the so-called Speech Act Phrase (henceforth SAP) following works by Speas and Tenny (2003), Hill (2007), Haegeman and Hill (2013), and Haegeman (2014).

For the moment, let us explore whether any combination of adjunct wh-phrase + adjunct wh-phrase is allowed in the left periphery of NA, a matter I take up in the next sub-section.

4.2.3 *A combination of adjunct wh-phrase + adjunct wh-phrase*

Data in NA show that two adjunct wh-phrases can appear fronted if they are conjoined by the coordinating conjunction *wa* "and". Consider the following examples ((13a) is a declarative clause):

(13)

    a. al-radʒaal   ħadˤar   al-ʕirs   ams   b-al-dirah?
      DEF-man   attend   DEF-marriage   yesterday   in-DEF-village
     'The man attended the marriage yesterday in the village.'

    b. meta   wa-wein   ħadˤar   al-radʒaal   al-ʕirs
      when   and-where   attend   DEF-man   DEF-marriage
     'When and where did the man attend the marriage?'

    c. wein   wa- meta   ħadˤar al- radʒaal   al-ʕirs ?
      where   and-when   attend DEF-man   DEF-marriage
     'Where and when did the man attend the marriage?'

d. meta   wa-keif   ħadˤar al-radʒaal   al-ʕirs ?
   when   and-how   attend DEF-man   DEF-marriage
   'When and how did the man attend the marriage?'

e. keif   wa-meta   ħadˤar   al-radʒaal   al-ʕirs_?
   how   and-when   attend   DEF-man   DEF-marriage
   'How and when did the man attend the marriage?'

f. keif   wa-wein   ħadˤar al-radʒaal   al-ʕirs ?
   how   and-where   attend DEF-man   DEF-marriage
   'How and where did the man attend the marriage?'

g. wein   wa-keif   ħadˤar   al-radʒaal   al-ʕirs ?
   where   and-how   attend   DEF-man   DEF-marriage
   'Where and how did the man attend the marriage?'

The examples in (13b) and (13c) show that fronted locative-temporal wh-phrase combinations are allowed in NA with either word order (the locative wh-phrase preceding the temporal wh-phrase and vice versa). Additionally, the examples in (13d) and (13e) show that fronted manner-temporal wh-phrase combinations are also allowed in NA with either order between them. The examples in (13f) and (13g) demonstrate that fronted locative-manner wh-phrase combinations are allowed in NA with either order between them.

The most important observation here is that the fronted multiple wh-phrases must be conjoined by the coordinating conjunction *wa* "and". If this coordinating conjunction is deleted, the resulting questions become ungrammatical, as the following examples show:

(14)

a. *meta   wein   ħadˤar   al-radʒaal   al-ʕirs ?
   when   where   attend   DEF-man   DEF-marriage
   'When and where did the man attend the marriage?'

b. *wein   meta   ħadˤar   al-radʒaal   al-ʕirs ?
   where   and-when   attend   DEF-man   DEF-marriage
   'Where and when did the man attend the marriage?'

c. *meta   keif   ħadˤar   al-radʒaal   al-ʕirs ?
   when   and-how   attend   DEF-man   DEF-marriage
   'When and how did the man attend the marriage?'

d. *keif   meta   ħadˤar al-radʒaal   al-ʕirs ?
     how   and-when   attend DEF-man   DEF-marriage
'How and when did the man attend the marriage?'

e. *keif   wein   ħadˤar al-radʒaal   al-ʕirs ?
     how   where   attend DEF-man   DEF-marriage
'How and where did the man attend the marriage?'

f. *wein   keif   ħadˤar al-radʒaal   al-ʕirs ?
     where   how   attend DEF-man   DEF-marriage
'Where and how did the man attend the marriage?'

Moreover, the examples in (14) remain ungrammatical even if the coordinating conjunction *wa* "and" is replaced by another coordinating conjunction, including *aw* "or". Consider the following examples:

(15)

    a. *meta   aw-wein   ħadˤar   al-radʒaal   al-ʕirs ?
       when   or-where   attend DEF-man   DEF-marriage
      'When or where did the man attend the marriage?'

    b. *wein   aw- meta   ħadˤar al-radʒaal   al-ʕirs ?
       where   or-when   attend DEF-man   DEF-marriage
      With the intended meaning: 'Where and when did the man attend the marriage?'

    c. *meta   aw-keif   ħadˤar al-radʒaal   al-ʕirs ?
       when   or-how   attend DEF-man   DEF-marriage
      'When or how did the man attend the marriage?'

    d.* keif   aw- meta   ħadˤar al-radʒaal   al-ʕirs ?
       how   or-when   attend DEF-man   DEF-marriage
      'How or when did the man attend the marriage?'

    e. *keif   aw-wein   ħadˤar al-radʒaal   al-ʕirs ?
       how   or-where   attend DEF-man   DEF-marriage
    'How or where did the man attend the marriage?'

    f. *wein   aw- keif   ħadˤar al-radʒaal   al-ʕirs ?
      where   or-how   attend DEF-man   DEF-marriage
      'Where or how did the man attend the marriage?'

The examples above clearly show that the coordinating conjunction *wa,* "and", cannot be replaced by any other coordinating conjunction.

4.2.4 Interim summary

Table 4 below summarizes all findings for the multiple wh-phrase combinations in NA.

Table 4: Fronted multiple wh-phrases in NA

Fronted multiple wh-phrases	Examples	Status	Restrictions
Subject wh-phrase + object wh-phrase	*Who whom	Not allowed	N/A
Object wh-phrase + subject wh-phrase	*Whom who	Not allowed	N/A
Subject wh-phrase + adjunct wh-phrase	*Who where	Not allowed	N/A
Adjunct wh-phrase + subject wh-phrase	*Where Who	Not allowed	N/A
Object wh-phrase + adjunct wh-phrase	*Whom Where	Not allowed	N/A
Adjunct wh-phrase + Object wh-phrase	*Where whom	Not allowed	N/A
Adjunct wh-phrase+ adjunct wh-phrase	Where and when	Allowed	Conjoined with *wa* 'and'

Based on Table (4), the following generalization can be formulated:

(16)

> Conjoined fronted wh-phrases in NA should be adjunct wh-phrases, separated by the coordinating conjunction *wa* "and".

The following section is dedicated to a syntactic account of why fronted adjunct/argument or argument/argument combinations are not allowed. In the next chapter, I provide a syntactic analysis of questions that include two fronted conjoined adjunct wh-phrases, cases where the condition in (16) is met. In Chapter Six, I provide a syntactic account of the combination of *leiʃ+wh-word* wh-phrases.

4.3   Prohibited multiple wh-phrase cases in NA

In this section, I explore cases where the fronted multiple wh-phrases are prohibited in NA questions. I will begin with a combination of argument + argument wh-phrases, and then investigate argument + adjunct wh-phrases cases. I will show that there is one way for a question in NA to have a subject wh-phrase and an object wh-phrase, namely through the movement of the subject wh-phrase to Spec, CP while the object wh-phrase remains in situ. The object wh-phrase cannot move instead of the subject wh-phrase because of the latter being more local to the head of the CP than the former.

4.3.1   Argument wh-phrase +argument wh-phrase cases

As clearly shown in the previous sections, fronted multiple wh-phrases where the two wh-phrases are arguments, i.e. subject and object, are prohibited in NA, regardless of the word order between the two wh-phrases. Consider the following examples:

(17)

    a. *min   wiʃ   ħadˤar ams   b-al-dirah?
       who   what   attend yesterday   in-DEF-village
  'Who attend what yesterday in the village?'

    b. * wiʃ   min   ħadˤar ams   b-al-dirah?
     What   who   attend yesterday   in-DEF-village
  'Whom did who attend yesterday in the village?'

    c.*wiʃ   il-min   ʔaʕtʰa   al-walad
     what   to whom   give.PAST.3SG.M   DEF-boy
  'What did the boy gave to whom?'

    d.* il-min   wiʃ   ʔaʕtʰa   al-walad
     to whom   what   give   DEF-boy
  'To whom did the boy gave what?'

We argued in the previous chapter that the ungrammaticality of sentences like those in (17) can be attributed to the assumption that there is only one Spec, CP to be filled by only one wh-word because CP has a non-recursive Spec position (see also Rizzi, 1997, Kiss, 1998, Holmberg and Nikanne, 2002, and López, 2014, among others). If we follow the assumption that the Spec position(s) are invoked by the [EPP] feature on the head of the given phrase, it can be postulated that the CP has only one [EPP] feature, which, once satisfied by the movement of one element to Spec position of the CP, cannot be reiterated.

In the previous chapter, we proposed that the satisfaction of the [EPP] feature on the head of the CP depends on two factors, namely, locality and the presence of [Q] feature endowment. The element to fill the Spec, CP must first be local to the CP, i.e. everything down to the next CP, and second endowed with a [Q] feature. Recall from the second chapter that Agree operation takes place in a local domain where the probe c-commands the goal. In other words, for the C to probe the goal, the goal must be the closest phrase to the probe and bear the matching features. (For ease of exposition I repeat the formulation of the Agree operation and the notion of closeness).

A standard version of Agree is given in (18) (Heck and Richards, 2010: 690).

(18)

Operation Agree

A probe α can agree with a goal β iff:

i. α is unvalued and seeks the value of β.

ii. α c-commands β.

iii. β is the closest goal to α.

iv. β co-occurs with an unvalued Case feature.

The notion of closeness (18iii) is structurally defined. Heck and Richards (2010: 690) provide the following formulation of closeness:

Closeness:

Goal β is closer to probe α than goal γ if a. and b. hold.

a. α c-commands both β and γ.

b. β asymmetrically c-commands γ.

Following this, we can account for why the subject wh-phrase should move to Spec, CP while the object wh-phrase remains in situ, as demonstrated in (19) below.

(19)

min	ħadˤar	wiʃ	ams	b-al-dirah?
who	attend	what	yesterday	in-DEF-village

'Who attended whom yesterday in the village?'

In addition to locality (Closeness notion), this situation is better suited under the so-called Minimal Link Condition (Chomsky, 1995: 311), which is reformulated as follows:

Minimal Link Condition:

K attracts a only if there is no b, and b is closer to K than a, such that K attracts b.

Accordingly, we reach the following conclusions relating to the combination between the subject wh-phrase + object wh-phrase. It is clear that the only way a question in NA has a subject wh-phrase and an object wh-phrase is through the movement of the subject wh-phrase to the left periphery (i.e. Spec, CP), while the object wh-phrase remains in situ, where it is assigned a theta role, i.e. complement of VP. The movement of the subject wh-phrase is attracted by the head of the CP so as to satisfy its [EPP] feature. The object wh-phrase cannot move instead of the subject wh-phrase because of the latter being more local to the head of the CP than the former.[35] Consider the following schematic representation for (19):

---

[35] In the next chapter we will show that NA devises a special mechanism, pseudo-coordination, to overcome the demand that there is only one Spec position of CP. This mechanism allows two wh-phrases to become one syntactic object through adjoining a Coordination Phrase which is inserted into the Spec position of the CP. As we will show later, this mechanism is only suitable for adjunct wh-phrases because the latter elements have a strong [Q] feature which should be checked in the overt syntax, while the subject/object wh-phrase bears a weak Q-feature which does not force the subject/object wh-phrase to move overtly to the left periphery, unless it is attracted by an upper head.
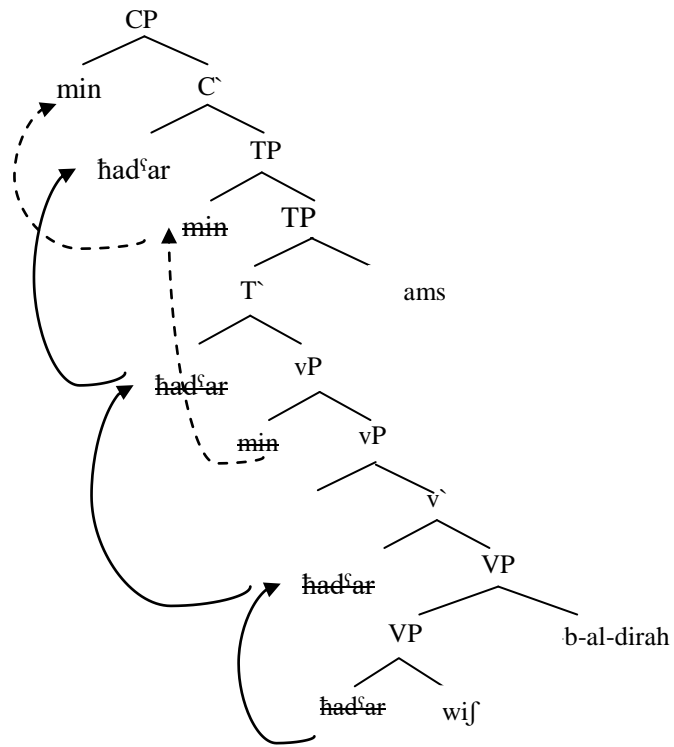
If the object wh-phrase moves over the subject wh-phrase, locality is violated, a matter that results in the ungrammaticality of the relevant question (this implies that an element bearing a [Q] feature should not leave its position in the overt syntax by their own requirements). This is the main reason why the following sentence is ungrammatical, where the object wh-phrase moves to the left periphery although the subject is closer to the head of the CP than the object:

(20)

       *wiʃ   ħadˤar   min   ams   b-al-dirah?
       what   attend.PAST.3SG.M   who yesterday   in-DEF-village
       Equal in English to: "What did who see yesterday in the village?"

In (20), the C° cannot attract the object wh-phrase *wiʃ* "what" as long as the subject is a wh-phrase. Otherwise the minimal link condition/locality would be violated, given that the subject wh-phrase is closer to the C° than the object wh-phrase. Consider the following schematic representation for (20):

(21)

CP
wiʃ C`
ˈħadˤar TP
min TP
T` ams
ħadˤar vP
min vP
v`
ħadˤar VP
VP b-al-dirah
ħadˤar wiʃ
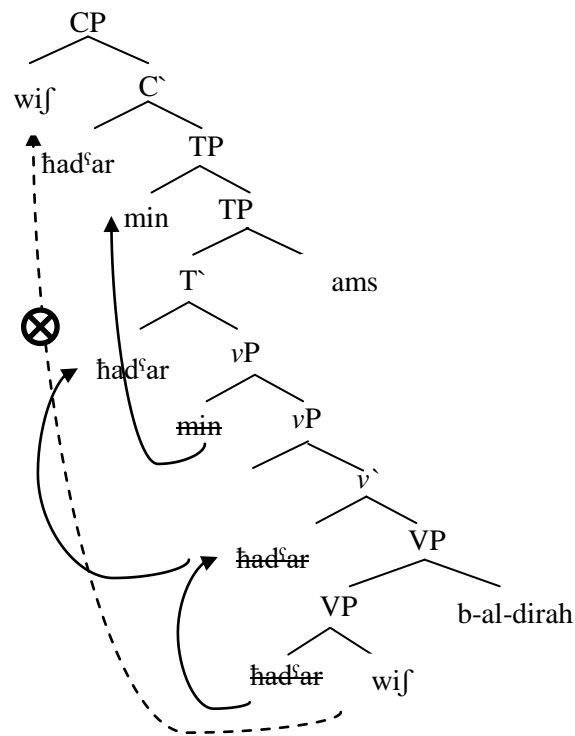
In the next section, I investigate questions with multiple wh-phrases (one argumental and one adjunct). I show that such questions are not allowed in NA grammar, unless the argumental wh-phrase is an object that remains in situ. I will discuss two possibilities to account for why a fronted adjunct wh-phrase is not compatible with a subject wh-phrase.

4.3.2 *Argument wh-phrase + adjunct wh-phrase cases*

NA does not allow fronted multiple wh-phrases combinations where one wh-phrase is the subject and the second wh-phrase is an adjunct. Consider the following examples, which include a subject wh-phrase being fronted with an adjunct wh-phrase ((22a) is a declarative clause):

(22)

a. al-radʒaal   ħadˤar   al-ʕirs
   DEF-man   attend.PAST.3SG.M   DEF-marriage
   ams   b-al-dirah?
   yesterday   in-DEF-village
   'The man attended the marriage yesterday in the village?'

b. *min meta ħadˤar   al-ʕirs   b-al-dirah?
   who when   attend.PAST.3SG.M   DEF-marriage in-DEF-village
   'Who attended the marriage in the village, and   when?'

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c.　*meta　min　　ħadˤar　　　　　al-ʕirs　　　b-al-dirah?
　　　　　when　who　attend.PAST.3SG.M　DEF-marriage　in-DEF-village
　　　　　'Who attended the marriage in the village, and when?'

　　　d.　*min　wein　　　　ħadˤar　al-ʕirs　　　ams?
　　　　　who　where　　　attend　DEF-marriage　yesterday
　　　　　'Who attended the marriage yesterday, and where?'

　　　e.　*wein　min　　ħadˤar　al-ʕirs　　　　　ams?
　　　　　where　who　attend　DEF-marriage　　　yesterday
　　　　　'Who attended the marriage yesterday, and where?'

In (22b) the subject wh-phrase *min* "who" and the temporal adjunct wh-phrase *meta* "when" are fronted to the left periphery, hence, the ungrammaticality of the question. The question remains ungrammatical if we switch the order between the fronted wh-phrases, as (22c) demonstrates. The same observations hold for the sentences in (22d) and (22e).

The direct account for the ungrammaticality of the sentences in (23b-e) can be attributed to the assumption that Spec, CP is not recursive; hence there is only one Spec position which is filled by one wh-phrase. Given that there is only one Spec position, the second wh-phrase cannot be accommodated in the left periphery.

What is significant to mention here is that the sentences in (22b-e) remain ungrammatical even if the adjunct wh-phrases remain in the corresponding position, unlike the case with the object wh-phrase. Consider the following ill-formed examples:

(23)

　　　a.　*min　　　ħadˤar　al-ʕirs　　　b-al-dirah　　　　meta?
　　　　　who　　　attend　DEF-marriage　in-DEF-village　　　when
　　　　　'Who attended the marriage in the village, and when?'

　　　b.　*min　　　ħadˤar　al-ʕirs　　　ams　　　wein?
　　　　　who　　　attend　DEF-marriage　yesterday　　where
　　　　　'Who attended the marriage yesterday, and where?'

In (23a), the subject wh-phrase *min "who"* appears question-initially, whereas the adjunct wh-phrase *meta "when"* appears in the same position where temporal information appears canonically, i.e. after the verb and the direct object; however, the question becomes ungrammatical. The same observation holds for question (23b) where the adjunct wh-phrase *wein "where"* appears in its canonical position where locative information appears (i.e. at the end of the question). Unlike cases

including the subject wh-phrase and the object wh-phrase, the question remains grammatical as long as the object wh-phrase appears in its canonical position, i.e. after the verb (as in example (20) above). So, my next pursuit must be related to find out the syntactic reasons that block adjunct wh-phrases from appearing in their canonical positions within sentence boundaries.

It is worth mentioning that in NA, adjuncts can appear approximately in any position in the sentence. For instance, consider the following examples which show different positions that the locative adjunct and temporal adjunct occupy:

(24)

   a. al-radʒaal ħadˤar al-ʕirs ams b-al-dirah
      DEF-man attend DEF-marriage yesterday in-DEF-village
      'The man attended the marriage yesterday in the village.'

   b. al-radʒaal ħadˤar ams al-ʕirs b-al-dirah
      DEF-man attend yesterday DEF-marriage in-DEF-village
      'The man attended the marriage yesterday in the village.'

   c. al-radʒaal ams ħadˤar al-ʕirs b-al-dirah
      DEF-man yesterday attend DEF-marriage in-DEF-village
      'The man yesterday attended the marriage in the village.'

   d. ams al-radʒaal ħadˤar al-ʕirs b-al-dirah
      yesterday DEF-man attend DEF-marriage in-DEF-village
      'Yesterday, the man attended the marriage in the village.'

   e. al-radʒaal ħadˤar b-al-dirah al-ʕirs ams
      DEF-man attend in-DEF-village DEF-marriage yesterday
      'The man attended the marriage yesterday in the village.'

   f. al-radʒaal b-al-dirah ħadˤar al-ʕirs ams?
      DEF-man in-DEF-village attend DEF-marriage yesterday
      'The man in the village attended the marriage yesterday.'

   g. b-al-dirah al-radʒaal ħadˤar al-ʕirs ams ?
      in-DEF-village DEF-man attend DEF-marriage yesterday
      'In the village, the man attended the marriage yesterday.'

As is clear from all examples in (24), the temporal adjunct *ams* "yesterday" and the locative adjunct *b-al-dirah* "in the village" can appear in different positions in the syntax. The main concern here is that if we replace the adjuncts with the corresponding wh-phrases, the resulting questions are ungrammatical if the adjunct wh-phrase does not appear question-initially and is not followed by the verb. Consider the following questions:

(25)

    a. *al-radʒaalħadˤar   al-ʕirs   meta   b-al-dirah?
        DEF-man   attend   marriage   when in-DEF-village
        'When did the man attended the marriage in the village?'

    b. *al-radʒaalħadˤar meta   al-ʕirs   b-al-dirah?
        DEF-man   attend when DEF-marriage in-DEF-village
        'When did the man attend the marriage in the village?'

    c. al-radʒaal,   meta ħadˤar   al-ʕirs   b-al-dirah
        DEF-man   when attend   DEF-marriage in-DEF-village
        'When did the man attend the marriage in the village?'

    d. *meta   al-radʒaal   ħadˤar al-ʕirs   b-al-dirah
        when   DEF-man   attend DEF-marriage in-DEF-village
        'When did the man attend the marriage in the village?'

    e. *al-radʒaal   ħadˤar wein   al-ʕirs   ams
        DEF-man   attend where   DEF-marriage yesterday
        'Where did the man attend the marriage yesterday?'

    f. al-radʒaal,   wein   ħadˤar al-ʕirs   ams?
        DEF-man   where   attend DEF-marriage yesterday
        'Where did the man attend the marriage yesterday?'

    g. *wein   al-radʒaal   ħadˤar al-ʕirs   ams?
        where   DEF-man   attend DEF-marriage yesterday
        'Where did the man attend the marriage yesterday?'

Let us first capitalize on the observation that a question is grammatical as long as the adjunct wh-phrase is followed by a verb, as in (25c) and (25f), even if the wh-phrase does not appear clause-initially. According to Rizzi's (1997) CP system, this observation can be readily accounted for. The adjunct wh-phrase lands in Spec, Focus Phrase. The verb, in turn, adjoins to the head of the Focus Phrase (see section 3.2). The question-initial subject is a topic rather than a subject. According to Rizzi's (1997) CP system, the Focus Phrase is dominated by a Topic Phrase which is in turn dominated by the Force Phrase. Some evidence that the question-initial subject is a topic can be adduced from the restrictions that the subject under such cases must be definite and specific and nothing can appear between the adjunct wh-phrase and the verb. If the subject turns out indefinite and non-specific, the resulting question is no longer grammatical. Consider the following ill-formed examples:

(26)

    a.*radʒaal   meta   ħadˤar   al-ʕirs   b-al-dirah
      man   when   attend   DEF-marriage in-DEF-village
        'When did a man attend the marriage in the village?'

    b. *radʒaal   wein   ħadˤar al-ʕirs   ams?
      man   where attend DEF-marriage yesterday
    'Where did a man attend the marriage yesterday?'

Additionally, the subject in such a case should be separated from the rest of the question by a comma intonation, as confirmed by all NA speakers I consulted. It is well-known that topicalized elements are separated by an intonational break in Arabic grammar (see Ouhalla, 1997). Furthermore, the subject can also be introduced by the expression *binisbili* 'as for' which is analysed as a topicalizers in NA grammar (see Alshamari, 2017).

Rizzi (1997) stresses the assumption that topics cannot be indefinite and non-specific, because topics express given information that is shared by the speaker and the hearer. Hence, no element expressing new information which is not shared by the discourse interlocutors can be licensed in Spec, Topic Phrase which dominates the Focus Phrase.

As for the second restriction (i.e. no element can intervene between the adjunct wh-phrase and the verb), it is clear that this follows from the movement of the verb to adjoin to the head of the Focus Phrase. For instance, if the subject is forced to appear between the adjunct wh-phrase and the verb, the grammaticality of the relevant question sharply degrades. Consider the following ill-formed examples where the subject appears between the adjunct wh-phrase and the verb:

(27)

    a. *meta   al-radʒaal   ħadˤar al-ʕirs   b-al-dirah?
      when   DEF-man   attend DEF-marriage in-DEF-village
        'When did the man attend the marriage in the village?'

    b. *wein   al-radʒaal   ħadˤar al-ʕirs   ams?
      where   DEF-man   attend DEF-marriage yesterday
        'Where did the man attend the marriage yesterday?'

Along these lines, it can be postulated that the sequence *subject + adjunct wh-phrase + verb* is a grammatical question with the subject being a topic.

Now, let us investigate why adjunct wh-phrases cannot appear in situ. According to the observation that adjunct wh-phrases only appear in the left periphery in the Spec position of the CP, one possibility is that adjunct wh-phrases are base-generated in the left periphery of the respective clause. In other words, adjunct wh-phrases do not enter the derivation adjoining to the TP or VP, but rather directly to the left periphery. Following this possibility, we can account for the ungrammaticality of the questions where the wh-phrases are located in the positions that adjuncts can occupy in the declarative sentences. Therefore, according to the first-merger proposal, sentences (25a-b), repeated below, are ungrammatical because the adjunct wh-phrase *meta* "when" enters the derivation adjoining TP.

(28)

    a. *al-radʒaal   ħadˤar al-ʕirs   meta   b-al-dirah
      DEF-man   attend DEF-marriage when in-DEF-village
    Intended: 'When did the man attended the marriage in the village?'

    b. *al-radʒaal   ħadˤar meta   al-ʕirs   b-al-dirah
      DEF-man   attend when DEF-marriage in-DEF-village
    Intended: 'When did the man attend the marriage in the village?'

On the other hand, what casts doubt on the first-merge proposal is the fact that when the subject is a wh-phrase and there is one adjunct wh-phrase, the sentence becomes ungrammatical, even if the subject remains in Spec, TP. Consider the following examples:

(29)

    a. *meta   ħadˤar   min al-ʕirs   b-al-dirah
      when attend.PAST.3SG.M   who DEF-marriage   in-DEF-village
    With the intended meaning: 'Who attended the marriage in the village, and when?'

    b. *wein   ħadˤar   min al-ʕirs   ams
      Where   attend.PAST.3SG.M   who DEF-marriage yesterday
        Intended: 'Who attended the marriage yesterday, and where?'

According to my exploration of the derivation of questions with a single wh-phrase and multiple argumental wh-phrases, the examples in (29) would be grammatical, contrary to fact. Why the examples in (29) would be grammatical is because Spec, CP is filled by the adjunct wh-phrases *meta* "when" and *wein* "where", respectively. The [EPP] feature on the head of the CP would be thus

satisfied by the first merger of the adjunct wh-phrases directly into Spec, the CP. As we extensively argued before, subject wh-movement to the left periphery is forced by the demand of the feature content of the CP. Accordingly, there is nothing preventing the subject wh-phrase to remain in Spec, TP as long as another element occupies the Spec position of CP. What lends further credence to the assumption that the first-merger proposal is not along the right track is the assumption that merger is superior to movement in derivation. According to the minimalist assumptions, merge, unlike movement of Chomsky (2001), comes for free.[36] Chomsky (2001) asserts that:[37]

> "…narrow syntax has one operation that comes 'free,' in that it is required in some form for any recursive system: the operation Merge…. The condition that language is a recursive system is imposed by the conceptual-intentional interface. Merge is therefore 'free,' a consequence of general principles, because recursion is impossible without it. Moreover, any other operation in narrow syntax besides merge requires empirical motivation, and is a prima facie departure from SMT." (2001: 6)

Accordingly, what is expected under the first-merger proposal of adjunct wh-phrases into the left periphery is that to fill Spec, CP by the adjunct wh-phrase is superior to filling it by the internal merge of the subject through movement form Spec, TP to Spec, CP. In this light, we are led to reject the first-merger possibility of adjunct wh-phrases into the left periphery.

The other proposal is that wh-phrases are base-generated in the canonical position where adjuncts enter the derivation in a declarative sentence, but what distinguishes adjunct wh-phrases from argumental wh-phrases is that the former have a strong [Q] feature that must be checked in overt syntax (i.e. moving to the Spec, CP), while the latter have a weak [Q] feature (see Chomsky, 1995). It can be argued that adjunct wh-phrases in NA must move to the Spec, CP in the overt syntax because they have a strong [Q] feature that should be checked in the overt syntactic cycle of the relevant derivation.

Reinhart (1998) states that the occurrence of multiple wh-words, in interrogative clauses, is subject to a superiority effect, as shown in (30a) and (30b). However,

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[36] This distinction is rejected in Chomsky's later work where Move is viewed as internal Merge (Chomsky, 2007).

[37] SMT stands for '*Strong Minimalist Thesis*' which is the assumption of optimal, efficient design for the satisfaction of interface conditions (Chomsky, 2005: 4; cited in Richards, 2011: 74).

she argues that the superiority effect cannot account for the ungrammaticality of (30b).

(30)

      a. Who discussed what with you?

      b. */?What did who discuss e with you?

      c. *Who arrived why?

(Reinhart, 1998: 30)

She argues that the distinction between argument and adjunct wh-words should be ascribed to the distinction between argument and adverbial wh-phrases. According to her discussion, adverbial wh-words are only interpretable in Spec, CP. She argues that when adverbial wh-words co-occur with another argument wh-word, they are not interpreted. According to Reinhart (1998), *how* and *what way* are adjunct wh-words which are syntactically and semantically the same. When they co-occur with an argument wh-word such as *who*, *what way* is licenced in situ, as in (31b), while the adverbial wh-word *how* is not licenced in situ, as shown in (31a).

(31)

      a.* Who fainted when you behaved how?

      b. Who fainted when you behaved what way?

If Reinhart`s argument is on the right track, adjunct wh-words in NA fall under adverbial wh-words. This argument will account for the NA data in (28) where the adjunct wh-word *meta* "when" remains in situ. In order for the adjunct wh-word *meta* "when" to be be interpreted in (28), it must move to the Spec, CP.

Let us now discuss the evidence that wh-phrases are base-generated in the canonical position where corresponding adjuncts enter the derivation in a declarative sentence. As I argued in the previous chapter (section 3.2), the subject wh-phrase moves first to Spec, TP prior to its movement to the left periphery. There are two logical possibilities for the interaction between the base-generation of the subject wh-phrase and any adjunct wh-phrase. The first possibility is that the subject is base-generated in a position higher than the base-generation of the

adjunct wh-phrase. An example of this possibility is when the question includes a subject wh-phrase and a locative wh-phrase or a manner wh-phrase. Consider the following question:

(32)

    *wein   ħadˤar   min   al-ʕirs ams?
     where   attend.PAST.3SG.M   who DEF-marriage yesterday
    Intended: 'Who attended the marriage yesterday, and where?'

Following Cinque (1999: 13-17), *wein* "where" is base-generated adjoining to VP. In this regard, *wein* "where" is overtly moved from its lower position, adjoining to VP, to the Spec, CP crossing over the subject wh-phrase in Spec, TP. The ungrammaticality of (32) is due to its violation to Minimal Link Condition and locality. Based on our discussion of Reinhart (1998), the adjunct wh-word *wein* "where" in (32) must move to the Spec, CP to gets its interpretation. However, it cannot move to the left periphery because the subject wh-word *min* "who" is the wh-word closest to the head of the CP. Consider the following syntactic representation of (32).

(33)
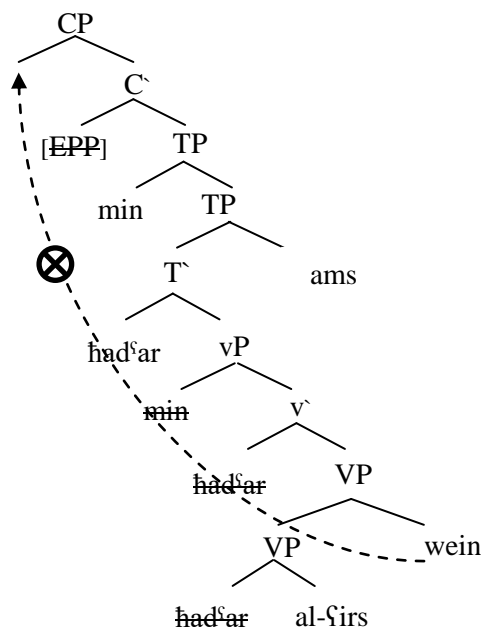
Let us now discuss the second situation where the adjunct wh-phrase is base-generated in a position higher than Spec, *v*P. An example of this proposal is when

the question includes a subject wh-phrase and a temporal wh-phrase. Consider the following question:

(34)

    *meta   ħadˤar min   al-ʕirs   b-al-dirah?
     When   attend who   DEF-marriage   in-DEF-village
     'Who attended the marriage in the village, and when?'

Temporal adjuncts are supposed to be base-generated adjoining to TP (Cinque, 1999: 12). The tree in (34) shows that the subject wh-word, *min* "who", is the wh-word closest to the head of CP. Therefore, the head C° will attract *min* "who" to its specifier rather than attracting the temporal wh-word *meta* "when". Consider the following tree:

(35)
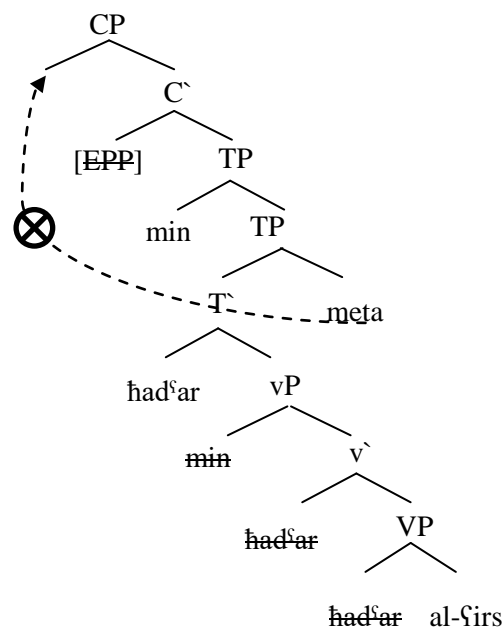
Furthermore, compelling evidence for my argument comes from the fact that a question with a temporal wh-phrase and an object wh-phrase is grammatical. Consider the following sentence:

(36)

    meta   ħadˤar al-radʒaal   wiʃ   b-al-dirah?
    when   attend DEF-man   what   in-DEF-village
     'What did the man attend in the village and when?'

In the above question, we have two wh-phrases *meta* "when" and *wiʃ* "what". *Meta* "when" appears at the beginning of the question and, following my analysis, lands in the Spec position of CP. *wiʃ* "what" remains in situ, as a complement of VP. What is significant here is the fact that the question is grammatical, unlike cases where the subject is a wh-phrase, as discussed above. Here the case is straightforward. The temporal wh-word *meta* "when" is more local to the head of the CP than the object wh-word *wiʃ* "what" and vice versa. Consider the following syntactic representation of (36):

(37)
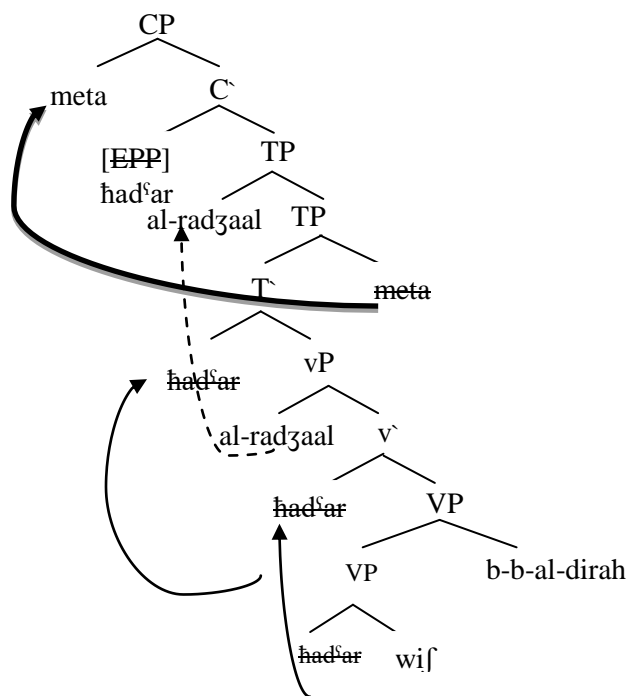
4.4   Conclusion

This chapter has introduced the descriptive facts relating to instances of multiple wh-phrases in NA. Two obvious generalizations have been drawn: a wh-phrase cannot move over a higher wh-phrase, and no two argumental wh-phrases can appear independently in the left-periphery. Coordination between the two fronted wh-phrases does not help the sentence to be grammatical if the two fronted wh-phrases are argumental. This chapter has also examined the context where the subject/object wh-phrase can appear fronted with another wh-phrase. I have provided evidence in this section that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase (when it is fronted with another wh-phrase) and does not constitute an example of multiple wh-phrases. This chapter has investigated examples whereby

multiple adjunct wh-phrases are fronted to the left periphery. Two adjunct wh-phrases can appear fronted if they are conjoined by the coordinating conjunction *wa* "and". This chapter has accounted for why for a question in NA to have a subject wh-phrase and an object wh-phrase, the subject wh-phrase should move to Spec, CP, while the object wh-phrase remains in situ. The subject wh-phrase moves to Spec, CP, attracted by the [EPP] feature on the head of this projection. The object wh-phrase cannot move instead of the subject wh-phrase because of the latter being more local to the head of the CP than the former. This chapter has also investigated questions with multiple wh-phrases (one argumental and one adjunct). Such questions have been shown to not be allowed in NA grammar, unless the argumental wh-phrase is an object that remains in situ. I proposed that adjunct wh-phrases have a strong [Q] feature which force these elements to move to the left periphery in the overt syntax. However, the existence of the subject wh-phrase in Spec, vP (or Spec,TP) makes it the desired element to move upstairs instead of the the adjunct wh-phrases (base-generated below Spec,*v*P), a matter that leads to the ungrammaticality of the question.

CHAPTER FIVE: Analysis of conjoined wh-phrases in NA

5.1 Introduction

In Chapter Four, I made it explicit that NA allows for questions with fronted multiple wh-phrases as long as the two fronted wh-phrases are adjuncts (not arguments, i.e. subject wh-phrase or object wh-phrase). Consider some relevant examples from the previous chapter, repeated in (1).

(1)

    a. al-radʒaal ħadˤar   al-ʕirs   ams   b-al-dirah?
             DEF-man   attend   DEF-marriage yesterday   in-DEF-village
             'The man attended the marriage yesterday in the village.'

    b. meta   wa-wein   ħadˤar al-radʒaal   al-ʕirs
             when   and-where   attend DEF-man   DEF-marriage
             'When and where did the man attend the marriage?'

    c. wein   wa- meta   ħadˤar al- radʒaal   al-ʕirs ?
             where   and-when   attend DEF-man   DEF-marriage
             'Where and when did the man attend the marriage?'

    d. meta   wa-keif   ħadˤar al-radʒaal   al-ʕirs ?
             when   and-how   attend DEF-man   DEF-marriage
             'When and how did the man attend the marriage?'

    e. keif   wa- meta   ħadˤar al-radʒaal   al-ʕirs ?
             how   and-when   attend DEF-man   DEF-marriage
             'How and when did the man attend the marriage?'

    f. keif   wa-wein   ħadˤar al-radʒaal   al-ʕirs ?
             how   and-where   attend DEF-man   DEF-marriage
             'How and where did the man attend the marriage?'

    g. wein   wa-keif   ħadˤar al-radʒaal   al-ʕirs ?
             where   and-how   attend DEF-man   DEF-marriage
             'Where and how did the man attend the marriage?'

Note also that the two adjunct wh-phrases should be conjoined by the coordinating conjunction *w*a "and", otherwise the resulting questions would be ungrammatical. For instance, if the coordinating conjunction *wa* "and" is replaced by another coordinating conjunction, the resulting questions are ungrammatical (see section 4.2.3 for detail). In this chapter, I explore such questions and

investigate their licencing conditions. I argue that such questions are mono-clausal constructions, and coordination of the two fronted wh-phrases is used as a strategy to convert the two independent wh-phrases into a single XP which in turn can be licensed in the single Spec, CP. The movement of the two adjunct wh-phrases to the left periphery and their forming &P is implemented through the so-called sideward movement (Nunes, 2001, 2004). However, before I explain this in detail, I bring forth evidence in the next section (section 5.2) that questions with fronted multiple wh-phrases are true questions that ask for new information. Additionally, before discussing my account of conjoined question word constructions in NA, I dismiss the possibility that such questions are bi-clausal constructions derived through ellipsis (section 5.3).

5.2   Questions with Fronted Multiple Wh-phrases are True Questions

In this section, I bring forth evidence that the questions with fronted multiple wh-phrases are true questions that ask for new information. The first piece of evidence that the examples in (1) are true multiple wh-phrases comes from the felicitous answers to such questions. For the sake of brevity and space, I provide only the potential answers for two examples in (1), namely (1c) and (1d), which include time, place and manner wh-phrases.

(2)

    a. wein   wa- meta   ħadˤar al-radʒaal   al-ʕirs
      where   and-when   attend DEF-man   DEF-marriage
    'Where and when did the man attend the marriage?'

    b. ams   b-al-dirah
    yesterday   in-DEF-village
    'The man attended the marriage yesterday in the village[38].'

    c. meta   wa-keif   ħadˤar al-radʒaal   al-ʕirs
      when   and-how   attend DEF-man   DEF-marriage
    'When and how did the man attend the marriage?'

    d. ams   b-al-sayyarah
    yesterday   by-DEF-car
    Intended: 'The man attended the marriage yesterday by car.'

---

[38] Note here that the coordinator conjunction *wa* "and" does not appear in the answer.

Note that the felicitous answers (as verified by all NA speakers consulted for this purpose) contain corresponding information to the two wh-phrases which are used in the questions (NA informants are asked to imagine an appropriate situation and answer these questions). The felicitous answer (b) contains information about the place and time, whereas the felicitous answer (d) contains information about the place and the manner, indicating that the wh-phrases in the relevant questions are not discourse particles but genuine wh-phrases that ask for specific information encoded in the meanings of the wh-phrases used. What supports this observation is that if one piece of corresponding information is lacking in the answers, the latter become infelicitous, as normally expected in cases with a single wh-phrase. Consider the following infelicitous answers intended for the questions in (2a) and (2c) where the time information is not mentioned:

(3)

      a. #b-al-dirah
        in-DEF-village
       Intended:'The man attended the marriage in the village.'

      b. #b-al-sayyarah
        by-DEF-car
       Intnded:'The man attended the marriage by car.'

Likewise, if the place and manner information is deleted from the answers to the questions (3a) and (2c), respectively, and the time information is retained, the resulting questions would be infelicitous, as exemplified in the following pair of infelicitous answers:

(4)

      a. #ams
        yesterday
       The man attended the marriage yesterday.'

      d. #ams
        yesterday
       'The man attended the marriage yesterday.'

The obvious generalization is that corresponding information of the two adjuncts used in the question should be present in the answer, otherwise the answers are

not felicitous. This generalization contrasts with the cases where the first wh-phrase is *leiʃ* "why", which is assumed to be a discourse particle (see the next chapter for discussion).

The second piece of evidence that multiple adjunct wh-phrases are genuine wh-phrases is that they can occur in indirect questions. Consider the following examples where the adjuncts multiple wh-phrases are licensed in indirect questions as complements to the verbs *saʔal* 'asked' and *ʔistaʁrab* 'wondered'.

(5)

Talal	saʔal/ʔistaʁrab		wein	wa- meta
Talal	ask/wondered.PAST.3SG.M		when	and-where

ħadˤar   al-radʒaal   al-ʕirs
attend.PAST.3SG.M   DEF-man   DEF-marriage
 'Talal asked/wondered when and where the man attended the marriage.'

The grammaticality of the sentence in (5) is evidence that the questions with conjoined fronted wh-phrases are true questions that ask for new information because they can occur in the same syntactic environments as the questions with a single wh-phrase.

Having shown that the questions with conjoined fronted wh-phrases are true questions, let us now discuss why such questions are allowed in NA, unlike the questions with multiple argumental wh-phrases, where the object wh-phrase should remain in situ in the overt syntax.

5.3   Questions with conjoined fronted wh-phrases: Towards a syntactic account

5.3.1   Introduction

In this section I will account for the occurrence of conjoined fronted wh-phrases in the left periphery. However, two observations need to be addressed here; one related to the NA itself and one related to the structure of the left periphery in Arabic syntax. In NA, multiple wh-fronting is restricted to conjoined adjunct wh-phrases. Argumental wh-phrases are not allowed to appear question initially even if they are conjoined (see section 4.3 for discussion).

In order to account for the derivation of questions with conjoined fronted wh-phrases, one might suggest that two wh-phrases demand two layers of CPs or two Specs, CP. I argue that this possibility is wrong. First, it has never been attested. For instance, related works on Arabic syntax indicate that CP is not recursive in this language (and obviously most other languages) nor are two focalized elements allowed to appear sentence-initially (see, for example, Ouhalla, 1997, Soltan, 2007, and Aoun *et al.,* 2010, among others). So, any proposal that seeks to account for the questions with conjoined fronted wh-phrases in NA must take into consideration these two problems, otherwise the proposal would be untenable to pursue.

Against this background, I assume that the appropriate account of questions with conjoined fronted wh-phrases in NA should be tied to the necessity of the coordinating conjunction *wa* "and". Interestingly, while the coordinating conjunction is obligatorily present in the question, it is obligatorily absent from the answer. Consider the felicitous answers to the questions in (2), repeated below as (6).

(6)

      a. wein   wa- meta   ħadˤar al-radʒaal   al-ʕirs
        where   and-when   attend DEF-man   DEF-marriage
        'Where and when did the man attend the marriage?'

      b. ams   (#wa-)b-al-dirah
        yesterday   (and-)in-DEF-village
        'The man attended the marriage yesterday (#and) in the village.'

      c. meta   wa-keif   ħadˤar al-radʒaal   al-ʕirs
        when   and-how   attend DEF-man   DEF-marriage
        'When and how did the man attend the marriage?'

      d.ams   (#wa-)b-al-sayyarah
        yesterday   (and-)by car
        Intended: 'The man attended the marriage yesterday (#and) by car.'

The fact that adjuncts of various types do not need to be conjoined (in statements) is attested in other languages such as English and Swedish. Consider the following data:

(7)

      a. I saw John yesterday next to the shop.

b. naan   innale   aviDe   pook-um-aayir-unnu.
I-NOM   yesterday   there   go-FUT-be.PAST-PRES
'I would have gone there yesterday.'

(Babu, 1996: 12)

c. Han hade hittat pengarna   under sangen   iga˚r.
  he   had   found money-the   under bed-the   yesterday
'He had found the money under the bed yesterday.'

(Holmberg and Platzack, 2005: 423)

The constructions are grammatical without the use of the conjunction. So, why must the fronted adjunct wh-phrase be conjoined? I propose that the fronted adjunct wh-phrase should be conjoined because of two factors: the need of the adjunct wh-phrase to move in the overt syntax given their strong Q-feature and the fact that there is only one Spec, CP in NA. In order to accommodate these two factors, NA devises what I call pseudo-coordination where the fronted two adjunct wh-phrases are conjoined to form one single XP that is licensed in Spec, CP. The movement of the two adjunct wh-phrases to the left periphery and their forming &P is implemented through the so-called sideward movement (Nunes, 2001, 2004). Prior to elaborating on this claim, I find it useful at this point of the discussion to look at another possible competing proposal (namely ellipsis) and show how it fails to account for the formation of NA wh-multiple questions.

5.3.2   *Ellipsis approach to conjoined question word conductions*

In this section, I discuss the possibility that questions with fronted conjoined wh-phrases are derived through ellipsis. First, I bring in Wilder's (1994) approach for questions with fronted conjoined wh-phrases. Then I report some problems related to this approach, as raised by several researchers.

Wilder (1994) provides a syntactic account of questions with fronted conjoined wh-phrases, arguing that such questions are underlyingly two clauses conjoined and at PF. Note here that Wilder's (1994) approach for questions with fronted conjoined wh-phrases was mainly set to account for questions where the fronted wh-phrases need not be similar in their categorial status (as in *what and when* does…). Wilder (1994: 291) rejects two ideas: "conjuncts can be any category and only like categories can be coordinated". The following examples illustrate Wilder`s (1994: 304) proposal:

(8)

    a.   John is a Republican and proud of it

    b.   [John is [NP a republican]] and [~~John is~~ [AP proud of it]]

    c.   John has often drunk beer and has seldom drunk wine.

    d.   [John [T has often drunk beer]] and [~~John~~ [T has seldom drunk wine]]

    e.   John has often drunk beer and seldom drunk wine.

    f.   [John has [VP often drunk beer]] and [~~John has~~ [VP seldom drunk wine]]

    g.   John has often drunk beer and eaten crisps.

    h.   [John has often [VP drunk beer]] and [~~John has often~~ [VP eaten crisps]]

    i.   John has often drunk beer at lunchtime and wine in the evening.

    j.   [John has often drunk [VP beer at lunchtime]] and [~~John has often drunk~~ [VP wine in the evening]]

Following Wilder (1994), it can be suggested that the use of the coordinating conjunction *wa* "and" indicates some ellipsis process whose outcome is that fronted wh-phrases are conjoined by *wa* "and". Under this assumption, we have two questions rather than one question. These two questions are similar with only one difference, which is the wh-phrase. For instance, in order to generate the question in (9a), we need the bipartite question in (9b) as an underlying formation before ellipsis takes place.

(9)

a. wein   wa- meta   ħadˤar al-radʒaal   al-ʕirs?
  where   and-when   attend DEF-man   DEF-marriage
   'Where and when did the man attend the marriage?'

b. wein   ħadˤar   al-radʒaal   al-ʕirs

   where   attend.PAST.3SG.M   DEF-man   DEF-marriage

wa- meta   (ħadˤar   al-radʒaal   al-ʕirs)?

  and-when   attend.PAST.3SG.

DEF-man   DEF-marriage

 'Where did the man attend the marriage and when (did the man attend the marriage)?'

Applying the ellipsis process, the first part of the question (material before *wa* 'and') is deleted, whereas the rest of the question remains intact. This analysis patterns with Wilder's (1994) assumption on sentential conjuncts, as shown below (ellipted material is crossed).

(10)

wein   ~~ħadˤar al-radʒaal~~   ~~al-ʕirs~~   wa- meta

 where   attend   DEF-man   DEF-marriage and-wein

ħadˤar   al-radʒaal   al-ʕirs?

attend.PAST.3SG.M   DEF-man   DEF-marriage

 'Where ~~did the man attend the marriage~~ and when did he attend the marriage?'

Although ellipsis might account for the surface form of the resulting question with fronted conjoined wh-phrases, it gives rise to several questions which are hard to answer. Several works have indicated that Wilder`s (1994) proposal is not correct. I depend here on Zhang (2010). Zhang argues that Wilder`s analysis would generate ungrammatical coordinate structures if coordination of two clauses is applied and this is followed by deletion to (11a) and (11b). The result (11c) will be the ungrammatical sentence shown in (11c).

(11)

        a.   John sang beautifully

        b.   John sang a carol.

        c.   [John sang [beautifully]] and [John sang [a carol.]]

        d.   *John sang beautifully and a carol.

        (Peterson, 1981; as cited in Sag *et al.,* 1985: 145)

Zhang (2010) notes another problem with Wilder`s (1994) proposal. The preposition (such as *about*) may not select CP as its second conjunct. For instance, the preposition *about* selects the DP, *Mr. Golson`s many qualifications,* as shown in (12). However, if we assume that the coordinate structure is made of clausal coordination plus ellipsis, we would predict that the preposition would select the CP as a second coordinate complex. Consider the following structures, which are adapted from Zhang (2010: 51)

(12)

    a. We talked *about* $_{DP}$ Mr. Golson's many qualifications and $_{CP}$ that he had worked at the White House.

    b. ∗We talked *about* $_{CP}$ that he had worked at the White House.

    c. ∗We talked about $_{CP}$ that he had worked at the White House and his many qualifications.

Additionally, why is ellipsis applied on the first conjunct and not the second conjunct, given that almost all ellipsis-based accounts are based on the identity with something preceding the elided elements and what follows it, as shown in (13)? Wilder (1994) classifies deletion into two types: forward deletion (FWD) and backward deletion (BWD) (or right node raising), as represented below (Wilder, 1994: 306):

(13)

    a. [John is drinking beer] and [Mary ___ wine]   (FWD)

    b. [John bought ____] and [Mary read today`s copy of the Times] (BWD)

When a string of phrases is deleted from the second conjunct we can get FWD, as shown in (13a). According to Wilder (1994), FWD deletion results in Gapping. On the other hand, if the identical elements are deleted from the first conjunct, we get BWD, as shown in (13b). Data from NA reveal, though, that in questions with

fronted conjoined wh-phrases only the backward deletion (right node raising) is allowed, whereas the forward deletion is not. Consider the following examples:

(14)

*wein	ħadˤar	al-radʒaal	al-ʕirs	wa- meta
where	attend	DEF-man	DEF-marriage	and-when

~~ħadˤar~~	~~al-radʒaal~~	~~al-ʕirs~~?
attend.PAST.3SG.M	DEF-man	DEF-marriage

'Where did the man attend the marriage and when ~~did the man attend the marriage~~?'

(15)

wein	~~ħadˤar al-radʒaal~~	~~al-ʕirs~~	wa- meta
where	attend DEF-man	DEF-marriage	and-meta

ħadˤar	al-radʒaal	al-ʕirs?
attend.PAST.3SG.M	DEF-man	DEF-marriage

'Where ~~did the man attend the marriage~~ and when did the man attend the marriage?'

Under an ellipsis approach to questions with fronted conjoined wh-phrases, it is a mystery why the sentence in (14) is ungrammatical. Additionally, under recent accounts of the coordinating conjunction where the coordination phrase is headed by the coordination conjunctive and the first conjunct is located in Spec CoordP, whereas the second conjunct is in the complement position (see Johannessen, 1998), it is difficult to account for why the ellipsis does not apply at the whole Spec.

Furthermore, pursuing the ellipsis option, the same material elided in the question should be present in the answer as well, something that does not occur in NA. Consider the following infelicitous answer to the question in (15):

(16)

*al-radʒaal	ħadˤar	al-ʕirs	ams
DEF-man	attend	DEF-marriage	yesterday

wa-	al-radʒaal	ħadˤar	al-ʕirs	b-al-dirah
and-	DEF-man	attend.PAST.3SG.M	DEF-marriage	in-DEF-village

Intended: 'The man attended the marriage yesterday and the man attended the marriage in the village.'

Additionally, the ellipsis approach does not provide us with an explanation of why adjunct wh-phrases can be elided in NA, while argumental wh-phrases cannot be so (see Chapter Four).

Sulaiman (2016) also dismisses the possibility that ellipsis can be the driving force for the formation of the questions with fronted conjoined wh-phrases in Syrian Arabic. However, she adopts Moro`s (2011) analysis to account for the constraint hold on the co-occuerance of *leš* "why" when it is involved in multiple wh-coordination. According to Sulaiman (2016), *leš* "why" occurs the rightmost wh-word, as shown below.

(17)

a. kif   w   leš   Sar   l-ħadeth?
  how   and   why   happened   the-accident
  'How and when did the accident take place?'

b. *leš   w   kif   Sar   l-ħadeth?
  Why   and   how happened   the-accident

(Sulaiman, 2016: 66)

I argued in Chapter One that NA grammar does not hold any restriction on the order of adjunct wh-words, even if *leiʃ* "why" is a part of the coordinated wh-construction, as illustrated below.

(18)

a. leiʃ wa-wiʃloon   Sar   al-ħadith?
  why and how happen.PAST.3PS.M.   DEF-accident
  'why and how did the accident happen?'

b. wiʃloon wa-leih   Sar   al-ħadith?
  how and why happen.PAST.3PS.M.   DEF-accident
  'How and why did the accident happen?'

Note here that Sulaiman (2016) does not provide an account of multiple coordinated wh-phrases in Syrian, but her discussion was restricted to show how clause folding theory is able to account for the Syrian data in (17). As for NA data, there is no restriction hold on the order of wh-phrases in coordinated structures. Therefore, there is no need to adopt Moro`s (2011) folding theory to

account for multiple coordinated wh-words in NA. Instead, I provide an account of multiple coordinated wh-phrases, using sideward movement.

I argue below that NA's questions with multiple wh-phrases are mono-clausals, not bi-clausal. The natural question to raise at this point concerns the exact position of the two multiple wh-phrases in the left periphery. My proposal is that the two wh-phrases are in the left periphery situated in the Spec, CP. Given that the CP is not recursive, the expectation is that only one element can occupy its Spec. The most important point here is that due to non-recursivity of the CP, the two fronted wh-phrases cannot be situated in a unique Spec for each. The question remains how questions with fronted wh-phrases are licensed in the grammar of NA. I propose that such questions are allowed by virtue of the fact that fronted wh-phrases must be conjoined. I have shown above that conjunction is not used in the declarative counterparts of the questions. Consider sentence (1a), repeated below as (19). The following example is a declarative sentence:

(19)

       al-radʒaal   ħadˤar   al-ʕirs   ams   b-al-dirah
       DEF-man   attend   DEF-marriage yesterday   in-DEF-village
       'The man attended the marriage yesterday in the village.'

Now consider the question when the temporal and locative information is questioned:

(20)

       meta   wa-wein   ħadˤar   al-radʒaal   al-ʕirs
       when   and-where   attend.PAST.3SG.M   DEF-man   DEF-marriage
       'When and where did the man attend the marriage?'

It is clear that coordinating conjunction is only used in questions and it is not present in the declarative sentence. I assume that the coordinating conjunction is used in questions as a device to turn the two wh-phrases as one syntactic object that can occupy just one slot in the left periphery, i.e. Spec, CP. The two wh-phrases leave their canonical position and join together under the newly-merged ConjP, which is one XP that can be licensed in the left periphery. This process of producing one syntactic object out of two (or more) constituents of one tree and then re-introducing the two elements under the newly-formed syntactic object is referred to in literature as the sideward movement, first proposed by Nunes (2001,

2004). Several works argue for the compatibility of sideward movement to account for instances of multiple wh-phrases across languages (see Citko and Gračanin-Yuksek, 2013, Grewendorf, 2001, Zhang, 2007, Haida and Repp, 2011, among many others).

An important point to mention here is that sideward movement was used to account for questions with fronted conjoined wh-phrases. For instance, Zhang (2007) presented a sideward movement approach to account for the derivation of questions such as *what and when does John normally eat*? and the so-called Interwoven Dependency Constructions, such as *which nurse and which hostess did Fred date and Bob marry respectively*? Zhang shows that such questions and constructions exhibit dependencies between one coordinate complex and two syntactic gaps, with each conjunct of the complex associated with one of the gaps. Zhang proposes that the two conjuncts of the left coordinate complex in both constructions first undergo sideward movement from the gap positions independently, and form a coordinate complex with a conjunction, and later the newly built coordinate complex is integrated into the (complex) clause.

Before elaborating on the derivation of the questions with multiple wh-phrases, I provide a brief background discussion on the so-called sideward movement in the next section.

5.3.3 *Sideward movement (Nunes, 2001, 2004)*

In this section I will explain sideward movement, which is discussed by Nunes (2001, 2004). According to this approach, movement is decomposed into four interactive and independent operations. These are move, merge, form a chain and chain reduction. According to Nunes (2001, 2004), sideward movement is allowed by the computational system, where it takes a syntactic object from a subtree and merges it with another unconnected subtree (Nunes, 2001, 2004). According to this approach, sideward movement is used to account for a number of syntactic phenomena, such as parasitic gaps (Nunes, 2004), Across The Board movement (Nunes, 2004), adjunct control (Hornstein, 2001). The importance of sideward movement in the present context stems from its plausible application to account for the extraction of multiple coordinated wh-words in NA. In the literature, it has been used to account for coordinated wh-questions in Russian (Haida and Repp, 2011) and in English (Zhang, 2007). In what follows, I

introduce the main assumption of sideward movement as developed by Nunes (2001, 2004). Afterwards, I explore the implementation of sideward movement in relative clauses to show that adjuncts can be non-cyclically merged into a relative clause structure in English, a matter that will account for the extraction of two adjunct wh-words from their canonical positions to the Spec, CP in NA.

Following Chomsky (1993), Nunes (2001, 2004) argues that a trace left behind by a moved syntactic object is deleted at the phonological level but remains active for further logical processes. According to the Copy Theory of Movement, the underlying structure of (21a) is as represented in (21b).

(21)

        a.   John was kissed.

        b. $[_{TP} \text{John}^i [_T \text{T} [_{VP} \text{was} [_{VP} \text{kissed John}^i]]]]$

                              (Nunes, 2001:305)

Nunes (2001) argues that if we consider that the two copies of *John* in (21b) are the same, then we are unable to linearize the structure of (21b) at the level of Phonological Form in accordance with Kayne's (1994) Linear Corresponding Axiom (LCA), which is stated below:

(22) Linear Correspondence Axiom (Kayne, 1994: 33; as cited in Nunes, 2001: 307)

> Let X, Y be nonterminals and x, y terminals such that X dominates x and Y dominates y. Then if X asymmetrically c-commands Y, x precedes y.

To explain this, let us consider the structure of (21b) again. According to Nunes (2001), the copula *was* asymmetrically c-commands the lower copy *John*. Therefore, the linear order will be *<was kissed John^i>*. Simultaneously, LCA requires the copula *was* to be preceded by *John^i* because the higher copy of *John^i* c-commands the copula *was*. The result of this linear order will be *<John^i was kissed John^i >*. In other words, *John* will be pronounced before and after *was kissed.* This violates the asymmetry statement of LCA because Kayne (1994) argues that if x, which in this case the copula *was*, precedes y, which is in this case *John*, x (w*as*) cannot follow y (*John*) at PF. Therefore, there is no linear

order of the structure in (21b). In order to save the structure in (21b) and to make sure only the first copy of *John* is realized at PF, Nunes (2001) proposes that the movement of *John* to the subject position should pass through four steps: copy, merge, chain form, and chain reduction. Before we move to these steps, Nunes (2001) proposes that *John* is base-generated as the complement of the passivized verb *was arrested*, as shown in (23).

(23)

[$_{VP}$ was [$_{VP}$ kissed John]]

First, the computational system copies *John* out of its canonical position, as shown in (24a). Then, the copy of John is merged within the subject position, as shown in (24b). Now, the two copies of *John* form a chain because they are non-distinct, as in (24c). Next, Chain Reduction is applied where the lower copy is deleted, as shown in (24d). Nunes (2001, 2004) argues that Chain Reduction targets the lower copy because its features have been checked and it would be invisible at the PF level.

(24)

    a. copy: was arrested John   copy John

    b. merge: John was arrested John

    c. chain form: John^i was arrested John^i

    d. chain reduction: John^i was arrested ~~John^i~~

Nunes (2001, 2004) argues that the computational system is able to handle more than one syntactic object at the same time. Technically, Nunes (2001, 2004) explains that sideward movement becomes another possibility of our understanding of the interaction between the Copy and Merge approaches. For instance, in a subtree K, a syntactic element α is copied and merged into another unconnected subtree L, as shown in (25a). The two copies of α do not form a chain because none of them c-commands the other, as represented in (25b).

(25)

a. $[_K \ldots \alpha^i \ldots]$ α^i $\overset{\text{Merge}}{\longleftrightarrow}$ $[_L \ldots]$

Copy ↓

b. $[_K \ldots \alpha^i \ldots]$ $[_M \alpha^i [_L \ldots]]$
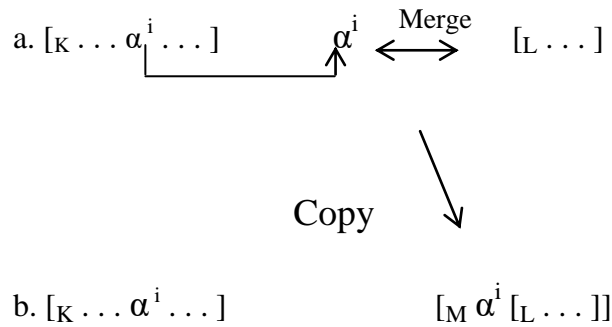
As the derivation continues, another syntactic object HP which requires both copies of α may be introduced, as illustrated in (26). At this level of derivation, the chain relationship between the two copies of α fails to be established because of the c-command condition (Nunes, 2004: 94).

(26)
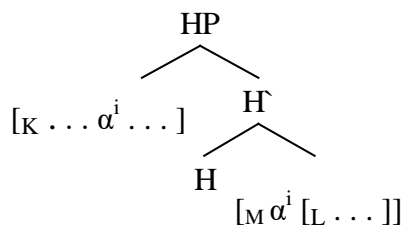
At a later stage of the computational processes, YP is merged with the structure HP and it needs another copy of α, as represented by (26).

(27)
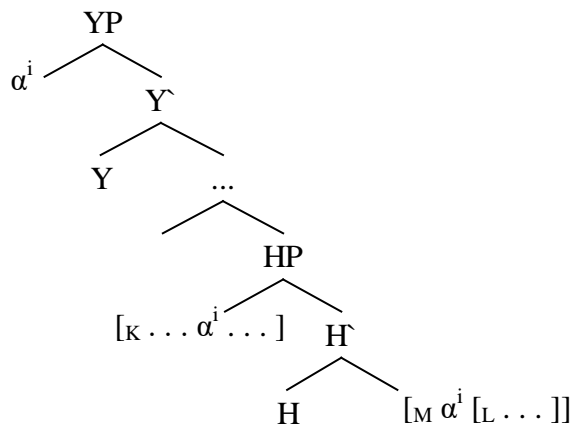
According to Nunes (2001, 2004), the formation of a chain between two copies is subject to two conditions: (a) they must be copies of the same syntactic object, (b) they must meet c-command condition. Since both conditions are met in (27), the highest copy of α is in a position to c-command the lower copies. Therefore, it establishes a chain link with each of the lower copies. In order to avoid pronouncing any of the lower copies at the Phonological level, Nunes (2004) proposes that nontrivial chains must be deleted according to the following statement:

Chain Reduction (Nunes, 2004: 101)

(28) Delete the minimal number of constituents of a nontrivial chain CH that suffices for CH to be mapped into a linear order in accordance with the LCA.

When Chain Reduction is applied to (27), the established chain links between the higher and lower copies are deleted, as shown in (29).

(29)

$$
\begin{array}{c}
\text{YP} \\
\alpha^{i} \quad \text{Y}' \\
\text{Y} \quad \ldots \\
\text{HP} \\
[_{K} \ldots \alpha^{i} \ldots] \quad \text{H}' \\
\text{H} \quad [_{M} \alpha^{i} [_{L} \ldots]]
\end{array}
$$
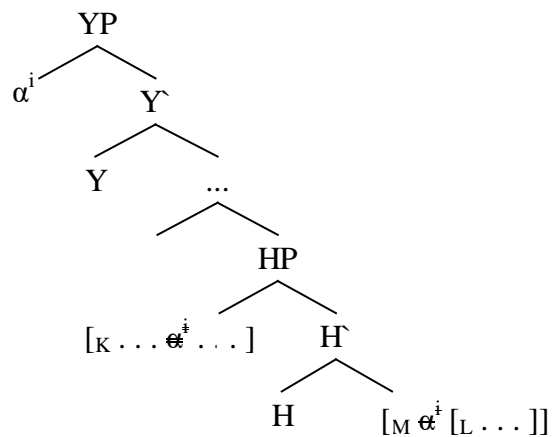
(Nunes, 2004: 95)

5.3.4 Implementation of Sideward Movement in Relative Clauses

Nunes (2001, 2004) argues that sideward movement occurs when a given constituent of a syntactic object is copied and then merges with an independent syntactic object which is not directly with the main tree. As an instance of sideward movement, consider the following instances, discussed in Chomsky (1993: 36) (reported in Nunes, 2001: 316-317):

(30)

        a. *Which claim that John$_i$ was asleep was he$_i$ willing to discuss?

        b. Which claim that John$_i$ made was he$_i$ willing to discuss?

In relation to the examples in (30), Chomsky (1993: 36) provides evidence that noun complement clauses and relative clauses do not pattern alike as far as reconstruction effects are concerned. Chomsky (1993) argues that the contrasts in (30) above are analyzable in terms of the distinction between complements and adjuncts. The main upshot of Chomsky's discussion is that the fact that substitution operations must extend the syntactic target entails that complements can only be introduced cyclically. This means that they are introduced prior to wh-extraction, whilst adjuncts can be introduced non-cyclically.

On the other hand, with the implementation of sideward movement, the contrast in (30) is accounted for with no recourse to (non)cyclicity. Nunes (2001, 2004) argues that at some point in the well-formed derivation of (30), there are two unconnected phrase structures, as shown in (31) (Nunes, 2001: 317):

(31)

        a. K = [$_{CP1}$ was + Q [he willing to discuss which claim]]
        b. L=[$_{CP2}$ Op$_j$ that   John   made   t$_j$]

The two unconnected phrase structures have been independently assembled. The phrase *which claim* is copied, but instead of merging with K in (31a), it, as Nunes (2001) notes, adjoins to the relative clause in (31b), yielding an instance of sideward movement. Consider the following representation (Nunes, 2001: 317):

(32)

        a. K = [$_{CP1}$ was + Q [he willing to discuss which claim]]

        b. M = [$_{CP2}$[which claim] ^{k} [$_{CP2\ Opj}$ that John made t$_j$]]

In the final step, K and M in (32) merge, forming the structure in (33) and the strong wh-feature of the interrogative complementizer [Q] is checked (Nunes, 2001: 317):

(33)

[CP1[CP2[which claim]^k [CP2 Op$_j$ that John made t$_j$]] [C' was + Q [he willing to discuss [which claim]]]]^k.

Nunes (2001) argues that in a derivation like (33), the upper copy of *which claim* is involved in the checking relation, satisfying the Last Resort condition.[39] Additionally, *which claim* c-commands the lower copy. Nunes also shows that the Minimal Link Condition is also satisfied in the derivation in (33) because there is no intervening element between the two copies that would be involved in the same checking relation as the upper wh-copy.[40] As all conditions on Form Chain are satisfied (i.e. the C-Command Condition, Last Resort, and the Minimal Link Condition), the wh-copies form the chain CH 4 ([which claim]^k, [which claim]^k) (Nunes, 2001: 317-318). After the structure in (33) is transferred into the phonological component by Spell-Out, CH undergoes Chain Reduction, and hence the optimal reduction of CH is the one that deletes its lower link. This results in minimizing the number of applications of FF-Elimination.[41] The final product is the sentence in (30b), which I repeat below for convenience.

(34)

Which claim that John made was he willing to discuss?

An important point here is that Nunes argues that sideward movement could not be extended to the sentence in (30a) repeated below, as it incorrectly allows *he* and *John* to be co-referential.

(35)

*Which claim that John$_i$ was asleep was he$_i$ willing to discuss?

Under sideward movement, every instance of movement is cyclic. The potential derivational steps for (35) represented in (36) and (37) below are ruled out. In order for the CP in (36b) to become the complement of the copy of *claim*, as

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[39] Last resort: An operation OP may apply only if the derivation would otherwise result in an ungrammatical representation (at PF or LF) (see Collins, 2001: 46).

[40] Minimal Link Condition: α can raise to a target K only if there is no operation (satisfying Last Resort) Move β targeting K, where β is closer to K. (see Chomsky, 1995: 296).

[41] Formal Feature Elimination (FF-Elimination): Given the sequence of pairs σ = <(F, P)$_1$, (F, P)$_2$, . . . , (F, P)$_n$> such that σ is the output of Linearize, F is a set of formal features, and P is a set of phonological features, delete the minimal number of formal features in order for σ to satisfy Full Interpretation at PF (Nunes, 2001: 313).

shown in (37b), a noncyclic merger between L and M is needed (Nunes, 2001: 319).

(36)

      a. K = [was + Q [he willing to discuss [which$_i$ claim^k]]]

      b. L = [that John was asleep]

      c. M = [which$_i$ claim^k]

(37)

      a. K = [was + Q [he willing to discuss [which$_i$ claim^k]]]

      b. N = [which$_i$ [claim^k [$_L$ that John was asleep]]]

Furthermore, Nunes argues that even if the derivation of the sentence (35) proceeds cyclically (as schematically represented in (38-40)), there is no chain containing the two copies of *claim* or the two copies of *which* that can be formed (Nunes, 2001: 319).

(38)

      a. K = [was + Q [he willing to discuss [which^i claim^k]]]

      b. L = [that John was asleep]

      c. M = [claim^k]

(39)

      a. K = [was+ Q [he willing to discuss [which^i claim^k]]]

      b. N = [claim^k [$_L$ that John was asleep]]

      c. O = [which^i]

(40)

      a. K = [was+Q [he willing to discuss [which^i claim^k]]]

      b. P = [which^i [claim^k [that John was asleep]]]

(41)

$$[[_P \text{which}^i [\text{claim}^k [\text{that John was asleep}]]] [_K \text{was}+ Q [\text{he willing}$$

to discuss $[\text{which}^i \text{claim}^k]]]]$

The potential chain $CH_1 = (\text{which}^i \text{claim}^k, \text{which}^i \text{claim}^k)$ is not formable. This is because the first link is not a constituent in (41). The other potential chains $CH_2 +$ (claim^k, claim^k). Additionally, $CH_3 + (\text{which}^i, \text{which}^i)$ are not made because there is no c-command between their links. Note here that according to Nunes (2001) the resulting non-distinct copies of *claim* and *which* in (41) induce violations of the asymmetry and irreflexivity conditions on linear order (if α precedes β, then it must be the case that α ≠ β). Furthermore, they cannot be deleted by Chain Reduction as the latter operates with nontrivial chains but is inapplicable with multiple occurrences of non-distinct constituents. In view of this, the structure in (41) cannot be linearized, something that causes the derivation to crash.[42]

After this brief introduction to the main assumptions of sideward movement and its application in accounting for certain structures, let us now explain how multiple wh-movement in NA fares better under this approach, the task which I undertake in the following section.

5.3.5 *Multiple Coordinated Wh-questions in NA: Towards an Analysis*

In this section, I provide a syntactic account of questions with conjoined fronted multiple wh-phrases in NA. I will essentially argue that such questions are mono-clausal constructions, which are generated through the movement of the two adjunct wh-phrases to the left periphery in the overt syntax, forced by their own strong [Q] features. I argue that NA devises what I call pseudo-coordination where the fronted two adjunct wh-phrases are conjoined to form one single XP that is licensed in Spec, CP. The movement of the two adjunct wh-phrases to the

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[42] Nunes (2001) shows that the only other relevant cyclic derivation for (34) that would allow co-reference between *John* and *he* is outlined as follows:
  i.   a. K = [was + Q [he willing to discuss [which claim]^i]]
         b. L = [that John was asleep]
  ii.   a. K = [was + Q [he willing to discuss [which claim]^i]]
         b. M 4 [[which claim]i [L that John was asleep]]
  iii.   [[M [which claim]^i [$_L$ that John was asleep]] [$_K$ was+ Q [he willing to discuss [which claim]^i]]]
The copy of *which claim* merges with L, and the resulting syntactic object merges with K. However, Nunes argues for a chain that involves the two copies of *which claim* in (iii) to be formed, the upper copy must have merged with L in (iib) by adjunction, otherwise the upper copy would not be able to c-command the lower one.

left periphery and their forming &P is implemented through the so-called sideward movement (Nunes, 2001).

We have shown above that multiple wh-construction in NA is only permitted when the two wh-phrases are adjuncts and conjoined by the coordinating conjunction *wa* "and", not arguments. I argue that this restriction on the type of multiple wh-phrases follows from the nature of the adjunct wh-phrases in NA having strong [Q] feature, hence they must raise to the left periphery in narrow syntax, whereas argument wh-phrases do not. One empirical argument for this comes from the observation that argument wh-phrases need not move to the left periphery, as is the case when both the subject and the object are wh-phrases (only the subject wh-phrase moves to Spec, CP) (see section 4.3). Their dislocation, if any, is forced because of the [EPP] feature on the head of the CP. Following this, we can account for why the object wh-phrase remains in situ in the presence of a subject wh-phrase. As for adjunct wh-phrases, they must all move to the left periphery and the fact that there is one adjunct wh-phrase in the left periphery does not salvage the sentence derivation in the presence of another adjunct wh-phrase. We have shown that multiple wh-phrases must be coordinated by the coordinating conjunction *wa* "and", otherwise the resulting question would be ill-formed. Consider the following instance:

(42)

a. meta   wa-wein   ħadˤar   al-radʒaal   al-ʕirs
   when   and-where   attend.PAST.3SG.M   DEF-man   DEF-
   marriage   'When and where did the man attend the marriage?'

b. wein   wa- meta   ħadˤar   al-radʒaal   al-ʕirs
   where   and-when   attend.PAST.3SG.M   DEF-man   DEF-
   marriage
   'Where and when did the man attend the marriage?'

c. meta   wa-keif   ħadˤar   al-radʒaal   al-ʕirs
   when   and-how   attend.PAST.3SG.M   DEF-man   DEF-
   marriage
   'When and how did the man attend the marriage?'

My proposal for the examples in (42) will now follow. There is only one [EPP] feature, on the head of the CP, which only licenses one Spec position to be filled with one syntactic object. In sentences where there are two syntactic objects which need to move to the left periphery, such as in the examples in (42), the

restriction against recursivity of CP bars the possibility of accommodating the two wh-phrases as two different syntactic objects. The question that arises here concerns whether there is some mechanism that allows the two wh-phrases to be accommodated in the non-recursive Spec, CP. I appeal to coordination in this regard. The two wh-phrases form one syntactic unit which can be licensed in the Spec, of CP. In other words, the two wh-phrases are copied and then re-merge with an independent syntactic object, which here is the coordination Phrase, which I dub as (&P), and then the resulting &P remerges in Spec, of CP as one single syntactic object in the sideward movement fashion. This implies that in the well-formed derivation of (42b), there are two unconnected phrase structures, as outlined in (43):

(43)

        a. K = [CP C° [ħadˤar al-radʒaal   al-ʕirs [meta^i] [wein^j]]]]

        b. L = [&P]

(44)

        a. K = [CP C°[ħadˤar al-radʒaal   al-ʕirs [meta^i] [wein^j]]]]

        b. M= [&P [meta^i]& [wein^j]] ^{k}

(45)

    CP [&P [meta^i] & [wein^j]]^k C° [ħadˤar al-radʒaal al-ʕirs [mata?^{i}]
    [ween^j]]].

The two unconnected phrase structures (43a) and (43b) have been independently assembled. The copies of *meta* and *wein* merge with L, forming M. The resulting syntactic object M in (44b) merges with K, forming the structure in (45). Nunes argues that in a derivation like (45), the upper copies of *meta* "when" and *wein* *"where"* (or &P) are involved in checking the [EPP] feature on C^0, therefore satisfying the Last Resort condition. Furthermore, the CoordP including the copies of *meta* and *wein* c-commands the lower copies. As such, all conditions on Form Chain are satisfied. After the structure in (45) is shipped into the phonological component by Spell-Out, CH undergoes Chain Reduction, and all lower copies

are deleted. The final product is the sentence in (42a), which I repeat below for convenience (the same analysis is extended to all other questions in (42)):

(46)

meta	wa-wein	ħadˤar	al-radʒaal	al-ʕirs?
when	and-where	attend.PAST.3SG.M	DEF-man	DEF-marriage

'When and where did the man attend the marriage?'

The previous analysis shows that adjunct wh-words, in multiple wh-constructions, are conjoined in a coordinating phrase and moved to the Spec, CP by means of sideward movement to the left periphery, as in (46). However, in the case of multiple wh-words, where one adjunct wh-word is moved to the left periphery and the other adjunct wh-word remains in situ, the structure collapses, as in (47a). In contrast, when multiple argument wh-words appear in interrogative clauses, the highest wh-word is moved to the left periphery, whereas the lowest wh-word remains in situ, as in (47b). However, unlike adjunct wh-words, NA grammar does not license both argument wh-words to be conjoined by a coordinator *wa* "and" and move the coordinating phrase to the left periphery by means of sideward movement, as in (47c).

(47)

a.
*meta	ħadˤar	al-ridʒaal	al-ʕirs	wein?
when	attend.PAST.3SGM	DEF-man	DEF-marriage	where

'When and where did the man attend the festival?'

b.
min	ħadˤar	wiʃ	ams	b-al-dirah?
who	attend.PAST.3SG.M	what	yesterday	in-DEF-village

'Who attended whom yesterday in the village?'

c.
*min	wa- wiʃ	ħadˤar	ams	b-al-dirah?
who	and-what	attend.PAST.3SG.M	yesterday	in-DEF-village

'Who attended whom yesterday in the village?'

5.4 Conclusion

In this chapter, I have first shown that the questions with fronted multiple wh-phrases are true questions that ask for new information. I have argued that such questions are mono-clausal constructions, which are generated through the movement of the two adjunct wh-phrases to the left periphery in the overt syntax,

forced by their own strong [Q] features. The movement of the two adjunct wh-phrases to the left periphery and their forming &P is implemented through sideward movement (Nunes, 2001, 2004). The two conjuncts of the left coordinate complex in both constructions first undergo sideward movement from the gap positions independently, and form a coordinate complex with a conjunction, and later the newly built coordinate complex is integrated into the (complex) clause. Given that there is only one SpecCP in NA clause structure on the one hand and that the two adjunct wh-phrases (unlike argumental wh-phrases) bear a strong [Q] feature, NA devises pseudo-coordination where the fronted two adjunct wh-phrases are conjoined to form one single XP that is licensed in Spec,CP.

Chapter SIX: the *leiʃ*+wh-phrase constructions in NA

6.1   Introduction

In Chapter Three, I have discussed that NA does not allow any syntactic object to intervene between the wh-word and the verb in a single interrogative clause. However, when the interrogative clause involves the wh-word *leiʃ* "why", the subject can intervene between the wh-word *leiʃ* "why" and the verb, as shown by the following examples from the first chapter which are repeated here as (1)[43]:

(1)

    a. leiʃ,   Hakim   kisar   al-liʕbah
        why.D.   Hakim   break.PAST.3PS.M.   DEF-toy
        'Hakim broke the toy.'

    b. leiʃ   kisar   Hakim   al- al-liʕbah
        why.Q.   break.PAST.3PS.M.   Hakim   the-toy
        'Why did Hakim break the toy?'

The following sections will reveal that *leiʃ* "why" in (1a) is not an interrogative wh-word that must be answered in the discourse. I will show that *leiʃ* "why" is a discourse particle followed by a declarative clause. In addition, in Chapter Four (section 4.2.2), I have shown that the wh-phrase *leiʃ* "why" is the only (adjunct) wh-phrase that can appear fronted with the subject wh-phrase or the object wh-phrase. One important restriction is that the subject/object wh-phrase must follow the wh-phrase *leiʃ* "why", otherwise the resulting question is ungrammatical. Note here that in the latter cases, *leiʃ* "why" is followed by a pause that is mirrored as a comma in the examples. Consider the following examples from the previous chapter which I repeated below as (2):

(2)

    a. leiʃ,   min   ħadˤar al-ʕirs   b-al-dirah
        Why.D.   who   attend DEF-marriage   in-DEF-village
        'Who attended the marriage in the village?'

---

[43] For the sake of clarity, in this chapter, the discourse particle *leiʃ* "why" will be marked with D (which stands for discourse) in the glosses to make it different from the real question phrase *leiʃ* "why" which will be marked with Q (which stands for question) in the glosses. Also, another difference between the discourse particle *leiʃ* "why" that expresses the speaker's point of view and the the genuine wh-word *leiʃ* "why" is that a comma is put after the discourse particle *leiʃ* "why" to indicate a short pause by the speaker.

b. *min leiʃ ħadˤar al-ʕirs b-al-dirah?

c. leiʃ, wiʃ ħadˤar al-radʒaal b-al-dirah
   Why.D. what attend DEF-man in-DEF-village
   'What did the man attend in the village?'

d. * wiʃ leiʃ ħadˤar al-radʒaal b-al-dirah?

The aim of this chapter is to provide a syntactic account of the base positions of the wh-word *leiʃ* "why" in (1a) and (2). There is much evidence that casts doubt on the assumption that the grammatical examples in (1a) and (2) are examples of fronted wh-phrases. However, I will argue that the wh-phrase *leiʃ* "why", in (1a) and (2), is not used as a wh-phrase, but rather as discourse particles that express the speaker's surprise, anger/resentment attitude towards his/her utterance. Furthermore, I will argue that the discourse particle *leiʃ* "why", in (1a) and (2), is base-generated in the head of Speech Act Projection (SAP) that takes ForceP as its complement.

This chapter is organized into six sections. The next section will explore the base position of the wh-word "why" in NA, Italian and English. Also, the section will distinguish between the wh-word *leiʃ* "why" in (1a) and (1b). The third section will provide more evidences that *leiʃ* "why", in a sequence of *leiʃ* + wh-word, is not a genuine wh-word. The fourth section will review some cross linguistic data from verb-based particles in West Flemish (WF) and sentential adverbs in Romanian (R). In section five, I will present a syntactic analysis that shows the integration of the discourse particle *leiʃ* "why" into the syntactic structure of NA. This section is followed by the conclusion in section six.

6.2   Italian perché "why", *why* in English and leiʃ "why" in Najdi

It is a good idea in this work to compare *perché* "why" in Italian and "why" in English with the wh-word *leiʃ* "why" in NA. This comparison will show some evidence that the wh-words "why" in these languages behave similarly towards focalized, topicalized phrases. Also, this comparison will reveal that *leiʃ* "why" in NA and *perché* "why" in Italian react similarly to the verb movement; both allow verb movement from T to C when a wh-word "why" is derived. Although these languages share similar behaviour of the wh-word "why" towards focalized and topicalized phrases, this section will show that the wh-word "why" in Italian and

English is located in the Spec, IntP in the CP domain, whereas the wh-word *leiʃ* "why" in NA is located in a higher position than the ForceP. In this section, I will provide a piece of evidence[44] that the wh-word *leiʃ* "why", in (1a), can precede all topicalized and focalized phrases. This evidence will support my argument that *leiʃ* "why", in (1a), is located outside the ForceP. In addition, I will argue that unlike *perché* "why" in Italian and "why" in English, the wh-word *leiʃ* "why" in NA in (1a) is not a genuine wh-word that seeks an answer but rather it is used as a discourse particle that expresses the speaker`s point of view. Moreover, this section will differentiate between the genuine wh-word *leiʃ* "why" in (1b) and the discourse particle wh-word *leiʃ* "why" in (1a).

In Italian, Rizzi (2001b) observes that *perché* "why" and *come mai*[45] "how come" behave differently from other wh-words such as *che cosa* "what". For example, Italian wh-words, such as *che cosa* "what", require the verb to move from T to C, as shown below (data are taken from Rizzi (2001b: 292)).

(3)

    a. Che cosa ha fatto Gianni?
         what has done Gianni

    b. *Che cosa Gianni ha fatto?
         what Gianni has done

The previous example shows that the verb movement from T to C is obligatory when a wh-word *che cosa* "what" is derived. However, this is not the case when *perché* "why" or *come mai* "how come" are derived. The verb movement from T to C becomes optional, as illustrated by the following examples:

(4)

    a. Perché Gianni è venuto?   (Rizzi, 2001b: 293)
         why Gianni has come

    b. Perché è venuto Gianni?   (Thornton, 2008: 116)
         why has come Gianni

---

[44] In sections 6.2 and 6.3, I will show more evidence that *leiʃ* "why" is a discourse particle which is externally merged into the head of SAP.

[45] For the sake of brevity, I will show examples of *perché* "why" because it shares with *come mai* "how come" similar syntactic behavior.

Although NA exhibits obligatory verb movement from T to C in interrogative clauses (see Chapter Three, section 3.2.1), the verb can remain in situ in T when the wh-word *leiʃ* "why" is involved. In (1a), which is repeated as (5a), one might assume that the wh-word *leiʃ* "why" is a real wh-word. I will argue that *leiʃ* "why" in (5a) is not a genuine wh-word that must be answered in the discourse. In NA, the construction in (5a) is used to express a speaker`s point of view. In fact, it is a declarative clause preceded by the discourse particle *leiʃ* "why". This discourse particle reflects the speaker`s point of view (anger in this case). The use of the discourse particle *leiʃ* "why" with the declarative clause in (5a) explains why the verb does not move from T to C compared to the genuine wh-word in (1b), which is repeated here as (5b) for convenience, where the verb must move from Tto C.

(5)

    a.   leiʃ,   hakim   kisar   al-liʕbah
        why.D. Hakim   break.PAST.3PS.M.   DEF-toy
        'Hakim broke the toy!'

    b.   leiʃ   kisar   hakim   al-liʕbah
        why.Q. break.PAST.3PS.M.   Hakim   DEF-toy
        'why did Hakim break the toy?'

Unlike verb movement in interrogative clauses in Italian and NA, subject-auxiliary inversion is required when wh-clauses are formed in English. This kind of inversion is mandatory even if there is an intervening XP between the wh-word and the inverted auxiliary verb (Thornton, 2008). Consider the following examples:

(6)

    a.   Why did Adam eat the apple? (Stepanov and Tsai, 2008: 601)

    b.   *Why Adam ate the apple?

    c.   Why, in 2007, did he buy a 4-wheel drive vehicle?

    d.   What, in 2007, did he buy?   (Thornton, 2008: 121)

    e.   *What, in 2007, he bought?

In addition, Rizzi (2001b) provides evidence that *perché "why"* is positioned higher than any wh-word in Italian. He argues that focused phrases can only co-occur after the wh-word *perché* "why" and not before it, as shown below[46].

(7)

> Perché QUESTO avremmo dovuto dirgli, non qualcos'altro?
> why   THIS (we) have   should said,   not something else

(Rizzi, 2001b: 294)

Rizzi (2001b) adds that focused phrases cannot follow other wh-words such as *che cosa* "what". He adds that the landing site for other wh-words such as *che cosa* "what" is the Spec, FocP position. Also, he argues that the movement of *che cosa* "what" to the Spec, FocP will result in the blocking of any movement of any focus phrase to Spec, FocP, as in (8). The focused phrase is in uppercase letters.

(8)

> *Che cosa A GIANNI   hanno detto (non a Piero)?
> what   TO GIANNI (they) have said (not to Piero)

(Rizzi, 2001b: 291)

Similarly, Stepanov and Tsa (2008) argue that focused phrases[47] can co-occur after "why" in English. Consider the following example:

(9)

> Why WAS IT ADAM who ate the apple?

(Stepanov and Tsai, 2008: 603)

The previous example shows that "why" is positioned higher than the focused phrases "WAS IT ADAM", which are moved to the left periphery by clefting (Stepanov and Tsai, 2008). The example in (9) is taken as evidence that, unlike other wh-words, "why" in English, in this case, can be higher than the position that hosts other wh-words in interrogative structures in English. The evidence that supports this argument comes from the fact that other wh-words cannot be followed by a focused phrase, as illustrated by the following example:

---

[46] Focused phrases are written in capital letters.
[47] Focused phrases are in uppercase letters.

(10)

> *When WAS IT ADAM who ate the apple?

> (Stepanov and Tsai, 2008: 603)

It is worth mentioning that NA grammar permits a similar construction to the Italian (7) and (8) and English examples (9) and (10). The question phrase, *leiʃ* "why" can be followed by a focused phrase, as shown below. Focused phrase(s) are in uppercase letter.

(11)

> leiʃ, HA-ASSALFAH tˤarat ʕala baala-k
> why.D., THIS INCIDENT come.PAST.3PS.MAS. to mind-your
> 'THIS INCIDENT comes to your mind!'

In contrast, Najdi grammar does not allow the focused wh-phrases to co-occur with any other wh-words. For instance, it is not grammatical to insert the focused phrase immediately after any wh-word, as shown in (12). The reason behind the ill-formedness of example (12) is that both the wh-word *meta* "when" and the focused phrase HA-ASSALFAH "this incident" are competing to occupy the position of Spec, FocP.

(12)

> *meta HA-ASSALFAH tˤarat ʕala baala-k
> meta THIS INCIDENT come.PAST.3PS.MAS. to mind-your
> 'When does this incident come to your mind?'

Another piece of evidence that *Perché* "why" in Italian, *leiʃ* "why" in NA and "why" in English are positioned higher than any other ordinary wh-phrase comes from the fact that a subordinate clause can intervene between the wh-word "why" and the subject in these languages. Consider the following examples[48]:

(13)

> a. leiʃ, *j:um dʒi:t* al-mudeer tˤalaʕ
> why.D. *when come.PAST.1PS. MASC.* DEF-manager left.PAST.-2PS.MASC.
> 'The manager went out when I came in!'

---

[48] Subordinate clauses are in Italic.

b. *weʃ *j:um dʒj:t*   al-mudeer   sawwa
    what when come.PAST.1PS. MAS.   the-manager   do.PAST.-3PS.MAS.
    'What did the manager do when I came in?'

c. Perché *quando va a Milano* Gianni compra il panettone?

    why *when (he) goes to Milan* Gianni buys the panettone

d. *Che cosa *quando va a Milano* compra Gianni?
    what *when (he) goes to Milan* buys Gianni
    What does Gianni buy when he goes to Milan

<div align="right">(Thornton, 2008: 116)</div>

e. Why, *when Congress releases its own investigation into September 11*, did you, Mr. Bush, censor out twenty-eight pages that deal with the Saudis' role in the attack?

<div align="right">(Moore, 2003: 17; as cited in Thornton, 2008: 121)</div>

f. *What, *when Congress releases its own investigation into September 11*, did you, Mr. Bush, censor out twenty-eight pages that deal with the Saudis' role in the attack?

<div align="right">(Adapted from Thornton, 2008: 121)</div>

To summarize, Rizzi (2001b) concludes that when *perché* "why" is moved to Spec, FocP, it must be followed by verb movement from T to C. The verb movement from T to C blocks any phrase from intervening between *Perché* "why" and the main verb. He argues that when *perché* "why" is base-generated in the Spec, IntP, verb movement is not required, therefore topicalized and focalized phrases may intervene between *perché* "why" and the subject. Rizzi (2001b) reaches the following schematic representation that shows the position of *perché* "why" and *che cosa* "what" in Italian.

(14)

```
            Force P
           /\
            TopP
           /\
            IntP
           /\
  Perché / why    TopP
               /\
                FocP
               /\
      che cosa / what   TopP
                      /\
                       FinP
                      /\
                        TP
```

As discussed in this section, the behaviour of "why" in English as in (9), (10), (13e) and (13f), is identical to its counterpart in Italy as in (7), (8), (13c) and (13d), and in NA as in (11), (12), (13a) and (13b). A number of researchers argue that the position of the wh-word "why" in English, as seen in (9), (10), (13e) and (13f), is base-generated in the Spec, IntP (Thornton, 2008; Stepanov and Tsai, 2008).

Based on the previous discussion, one might argue that the same analysis can be extended to the wh-word *leiʃ* "why" in NA. The reason that could establish such an argument is the fact that the behaviour of *leiʃ* "why" with respect to verb movement, focused and topicalized phrases is identical to its Italian counterparts. However, I will argue that the wh-word *leiʃ* "why", in NA, as shown in (5a), (11) and (13a), occupies a higher position than *perché* "why" and "why" in English. Also, I will show that *leiʃ* "why" precedes all topicalized and focalized phrases in the left periphery. Besides, I will assume that *leiʃ* "why" is not a genuine wh-word that seeks new information. Moreover, the interaction between topicalized phrases (upper and lower topiccalized phrases) with *perché* "why" in Italian and in NA, will show that *leiʃ* "why" is positioned higher than *perché* "why". In addition, I will show that the *perché* "why" occupies the Spec, IntP in embedded clauses whereas the NA *leiʃ* "why" cannot be embedded which indicates that *leiʃ* "why" is set outside the ForceP.

The following dialogue between a wife and a husband will show that *leiʃ* "why" is higher than topicalized, and focalized phrases:

(15)

Wife:	ma	tadri	ʕan	liʕbat	salman	al-jididah
	neg.	know	about	toy	Salman	DEF-new

'Don`t you know about Salman`s new toy?'

Husband:	la.	wiʃ	ʕilma-h
	no,	what	news-it

'No, What is wrong about it?'

Wife:	leqaita-h	maksourah	b-asˤalah
	find.PAST.1PS.	broken	in-DEF-living room

'I found it broken in the living room.'

Husband:	ma	tadreen	min	alli	kisar-ha
	Neg.	PRES.know.2PS.FEM.	who	that	broke-it

'Don't you know who broke it?'

Wife:	ma	adri
	Neg.	PRES.know.1PS.FEM.

'I don't know.'

Husband:	leiʃ,	Hakim	ɣadih	hu	alli	kisar al-liʕbah
	Why.D.,	Hakim	PRT	he	that	break.PAST.3PS.M DEF-toy

'Hakim is the one who broke the toy.'

Wife:	la	Hakim	nam	badri	albariħ
	no	Hakim	sleep.PAST.3PS.M.	early	last night

'No. Hakim went to bed early last night.'

This dialogue between a wife and her husband reveals interesting facts about the syntactic position and the semantic value of *leiʃ* "why" in NA. As can be seen in the third utterance by the husband, *leiʃ* "why" is in a position higher than any topicalized and focalized phrase in the discourse. The wh-word *leiʃ* "why" precedes the particle "*ɣadih*" and the topicalized subject *Hakim*[49] which agrees

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[49] It is difficult to translate the particle in one word. However, I will try to explain its contextual usage in the dialogue.

with the topic particle "*ɣadih*"[50]. Both the particle and its subject are topicalized and positioned higher than the focused phrase *hu* "he", which is headed by the complementizer *alli* "that". *leiʃ* "why" is used in this context to express the husband`s anger that the new toy was broken[51]. According to Alshamari (2017), the use of the particle *ɣadih* is to reflect the husband`s uncertainty that *Hakim* is the one who broke the toy. Although the husband doubts that Hakim did it, he does not have sufficient evidence to accuse Hakim of being the one who is suspected. From the semantic point of view, it can be concluded that the wh-word *leiʃ* "why" is not a genuine wh-word that seeks an answer in such a context but rather a discourse particle that reflects the husband`s point of view (anger in this case). The evidence comes from the wife`s reply. She does not provide any reason in answer to her husband`s wh-word *leiʃ* "why". Instead, the wife`s reply is negative and she tries to give an excuse for Hakim to lessen her husband`s anger.

Rizzi (2001b) argues that topicalized phrases can precede and follow *perché* "why" in Italian. Consider the following example (Rizzi, 2001b: 295):

(16)

> II mio libro, perche, a Gianni, non glielo avete ancora dato?
> 'My book, why, to Gianni, you still haven't given it to him?'

The previous example shows that *perché* "why" is surrounded by the topicalized direct object *II mio libro* "my book" and indirect object *a Gianni* "to Gianni". In a similar way, NA allows the topicalized object to precede the genuine wh-word *leiʃ* "why", as shown in (17a). However, when *leiʃ* "why" is used as a discourse particle that expresses the point of view of the speaker, it cannot be preceded by the topicalized object phrase, as shown in (17b)[52]. Note that in almost all Arabic dialects, when the object is topicalized, a pronominal pronoun is attached to the verb (Aoun *et al*, 2010). Consider the below examples.

(17)

> a. al-liʕbah   leiʃ   kisara-h   Hakim
>   DEF-toy   why.Q. break.PAST.3PS.M.-it   Hakim
>   Intended: 'Why did Hakim break the toy?'

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[50] See Alshamari (2017) for further details about topic particles in NA.
[51] In the following sections, further details about the meaning and the syntactic position of *leiʃ* "why" will be discussed.
[52] The next section will provide more details about the distinction between the discourse particle *leiʃ* "why" and the genuine wh-word *leiʃ* "why".

b. * al-liʕbah leiʃ, Hakim ɣadih hu alli kisar-ha
DEF.toy Why.D., Hakim PRT he that break.PAST.3PS.M-it
Intended: 'The toy, Hakim is the one who broke it.'

We have seen that *perché* "why" can precede a focused phrase, which is considered by Rizzi (2001b) as an indication that *perché* "why" is positioned higher than Spec, FocP in the left periphery, as shown in (7) which is repeated here as (18a) for convenience. In addition, Rizzi (2001b) argues that *perché* "why" can co-occur in embedded clauses as well. He concludes that *perché* "why" is base-generated in Spec, IntP in the main, as in (18a), and in embedded clauses, as illustrated in (18b).

(18)

      a. Perché QUESTO avremmo dovuto dirgli, non qualcos'altro?
         why THIS (we) have should said, not something else

      b. Mi domando perche QUESTO avremmo dovuto dirgli, non qualcos'altro
         'I wonder why THIS we should have said to him, not something else'

                                  (Rizzi, 2001b: 294)

Similarly, we have seen that focused phrases can be preceded by the discourse particle *leiʃ* "why" in main clauses in NA, as in (11) which is repeated here as (19a) for ease of exposition. However, *leiʃ* "why" does not occur in embedded clauses, as shown in (19b).

(19)

    a. leiʃ, HA-ASSALFAH tˤarat ʕala baala-k
      why.D., THIS INCIDENT come to mind-your
      'THIS INCIDENT comes to your mind!'

    b. *Ali qal leiʃ, HA-ASSALFAH tˤarat ʕala baala-k
      Ali say. why.D., THIS INCIDENT come.PAST.3PS.MAS. to mind-your
      Intended: 'Ali said THIS INCIDENT comes to your mind!'

The ungrammaticality of (19b) is due to the fact that *leiʃ* "why" is positioned above the ForceP and cannot be embedded. Based on our discussion of the

examples in (15), (17) and (19), I will conclude that *leiʃ* "why" occupies a position higher than the ForceP and it cannot be embedded.

6.2.1 *Distinction between discourse particle and wh-word leiʃ "why"*

In this sub-section, I will discuss the difference between the discourse particle *leiʃ* "why" in (1a) and the wh-word *leiʃ* "why" in (1b)[53]. I will argue that they differ in a number of ways. For the sake of convenience, (1a) and (1b) are repeated here, respectively, as (20a) and (20b).

(20)

    a. leiʃ   Hakim   kisar   al-liʕbah
       why.D.   Hakim   break.PAST.3PS.M.   DEF-toy
       'Hakim broke the toy!'

    b. leiʃ.Q. kisar   Hakim   al- al-liʕbah
       why   break.PAST.3PS.M..   Hakim   the-toy
       'Why did Hakim break the toy?'

The first difference between *leiʃ* "why" in (20a) and (20b) lies in their interpretations. The first wh-word, as in (20a), is a discourse particle which means literally "why". However, it is used in such context to conveys the speaker`s point of view. On the other hand, the wh-word *leiʃ* "why" in (20b) is a genuine wh-word that requires a proper answer. As we will show in the next section, the wh-word in (20a) is incompatible with the answer in (21a), whereas the wh-word in (20b) stands for a reason *why* that elicits an answer referring to a cause, as shown in (21b).

(21)

    a. #liʔan   Hakim   ma   ħaba-ha
       Because   Hakim   NEG   like. PAST.3PS.M.-it
       'Because Hakim did not like it.'

    b. liʔan   Hakim   ma   ħaba-ha
       because   Hakim   NEG   like. PAST.3PS.M.-it
       'Because Hakim did not like it.'

Based on our discussion in the previous section, I will argue that the construction in (20a) is a declarative clause that is preceded by the discourse particle *leiʃ*

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[53] Recall in Chapter Three, I have discussed that NA does not allow any element to intervene between the wh-word and the verb. Note here that when the discourse particle *leiʃ* "why"is used, as in (20a), the subject can intervene between the discourse particle *leiʃ* "why" and the verb.

"why", whereas the structure in (20b) is an instance of an interrogative clause where the wh-word is moved from its canonical position to the Spec, CP[54].

Further evidence that proves that the discourse particle *leiʃ* "why" is positioned in a layer outside the ForceP comes from object topicalization. According to Rizzi (1997), focus phrases are sandwiched between two topical phrases. We have seen that the discourse particle *leiʃ* "why" can procede all topicalized and focalized elements in the discourse, as shown in (15) which is repeated as (22a). However, NA grammar does not license any topicalized phrases (object in this case) above the discourse particle *leiʃ* "why". This is due to the fact that the discourse particle *leiʃ* "why" is located in a layer outside the ForceP, as illustrated in (17b) which is repeated here for convenience as (22b). The same justification is extended to (20a) which is repeated as (22c) and (22d). On the other hand, when *leiʃ* "why" is used as a question word that must be answered in the discourse, as in (20b) which is repeated as (22e), a topicalized object can precede the wh-word *leiʃ* "why" because the two phrases, the topicalized object and the wh-word *leiʃ* "why", are licenced in the same CP domain, therefore the topicalized object phrase *al-liʕbah* "the toy" can cross over the wh-word *leiʃ* "why" that occupies the Spec, FocP, as shown in (17a) which is repeated here as (22f). Consider the following examples:

(22)

    a. leiʃ,   Hakim ɣadih hu   alli   kisar   al-liʕbah
       why.D. HAkimPRT   he   that   break.PAST.3PS.M   DEF-toy
       Intended: 'Hakim is the one who broke the toy!'

    b. *al-liʕbah   leiʃ,   Hakim   ɣadih hu   alli   kisar-ha
       DEF-toy   why.D., HAkim   PRT   he   that
       break.PAST.3PS.M
       Intended: 'The toy, Hakim is the one who broke it.'

    c. leiʃ,   Hakim   kisar   al-liʕbah
       why.D., Hakim   break.PAST.3PS.M.   DEF-toy
       'Hakim broke the toy!'

    d. *al-liʕbah   leiʃ,   Hakim   kisara-ha
       DEF-toy   why.D., Hakim   break.PAST.3PS.M.-it
       Intended: 'The toy, Hakim broke it.'

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[54] In section (6.3) my analysis of the particle *leiʃ* in the sequence *leiʃ* + wh-word will be extended to account for *leiʃ* + declarative.

e. leiʃ   kisar   Hakim   al-liʕbah
   why.Q. break.PAST.3PS.M..   Hakim   the-toy
   Intended: 'Why did Hakim break the toy?'

f. al-liʕbah   leiʃ kisara-ha   Hakim
   DEF-toy   why.Q. break.PAST.3PS.M.-it   Hakim
   'Why did Hakim break the toy?'

In addition, NA data reveal that the discourse particle *leiʃ* "why" is not compatible with imperative and embedded clauses, as seen by (23a) and (23b). On the other hand, the genuine wh-word *leiʃ* "why" can co-occur with imperative and embedded clauses, as illustrated in (23c) and (23d)[55].

(23)

   a. * qooli   l-i   leiʃ, Hakim   kisar
          al-liʕbah
        tell.IMPRV.2SP.F   to-me why.D., Hakim   break.PAST.3PS.M.
        DEF-toy
        Intended: '*Tell me, Hakim broke the toy!'

   b. *Sami   qal   leiʃ, Hakim   kisar   al-
        liʕbah
        Sami   say   why.D., Hakim   break.PAST.3PS.M.   DEF-
        toy
        Intended: 'Sami said Hakim broke the toy!'

   c. qooli   l-i   leiʃ kisar   Hakim   al-
        liʕbah
        tell.IMPRV.2SP.F   to-me why.Q. break PAST.3PS.M.   Hakim   the-
        toy
        Intended: 'Tell me, why did Hakim break the toy?'

   d. Sami   qal   leiʃ kisar   Hakim al-liʕbah
        Sami   say   why.Q. break .PAST.3PS.M.   Hakim DEF-toy
        Intended: 'Sami said why did Hakim break the toy?'

Moreover, the discourse particle *leiʃ* "why" is compatible with polar questions that convey a true/false value of the proposition. However, its interpretation as a discourse particle is subject to an intonational pause immediately after the

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[55] Notice that the wh-word *leiʃ* "why" in (23a) and (23c) are instances of the discourse particle *leiʃ* "why". The subject Hakim intervens between the discourse particle and the verb *kisar* "break". In (23c) and (23d), the wh-word *leiʃ* "why" is a genuine wh-word. There is not intervening element between the wh-word *leiʃ* "why" and the verb kisar "break" in (23c) and (23d).

discourse particle and a stress on the verb that follows *leiʃ* "why"[56]. For instance, the third utterance by the wife in (24) shows that the discourse particle *leiʃ* "why" and the polar question are separated by a comma which represents the intonational pause and the stress is spelled out on the verb TAÐˤAN "think". Therefore, the use of the discourse particle *leiʃ* "why" with polar questions reflects the resentment of the speaker. In other words, the wife`s third utterance in (24) expresses her dissatisfaction that the husband is always accusing Hakim to be the usual suspect. That is at the LF interface, the question is spelled out/expressed on TAÐˤAN "think", which has a stress spelled on it at PF, where this is interpreted as an interrogative clause. The wife did not expect her husband to answer the interrogative clause but rather she used the discourse particle with the stress on the verb TAÐˤAN "think" to give her husband a message that she is not happy about him accusing Hakim of being the one who broke the toy. Consider the following dialogue between the wife and the hisband:

(24)

Husband: wein   Hakim
              where Hakim
              'where is Hakim?'

Wife: tˤalaʕ   j:alʕab,   weʃ   tabi   men-uh
        go.PAST.3PS.M.   PRES.play.PAST.3PS.M. what   PRES.2PS.want. from-him
        Intended: 'He went out to play, what do you want from him?'

Husband: ʔbi   asʔal-uh   ʕan   liʕbat Salman
              PRES.want.1PS. PRES.ask.1PSM.-him   about   toy   Salman
              'I want to ask him about Salman`s toy.'

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[56] If the stess is spelled out on the discourse particle *leiʃ* "why" and there is no short intonational break between the discourse particle *leiʃ* "why"and the verb that comes immediately after it, taðˤan "think" in this case, the realization of the discourse particle is interpreted as an interrogative wh-word that must be given new information by the hearer, as shown below.

Wife: LEIʃ taðˤan   inn   Hakim   hu   alli   kisar
        al-liʕbah
        why   think.PAST.2PS.M. that   Hakim   he   that   break
        DEF-toy
        'Why do you think that Hakim is the one who broke the toy?'

Husband: leʔn   Hakim   ma   j:ħeb   al-alʕab
              because Hakim   NEG. PRES.like.3PS.M.   DEF-toy.PL
              'Because Hakim does not like toys.'

Wife: al-liʕbah   al-maksoorah
             DEF-toy   DEF.broken
             'The broken toy!'

Husband: eih
             yes
             'yes.'

Wife: leiʃ,   TAÐˤAN   inn   Hakim hu   alli   kisar
        al-liʕbah
        why   THINK.PAST.2PS.M.   that   Hakim he   that   break
        DEF-toy
        'Do you think that Hakim is the one who broke the toy!'

Husband: ma hi ʔawaal   marrah alqa   alʕab Salman
             maksoorah
             NEG. it first   time   find.PAST.2PS.M. toy.PL. Salman
             broken
             'It is not the fisrt time that I found Salman`s toys are broken.'

Wife: ma hu daleel inn Hakim hu   alli kisar   al-liʕbah
        NEG. it evidence that Hakim he   that break.PAST.3PS.M. DEF-toy
        Intended: 'This is not enough evidence that Hakim is the one who broke
        the toy.'

It is important to point out that the use of the discourse particle *leiʃ* "why" with polar questions reflect the resentment of the speaker. The speaker in (24) expresses dissatisfaction that the other speaker is always accusing Hakim of being the usual suspect.

6.3   *Leiʃ* "why" is a not a true wh-phrase in leiʃ+wh-phrase constructions

In this section, I will show that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase in a *leiʃ* + wh-word sequence. Extending our previous discussion in section 6.1.2, I will explore a number of evidences that *leiʃ* in *leiʃ* + wh-word sequence, is not a genuine wh-word, as shown in examples (2) which are repeated here as (25).

(25)

        a. leiʃ,   min   ħadˤar al-ʕirs   b-al-dirah?
        Why.D.   who   attend DEF-marriage   in-DEF-village
        'Who attended the marriage in the village?'

        b. *min   leiʃ   ħadˤar al-ʕirs   b-al-dirah?

        c. leiʃ,   wiʃ   ħadˤar al-radʒaal   b-al-dirah?
          Why   what   attend DEF-man   in-DEF-village
          'What did the man attend in the village?'

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d. * wiʃ   leiʃ   ħadˤar   al-radʒaal   b-al-dirah?

First, I depend on the fact that the felicitous answers of *leiʃ*+wh-phrase questions must only have corresponding new information about the second wh-phrase without any mention of the reason for the truth value of the propositional content of the respective question. Second, I show that the wh-phrase *leiʃ* "why" and the second wh-phrase can be separated from each other by some intervening material, something which suggests that the *leiʃ*+wh-phrase and the following wh-phrase are not contained within the same phrase. Additionally, I show that *leiʃ* "why" cannot be preceded by any element, a matter I interpret as *leiʃ* "why" is not Spec, CP. Furthermore, I show that *leiʃ*+wh-phrase construction is incompatible with indirect questions. I interpret this fact as supporting evidence that *leiʃ* is not an interrogative wh-phrase, otherwise it is hard to account for its impossibility in contexts where interrogative wh-phrases preferably appear. I propose that the wh-phrase *leiʃ* "why" is used in *leiʃ*+wh-phrase questions to express the speaker's resentment or surprise (based on the speaker's meaning) towards the common ground of the question.

The first piece of evidence comes from the felicitous answers to the questions which are formed by the *leiʃ*+wh-phrase. The felicitous answers to such questions must only have corresponding new information about the second wh-phrase without any mention of the reason for the truth value of the propositional content of the respective question. Consider the felicitous answers to the question in (25a) (repeated in (26)).

(26)

    a. leiʃ,   min   ħadˤar al-ʕirs   b-al-dirah?
        Why.D. who   attend DEF-marriage   in-DEF-village
        'Oh! Who attended the marriage in the village?'

    b. Umm-i
        Mother-my
        'My mother!'

    c. al-radʒaal
        DEF-man
        'The man!'

d. #Umm-i   liʔin-ha   sˤdeeqat   umm   al-ʕaroos
   Mother-my   because-she   friend   mother   DEF-bride
   'My mother because she is a friend of the bride`s mother.'

e. # al-radʒaal   liʔin-uh   sˤdeeq   al-miʕirs
   DEF-boys   because-they   go.PAST.3P.M   DEF-groom
   'The man because he is the groom`s friend.'

The replies in (26b) and (26c) are felicitous as they contain new information (i.e. narrow focus) that answers the second wh-phrase *min* "who". On the other hand, the replies in (26d) and (26e) are infelicitous given that they contain extra-information (i.e. the reason) which is not expected to be in the answer. If the wh-phrase *leiʃ* "why" has [Q] feature (which makes it interrogative), the replies in (26b) and (26c) would be infelicitous and the replies in (26d) and (26e) would not, contrary to fact. The range of the felicitous answers to the questions with *leiʃ*+wh-phrase is direct evidence that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase in the sense that it is not endowed with an interrogative feature [Q].

A further line of evidence in favour of my claim that the wh-phrase *leiʃ* "why" in *leiʃ*+wh-phrase constructions comes from the observation that the wh-phrase *leiʃ* "why" and the second wh-phrase can be separated from each other by some intervening material. Consider the following examples where the wh-phrase *leiʃ* "why" is separated from the second wh-phrase by an adjunct as in (27a) and by the object as in (27b) (the second wh-phrase asks about the subject):

(27)

a. leiʃ,   b-al-dirah   min   ħadˤar   al-ʕirs
   why.D.   in-DEF-village   who   attend   DEF-marriage
   'In the village, who attended the marriage?'

b. leiʃ, al-ʕirs   min   ħadˤur-uh   b-al-dirah
   why.D. DEF-marriage   who   attend   in-DEF-village
   'The marriage, who attended (it) in the village?'

As is clear from the examples in (27), the apparent adjacency between the wh-phrase *leiʃ* "why" and the second wh-phrase can be broken up by any element, which suggests that the *leiʃ*+wh-phrase and the following wh-phrase are not contained within the same phrase. As I have shown in the preceding chapter, multiple wh-phrases are allowed in NA if they are, among other things, coordinated through the conjunction *wa* "and".

A further interesting observation to mention here is that if the intervening element is forced to appear before the wh-phrase *leiʃ* "why", the resulting question would become ungrammatical. Consider the following examples:

(28)

    a. *b-al-dirah   leiʃ,   min   ħadˤar   al-ʕirs
       in-DEF-village why.D. who   attend.   DEF-marriage
       Intended: 'In the village, who attended the marriage?'

    b. *al-ʕirs   leiʃ,   min   ħadˤur-uh   b-al-dirah?
       DEF-marriage why.D. who   attend.PAST.3SG.M-it   in-DEF-village
       Intended: 'The marriage, who attended (it) in the village?'

The direct conclusion that we can draw in conjunction with the examples in (28) is that the wh-phrase *leiʃ* "why" is base-generated higher than the ForceP. The observation that it cannot be preceded by any element is indicative of the assumption that it is not the Focus Phrase. Following Rizzi's (1997) articulated CP system, it can be assumed that the intervening material between the wh-phrase *leiʃ* "why" and the second wh-phrase is a topic, occupying the Spec position of the upper Topic Phrase. Recall that the Focus Phrase (which houses the second wh-phrase) is sandwiched between two Topic Phrases (see the preceding chapters for discussion). Following this path of analysis, the wh-phrase *leiʃ* "why" is situated in a position which is structurally higher than ForceP.

A relevant point that deserves mentioning is that the wh-phrase *leiʃ* "why" in *leiʃ* + wh-word construction is incompatible with non-root questions (which I call indirect questions). Examine the following examples which include an indirect question:

(29)

    a. Talal saʔal   min   ħadˤar   al-ʕirs
       Talal ask.PAST.3SG.M who   attend.PAST.3SG.M DEF   marriage
       'Talal asked who attended the marriage.'

    b. *Talal saʔal   leiʃ,   min   ħadˤar al-ʕirs
       Talal ask.PAST.3SG.M   why.D. who attend.PAST.3SG.M DEF-marriage
       Intended: 'Talal asked who attended the marriage.'

The observation that the wh-phrase *leiʃ* "why" is incompatible with the indirect questions within *leiʃ*+wh-phrase construction is corroboratory evidence that it is

not an interrogative wh-phrase, otherwise it is hard to account for its impossibility in contexts where interrogative wh-phrases preferably appear.

In a related vein, the wh-phrase *leiʃ* "why" in *leiʃ*+wh-phrase construction does not appear in reported questions. When a speaker reports a question with a *leiʃ*+wh-phrase construction, he/she would delete the wh-phrase *leiʃ* "why" from the reported question. Consider the following examples:

(30)

    a. Talal   gaal   'min   ħadˤar   al-ʕirs
        Talal   said.PAST.3SG.M who attend.PAST.3SG.M   DEF-marriage
        'Talal said: who attended the marriage.'

    b. *Talal   gaal   'leiʃ, min   ħadˤar   al-ʕirs
        Talal   said.PAST.3SG.M why.D. who attend.PAST.3SG.M   DEF-
        marriage
        'Talal said: who attended the marriage.'

As is clear from (30b), if the wh-phrase *leiʃ* "why" remains in the reported question, the resulting question would be ungrammatical. As it appears, *leiʃ* in this use is restricted to root questions (I provide below an analysis of this observation). As it was made clear in the previous chapter (see Chapter Five, section 5.2), multiple wh-phrases with adjunct + adjunct are compatible with indirect questions and reported questions. So, the incompatibility of the wh-phrase *leiʃ* "why" in such syntactic environments must be attributed to a different reason.

Against this background, I assume that the wh-phrase *leiʃ* "why" is not an interrogative wh-phrase when it is used in *leiʃ*+wh-phrase constructions. Based on my intuition and the 40 Najdi Arabic speakers whom I consulted, it is clear that the wh-phrase *leiʃ* "why" is used in such questions to express the speaker's surprise towards the common ground of the question (i.e. the mutually recognized shared information in a situation in which an act of trying to communicate takes place (Stalnaker, 2002: 704)). As such, this use of *leiʃ* "why" is like the old-fashioned English cases where *why* acts rather like an interjection of surprise, as in: "Where did you put the dishes? Why! I put them in the dishwasher."

In order to explain this point, consider the following 'natural' discourse where the wh-phrase *leiʃ* "why" is used twice; one in a *leiʃ*+wh-phrase construction and one

as an interrogative wh-phrase (the data here are from NA, based on the researcher and 40 NA speakers consulted):

(31)

Speaker A: ʔitiʕraf   fahad sʰadiig   ʔaχuu-k   ali
know.PRES.2SG.M   Fahad friend brother-your   Ali
'Do you know Fahad, your brother Ali's friend'

Speaker B: maʕrifahtin   zainah
knowledge   good
'I know him well.'

Speaker A: al-radʒaal   b-al-sijin   men   ʃahrein
DEF-man   in-DEF-prison   from   two.months
'The man is in prison for two months'

Speaker B: leiʃ,   min   gal-l-ak   ha-assalfah
why.D.   who   tell-to-you   this-news
'Why! Who told you this news?'

Speaker A: ʔaχuu-i   gal-l-i
brother-my   tell.PAST.3SGM.-to-1SG.M
'My brother told me.'

Speaker B: tʰayib   leiʃ   hu   b-al-sijin
well   why.Q.   he   in-DEF-prison
'Well! Why he is in the prison?'

Speaker A: li-ann-uh   zawwar   mustanadat
because-he   falsify.PAST.3SG.M.   documents
'because he falsified documents'

The scenario of this dialogue is clear. Speaker A tells Speaker B about his brother's friend's incarceration due to a corruption case. What is significant here to capitalize on is that the first occurrence of the wh-phrase *leiʃ* "why" (in Speaker B's second utterance) is translated as exclamatory to indicate the speaker's surprise at the preceding discourse. It is said in a context which the speaker considers as 'unusual' and even 'shocking'. Additionally, consider Speaker A's answer to Speaker B's first question; it does not contain any information about the

reason for the imprisonment. On the other hand, consider Speaker A's answer to Speaker B's first question where the wh-phrase *leiʃ* "why" is used as an interrogative wh-phrase. The answer contains the reason for the incarceration, which is the falsification of documents.

The last piece of evidence I bring to support my assumption that the wh-phrase *leiʃ* "why" in questions with multiple wh-phrases is not interrogative is the observation that we can have a question with reduplicated *why*'s. Consider the following example:

(32)

> leiʃ, leiʃ hu b-al-sijin
> why.D. why he in-DEF-prison
> 'Why is he in the prison?'

The grammaticality of sentence (32) strongly indicates that the first wh-phrase *leiʃ* "why" is not an interrogative wh-phrase, otherwise it is hard to account for apparent wh-reduplication in (32). What is significant to mention here is that wh-reduplication is prohibited with other wh-phrases. Consider the following ill-formed examples:

(33)

> a. *min, min hu b-al-sijin
> who who he in-DEF-prison
> 'Who is he in the prison?'
>
> b. *keif, keif hu b-al-sijin
> how how he in-DEF-prison
> With the intended meaning: 'How is he in the prison?'

The ban on wh-reduplication with other wh-phrases indicates strongly that the first *leiʃ* "why" in multiple wh-phrase constructions is not a wh-phrase. Along these lines, I label the wh-phrase *leiʃ* "why" when it is used to express the speaker's point of view towards the common ground of the question as a discourse particle *leiʃ* "why" so we can differentiate it from the interrogative *leiʃ* "why".

Before we get into the syntactic analysis of the discourse particle *leiʃ* "why" in NA, it would be favourable to show some cases from other languages where

discourse particles can occupy a higher position than ForceP. In the following section, I will review verb-base particles in West Flemish and sentential adverbs in Romanian.

6.4   Cross Linguistic Evidence

The main motivation for this section is to make use of discourse particle phenomena and to show evidence from other languages that a discourse particle can be licensed above the ForceP. More precisely, this section will review Haegeman and Hill`s (2013) work on the syntactic position of verb-based particles in West Flemish (WF). Also, this section will review Hill`s (2007) analysis of sentential adverbs in Romanian where she argues that adverbs that precede *că* "that" are located in the head of Speech Act Phrase which dominates ForceP.

Haegeman and Hill (2013) investigate discourse particles and their interaction with vocative elements in West Flemish and Romanian. Following Speas and Tenny`s (2003) proposal, Haegeman and Hill (2013) argue that the Speech Act Phrase (SAP) is a dominating Force Phrase. Also, they argue that the SAP hosts discourse particles and vocative phrases in Romanian and West Flemish.

Haegeman and Hill (2013) examine verb-based particles in WF. These verb-based particles include *né(m)* "take", *wé* "you know" and *zé* "see". According to their argument, WF particles are derived from verbs and their existence in a clause is optional. This means that a clause remains grammatical without these particles but the interpretation of the clause will be different. Haegeman and Hill (2013) argue that WF verb-base particles are expressive in the sense of Kratzer (1999) and "they signal the speaker's attitude or his/her commitment towards the content of the utterance and/or of his relation towards the interlocutor" (p.376).

According to Haegeman and Hill (2013), WF verb-based particles can appear as clause-initial or clause-final and they cannot be inserted in the middle of the clause. For instance, the particle *né(m)* "take" appears clause initial and cannot show up in the middle of the clause, as shown below.

(34)

> Né, doet   (*né)   da (*né)   mo   mee!
> né do   né   that né   PART   with
> 'Here you are, you can have this!'

<div align="right">(Haegeman and Hill, 2013: 383)</div>

Haegeman and Hill (2013) state that WF is a verb second language (V2). They argue that when particles appear in initial position, these particles are licensed in a position higher than ForceP. For example, *zé* "see" and *né* "take" are both clause initial particles which are used to draw the attention of the hearer. Consider the following example:

(35)

> zé/né, m' een al een medalie.
> zé/né, we have already a medal
> 'Look, we already have a medal.

<div align="right">(Haegeman, 2014: 118)</div>

In addition to their occurrence in initial positions, *zé* "see" and *né* "take" can occur in clause final position. In (36), the final particle *ze*̀ "see", with a falling intonation, expresses the speaker`s authority whereas *ne*̀ transfers the clause to the hearer to react upon the utterance.

(36)

> M' een al een medalie zè/né
> We have already a medal zè/né
> 'We already have a medal, look.'

<div align="right">(Haegeman, 2014: 118)</div>

Moreover, WF grammar does not permit the particle *né* "take" to occur in the left periphery of an embedded clause, as illustrated by the following example:

(37)

> *Je zei [né dat da   roare was]
> He said né that that s trange was

<div align="right">(Haegeman and Hill, 2013: 383)</div>

Haegeman and Hill (2013) point out that *wé* "you know" occurs only in final position. *wé* "you know" as a verb-based particle is sensitive to clause type. It is intolerant with an interrogative clause, as shown in (38a). However, it can occur with declarative and imperative clauses, as illustrated in (38b) and (38c), respectively. When it appears with declarative clauses, it reflects the speaker`s endorsement of his/her utterance. In the case of imperative clauses, *wé* mirrors the speaker`s authority to utter the imperative (Haegeman and Hill, 2013).

(38)

    a. *Ee`j gedoan wè?
        Have you finished wè

    b. Dat is nie gemakkijk wè
        That is not easy wè

    c. 'It`s not easy, you know.'

    d. Zet je mo wè
        Set you PART wè
        'Do sit down.'

                      (Haegeman and Hill, 2013: 373-377)

Furthermore, Haegeman and Hill (2013) observe that two particles can co-occur in final positions. However, their occurrence in final position is subject to a strict order. *we`* "you know" can co-occur only with one final particle such as *né* "take" and *zé* "look". However, *we`*, with a falling intonation, must precede *né*/*zé*, whereas the latter particles must have a rising intonation. When *zé* is in final position, it can be followed either by *zé* or *né*. Similar to the constraint hold on *we`*, *zè* must receive falling intonation and the following particle must be stressed. The following examples show the distribution of two particles in final positions:

(39)

    a. Men artikel is gedoan wè zé/*zé wè
        My article is finished wè zé/zé wè
        'My article is finished, you know, look.'

    b. Men artikel is gedoan wè né/(*né wè)
        My article is finished wè né/né wè
        'My article is finished, you know, look.'
    c. Men artikel is gedoan zè zé/(*zé zè)
        My article is finished zè zé/zé zè
        'My article is finished, you know, look.'

d. Men artikel is gedoan zè né/(*né zè)
My article is finished zè zé/né zè
'My article is finished, you know, look.'

According to Haegeman and Hill (2013) verb-based particles can appear in initial and in final positions in a clause. The following data show the appearance of two particles on the edge sides of a clause in WF:

(40)

a. Né, men artikel is gedon wè (*zé)
né my article is finished wè (*zé)

b. zé, men artikel is gedon zè
zé my article is finished wè
'Look, my article is finished, there you are.'

Based on the distribution of verb-based particles in (35) and in (40), Haegeman and Hill (2013) propose a syntactic analysis of speech act in WF. They argue that WF is a verb second language and the appearance of the initial particles *zé/né*, as in (40), in WF must be licenced in the head of the Speech Act Phrase (SAP) which takes ForceP as its complement. Furthermore, the occurrence of two particles on the edges of a WF clause, as in (40), makes Haegeman and Hill (2013) come to the conclusion that there are two SAPs. The first SAP hosts initial particles which entail attention seeking and the second SAP hosts final particles which entail consolidating reading, as shown in the syntactic representation in (41).

(41)

$$[_{SAP1} \text{ né } [_{SAP2} \text{ wè } [_{CP}…]]]$$

In order to explain the derivation of *wè* in (38b), which is always in final position, Haegeman and Hill (2013) propose that *wè* merges with the head of the second SAP. After that, the CP is obligatorily moved to its specifier obtaining the order

"CP *weˋ*". If *né* appears in final position occurring to the right of *weˋ*, as in (39b), its derivation is obtained by moving its complement CP which is headed by *weˋ* to its specifier in SAP1, as shown in (42).

(42)

    a. [SAP1 né [SAP2 weˋ [CP…]

    b. [SAP1 né [SAP2 [CP..] weˋ ~~[CP…]~~]]

    c. [SAP1 [SAP2 [CP..] weˋ ~~[CP…]~~] né ~~[SAP2 [CP…] weˋ [CP…]~~]]]

(Haegeman and Hill, 2013: 385)

It is worth mentioning that Haegeman and Hill (2013) point out that the derivation in (42) contradicts anti-locality constraint which bans the complement to move from its position to the specifier of the same projection. In order to refine the structure in (42), Hageman and Hill examine the interaction of particles and vocative phrases in WF. They conclude that particles precede vocatives whether these particles are in initial or final positions, as illustrated by the following examples:

(43)

    a. Né Valère, men artikel is gereed (weˋ).
        né Valère my article is ready weˋ
        'Look Valère, my paper is ready, (you know).'

    b. *Valère né, men artikel is gereed (weˋ).
        Valère né my article is ready weˋ

    c. (Né) Men artikel is gereed weˋ Valère.
        né my article is ready weˋ Valère
        'Look, my paper is ready you know, Valère.'

    d. *(Né) Men artikel is gereed Valère weˋ.
        né my article is ready Valère weˋ

(Haegeman and Hill, 2013: 386)

In order to provide a syntactic structure that hosts particles and vocatives in WF, Haegeman and Hill (2013) propose that each SAP in (42) must have a shell; *sa*P and SAP analogous to *v*P and VP. They argue that the SAP selects ForceP as its complement, where the head of the SAP hosts the particle. The specifier of each SAP hosts the vocative phrase. The SAP is dominated by a higher shell *sa*P. In

order to obtain the order *né*-vocative-CP, as in (43a), the particle moves from the lower head in SA to the higher head of *sa*P, whereas the vocative phrase remains in situ in Spec, SAP, as illustrated by the following schematic representation[57]:

(44)

$$[_{sa\text{P}} [_{sa} \text{ né } [_{\text{SAP}} \text{ VOCATIVE } [_{\text{SA}} \text{ né} ... [\text{CP} ....$$

(Haegeman and Hill, 2013: 386)

As discussed previously, there is a possibility that two particles co-occur in WF. Haegeman and Hill (2013) propose that there are two SAPs projected in the structure and each one of them is articulated in a shell structure. According to their analysis, vocatives reside in the specifier of each SAP whereas the particles are moved to the higher functional head in the shell structure, as illustrated by the following representation:

(45)

$$[_{sa\text{P1}} [_{sa1} \text{ né }][_{\text{SAP1}} \text{ VOC } [_{\text{SA1}} \text{ né}][_{sa\text{P2}} [_{sa2} \text{ wé}] [_{\text{SAP2}} \text{ VOC } [_{\text{SA2}} \text{ wé}]$$
[ForceP]]]]]

In a related issue to the integration of speech act into the syntactic structure, Hill (2007) examines the behaviour of certain adverbs in Romanian. She argues that certain adverbs have the option to select CP, as shown in the following example:

(46)

        a.   sigur   va   veni
             surely will-3SG   come
             'Of courses/he`s coming.'/ 'it is certain that s/he`s coming.'

        b.   sigur   că   va   veni
             surely that   will-3SG   come
             'Of courses/he`s coming.'/ *'it is certain that s/he`s coming.'

(Hill, 2007: 61)

Hill (2007) argues that the adverb *sigur* "surely" in (46a) is a lexical category that resides in the Spec, AdvP in CP domain. According to her analysis, the adverb in (46b) is a functional category that projects to the head of SAP which dominates

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[57] Due to space and word limit, vocative in NA will be left for future work.

ForceP. In terms of adverb interpretation, Hill (2007) argues that the adverb in (46a) conveys a punctual reading while the adverb in (46b) conveys evidential reading.

Hill (2007) adopts Rizzi`s (2002) split CP hypothesis, as shown in (47a). She argues that the ForceP is selected as a complement by the speech act phrase in the sense of Speas and Tenny (2003), as represented in (47b).

(47)

   a.   CP: ForceP   TopP   IntP   TopP   FocusP   ModP   TopP   FinP   IP

   b.   [$_{SAP}$ SA [$_{ForceP}$ Force . . . Mod . . . Fin [$_{IP}$ I–V]]]

<div align="right">(Hill, 2007: 64-65)</div>

Hill (2007) states that *că* "that", in (46b), is a complementizer that introduces a subordinate clause. According to her analysis, the location of the complementizer, in (46b), is in the head of the CP. She argues that when (46b) is embedded, the occurrence of the complemetizer *că* "that" after the adverb *sigur* "surely" is not licenced, as shown below.

(48)

Spunea	că	sigur (*că)	va	veni
Said-3SG	that	surely that	will-3SG	come

'S/he said it is true that s/he will come.'
<div align="right">(Hill, 2007: 68)</div>

According to Hill (2007), the first complementizer is selected by the verb *supean* "said" as its complement that introduces the embedded clause. She argues that the landing site for the first comlementizer is the head of the CP. The occurrence of the second complementizer, after the adverb *sigur* "surely", is ungrammatical because the embedded clause is bereft from SAP (Hill, 2007). Another piece of evidence in favour of Hill`s analysis comes from wh-extraction. In (49), the derivation of the object wh-word over *că* "that" fails. Hill (2007) states that there is no wh-probe above the sequence adverb-că that can trigger the movement of the object wh-word. Consider the following example:

(49)

> *Ce   sigur   că   a   cumpărat?
> What surely that has   bought

(Hill, 2007: 68)

Based on the observations in (48) and (49), Hill (2007) concludes that the overt complementizer, *că* "that" in (46b), is located in the head of ForceP whereas the sentential adverb *sigur* "surely" is located in the head of the SAP, as illustrated in (50a). On the other hand, the adverb in (46a) resides in the Spec, ModP in CP domain. The following schematic representations capture the positions of the sentential adverbs *sigur* "surely" in (50) (adapted from Hill, 2007: 78-80).

(50)   a.

```
              SAP
             /   \
       Speaker    Sa`
                 /   \
            Adverb    Force
                        |
                        ca
```

        b.
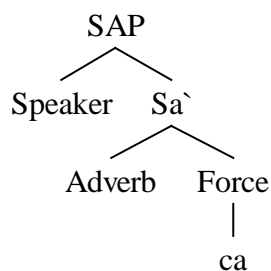
```
              SAP
             /   \
       Speaker    Sa`
                 /   \
                SA    Force / ModP
                        |
                      Adverb
```
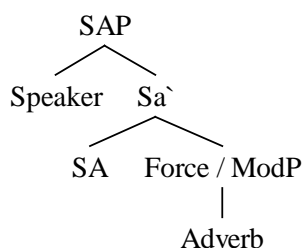
The previous structures in (50) are assumed by Hill (2007) to account for the position of the adverb *sigur* "surely" in Romanian. She argues that both structures contain a speech act phrase, *sigur* "surely" which reflects speaker-oriented reading. Therefore, the syntactic object that is in charge of speaker-orientedness must be present in both structures. The main difference between the two structures lies in checking the CP selection by the adverb *sigur* "surely". Hill (2007) proposes that the structures in (50a) and (50b) are derived through merging the adverb phrase into the head of the

SAP. The SAP selects the ForceP which is compatible with evidential features. She argues that c-selection must be checked. Moreover, Hill (2007) states that there are two ways to check c-selection; either by moving the adverb from ModP to the ForceP which results in covert SAP, or through merging *că* in Force which results in overt SAP.

In terms of interpretation, Hill (2007) argues that the difference between (50a) and (50b) lies in the realization of the sentential adverb. She argues that the adverb in (50a) and (50b) is classified as an evaluative in the sense of Cinque (1999). However, when the utterance obtains adverb- *că* sequence, as in (46b), which is represented syntactically in (50a), it reflects the speaker`s evaluation towards an event (active SAP). On the other hand, when the adverb is used without the occurrence of the complementizer *că* "that", as in (46a), which is represented in (50b), it conveys punctual/statement reading (inactive SAP).

In conclusion, this section has reviewed work on discourse particles in West Flemish and Romanian. The data analysis shows that verb-based particles in West Flemish can take ForceP as a complement. In addition, the Romanian data show that ForceP can be selected as a complement by SAP when the sentential adverb *sigur* "sure" co-occurs with the complemetizer *că* "that" in root declarative clauses.

In the following section, I investigate the base-position of the discourse particle *leiʃ* "why" in NA. Following Speas and Tenny (2003), Speas (2004a, 2004b), Hill (2007), Haegeman and Hill (2013), and Haegeman (2014), I will argue that the discourse particle *leiʃ* "why" is base-generated in the head of the Speech Act Phrase (SAP) which dominates Force Phrase. The wh-phrase *leiʃ* "why" in such constructions is a PF form of a speaker-oriented operator.

6.5 Base position of the speaker-orientated leiʃ "why"

Based on our discussion of the discourse particle *leiʃ* "why" in (6.2), (6.2.1) and (6.3), the natural question to ask at this point is where the discourse particle *leiʃ* "why" is articulated in the syntax of NA. The aim of this section is to provide a syntactic analysis of the base position of the wh-word *leiʃ* "why" in the sequence *leiʃ* "why"+ wh-word. This analysis is also extended to the base position of *leiʃ* "why" with declarative clauses. Following Speas and Tenny (2003), Speas (2004), Hill (2007), Haegeman and Hill (2013), and Haegeman (2014), I will argue that the

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discourse particle *leiʃ* "why", in the sequence *leiʃ* + wh-word and in declarative clauses, is externally merged into the head of the SAP that dominates ForceP. The following schematic representation captures the position of the discourse particle *leiʃ* "why" in NA in declarative and in *leiʃ* + wh-word sequence.

(51)

$$[_{\text{Spec}} \ [_{\text{SAP}} \ leiʃ \ [\text{ForceP}…]]]$$

It has been discussed that the verb-based particles in WF, and sentential adverbs in Romanian, are positioned in the head of the SAP. Following Haegeman and Hill (2013) and Hill (2007), I will claim that the position of the discourse particle *leiʃ* "why" in NA is also in the head of the SAP. In other words, the discourse particle *leiʃ* "why" in NA is not internally re-merged because it is not probed by a higher head which triggers its movement to the left periphery.

Given the observation that the discourse particle *leiʃ* "why" must precede all topicalized and focalized elements, as seen from the examples in (22a), (28a) and (22b), which are repeated respectively as (52a), (52b) and (52c) for ease of exposition, I claim that the discourse particle *leiʃ* "why" is base-generated in the head of SAP that c-commands the Force Phrase.

(52)

    a. *al-liʕbah   leiʃ Hakim   kisara-h
        DEF-toy   why.D. Hakim   break.PAST.3PS.M.-it
        Intended: 'The toy, Hakim broke it!'

    b. *b-al-dirah   leiʃ, min ħadˤar   al-ʕirs ?
        in-DEF-village why.D. who attend.PAST.3SGM   DEF-marriage
        Intended: 'In the village, who attended the marriage?'

    c. *al-ʕirs leiʃ, min ħadˤar   b-al-dirah?
        DEF-marriage why.D. who attend.PAST.3SG.M   in-DEF-village
        Intended: 'The marriage, who attended (it) in the village?'

The ill-formedness of sentences in (52) implies that this position is neither the Topic Phrase nor the Focus Phrase. Recall that the Spec position of the Focus Phrase is occupied by the interrogative wh-phrases including the interrogative *why*. According to Rizzi's (1997) Split CP hypothesis, the Focus Phrase which houses the

interrogative wh-phrase is dominated by another Topic layer which I assume houses the pre-wh-phrases topicalized entities. Here I make recourse to the arguments of Speas and Tenny (2003), Speas (2004a, 2004b), Hill (2007), Haegeman and Hill (2013), and Haegeman (2014), that Force is dominated by SAP. The main argument behind SAP is that it can open new horizons for semantics/pragmatic to be integrated within the syntactic structure. Speas and Tenny`s (2003) insight was based on Tenny's (2000) six semantic zones of a clause. What is relevant here is the highest semantic zone, i.e. 'point of view' zone, where I assume the discourse particle *leiʃ* "why" is base-generated. Tenny (2000: 319) states:

> The top 'point of view' zone contains those mood or modality elements that necessarily *introduce the point of view of the speaker*, and therefore also introduce the speaker as a sentient, deictic argument. We cannot have a point of view without a sentient being to hold it. A speech act, of course, necessarily involves the speaker as a participant. An evaluative expression, at the sentence level, reflects the point of view of the speaker. Evidentiality involves the speaker as a sentient perceiver, a proposition that is apparently true or false must be so to someone. Finally epistemic modality, which addresses a state of knowledge of something must involve a sentient mind that is in the state of knowing; at the sentence level it is the speaker who is represented as holding that knowledge.

Following these insights as well as the observation that the speaker-orientated *why* introduces the point of view of the speaker towards the previous discourse and his/her question, I argue that the discourse particle *leiʃ* "why" is externally merged in the head of the SAP where elements that introduce the point of view of the speaker are base-generated and it takes ForceP as its complelement. By this, we can account first for the observation that the discourse particle *leiʃ* "why" has a higher position than FoceP, c-commanding all topicalized and focalized elements in the left periphery, and second for the observation that the adjacency between the the discourse particle *leiʃ* "why" and the second wh-phrase can be broken up. According to Rizzi's (1997) Split CP hypothesis, the Focus Phrase which houses the interrogative wh-phrase is dominated by another Topic layer which I argue houses the pre-wh-phrases topicalized entities such as the left dislocated objects and adjuncts in the examples in (27) above, which I repeat below as (53) (the topicalized entities are in boldface).

(53)

a. lei∫, **b-al-dirah**   min   ħadˤar   al-ʕirs
why.D. **in-DEF-village** who   attend.PAST.3SG.M   DEF-marriage
'**In the village**, who attended the marriage?'

b. lei∫,   **al-ʕirs**   min   ħadˤar-uh   b-al-
dirah?
Why.D.   **DEF-marriage** who   attend.PAST.3SG.M-it   in-DEF-
village
'**The marriage**, who attended (it) in the village?'

Consider the following schematic representation of (53a) (the boldface arrows show the purported path of object movement to the left periphery, the dotted arrow shows the movement of the subject to the left periphery whilst the verb movement is shown in regular arrows):

(54)

SAP
Spec   SAP`
    leiʃ   CP
        Spec   Topic Phrase
            Spec   Focus Phrase
            b-al-dirah
                Spec   Focus`
                min
                    ħadˤar   FinP
                            TP
                        min   T`
                            ħadˤar   vP
                            b-aldirah   vP
                                    min   v`
                                        ħadˤar   VP
                                                VP   b-al-dirah
                                            ħadˤar   al-ʕirs
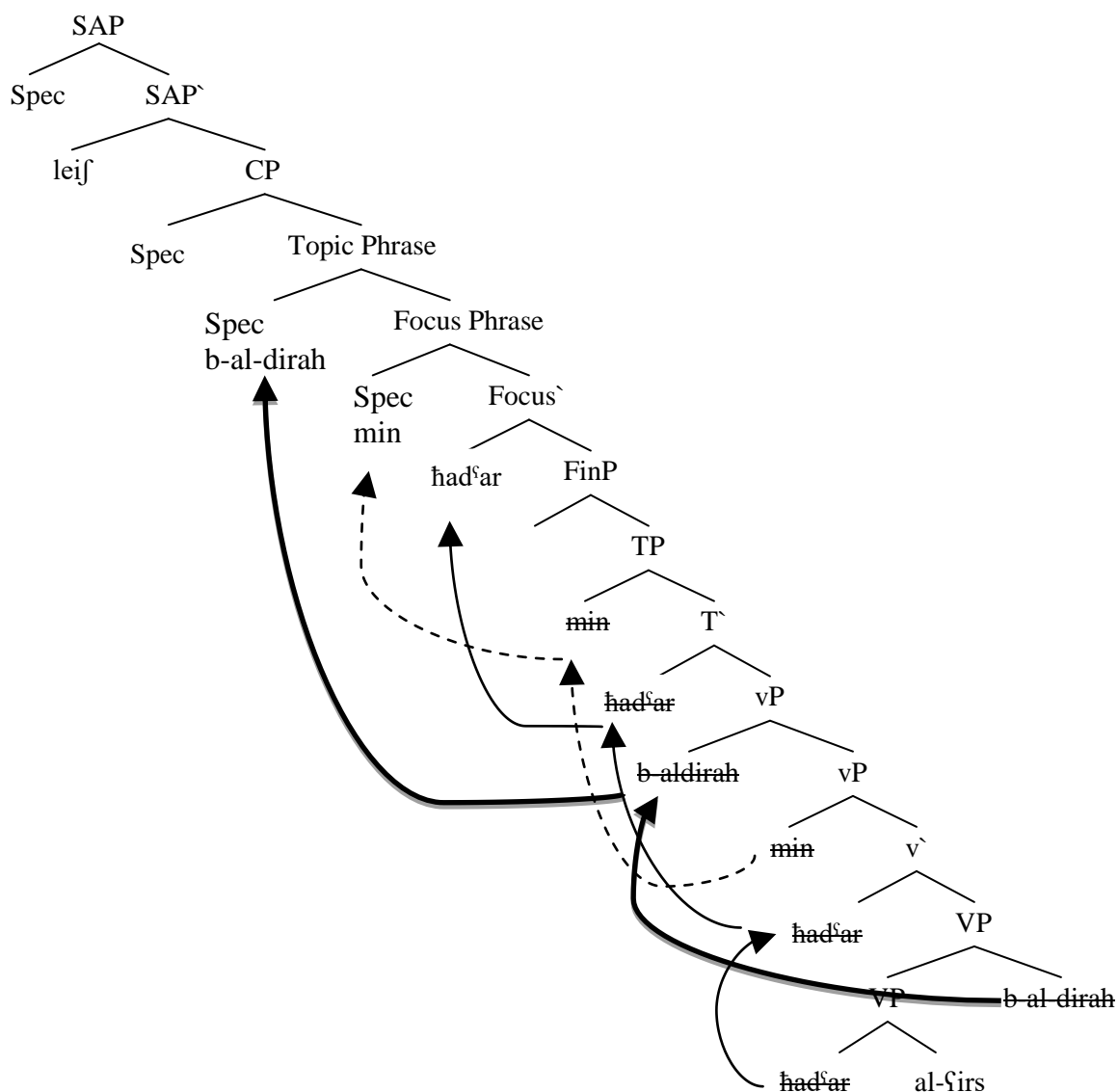
The above schematic representation shows that the discourse particle *leiʃ* "why" is base-generated in the head of the SAP. Unlike the interrogative wh-phrase *min* "who", the discourse particle *leiʃ* "why" does not move to its final position in the left periphery, but rather it is externally-merged (in the sense of Chomsky, 1999, 2000). So, unlike the interrogative wh-phrase *min* "who", the discourse particle *leiʃ* "why" does not constitute a two-membered chain but rather a one-membered chain.

In addition, I extend my analysis of the position of the discourse particle *leiʃ* "why" to account for its co-occurrence with declarative clauses where it precedes all topicalized and focalized phrases, as in (15) which is repeated here as (55).

(55)

leiʃ,	Hakim	ɣadih	hu	alli	kisar	al-liʕbah
why.D.,	Hakim	PRT	he	that	break.PAST.3PS.M	DEF-toy

Intended: 'Hakim is the one who broke the toy.'

If our analysis is on the right track, it can be argued that *leiʃ* "why" in (55) is base-generated in the head of the SAP, which is a functional projection that takes the ForceP as its complement. The topic particle *ɣadih* and its subject are located in a Topic Phrase above the Focus Phrase[58]. The focused pronoun *hu* "he" is in the Spec, FocP which dominates the complementizer *alli* "that". According to our analysis, the topicalized and focalaized phrases are within the Force Phrase domain which is c-commanded by the SAP. Therefore, the occurrence of the discourse particle *leiʃ* "why" higher than topicalized and focalized phrases in a declarative clause is predicted. The following schematic representation displays the position of the *leiʃ* "why" in (56)[59]:

(56)

[Spec, SAP [SAP leiʃ [CP [SpecTopP Hakim [Top ɣadih [Spec,FocP hu [FocP alli[Spec TP ~~Hakim~~ [T· ~~kisar~~[Spec vP ~~Hakim~~ [v· ~~kisar~~ [VP [v· [kisar [DP al-liʕbah]]]]]]]]]]]]]]]

Along these lines and following the main intention behind the SAP, it is expected that the discourse particle *leiʃ* "why" is not restricted to questions and can occur with, say, declarative sentences, something that is supported by Najdi Arabic data. Consider the following declarative sentences where the speaker-orientated *leiʃ* "why" occurs:

(57)

a.
leiʃ,	ʔana	ʔilli	ʔaʕtʰeet-uh	al-hisab
why.D.	I	that	give-.PAST.1SG.M-3SG.M	DEF-money

'I am the one who gave him the money.'

b.
leiʃ,	alyoom	al-madaaris	ʔimsakrih
why.D.	today	DEF-schools	closed

'The schools are closed today,'

---

[58] For more details about the position of the topic particle *ɣadih* and its subject in NA, see Alshamari (2017).

[59] Irrelevant details such as the occurrence of the contrastive focus pronoun *hu* "he" will not be discussed here.

The sentences in (57) provide more evidence that the discourse particle *leiʃ* "why" is not an interrogative wh-phrase, given that the examples in (57) are declarative and not questions. One might wonder why the speaker-orientated *leiʃ* "why" is used in the first place in declarative sentences like those in (57). The interpretive reading of the sentences in (57) is that such sentences should be true from the viewpoint of the speaker. This is why the sentences in (57) might be followed by conflicting/agreeing statements. Therefore, the discourse particle *leiʃ* "why" is an element that expresses the point of view of the speaker towards his/her sentence/discourse. For instance, the following two sentences can be seen as natural continuations that can follow the sentences in (57) (the sentence in (58a) is a continuation of (57a), and (58b) is a continuation of (57b)):

(58)

    a. la,   ʔint   ʔantʰeit-uh   nusʰ   al-hisab
         no   you   give.PAST.1SG.M-3SG.M   half   DEF-money
         'No, you gave him half of the money.'

    b. baʕad almaatʰig illi   ba-ha   hawa gawiyy
         some   DEF-regions   that   EXP-it   winds strong
         'They are closed in some regions where there is strong wind,'

The question that arises here is why the discourse particle *leiʃ* "why" does not show up in imperative and embedded contexts. Recall that if the discourse particle *leiʃ* "why" occurs in the imperative and embedded clauses, the resulting sentence would be ungrammatical. Consider the examples in (23) which I repeat below for convenience as (59) (note that indirect questions are taken as instances of embedded clauses).

(59)

    a. * qooli   l-i   leiʃ   Hakim   kisar   al-liʕbah
         tell.IMPRV.2SP.F   to-me why.D. Hakim   break.PAST.3PS.M.   DEF-toy
         '*Tell me, Hakim broke the toy!'

    b. *Sami qal   leiʃ   Hakim   kisar   al-liʕbah
         Sami say.PAST.3PS.M.   why.D. Hakim   break.PAST.3PS.M.   DEF-toy
         'Sami said Hakim broke the toy!'

Following Haegeman (2006), I will argue that the incompatibility of the discourse particle *leiʃ* "why" with an imperative and embedded clause is due to the fact that the complement which is selected by the imperative/subordinate clause is bereft of speech acts.

However, NA does not prevent a genuine wh-word, involving the wh-word *leiʃ* "why", to be embedded, as in (60b), or to occur with imperative clause, as in (60a). I will argue that the left periphery of the complement, which is selected by imperative/subordinate clauses, is a full CP. In other words, when imperative/subordinated clauses select a complement with a genuine wh-word like *leiʃ* "why", the wh-word, in this case *leiʃ* "why", can co-occur in the CP domain of the selected complement.

(60)

    a.   qooli   l-i   leiʃ   kisar   Hakim   al-liʕbah
        tell.IMPRV.2SP.F to-me why.Q. break.PAST.3PS.M. Hakim   the-toy
        'Tell me, why did Hakim break the toy?'

    b.   Sami   qal   leiʃ   kisar   Hakim al-liʕbah
        Sami   say.PAST.3PS.M. why.Q. break.PAST.3PS.M.   Hakim DEF-toy
        'Sami said why did Hakim broke the toy!'

6.6   Conclusion

In this chapter, I have investigated cases where the wh-phrase *leiʃ* "why" as a discourse particle co-occurs with declarative clauses and as well as another wh-phrase. Depending on a range of related observations between the discourse particle *leiʃ* "why" and the wh-word *leiʃ* "why" on one the hand and the behaviour of the discourse particle *leiʃ* "why" + wh-word sequence on the other, I have argued that the wh-phrase *leiʃ* "why" is not a genuine wh-phrase in the sense that it does not ask for new information. I have argued that the discourse particle *leiʃ* "why" is externally merged in the so-called SAP layer, following works by Speas and Tenny (2003), Hill (2007), Haegeman and Hill (2013), and Haegeman (2014). Using this analysis, I have accounted for all relevant observations related to the occurrence of the wh-phrase *leiʃ* "why".

Chapter SEVEN: Conclusion

This thesis has explored the syntax of multiple wh-questions in NA. It has provided a descriptive study of instances involving questions with multiple wh-phrases and has revealed that NA allows such questions under certain constraints whose violations render the relevant questions ungrammatical. The main observation has been that these conditions are sensitive to the categorial status of the multiple wh-phrases, i.e. argumental wh-phrases vs. adjunct wh-phrases. The first constraint is, in the case that the subject and the object are wh-phrases, the subject is fronted, whereas the object wh-phrase remains in situ. The second constraint concerns cases when multiple wh-phrases are a combination of argumental and adjunct wh-phrases. Here, the argumental wh-phrase must not be a subject but only an object wh-phrase, which in turn must remain in situ. The third constraint pertains to instances with multiple adjunct wh-phrases. Here the two wh-phrases must be fronted, separated by the coordinating conjunction *wa* 'and'. The whole thesis has been set to account for these constraints.

In the first chapter, I introduced NA and showed that this Arabic variety is a pro drop language. Then I presented brief descriptive data about question formation in NA. Then, I provided a comparison between NA, MSA, SA, IA, EA and English in terms of question formation. Also in the first chapter, I set out my research questions.

In the second chapter, I introduced the main theoretical assumptions of the MP which I depended on in my analysis of questions with multiple wh-phrases in NA. Additionally, I sketched out Rizzi's (1997) split CP system, Phase Theory and question formation in MP and in Phase Theory. Furthermore, I introduced the basic facts regarding clause structure and subject positions in NA. I discussed several works that have attempted to investigate the clause structure of Arabic and tested them against NA facts. The main finding that I reached was that the subject in NA must move to Spec,TP, an assumption that is well-backed by empirical evidence, including the use of indefinite subjects in the SVO word order.

In the third chapter, I investigated NA questions with subject/object wh-phrases and adjunct wh-phrases. I showed that in questions with a subject wh-phrase, the subject

wh-phrase moves to Spec, CP. I also showed that the object wh-phrase moves to Spec, CP in the overt syntax, attracted by the head of the CP.

Chapter Four introduced the descriptive facts relating to instances of multiple wh-phrases in NA. Following NA facts on grammatical questions with multiple wh-phrases, there are two obvious generalizations that can be drawn: a wh-phrase cannot move over a higher wh-phrase, and no two argumental wh-phrases can appear independently in the left-periphery. The fourth chapter also investigated examples whereby multiple adjunct wh-phrases are fronted to the left periphery. The chapter accounted for the observation that when a question has a subject wh-phrase and an object wh-phrase, the subject wh-phrase should move to Spec, CP, while the object wh-phrase remains in situ. I argued that the subject wh-phrase moves to Spec, CP, attracted by the [EPP] feature on the head of this projection. The object wh-phrase cannot move instead of the subject wh-phrase because of the latter being more local to the head of the CP than the former. Additionally, the fourth chapter investigated questions with multiple wh-phrases (one argumental and one adjunct). I showed that such questions are not allowed in NA grammar unless the argumental wh-phrase is an object that remains in situ. I argued for the possibility that adjunct wh-phrases have a strong [Q] feature which forces these elements to move to the left periphery in the overt syntax. However, the existence of the subject wh-phrase in Spec,vP (or Spec,TP) makes it the desired element to move upstairs given its locality to the head of the CP. This militates against the movement of adjunct wh-phrases (base-generated below Spec, vP), a matter that leads to ungrammatical questions. In the case of questions with adjunct wh-phrases that are located above Spec,vP (i.e. temporal adjuncts), I argued that these elements invoke an intervention blocking effect against the movement of the subject to Spec,TP, causing ungrammatical questions.

In Chapter Five, I first showed that questions with fronted multiple wh-phrases are true questions that ask for new information. I introduced the main premises of the sideward movement analysis which I depended on to account for questions with fronted multiple wh-phrases. The two conjuncts of the left coordinate complex in both constructions first undergo sideward movement from the gap positions independently, and form a coordinate complex with a conjunction, and later the newly built coordinate complex is integrated into the (complex) clause. Given that

there is only one Spec, CP in NA clause structure and that the two adjunct wh-phrases (unlike argumental wh-phrases) bear a strong [Q] feature, NA devises pseudo-coordination where the fronted two adjunct wh-phrases are conjoined to form one single XP that is licensed in the Spec, Focus Phrase.

In Chapter Six, I investigated the discourse particle wh-phrase *leiʃ* "why". I showed its base position compared to its Italian *perché* "why" and English *why*. Also, the fifth chapter examined the co-occurrance of *leiʃ* "why" with another wh-phrase. The chapter reached the conclusion that the discourse particle *leiʃ* "why" and the wh-word *leiʃ* "why" do not pattern alike at the level of the syntactic construction or at the level of interpretation. Then, I moved on to show how this discourse particle behaves with interrogative clauses. NA shows that the discourse particle *leiʃ* "why" must precede all topicalized and focalized phrases. Also, it does not seek new information. It was discussed that it is used as a discourse marker that expresses the speaker`s point of view towards an event or an uttereance. Besides this, I brought forth some cross linguistic data which exhibited a similar phenomenon where discourse particles dominate ForceP. Before the end of the chapter, I spelled out my proposal following Haegeman and Hill (2013), Hill (2007), and Haegeman (2014). I argued that the discourse particle *leiʃ* "why" is not a wh-word that must be answered. I also argued that the discourse particle *leiʃ* "why" in NA is base generated in the head of the SAP.

This thesis has contributed towards the study of formation of questions in NA. I hope the current thesis will inspire scholars to conduct further research on pertinent issues across other Arabic dialects. It would be worth investigating any differences between NA and other Arabic dialects, a matter that can provide us with a deeper understanding of question formation in Arabic in general. Additionally, I leave it open whether sideward movement can apply to other Arabic structures, hence providing credence to this model of analysis. Furthermore, more attention should be paid to the use of discourse markers/partciles in Arabic varieties, as they are important to explore the underlying structure of Arabic clause structure. In addition, the integration of discourse particles within the syntactic structure will open a new dimension for syntacticians in Arabic countries to investigate the left periphery of Arabic varieties. Moreover, because of limitations of space, this work has not covered the vocative and its relationship with the discourse particle *leiʃ* "why". I will leave this issue for future work.

References

Abd El-Moneim, A.A. 1989. *The role of INFL* (Doctoral dissertation, University of Connecticut).

Abdel-Razaq, I.M. 2015. *Who is what and what is who: The Morphosyntax of Arabic WH*. Cambridge: Cambridge Scholars Publishing.

Al-Aqarbeh, R.N. and A. Al-Sarayreh. 2017. 'The clause structure of periphrastic tense sentences in Standard Arabic'. *Lingua* 185: 67-80.

Albaty, Y.A. 2013. 'Wh-in-situ in Najdi Arabic'. *Working Papers of the Linguistics Circle of the University of Victoria* 23(1): 1-14.

Al-Horais, N. 2013. 'A Minimalist Approach to the internal structure of Small Clauses'. *The Linguistics Journal* 7: 320-347.

Alshamari, M. 2016. 'In Favour of Contrastive Topic Phrase in North Hail Arabic Left Periphery: Evidence fom The Discource Particle Tara'. *Newcastle and Northumbria Working Papers in Linguistics* 22: 23-39.

Alshamari, M. 2017. *Topic Particles in the North Hail Dialect of Najdi Arabic*. (Doctoral Dissertation: Newcastle University).

Alshamari, M. 2017. 'Syntactic analysis of the C-particle ʁedɪ'. *Poznan Studies in Contemporary Linguistics*. 53(3): In press.

Al-Shorafat, M. 2013. 'A phase-based account of wh-questions in Standard Arabic'. *Linguistics and Literature Studies* 1(4): 179-190.

Al-Sweel, A.I., 1981. *The verbal system of Najdi Arabic: A morphological and phonological study* (Doctoral dissertation, University of Washington).

Aoun, J. 1979. *On government, case-marking and clitic placement.* Cambridge, MA: MIT Press.

Aoun, J. and Benmamoun, E. 1998. 'Minimality, reconstruction, and PF movement'. *Linguistic Inquiry* 29(4): 569-597.

Aoun, J., Benmamoun, E. and Sportiche, D. 1994. 'Agreement, word order, and conjunction in some varieties of Arabic'. *Linguistic inquiry* 1: 195-220.

Aoun, J.E., Benmamoun, E. and Choueiri, L. 2010. *The syntax of Arabic*. Cambridge University Press.

Aoun, J. and Li, Y.H.A., 1993. Wh-elements in Situ: Syntax or LF? *Linguistic Inquiry*, *24*(2), pp.199-238.

Babu, H. 1996. 'The structure of Malayalam sentential negation'. *IJDL. International journal of Dravidian linguistics* 25(2): 1-15.

Badawi, E., Carter, M. and Gully, A. (eds.) (2004). *Modern Written Arabic: A Comprehensive Grammar.* London: Routledge.

Bahloul, M. 2007. *Structure and function of the Arabic verb*. Routledge.

Bahloul, M. and Harbert, W. 1993. 'Agreement Aymmetries in Arabic'. In J. Mead (ed) *The Proceedings of the Eleventh West Coast Conference on Formal Linguistics*. Stanford, Calif.: CSLI Publications. 15-31.

Bayer, J., 2001. Asymmetry in emphatic topicalization. *Audiatur vox sapientiae* 52: 15-47.

Benmamoun, E. 1992. *Functional Categories, Problems of Projection, Representation and Derivation* (Doctoral dissertation, Ph. D. dissertation, University of Southern California).

Benmamoun, E. 2000. *The feature structure of functional categories: A comparative study of Arabic dialects*. Oxford: Oxford University Press.

Blake, N.F. 2001. *A grammar of Shakespeare's language*. New York: Palgrave.

Boeckx, C. 2003. *Islands and chains: Resumption as stranding*. Amsterdam: John Benjamins.

Boeckx, C. 2007. *Understanding Minimalist Syntax*. Oxford: Blackwell.

Bolotin, N. 1995. 'Arabic and parametric VSO agreement'. *Amsterdam Studies in The Theory and History of Linguistic Science Series* 4: 7-7.

Bošković, Ž. 2002. 'On multiple wh-fronting'. *Linguistic inquiry* 33(3): 351-383.

Bošković, Ž. 2007. 'On the locality and motivation of Move and Agree: An even more minimal theory'. *Linguistic inquiry* 38(4): 589-644.

Browne, E. 1972. 'Conjoined question words and a limitation on English surface structures. *Linguistic Inquiry* 3(2): 223-226.

Brustad, K. 2000. *The syntax of spoken Arabic: A comparative study of Moroccan, Egyptian, Syrian, and Kuwaiti dialects*. Washington D.C.: Georgetown University Press.

Carstens, V. 2000. 'Concord in minimalist theory'. *Linguistic Inquiry* 31, 319–355.

Cheng, L. 2003a. 'Wh-in-situ, Part I'. *Glot International* 7: 103–109.

Chomsky, N. (1973) 'Conditions on Transformations'. in S. R. Anderson and P. Kiparsky (eds) *A Festschrift for Morris Halle.* Holt, Rinehart and Winston: New York. 232–286.

Chomsky, N. 1981. *Lectures on binding and government*. Dordrecht: Foris.

Chomsky, N. 1982. *Some concepts and consequences of the theory of government and binding*. Cambridge Mass: MIT press.

Chomsky, N. 1986. *Barriers*. Cambridge Mass: MIT press.

Chomsky, Ž. 1993. 'A minimalist program for linguistic theory'. The view from Building 20:1-52.

Chomsky, N. 1994. *Bare phrase structure*. Cambridge Mass: MIT press.

Chomsky, N. 1995. *The minimalist program*. Cambridge, Mass: MIT Press.

Chomsky, N. 1998. 'Minimalist inquiries: The framework'. *MIT Occasional Papers in Linguistics*. Cambridge Mass: MITWPL.

Chomsky, N. 1999. 'Derivation by phase'. *Occasional papers in linguistics (18).* Cambridge Mass: MIT Department of Linguistics.

Chomsky, N. 2000. 'Minimalist Inquiries: The Framework'. In H. Lasnik, R. Martin, D. Michaels and J. Uriagereka (eds.) *Step by step.' essays on minimalist syntax in honor of Howard Lasnik.* Cambridge Mass: MIT Press. 89-155.

Chomsky, N. 2001. 'Derivation by phase'. In M. Kenstowicz (ed.) *Ken Hale: A Life in Language*. Cambridge Mass: MIT Press. 1-52.

Chomsky, N. 2004. 'Beyond explanatory adequacy'. In A. Belletti (ed.) *Structures and Beyond, The cartography of syntactic structures*. Oxford: Oxford University Press. 3: 104-131.

Chomsky, N. 2005. 'Three factors in language design'. *Linguistic inquiry* 36(1): 1-22.

Chomsky, N. 2007. Approaching UG from below. In Gartner, H., and Sauerland, U., *Interfaces + recursion = language? Chomsky's minimalism and the view from syntax-semantics*. Berlin: Mouton de Gruyter. 1-30.

Chung, S. 2013. 'Syntactic identity in sluicing: How much and why'. *Linguistic Inquiry* 44(1): 1-44.

Cinque, G. 1999. *Adverbs and functional heads: A cross-linguistic perspective*. Oxford University Press.

Citko, B. 2013. 'The puzzles of *wh*-questions with coordinated *wh*-pronouns'. In T. Biberauer and I. Roberts (eds) *Challenges to Linearization.* Berlin: Walter de Gruyter. 295-329.

Citko, B. 2014. *Phase theory: An introduction*. Cambridge University Press.

Citko, B. and Gračanin-Yuksek, M. 2013. 'Towards a new typology of coordinated wh-questions'. *Journal of Linguistics* 49(1): 1-32.

Collins, C., 2001. 'Economy conditions in syntax'. In M. Baltin and C. Collins (eds.) *The handbook of contemporary syntactic theory*. Oxford: Blackwell. 45-61.

Collins, P. 1995. 'The indirect object construction in English: An informational approach'. *Linguistics* 33(1): 35-50.

Corver, N. and Nunes, J. (eds). 2007. *The Copy Theory of Movement*. Amsterdam: John Benjamins.

Demirdache, H. 1992. 'Weakest crossover revisited'. *Linguistics Colloquium, University of California at Los Angeles*.

El-Touny, K. 2011. 'Optionality in Cairene Arabic wh-questions between the Minimalist program and optimality theory'. *Studies in the Linguistic Sciences: Illinois Working Papers* 2011: 16-35.

El-Yasin, M.K. 1985. Basic word order in classical Arabic and Jordanian Arabic. *Lingua* 65(1-2): 107-122.

Fargal, M. 1986. *The Syntax of Wh-Questions and Related Matters in Arabic*. (Doctoral Dissertation). Indiana University.

Fassi A. 1993. *Issues in the Structure of Arabic Clauses and Word order*. London: Kluwer Academic.

Fehri, A. 2012. *Key Features and Parameters in Arabic Grammar*. Amsterdam: John Benjamins.

Ferguson, C.A.1959. Diglossia. *Word* 15(2): 325-340.

Féry, C. and Krifka, M. 2008, 'Information structure. Notional distinctions, ways of expression'. In: P. van Sterkenburg (ed.), *Unity and diversity of languages*. Amsterdam: John Benjamins, 123-136.

Gad, R. 2011. *A syntactic study of WH-Movement in Egyptian Arabic within the Minimalist Program*. Ph.D. dissertation: University of Leeds.

Grewendorf, G., 2001. Multiple wh-fronting. *Linguistic inquiry* 32(1): 87-122

Grosu, A. 1985. 'Subcategorization and parallelism'. *Theoretical Linguistics* 12: 231–239.

Haegeman, L. 1997. 'Introduction: on the interaction of theory and description in syntax'. In L. Haegeman (ed.) *The New Comparative Syntax.* London: Longman.1-32.

Haegeman, L. 2006. 'Conditionals, Factives and the Left Periphery'. *Lingua 116*(10): 1651-1669.

Haegeman, L. 2014. 'West flemish verb-based discourse markers and the articulation of the speech act layer'. *Studia Linguistica* 68(1): 116-139.

Haegeman, L. and Hill, V. 2013. 'The syntacticization of discourse'. In R. Folli, C. Sevdali and R. Truswell (eds) *Syntax and its Limits*. Oxford: Oxford University Press. 370-390.

Haida, A. and Repp, S. 2011. 'Monoclausal question word coordinations across languages'. In S. Lima, K. Mullin and B. Smith (eds) *Proceedings of NELS 39*. Amherst: GLSA. 373–386.

Heck, F. and Richards, M. 2010. 'A Probe-goal Approach to Agreement and Non-incorporation Restrictions in Southern Tiwa. *Natural Language and Linguistic Theory* 28(3): 681-721.

Hill, F.J. and Peterson, G.R. 1981. *Introduction to switching theory and logical design*. Willey: New York.

Hill, V. 2007. 'Romanian adverbs and the pragmatic field'. *The Linguistic Reiview* 24: 61-86.

Holmberg, A. and Platzack, C. 2005. 'The Scandinavian Languages'. In G. Cinque and R. Kayne (eds.) *The Oxford handbook of comparative syntax*. Oxford: Oxford University Press. 420-458.

Holmberg, A. and Roberts, I. 2013. 'The Syntax–morphology Relation'. *Lingua* 130:111-131.

Holmberg, A. and Nikanne, U. 2002.' Expletives, Subjects and Topics in Finnish'. In P. Svenonius (ed) *Subjects, expletives, and the EPP*. Oxford: Oxford University Press. 71–105.

Huang, C.J. 1982. 'Move WH in a language without WH movement'. *The linguistic review* 1(4): 369-416.

Ilc, G. And M. Sheppard. 2002. 'Verb movement and interrogatives'. *Linguistica* 42(1): 161-176.

Ingham, B. 1994. *Najdi Arabic: Central Arabian*. Amsterdam: John Benjamins Publishing.

Ingham, B. 2010. 'Information Structure in Najdi Dialects'. In J. Owens and A. Elgibali (eds.) *Information structure in spoken Arabic*. London: Routledge. 75–92.

Johannessen, J.B. 1998. *Coordination*. Oxford University Press.

Kayne, R. 1998. 'Overt vs. Covert Movements'. *Syntax* 1(2): 128-191.

Kiss, K.É. 1998. 'Identificational focus versus information focus'. *Language* 74: 245-273.

Ko, H. 2005a. 'Syntax of why-in-situ: Merge into [Spec, CP] in the Overt Syntax'. *Natural Language and Linguistic Theory* 23(4): 867-916.

Ko, H. 2005b. *Syntactic edges and linearization*. (Doctoral dissertation, Massachusetts Institute of Technology).

Koopman, H. and Sportiche, D. 1991. 'The Position of Subjects'. *Lingua* 85(2-3): 211-258.

Kortobi, I. 2002. 'Gapping and VP-Deletion in Moroccan Arabic'. In J. Ouhalla and U. Shlonsky (eds.) *Themes in Arabic and Hebrew syntax*. Dordrecht: Kluwer. 217-240.

Kratzer, A. 1999. 'Beyond 'ouch' and 'oops': how descriptive and expressive meaning interact'. Paper presented at the Cornell Conference on Theories of Context Dependency.

Kuno, S. and Robinson, J. 1972. 'Multiple wh questions'. *Linguistic Inquiry* 3(4): 463-487.

Lasnik, H. 1995. 'Case and Rxpletives Revisited: On Greed and Other Human Failings'. *Linguistic inquiry* 26:615-633.

Lee, S. 1993. 'The syntax of serialization in Korean'. *Japanese/Korean Linguistics* 2: 447-463.

Legate, J.A. 2003. 'Some Interface Properties of the Phase'. *Linguistic inquiry* 34(3): 506-515.

Legate, J.A. 2014. 'Split ergativity based on nominal type'. *Lingua* 148: 183-212.

Lewis, R. 2013. *Complementizer Agreement in Najdi Arabic* (Doctoral dissertation, University of Kansas).

López, L. 2014. *A Derivational Syntax for Information Structure*. Oxford: Oxford University Press.

Mohammad, M.A. 1990. 'The Problem of Subject-verb Agreement in Arabic: Towards a solution'. *Perspectives on Arabic linguistics* 1: 95-125.

Mohammad, M.A. 2000. *Word Order, Agreement, and Pronominalization in Standard and Palestinian Arabic*. Amsterdam: John Benjamins.

Moore, M. 2003. *Dude, Where`s my Country?* Victoria, Australia: Allen Lane, Penguin.

Moro, A. 2011. 'Clause Structure Folding and the "Wh-in-Situ Effect"'. *Linguistic inquiry* 42(3): 389-411.

Moutaouakil, A. 1989. *Pragmatic Functions in a Functional Grammar of Arabic*. Dordrecht: Poris Publications Holland.

Musabhien, M. 2009. *Case, Agreement and Movement in Arabic: a Minimalist Approach* (PhD dissertation. Newcastle University).

Nunes, J. 1995. *The Copy Theory of Movement and Linearization of Chains in the Minimalist Program* (Doctoral dissertation, University of Maryland).

Nunes, J. 2001. 'Sideward Movement'. *Linguistic Inquiry* 32(2): 303-344.

Nunes, J. 2004. *Linearization of Chains and Sideward Movement.* Cambridge MA: MIT Press.

Olarrea, A. 1995. 'Notes on the Optionality of Agreement'. *Anuario del Seminario de Filología Vasca Julio de Urquijo* 29(1): 133-173.

Ouali, H. 2011. *Agreement, Pronominal Clitics and Negation in Tamazight Berber: A Unified Analysis*. New York: Continuum Studies in Theoretical Linguistics.

Ouhalla, J. 1991. Functional Categories and the Head Parameteric Variation. New York: Routledge.

Ouhalla, J. 1994a. 'Focus in Standard Arabic'. *Linguistics in Potsdam* 1: 65-92.

Ouhalla, J. 1994b. 'Verb movement and word order in Arabic', in D. W. Lightfoot and N. Hornstein (eds.) *Verb Movement*. Cambridge: Cambridge University Press. 73-85.

Ouhalla, J. 1997. 'Remarks on focus in Standard Arabic'. In M. Eid and R.R. Ratcliffe (eds.) *Perspectives on Arabic Linguistics X*. Amsterdam: John Benjamins. 9-45.

Pesetsky, D. 1987. 'Wh-in-situ: movement and unselective binding'. In E. Reuland and A. ter Meulen (eds.) *The Representation of (In)definiteness*. Cambridge: MIT Press. 98-129.

Peterson, P. 1981. 'Problems with constraints on coordination'. *Linguistic Analysis* 8: 449-460.

Platzack, C. 2004. 'Agreement and the Person Phrase Hypothesis'. *Working Papers in Scandinavian Syntax* 73: 83-112.

Radford, A. 1997. *Syntactic theory and the structure of English: A minimalist approach*. Cambridge University Press.

Radford, A. 2004. *Minimalist syntax: Exploring the structure of English*. Cambridge University Press.

Radford, A. 2009. *Analysing English sentences: A minimalist approach*. Cambridge University Press.

Reinhart, T. 1998. 'Wh-in-situ in the framework of the Minimalist Program'. *Natural Language Semantics* 6: 29–56.

Richards, N. 1997. What moves where when in which language? Doctoral dissertation, MIT.

Richards, M.D. 2011. Deriving the Edge: What's in a Phase? *Syntax* 14(1): 74-95.

Rizzi, L. (ed). 2004. *The structure of CP and IP: The Cartography of Syntactic Structures*. New York: Oxford University Press.

Rizzi, L. 1990. *Relativized Minimality*. Cambridge MA: MIT Press.

Rizzi, L. 1997. 'The fine structure of the left periphery'. In H. Liliane (ed.) *Elements of grammar: Handbook of generative syntax*. Dordrecht: Kluwer Academic Publishers. 281-337.

Rizzi, L. 2001a. 'Relativized Minimality Effects'. In M. Baltin and C. Collins (eds.) *Handbook of Syntactic Theory*. Oxford: Balckwell. 89-110.

Rizzi, L. 2001b. 'On the position "Int(errogative)" in the left periphery of the clause'. In G. Cinque and G. Salvi (eds.) *Current Studies in Italian Syntax. Essays offered to Lorenzo Renzi*. Amsterdam: Elsevier North-Holland. 287-296.

Rizzi, L. 2004a. 'On the cartography of syntactic structures'. In L. Rizzi (ed.) *The Structure of CP and IP*. New York: Oxford University Press. 3-51.

Sag, I.A., Gazdar, G. T., Wasow, T. and Weisler, S. 1985. 'Coordination and how to distinguish categories'. *Natural Language & Linguistic Theory* 3(2): 117-171.

Shlonsky, U. 1997. *Clause structure and word order in Hebrew and Arabic: An essay in comparative Semitic syntax*. New York: Oxford University Press.

Shlonsky, U. 2000. 'Subject positions and copular constructions'. In H. Bennis, M. Everaert and E. Reuland (eds.) *Interface strategies*. Amsterdam: Royal Netherlands Academy of Arts and Sciences. 325-347.

Shlonsky, U. 2002. 'Constituent questions in Palestinian Arabic'. In J. Ouhalla and U. Shlonsky (eds.) *Themes in Arabic and Hebrew Syntax*. Dordrecht: Kluwer. 137–159.

Simpson, A. 2000. *Wh-movement and the theory of feature-checking*. John Benjamins Publishing.

Soltan, U. 2006. 'Standard Arabic subject-verb agreement asymmetry revisited in an Agree-based minimalist syntax'. In C. Boeckx (ed.) *Agreement Systems*. Amsterdam: John Benjamins. 239-265.

Soltan, U. 2007. *On formal feature licensing in minimalism: Aspects of Standard Arabic morphosyntax* (Doctoral dissertation, University of Maryland, College Park).

Soltan, U. 2011. 'On issues of Arabic syntax: An essay in syntactic argumentation.' In Brill's Journal of Afroasiatic Languages and Linguistics 3: 236-280.

Soltan, U. 2012. 'On licensing wh-scope: wh-questions in Egyptian Arabic revisited'. In R. Bassiouney & G. Katz (eds) *Arabic Language and Linguistics*. Georgetown University Press: 99-114.

Speas, M. and Tenny, C. 2003. 'Configurational properties of point of view roles'. In An. Sciullo (ed.) *Asymmetry in Grammar*. Amsterdam: John Benjamins.315–344.

Speas, M. 2004a. Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114(3): 255-276.

Speas, M. 2004b. Evidential paradigms, world variables and person agreement features. *Italian Journal of Linguistics* 16(4): 253-80.

Stalnaker, Robert. 2002. 'Common ground'. *Linguistics and philosophy*, 25, 701-721

Stepanov, A. and W. D. Tsai. 2008. 'Cartography and licensing of wh-adjuncts: a crosslinguistic perspective'. *Natural Language and Linguistic Theory* 26: 589–638.

Sulaiman, M. 2016. *The syntax of wh-questions in Syrian Arabic* (Doctoral dissertation, Newcastle University).

Svenonius, P. 2004. 'On the edge'. In D. Adger, C. de Cat, and G. Tsoulas (eds.), *Peripheries*. Dordrecht: Kluwer. 259-287.

Szendrői, K. 2004. Focus and the interaction between syntax and pragmatics. *Lingua* 114(3): 229-254.

Tenny, C. 2000. 'Core events and adverbial modification'. In C. Tenny and J. Pustejovsky (eds.) *Events as Grammatical Objects*. Stanford: CSLI Publications. 285-334.

Thornton, R. 2008. 'Why continuity'. *Natural Language & Linguistic Theory* 26(1): 107-146.

Versteegh, K. 2001. Linguistic contacts between Arabic and other languages. *Arabica*, 48(4): 470-508.

Wahba, W. 1992. 'LF Movement in Iraqi Arabic'. In C.-T. J. Huang & R. May (eds.) *Logical Structure and Linguistic Structure*. Dordrecht: Kluwer. 253–276.

Whitman, N. 2004. 'Semantics and pragmatics of English verbal dependent coordination'. *Language* 80: 403–434.

Wilder, C. 1994. 'Coordination, ATB and ellipsis'. *Groninger Arbeiten zur Germanistischen Linguistik* 37: 291-331.

Zeijlstra, H. 2004. *Sentential Negation and Negative Concord* (Doctoral dissertation, Amsterdam: University of Amsterdam).

Zhang, N. 2009. *Coordination in syntax*. Cambridge: Cambridge University Press.

Zhang, N.N. 2007. 'The syntactic derivations of two paired dependency constructions'. *Lingua*, *117*(12): 2134-2158.

Zughoul, M. 1980. 'Diglossia in Arabic: investigating solutions'. *Anthropological Linguistics* 22(5): 201-217.