

The Syntax of Wh-Interrogatives in Buhairi Arabic: Documentation and Analysis

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Abstract

The current article documents new empirical data on the syntactic behaviors of wh-interrogatives in Buhairi Arabic (BA), an under-researched dialect spoken in the southwestern part of Saudi Arabia. Like Lebanese and Najdi Arabic (Aoun et al., 2009; Albaty, 2013), BA employs four strategies in wh-formation (i) gap, (ii) resumptive, (iii) Class II resumptive and (iiiiv) in-situ. In contrast to other Arabic dialects, BA employs a new mechanism in wh-questions, which I term, Class II gap strategy. In this paper, I highlight the hallmarks of all the strategies in operation, comparing them with parallel constructions in Arabic grammar. I examine the internal morpho-syntax of wh-words and provide a separate syntactic analysis for each strategy, after a unified account could not be warranted. Although the gap strategy is derived via the canonical wh-movement, the resumptive strategy is accounted for via a base-generation approach. As for Class II resumptive and Class II gap strategies, Shlonsky's (2002) treatment of reduced cleft wh-interrogatives in Palestinian Arabic proves efficient in accommodating all the peculiarities found in the same constructions in BA. Finally, and despite the recent support of the unselective binding proposal for wh-in-situ (Pesetsky, 1987; Aoun & Li, 1993; Mathieu, 1999; Bruening & Tran, 2006; Abdel Razaq, 2011; Albaty, 2013 inter alia), BA provides data that rather advocates the covert LF-movement analysis (Huang, 1982, 1995; Lasnik & Saito, 1992).

Keywords: Buhairi Arabic, Modern Standard Arabic, Wh-questions, Wh-in-situ

التركيب النحوي في الأسئلة الاستفهامية في اللهجة البحريرية: توثيق وتحليل

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الملخص:

توثق المقالة الحالية بيانات تجريبية جديدة حول السلوكيات النحوية في الأسئلة الاستفهامية في اللهجة البحريرية وهي لهجة لم تحظ بالبحث الوافي وتُستخدم في الجزء الجنوب الغربي من المملكة العربية السعودية. وعلى غرار اللهجة اللبنانية واللهجة النجدية (عون وآخرون، ٢٠٠٩؛ البطي، ٢٠١٣)، توظف اللهجة البحريرية أربع استراتيجيات في تشكيل الأسئلة: (١) الفراغ، و(٢) العائد، و(٣) العائد من النوع الثاني و(٤) إبقاء الكلمة الاستفهامية في مكانها. وعلى عكس اللهجات العربية الأخرى، توظف اللهجة البحريرية آلية جديدة، أسميها، استراتيجية الفراغ من النوع الثاني. وفي هذه الورقة، سأسلط الضوء على السمات المميزة لجميع الاستراتيجيات العاملة، ثم سأقوم بمقارنتها مع التراكيب الموازية في قواعد اللغة العربية. كما سأبحث النحو الصرفي للكلمات الاستفهامية وأقدم تحليلاً نحوياً مستقلاً لكل استراتيجية، بعد تعذر التوصل الحاسم إلى تحليل موحد. ورغم اشتقاق استراتيجية الفراغ من خلال الحركة المألوفة للكلمة الاستفهامية، فقد تم تحليل استراتيجية العائد وفقاً لمنهجية التوليد الأساسي. أما ما يخص استراتيجيات الفراغ والعائد من النوع الثاني، فقد أثبتت منهجية شلونسكي (٢٠٠٢) للأسئلة الاستفهامية المنقسمة والمخفضة فاعليتها في استيعاب جميع الخصائص المميزة في نفس التراكيب في اللهجة البحريرية. وأخيراً ورغم الدعم الأخير لمقترح الربط غير الانتقائي للكلمات الباقية في مكانها (بسييسكي، ١٩٨٧؛ عون ولي، ١٩٩٣؛ ماثيو، ١٩٩٩؛ بروينغ وتران، ٢٠٠٦؛ عبدالرزاق، ٢٠١١؛ البطي، ٢٠١٣ وآخرون)، فإن اللهجة البحريرية تقدم بدلاً من ذلك دعماً لتحليل الحركة المخفية في الصيغة المنطقية (هوانغ، ١٩٨٢، ١٩٨٥؛ لاسنيك وسيتو، ١٩٩٢).

الكلمات المفتاحية: اللهجة البحريرية، اللغة العربية الفصحى، الأسئلة الاستفهامية، إبقاء الكلمة الاستفهامية في مكانها

1. Introduction

Displacement is a common property of human language where a phrase is displaced from one position to another¹. In wh-questions, for instance, a wh-phrase is fronted to a clause-peripheral position, plus other internal movements as is the case with the auxiliary-subject inversion in English. In (1), the wh-word *what* is moved from its original position (represented with a gap symbol \emptyset) to the left edge of the clause, and the auxiliary *is* precedes the subject *John* in order.

1. a. John is reading a book
- b. What is John \emptyset reading?

Many syntactic analyses have been put forward to account for this long-distance dependency between the fronted wh-phrase and the original position from which it departs (Chomsky, 1973, 1977, 2001; Pesetsky, 1987, 2000; Donati, 2006; Cheng, 2009; Yeo, 2010 *inter alia*).

Among these studies, some have shed light on wh-movement in Arabic dialects including Iraqi Arabic (Ouhalla, 1996; Simpson, 2000), Lebanese Arabic (LA) (Aoun & Choueiri, 1999; Aoun & Li, 2003), Egyptian Arabic (EA) (Wahba, 1984; Soltan, 2009) Palestinian Arabic (PA) (Shlonsky, 2002), Jordanian Arabic (Al-Momani & Al-Saidat, 2010; Abdel Razaq, 2011) and Najdi Arabic (NA) (Albaty, 2013) among many others.

The current article aims to present new empirical data on wh-movement from a non-documented Arabic dialect spoken in Saudi Arabia, namely Buhairi Arabic (BA). Only two studies have investigated BA, and these analyses are conducted from theoretic and rhetoric perspectives. The first is a formal study examining the phonological alternations of the definite article in BA (Alqarni, 2010) while the other is a sociolinguistic

¹ Abbreviations used in this article are as follows: 1=First Person, 2=Second Person, 3=Third Person, ACC=accusative, BA=Buhairi Arabic, CS=Construct State, DU=Dual, EA=Egyptian Arabic, F=Feminine, GEN=genitive, IMPERF=Imperfective, INDEF=Indefinite, LA=Lebanese Arabic, MSA=Modern Standard Arabic, M=Masculine,

NOM=nominative, P&P=Principles and Parameter, PA=Palestinian Arabic; PERF=Perfective, PL=plural, S=Singular, UG=Universal Grammar.

Acknowledgement: I am indebted to Yasser Albaty (from Qassim University) and two anonymous reviewers for their valuable comments and constructive feedback for the first draft of this paper.

work investigating the gender-based variations between female and male BA speakers (Alqarni, 2019). The present study seeks to provide the first morpho-syntactic account to the patterns of wh-interrogatives in BA. The contribution of this paper is thus twofold, i.e. empirical and theoretical, as it advances the field of Arabic dialectology and provides further understanding of the syntax of wh-interrogation in Arabic language overall.

I will couch this study within the Principles and Parameters (P&P) framework (Chomsky, 1981, 1986, 1995, 2000). The P&P framework stipulates that all grammars in the world languages are invariant, leading to what is known as Universal Grammar (UG). However, typological variations attested among languages are attributed to parameters operating within their linguistic systems, such as head-directionality parameter (whether a language is head-initial or head-final), null-subject parameter, wh-parameter etc. In light of the wh-parameter, the recent reformulations in the Minimalist Program (Chomsky, 1995, 2000) divide languages into wh-movement or wh-in-situ languages. In Chomsky's (2000) terms, some languages satisfy the wh-feature on the head C^0 via movement while

others have the same feature checked from a long distance via an Agree approach.

Given that BA makes use of both wh-fronting and wh-in-situ strategies, we may need a more relaxed version of the Chomskyan approach. Chomsky, himself, acknowledges that the linguistic typology cannot be explained under the P&P framework in its strong sense, as "little is understood to venture any strong hypotheses" (1995:6). As a consequence, the notion of parameters has received renewed interest from scholars who require refinements to them (Smith & Law 2009) and others seeking to banish it from the syntactic theory as a whole (Boeckx, 2010). Thus, we may need a newer approach such as Nano-syntax proposed by Starke (2001, 2010, 2011). This micro-approach preserves the basic tenets of the P&P framework but considers the sub-morphemic levels of the linguistic variations. More in-depth analysis of the structure of the lexical items can explain the variations within the same language (see Abdel Razaq, 2011). Thus, the paper intends to delve into the internal structure of wh-expressions that might be responsible for the variations within the BA dialect. These attempts suggest that parameters can be micro-parameters language-internally, let

alone cross-linguistically. This is a possibility in the wh-parameter of Arabic as LA, for example, employs four strategies whereas EA makes use of only wh-in-situ as the default strategy which is in turn banned in Modern Standard Arabic (MSA). Likewise, BA implements the same four strategies observed in LA, plus a new strategy, I term, Class II gap strategy.

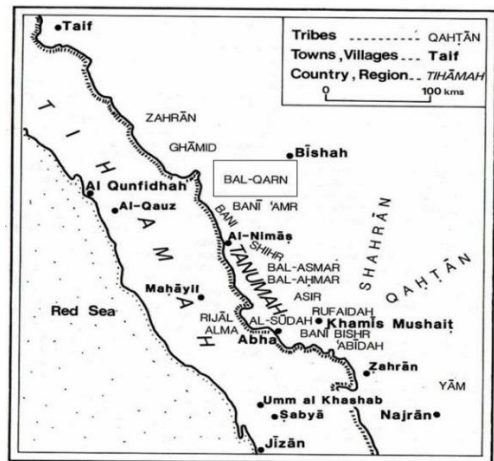
The paper is organized as follows. Section (2) provides a brief introduction of the dialect under study and compares it with MSA and other Arabic dialects. Section (3) focuses on the strategies that BA employs in question formation and addresses each strategy in a separate subsection. The discussion of each strategy is followed by a syntactic account. Concluding remarks are given in section (4).

2. BA vs. MSA and Other Arabic Dialects

This section constitutes a short introduction to BA. Due to space limitations, I will focus on the salient phonological and morphosyntactic properties of BA which are relevant to the primary concern of the study, i.e. question formation.

Bani Buhair is a subtribe of Bal-qarn as indicated with a square in Map 1 (cf. Prochaska, 1988a:6). It is

located in the southwestern part of Saudi Arabia, in Aloordiyat which officially belongs to Mecca governate. BA speakers live in villages surrounded by farms and mountains, particularly in a town called Alfaija which is the center of a 380 square kilometer area. According to the Statistics of the Health Care Center in Alfaija (2016), the population of BA speakers ranges between 8000 and 8600 at the maximum.



Map 1: The Southern Hijaz and the Tihama

Like other Arabic dialects, BA lost all the case markings assigned to noun phrases. In MSA, the subject is marked with the nominative case /u/ in (2a) whereas the object of the verb is cased with the accusative marker /a/ in (2b). As far as the object of the preposition is concerned, it is suffixed with the genitive marking /i/ in (2c).

2. a. dʒa:ʔa r-rajul-u
come.3.M.PERF the-man-NOM
'The man came'

b. raʔa r-rajul-a
see.3.M.PERF the-man-ACC
'He saw the man'

c. marra bi r-rajul-i
pass.3.M.PERF by the-man-GEN
'He passed by the man'

In BA, all these case-markings are lost as shown in the corresponding examples below.

3. a. dʒa w-walad
come.3.M.PERF the-boy
'The boy came'

b. ʃa:f aw-walad
see.3.M.PERF the-boy
'He saw the boy'

c. marr ba w-walad
pass.3.M.PERF by the-boy
'He passed by the boy'

In MSA, the definite article /ʔal-/ undergoes an assimilation process where the lateral sound /l/ assimilates to the initial sound of the noun if and only if the initial sound is /t/, /d/, /s/,

/z/, /θ/, /ð/, /r/, /l/, /n/ /ʃ/, /tʰ/, /dʰ/, /sʰ/
and /ðʰ/ (Ryding, 2005:40).

Elsewhere, the lateral /l/ is preserved. Consider (4) from MSA.

4. ʔaʃtʰaytu-hu l-marsama wa
give.1.M.PERF-him the-pencil-ACC and
d-daftar-a
the-notebook-ACC'
'I gave him the pencil and the notebook'

Almost all Arabic dialects maintain the assimilation process of the definite article. By contrast, BA has three invariable allomorphs of the definite article: (i) /ʔam/, (ii) /ʔab/ and (iii) /ʔaw/. The definite article /ʔab-/ precedes nouns that begin with a sound having a coronal or dorsal phonetic feature (Alqarni, 2010). Coronal sounds consist of the non-emphatic consonants /t/, /d/, /s/, /z/, /θ/, /ð/, /r/, /l/, /n/, /ʃ/, /dʒ/ plus the emphatic counterparts /tʰ/, /sʰ/ and /ðʰ/, whereas the dorsal sounds include /g/, /k/, /ɣ/ and /x². As for the article /ʔaw-/, it occurs in the contexts of nouns beginning with the glide /w/. The article /-ʔam/ is the elsewhere case³. Consider the contrast between MSA in (4) and the corresponding

² As common in the majority of Arabic dialects, the emphatic stop /dʰ/ in BA is substituted with the emphatic fricative /ðʰ/.

³ Although the definite article /ʔab/ and /ʔaw/ are attested only in BA and neighboring dialects primarily spoken in Aloordiyat, Prochazka (1988b) reports that the definite

article /ʔam/ is used in southern cities and towns such as al-Qahabah, Abha, al-Sahra, Rijal, BI-Asmar, Bal-Qarn, Mahayil area and Wadi m-Gher, with few variants: [ʔum] as in Bal-Ahmar, [m] as in Bal-Qarn, and [ʔam] as in Abu Arish.

example from BA in (5)⁴.

5. ?addaytu:-h **im-marsam** w
 give.1.M.PERF-him the-pencil and
ib-daftar w **iw-waragah**
 the-notebook and the-sheet
 'I gave him the pencil, the notebook and
 the sheet'

Another peculiar pattern in BA pertains to the indefinite article. In MSA, indefinite nouns end with a nasal suffix /-n/ as in (6a). Although this nasal ending is lost in Najdi Arabic as in (6b), it is retained as /-in/ in BA only in masculine nouns as shown in (6c) or feminine nouns that are not morphologically marked for gender in (6d).

6. a. ?aʕtʔaytu-hu marsam-a-n
 give.1.M.PERF-him pencil-ACC-INDEF
 'I gave him a pencil.'
- b. ?aʕtʔayta-h marsam
 give.1.M.PERF-him pencil
 'I gave him a pencil.'
- c. ?addaytu:-h marsam-**in**
 give.1.M.PERF-him pencil.M-INDEF
 'I gave him a pencil.'
- d. kull, maʕa-k i:d-**in**
 eat, with-you hand.F-INDEF
 'Eat! you have a hand.'

Feminine nouns that bear the

feminine marker /-ha/ do not allow the insertion of /-in/ in BA as seen in (7).

7. ?addaytu:-h sayya:r-ah(*-in)
 give.1.M.PERF-him car-F(-INDEF)
 'I gave him a car.'

In summary, BA exhibits the same characteristics found in other Arabic dialects such as the dropping of the case markings from noun phrases: the nominative /u/, the accusative /a/ and the genitive /i/. Yet, it differs from MSA and other dialects in that it has three variants of the definite article /ʔal/: /ʔam/, /ʔab/ and /ʔaw/. Unlike other Arabic dialects, the indefinite article in BA is manifested as the suffix /-in/ in masculine and non-morphologically feminine nouns.

3. Strategies of Wh-Questions in BA

In section (3.1), I will discuss the four strategies employed in BA wh-questions and other dialects. Section (3.2) will explore the aspects of each strategy, contrasting it with other strategies from a syntactic perspective; I will show in the same section that separate analyses, not a unified account, should be assigned to these strategies.

3.1. Five Strategies in BA Wh-

⁴ Very few nouns, basically time-expressions, in BA follow the phonological patterns of the definite article in MSA such as *al-ba:riḥ* 'last

night', *al-laylah* 'tonight', *il-yawm* 'today' and *is-sa:ʕ* 'now'.

Questions

Aoun et al (2009) point out that LA makes use of four strategies in wh-formation as demonstrated in the following examples (cf. Aoun et al, 2009:128)⁵.

8. *ʔayya mmasil ʃəft Ø b-l-matʕam*
which actor saw.2.M.PERF in-the-restaurant
'Which actor did you see in the restaurant'?
(Gap strategy)

9. *ʔayya mmasil ʃəft-o b-l-matʕam*
which actor saw.2.M.PERF-him in-the-restaurant
'Which actor did you see in the restaurant'?
(Resumptive strategy)

10. *miin yalli ʃəft-o b-l-matʕam*
who that saw.3.M.PERF-him in-the-restaurant
'Who is it that you saw in the restaurant'?
(Class II resumptive strategy)

11. *ʃəft ʔayya mmasil b-l-matʕam*
saw.2.M.PERF which actor in-the-restaurant
'Which actor did you see in the restaurant?'
(In-situ strategy)

In (8), the wh-constituent *ʔayya mmasil* 'which actor' moves to the left edge of the clause and it is associated with a gap in the original position. This operation is known as gap strategy. As for resumptive strategy in (9), the wh-constituent is also fronted clause-initially; however, it is related to a resumptive pronominal clitic in its extraction site, namely *-o*. Resumptive strategy has a subtype

known as Class II resumptive strategy (Shlonsky, 2002) demonstrated in (10) where the same wh-constituent is displaced to a clause-peripheral position and followed by the definite relativizer *yalli* 'that'. In other words, Class II resumptive strategy occurs only in relative clauses. As far as in-situ strategy is concerned, the wh-constituent remains in the variable position as in (11) and does not require any leftward movement.

Along the same lines, BA demonstrates all the four strategies in their wh-interrogatives as shown in the corresponding data below.

12. *maða aʃtra Ø ʕali*
what buy.3.M.PERF Ali
'What did Ali buy?' (Gap strategy)

13. *ʔay ab-kutib iʃtra:-ha ʕali*
which the-books buy.3.M.PERF-them Ali
'Which books did Ali buy?' (Resumptive strategy)

14. *maða lli iʃtra:-hu ʕali*
what that buy.3.M.PERF-it Ali
'What is it that Ali bought?' (Class II resumptive strategy)

15. *ʕali ra:h wayn*
Ali go.3.M.PERF where
'Where did Ali go?' (In-situ strategy)

In addition to these familiar strategies in (12) through (15), BA allows the deletion of the resumptive

⁵ For uniformity purposes, I have rewritten all the examples cited from other works using the

glosses and the transcription conventions endorsed in this paper.

pronoun in (14) as reproduced in (16).

16. *maḏa lli aḡtra Ø ʕali*
 What that buy.3.M.PERF Ali
 ‘What is it that Ali bought? (Class II gap strategy)’

That is, BA implements a new strategy that has never been documented in MSA and other Arabic varieties. Given that gap strategy also appears in relative clauses in BA, I will term this behavior as Class II gap strategy. Shlonsky (2002:140) reports that PA does not allow gaps in parallel relative wh-constructions. Example (17) from PA is only rescued by the substitution of the gap with a resumptive element.

17. **miin ʔilli l-ʔasad ʔakal Ø mba:rih*
 Who that the-lion eat.3.M.PERF yesterday
 ‘Who did the lion eat yesterday?’ (cf. Shlonsky, 2002:140)

In conclusion, while LA employs four strategies in wh-constructions, BA makes use of the same four strategies plus Class II gap strategy.

3.2. Discussion and Analysis

In this section, I will set the stage for our discussion with a morphosyntactic analysis of the wh-phrases in BA. Following Wahba’s (1984) classification of wh-phrases in Egyptian Arabic, BA has two classes:

(i) nominal wh-phrases and (ii) non-nominal wh-phrases. Consider Table (1) that draws an analogy between wh-phrases from MSA and BA.

Table 1: Wh-Phrases in MSA and BA

MSA		BA	
Nominal	Non-nominal	Nominal	Non-nominal
<i>man</i> ‘who’	<i>ʔayna</i> ‘where’	<i>Min/fin</i> ‘who’	<i>wayn</i> ‘where’
<i>ma:ḏa</i> ‘what’	<i>Mata:</i> ‘when’	<i>maḏa</i> ‘what’	<i>mata</i> ‘when’
<i>ʔayy(at)</i> ‘which’	<i>kayfa</i> ‘how’	<i>ʔay(a:t)</i> ‘which’	<i>kayf</i> ‘how’
<i>kam</i> ‘how many’	<i>lima:ḏa</i> ‘why’	<i>kam</i> ‘how many’	<i>maḏa lawh</i> ‘why’
<i>bikam</i> ‘how much’		<i>kam</i> <i>bu:h</i> ‘how much’	

The two-way distinction between wh-phrases reiterates the point that nominal wh-words are used with arguments whereas non-nominal wh-words are specific to adverbial adjuncts that express place, time and manner. Thus, non-nominal wh-elements are sometimes called adverbial wh-words (Aoun et al, 2009).

As demonstrated in Table (1), wh-expressions in BA are generally parallel to the ones in MSA. The wh-word *fin* in BA is a new finding and alternates in use with *min* ‘who’. Moreover, both MSA and BA use gender-marked wh-word *ʔayy(at)* and

ʔay(a:t) respectively. The *wh*-words *ʔayyat/ʔaya:t* are used with feminine nouns while *ʔayy/ʔay* can be the default form for both genders.

The major distinction between BA and MSA follows from the complex *wh*-phrases such as *kam bu:h* ‘how much’ and *maḏa lawh* ‘why’ in BA versus their equivalents in MSA, i.e. *bikam* and *lima:ḏa*. Upon closer inspection, it is clear that these complex *wh*-phrases in MSA consist of two elements: a preposition which are *li* (for) and *bi* (with) and the *wh*-words *ma:ḏa* ‘what’ or *kam* ‘how many’ respectively. In other words, *li-maḏa* and *bi-kam* in MSA can be literally translated as ‘for what’ and ‘with how much’. In BA, the order of these elements is reversed. The *wh*-elements *maḏa* and *kam* precede the prepositions *li* and *bi* respectively, and the prepositions become the host of a clitic-like pronominal element *-h* (it).

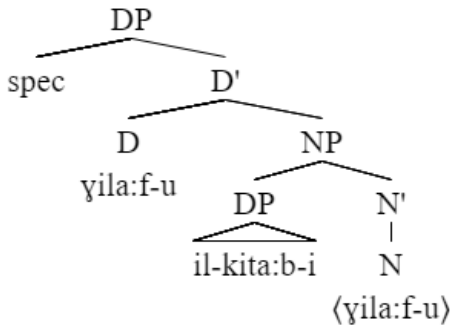
Turning to the internal morph-syntax of the complex *wh*-phrases in MSA and BA, one might observe that the complex *wh*-phrases such as *ʔayya+NP* ‘which+NP’ in (18a) displays properties that are characteristic of Construct State (CS), where two nouns are placed side by side in a possessee-possessor relationship as in (18b).

18. a. *ʔayy-u il-kutub-i iʔtara*
 which-NOM the-books-GEN buy.3.M.PERF
ʔaḥmad
 Ahmed
 ‘Which books did Ahmed buy?’

b. *yla:f-u il-kita:b-i ʔazraq-u-n*
 cover-NOM the-book-GEN blue-NOM-INDEF
 ‘The book’s cover is blue.’

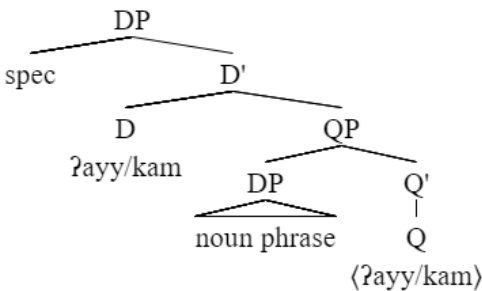
In (18a), the *wh*-word *ʔayy-u* assigns a genitive case to the following noun phrase, similarly to the possessee (first noun) in (18b) which assigns the same case to the possessor (the second noun). Also, the first element in both constructions does not bear the definite article */ʔal/* nor the indefinite suffix */-n/*, while the second element does. Benmamoun (1998) proposes that the first noun in CS originates as a head of a lexical NP whereas the second noun is base-generated in its specifier. This analysis allows genitive case in CS to be licensed in a spec-head configuration. To capture the word order, CS requires N-movement to the head of the DP in a process known as N-to-D raising as illustrated in (19) for the CS in (18b).

19.



In the same line of reasoning, I will propose that the complex wh-phrases in BA take the same internal structure of CS. Because *ʔayy* ‘which’ and *kam* ‘how many’ are categorially quantifiers, I will assume that the head D^0 in wh-phrases rather selects QP as a complement. As for the N-to-D movement and case assignment operations, they will remain intact. The derivation of *ʔayy*+NP ‘which+NP’ in (18a) and *kam*+NP ‘how-many+NP’ will be given the rough structure in (20).

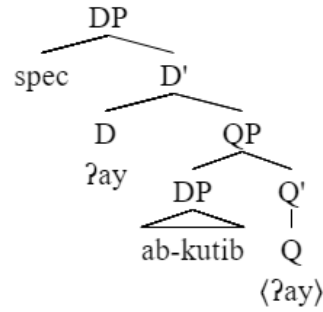
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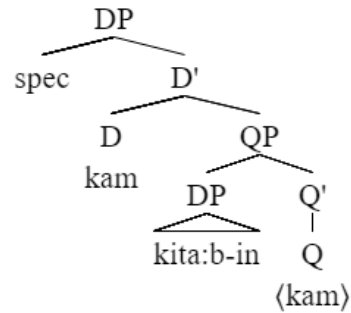
Based on this analysis, the complex wh-phrases *ʔay*+NP ‘which+NP’ and *kam*+NP ‘how-many+NP’ in BA will be

schematically represented as in (21a) and (21b) respectively.

21. a.



b.



One piece of evidence that advocates this analysis follows from the nature of the second element. It is obvious that the second nouns in these constructions are DP not NP. The proposal under consideration allows these DPs to be marked with the appropriate determiner, i.e. either the definite article /(?ab/ as in (21a) or the indefinite suffix /-in/ as in (21b). Including full-fledged DPs, these constructions can also allow the second elements to be further modified by adjectives and numerals.

22. a. *ʔayy*-u *il-kutub*-i *θ-θala:θat*-i

which-NOM the-books-GEN the-three-GEN
 l-dzadi:dat-i
 the-new-GEN
 ‘Which of the three new books’

b. ?ayilafat-u il-kutub-i l-?arba?at-i
 covers-NOM the-books-GEN the-four-GEN
 l-kabi:rat-i
 the-big-GEN
 ‘The covers of the four big books’

Although projecting QP within the shell of DP is incompatible with the canonical position of QP (i.e. above DP), the structure in (20) captures an interesting fact on the wh-word *kam* in MSA. Consider (23) from MSA below.

23. a. kam kita:b-i-n qara?ta
 how-many book-GEN-INDEF read.2.M.S.PERF
 ‘How many books did you read?’

b. kam kita:b-a-n qara?ta
 how-many book-ACC-INDEF read.2.M.S.PERF
 ‘How many books did you read?’

In (23), the wh-element *kam* can assign either genitive or accusative to its modified DP without disturbing the semantics of the question. I assume that the wh-element *kam* has the ability to check both cases in the same structural configuration. An independent piece of evidence for this assumption comes from superlative adjectives which can also assign genitive or accusative to their modified NPs.

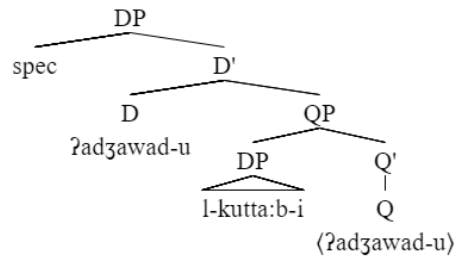
24. a. ?adzawad-u l-kutta:b-i

best-NOM the-writers-GEN
 ‘The best writers’ (cf. Alghamry, 2004:908)

b. ?ak?ar-u ?ilm-a-n
 more-NOM knowledge-ACC-INDEF
 ‘More knowledgeable’

Based on an analysis of definiteness and number ambiguity in Arabic superlative adjective constructions, Alghamry (2004) proposes a similar structure to (20) where the superlative adjectives occur in QP below the layer of DP and they move from Q^o to D^o as is the case in CS. Consider the following structure for example (24a) (cf. Alghamry, 2004:909).

25.



Since the wh-element *kam* also occupies the same structural position of superlative adjective, i.e. Q^o, I will take this peculiarity of accusative case assignment as further evidence that the structure in (20) is on the right track. Both the wh-expression *kam* and the superlative adjectives can check genitive or accusative in the same configuration.

Alqarni (2015) also provides evidence that QP can be situated under the DP layer. In light of arguments that categorize numerals 3-10 as quantifiers, he demonstrates that these numerals are projected as QP above or below DP. The definite article /ʔal/ sometimes occurs before or after these numerals as in (26a) and (27a), thus determining whether the QP projects over or below the DP level as bracketed in (26b) and (27b) respectively⁶.

26. a. θala:θat-u I-muᡥallim-i:na
 three-NOM the-teachers-GEN
 ‘The three male teachers’

b. [QP θala:θat-u [DP [D I- [NP muᡥallim-i:na]]] (cf. Alqarni, 2015:233)

27. a. ʔaθ-θala:θ-u muᡥallima:t-i-n
 the-three-NOM teachers-GEN-INDEF
 ‘The three female teachers’

b. [DP [D ʔaθ [QP θala:θ-u [NP muᡥallima:t-i-n]]] (cf. Alqarni, 2015:330)

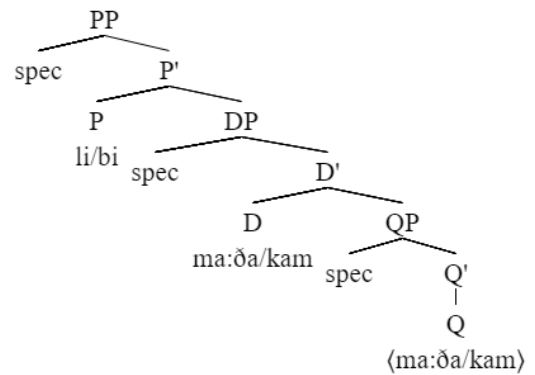
All these studies suggest that the position of QP under the DP layer in structure (20) is possible and can be carried over to complex wh-phrases as well.

Let us move away to the internal structure of complex prepositional wh-phrases such as *li-maᡥa* ‘for what’

⁶ It is important to note that Alqarni (2015) considers the indefinite suffix /-n/ in MSA a semantically vacuous marker. He assumes

and *bi-kam* ‘with how-much’ in MSA. These wh-phrases can be decomposed into two parts: (i) a preposition and (ii) a wh-element. Therefore, I propose that they take the same structure in (20). Yet, it is now selected by a P^o category.

28.



In BA, the wh-element precedes the preposition which becomes the host of a clitic *-h* as in *maᡥa law-h* ‘for what’ and *kam bu:-h* ‘with how much’. This pronoun behaves like a resumptive element as it is realized in the answers to the corresponding questions.

29. a. maᡥa **law-h** iᡥtarayata b-xubz
 what for-it buy.2.M.S.PERF the-bread
 ‘Why did you buy the bread?’

b. Answer: **li** m-fuᡥu:r
 for the-breakfast

that this suffix is added post-syntactically at PF. Under this assumption, indefinite nouns in Arabic are syntactically NPs not DPs.

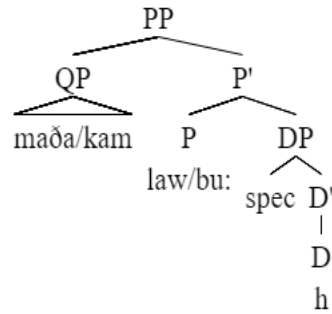
- ‘For the breakfast’
30. a. kam **bu:-h** im-ṣas^{ʕi:r}
 how-much with-it the-juice
 ‘How much is the juice?’
- b. Answer: **bi** riyal
 with riyal.M.S
 ‘With one riyal’

Thus, the wh-word *maḏa* and *kam* presumably bind the resumptive pronoun *-h*. One might hypothesize that the wh-element moves from the head D^0 across the head P^0 leaving a co-referential pronominal clitic behind. This proposal is conceptually problematic, however. First, it violates the Head Movement Constraint (Travis, 1984) because Q^0 must move across P^0 without extracting P^0 along, and the wh-element as Q also needs a head landing site above the PP, which is not existent. Second, this proposal needs a mechanism that transforms the trace or the copy of the wh-element into a pronoun; such machinery is not available in the syntactic theory and needs an independent theoretical motivation.

In short, resumption suggests that the internal syntax of these wh-phrases involves base-generation. I thus propose that QP in these wh-phrases is directly merged in spec,PP and the resumptive pronominal element appears like other pronouns in the head D^0 . Therefore, the

representations of *maḏa law-h* ‘for what’ and *kam bu:-h* ‘with how much’ in BA will be diagrammed as in the tree (31).

31.



For other wh-words such as *min/fin* ‘who’, *kayf* ‘how’, *wayn* ‘where’, *mata* ‘when’ and the like, I assume that they all take the same structure in (20). In short, all wh-expressions in BA, be it simple or complex, occupy a head position of a QP projection contained in a DP.

In this section, I discussed the structure of wh-phrases in both MSA and BA and provided morpho-syntactic analyses to them. In the following sections, I will explore the syntactic patterns of the five strategies employed in BA wh-questions.

3.2.1. *The Syntax of Gap vs. Resumptive Strategies*

Aoun et al (2009) highlight a contrast between gap and resumptive strategies in LA and MSA. While all the wh-phrases in LA and MSA occur

in gapped wh-interrogatives, only *miin/man* ‘who’ and *ʔayya+NP* ‘which+NP’ are used in the resumptive counterparts.

Conversely, BA allows all the wh-words in Table 1 to be associated with a gap in the variable position. Only complex wh-phrases such as *ʔay+NP* ‘which-NP’, *kam+NP* ‘how many-NP’, *maða lawh* ‘for what’ and *kam bu:h* ‘how much’ can be resumed by a pronoun⁷.

Let us begin with a demonstration of these facts. Consider the grammatical examples in (32) where the majority of BA wh-expressions correspond to gaps inside the clause.

32. a. *maða/ʔay-ab-kutib xið Ø ʕali*
 what/which-the-books take.3.M.PERF Ali
 ‘What/which books did Ali take?’
- b. *min/ʃin ʕazam Ø ʕali*
 who invite.3.M.PERF Ali
 ‘Who did Ali invite?’
- c. *kam kita:b-in katab Ø ʔahmad*
 how-many book-INDEF write.3.M.PERF Ahmed
 ‘How many books did Ahmed write?’
- d. *wayn yadan aw-waragah Ø*
 where go.3.F.PERF the-sheet
 ‘Where is the sheet gone?’
- e. *mata b-ta:ti bukrah Ø*
 when will-come tomorrow
 ‘When will you come tomorrow?’

- f. *kayf kasar-ha Ø*
 how break.3.M.PERF-it
 ‘How did he break it?’

As for the resumptive strategy, it is restricted in use to complex wh-phrases, namely (i) the wh-words that are followed by NPs such as *ʔay+NP* ‘which-NP’ as in (33a) or *kam+NP* ‘how many-NP’ in (33b) or (ii) wh-words followed by PPs such as *maða lawh* ‘for what’ as in (33c) or *kam bu:h* ‘how much’ in (33d).

- 33.a. *ʔayab-kutib iʃtra:-ha ʕali*
 which the-books buy.3.M.PERF-them Ali
 ‘Which books did Ali buy?’
- b. *kam kita:b-in katabaw-h ʕali*
 how-many book-INDEF write.3.M.PERF-it Ali
 ‘How many books did Ali write?’
- c. *maða law-h ma tahardʒan*
 what for-it not speak.3.F.S.PERF
 ‘Why did not she speak?’
- d. *kam bu:-h ab-kita:b ðeeh*
 how-much with-it the-book this
 ‘How much is this book?’

While the resumptive clitics are attached to the main verbs across which the objects are extracted in (33a) and (33b), the resumptive ones

⁷ It is worth mentioning that I do not count the complex wh-phrases *kam bu:-h* ‘how much’ and *maða law-h* ‘why’ among those wh-phrases that occur in gapped wh-

interrogatives because they inherently have a preposition cliticized by a resumptive pronominal element. Thus, they are always restricted to the contexts of resumption.

in (33c) and (33d) appear after a preposition within the complex wh-phrase itself. Other wh-expressions cannot appear in the same distributional contexts as manifested in the data below.

34. a. *maða dabadzaw-**h** ʕali
 what hit.3.M.PERF-him Ali
 ‘What did Ali hit?’
- b. *min/ʕin ʕazamaw-**h** ʕali
 who invite.3.M.PERF-him Ali
 ‘Who did Ali invite?’
- c. *wayn ra:han-**ha** im-bint
 where go.3.F.PERF-there the-girl
 ‘Where did the girl go?’
- d. *mata b-tuʕtʕuf-**ha** bukraḥ
 when will-return-then tomorrow
 ‘When will you come tomorrow?’
- e. *kayf ragad-**ha**
 how sleep.3.M.PERF-it
 ‘How did he sleep?’

It is noteworthy that the adverbial wh-words *when* and *where* in English have their referential pronouns such as *then* and *there* respectively. However, BA does not have such pronouns that correspond to *mata* ‘when’ and *wayn* ‘where’ as in (34c) and (34d). At any case, any resumptive pronouns are not allowed in these contexts. If these adverbial wh-words are however expressed with the use of *ʔay+NP* ‘which+NP’,

resumptive elements are permitted as attested in (35).

35. a. ʔay im-maka:yin b-tru:hu:n
 which the-places will-go.3.M.PL.IMPERF
 la-**ha** bukraḥ
 to-it.F tomorrow
 ‘To which place are you going tomorrow?’
- b. ʔaya:t laylah radzaʕan fi:-**ha**
 which night return.3.F.PERF in-it.F
 im-bint
 the-girl
 ‘At which night did the girl return?’
- c. ʔay tʕari:qah sawwan b-**ha**
 which way do.3.F.PERF with-it.F
 ib-xubzah
 the-bread
 ‘In which way did she cook the bread?’

It is not evident why only complex wh-phrases are used with resumptive elements as there is nothing that brings them together but their syntax. The assumption that complex wh-phrases cannot move and leave a gap is not empirically supported because we find *ʔay+NP* ‘which+NP’ and *kam+NP* ‘how-many+NP’ in gapped wh-interrogatives, e.g. (32a,c). On the other hand, the argument that resumption is not available for simple wh-words is also challenged by the occurrence of the simple wh-elements *maða* ‘what’ and *min/ʕin* ‘who’ in Class II resumptive wh-questions, see e.g. (45b) and (46). Like Aoun et al (2009) who reach a consensus that the

distribution of the wh-expressions among the strategies cannot be explained by any means such as referentiality, I will conclude that there are no syntactic factors that regulate such variations in BA.

The second difference between gap and resumptive strategies follows from island sensitivity (Ross, 1967). Gapped wh-interrogatives in BA respect islands, whereas resumptive ones do not. Consider (36) where gaps are not allowed inside islands such as adjunct clause in (36a), relative clause in (36b) or wh-island in (36c).

36. a. *min/fin safarata [gabлма who travel. 2.M.S.PERF [before tfu:f Ø] see.2.M.S.PERF] ‘Who did you travel before you see?’ (Adjunct clause)

b. *min/fin tiʕrifu:n aw-wlad who know.2.M.PL.IMPERF the-boy [illi ga:bal Ø] [who meet.3.M.PERF] ‘Who do you know the boy who met?’ (Relative clause)

c. *maða ʕrifta [in ʕali what know.2.M.S.PERF [whether Ali aʕtra Ø] buy.3.M.PERF] ‘What did you know whether Ali bought?’ (Wh-island)

In contrast, resumptive wh-interrogatives in BA are insensitive to island conditions as shown in (37).

37. a. ʔaya b-jahalal safarta which the-kids travel.2.M.S.PERF [gabлма tfu:fu:-h] [before see.2.M.S.PERF-him] ‘Which kid_i did you travel before you see him_i?’ (Adjunct clause)

b. ʔya:t bint tiʕrifu:n aw-wlad which girl know.2.M.PL.IMPERF the-boy [illi ga:bal-ha] [who meet.3.M.PERF-her] ‘Which girl_i do you know the boy who met her_i?’ (Relative clause)

c. ʔay ab-sayyara:t ʕrifta which the-cars know.2.M.S.PERF [in ʕali aʕtra:-ha] [whether Ali buy.3.M.PERF-it] ‘Which car_i did you know whether Ali bought it_i?’ (Wh-island)

Let us summarize the main patterns observed in gap and resumptive strategies and schematize their differences in the following representations.

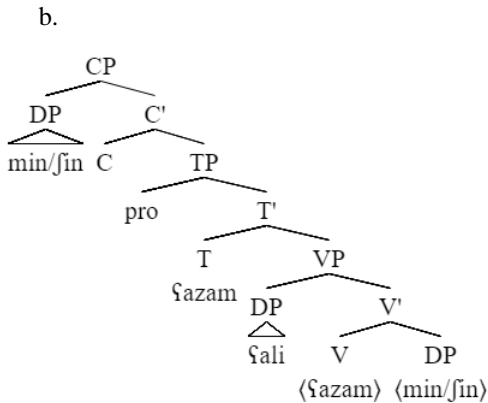
38. Wh-word_i ... (*[_{island} ...] ... gap_i) (gapped wh-interrogatives)

39. Wh-phrase_i ... ([_{island} ...]) ... pro_i (resumptive wh-interrogatives)

Bearing these representations in mind, the syntactic analyses to these strategies will proceed as follows. The gap strategy will be derived via movement whereas the resumptive strategy needs a base-generation analysis. Given that gapped wh-interrogatives respect islands in (36),

they must undergo a movement operation as illustrated in the tree diagram (40b) for the question in (40a).

40. a. min/ʃin ʃazam Ø ʃali
 who invite.3.M.PERF Ali
 ‘Who did Ali invite?’



According to (40b), I assume that the subject is base-generated within the shell of the thematic VP, particularly in spec,VP, while a null expletive pronoun satisfies the property of EPP in spec,TP (Aoun et al, 2009:51). Given that the verb in (40a) is in the past tense, it undergoes V-to-T movement as is the case in MSA (Aoun et al, 2009:33). To motivate the movement operation of the wh-expression to spec,CP, I follow the recent developments promoted in the Minimalism Program, particularly the valuation-driven approach proposed by Pesetsky & Torrego (2006) and Bošković (2011). According to this proposal,

valuation is independent from interpretability. Thus, feature checking is now feature valuation and only unvalued features, regardless of their interpretability, require elimination from the syntax. Uninterpretable but valued features, such as gender and case, do not invoke any checking, according to Bošković (2011:11). The valuation-driven system allows features to take four possibilities.

41. Features (cf. Pesetsky & Torrego, 2006)
- a. uF[val] (an uninterpretable and valued feature)
 - b. iF[val] (an interpretable and valued feature)
 - c. uF[] (an uninterpretable and unvalued feature)
 - d. iF[] (an interpretable and unvalued feature)

Thus, I propose that the complementizer head C° in BA wh-interrogatives bears an interpretable but unvalued [Q] feature (i.e. C_{iQ[]}). This unvalued feature needs to be valued during the syntactic computation for the convergence of the derivation. The wh-phrase, on the other hand, encodes an uninterpretable yet valued [WH] features (i.e. WH_{uQ[WH]}). Thus, the wh-movement in BA proceeds as in (42).

42. Wh-Movement Feature Valuation in BA
- a. [CP C_{iQ[]} [TP ..wh-phrase_{uQ[WH]}]
 (before movement)
 - b. [CP wh-phrase_{uQ[WH]} .. C_{iQ[WH]} [TP .. t]
 (after movement/valuation)

For gap strategy and all other strategies that induce wh-movement, I take for granted that they are driven by the process in (42). Wh-phrases in (42) moves from the sentence-internal position to value the unvalued C features on the head C. This movement captures the word order of wh-questions in BA and also accounts for the island sensitivity in these constructions. When islands create barriers across which wh-phrases cannot move, the derivation crashes due to the presence of an unvalued [Q] feature.

Although a unified account is desirable, the same movement analysis cannot be extended to resumptive wh-interrogatives. First, if wh-elements in resumptive strategy involve movement, we predict that they respect islands. However, this prediction is not borne out as island violations are recorded in this strategy, see e.g. (37). The second argument that can be levelled against the movement analysis concerns the status of the resumptive pronominal elements. Resumption implies the absence of movement, as there is no mechanism that transforms the trace or the copy of the moved wh-element into a pronoun.

Furthermore, resumption indicates that the left dislocated wh-expression can form an unbounded dependency with the pronominal element

(Plunkett, 1993; Aoun & Benmamoun, 1998). Consider (43a) where the relationship between the wh-phrase and the resumptive clitic is established from a long distance. Yet, the same dependency fails under the gap strategy in (43b).

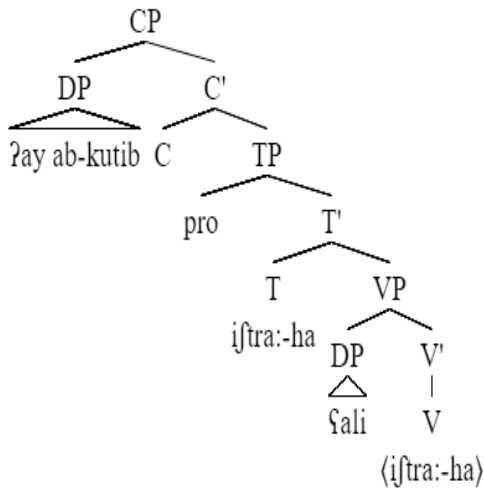
43. a. *ʔay im-maka:yin giltim in*
 which the-places say.3.M.PL.PERF that
fatʕima wasʕsʕan ʕali yuru:ħ
 Fatima advise.3.F.PER Ali go.3.M.PERF
la-ha bukra
 to-them tomorrow
 ‘Which places you said that Fatima advised
 Ali to go tomorrow?’

b. **wayn giltim in fatʕima*
 where say.3.M.PL.PERF that Fatima
wasʕsʕan ʕali yuru:ħ bukra
 advise.3.F.PER Ali go.3.M.PERF tomorrow
 ‘Where did you say that Fatima advised
 Ali to go tomorrow?’

In light of these facts, particularly the island violations, a base-generation analysis is more appropriate for the resumptive strategy. Under this account, the wh-expression will be directly merged in spec,CP to value the unvalued [Q] feature on the head C^o whereas the pronoun remains in the sentence-internal position as drawn in (44b).

44. a. *ʔay ab-kutib iʕtra:-ha ʕali*
 which the-books buy.3.M.PERF-them Ali
 ‘Which books did Ali buy?’

b.



In this section, I have pointed out the constraints imposed on the distribution of the resumptive and gap strategy: the resumptive strategy resumes only complex wh-phrases with pronominal clitics while the latter allows all the wh-words to be associated with gaps inside the clause, with the exception of *maḏa law-h* ‘for what’ and *kam bu:-h* ‘with how much’ which bear their own resumptive pronominal clitics. In the contexts of islands, I have shown that questioning into islands is acceptable in the resumptive strategy as opposed to the gap strategy. These facts led us to assign a movement analysis to the gap strategy but a base-generation account to the resumptive strategy.

3.2.2. The Syntax of Class II Resumptive vs. Class II Gap Strategies

Let us start with Class II resumptive strategy which differs

from the canonical resumptive strategy in that the wh-expressions in the former is followed by the definite relativizer *illi* as in (45b).

45. a. ʔay ab-kutib iftra:-**ha** ʕali
 what the-books buy.3.M.PERF-them Ali
 ‘Which books did Ali buy?’
 (Resumptive strategy)

b. maḏa *illi* iftra:-**hu** ʕali
 what that buy.3.M.PERF-it Ali
 ‘What is it that Ali bought?’ (Class II
 resumptive strategy)

The construction in (45b) is also termed as a reduced cleft wh-question (Cheng, 1991; Ouhalla, 1996). Class II resumptive strategy only occurs with two simple wh-words such as *maḏa* ‘what’ as in (45b) or *min/ʕin* ‘who’ as in (46) below.

46. min/ʕin *illi* ga:blaw-**h** ʕali
 who that meet.3.M.PERF-him Ali
 ‘Who is he that Ali met?’ (Class II
 resumptive strategy)

Although the resumptive strategy allows only complex wh-phrases to be resumed by pronouns as shown in (33), Class II resumptive strategy rules out the same phrases as demonstrated by the following data.

47. a. *ʔay ab-kutib *illi* iftra:-**ha** ʕali
 what the-books that buy.3.M.PERF-it Ali
 ‘Which book is it that Ali bought?’
 b. *kam kita:b-in *illi*
 how-many book-INDEF that

kataba-**h** ʕali
write.3.M.PERF-it Ali
‘How many books are there that Ali wrote?’

c. *maḍa law-**h** illi ma tahardʒan
what for-it that not speak.3.F.S.PERF
‘Why is it that she did not speak?’

d. *kam bu:-**h** illi ab-kita:b ɖeeh
how-much with-it that the-book this
‘How much is it that this book is worth?’

Concerning the adverbial wh-adjuncts, both resumptive and Class II resumptive strategies behave similarly in disallowing them. Since there are no pronouns that refer to these adjuncts, the questions in (48) are still banned even with the absence of the pronouns.

48. a. *wayn illi ra:han-(**ha**) im-bint
where that go.3.F.PERF-there the-girl
‘Where is it that the girl went?’

b. *mata illi b-tuʕtʕuf-(**ha**)
when that will-return.2.M.S.IMPERF-then
‘When is it that you will come?’

c. *kayf illi ragad-(**ha**)
how that sleep.3.M.PERF-it
‘How is it that he slept?’

To recap, Class II resumptive strategy only appears with two wh-words *maḍa* ‘what’ and *min/ʕin* ‘who’. It cannot appear with other adverbial wh-words or complex wh-phrases.

Two more intriguing properties should be highlighted in these

constructions. First, Class II resumptive strategy allows pronouns to appear between the wh-expression and the relativizer. These linking pronouns are known as copulas in the literature (Abdel Razaq, 2011, and the references within).

49. a. maḍa *huwwa lli* iʕtra:-**hu** ʕali
what it.M that buy.3.M.PERF-it.M Ali
‘What is it that Ali bought? (Class II resumptive strategy)

b. min/ʕin *huwwa lli* ga:blaw-**h**
who he that meet.3.M.PERF-him
ʕali
Ali
‘Who is he that Ali met? (Class II resumptive strategy)

The linking pronouns inflect for agreement with the answer predictable from the discourse. In (49a) and (49b), for instance, the expected answer is a masculine object or a male person respectively. If the predicted answers are feminine or plural, feminine and plural pronouns are rather used as in (50).

50. a. maḍa *hiyya lli* ʕtra:-**ha** ʕali
what it.F that buy.3.M.PERF-it.F Ali
‘What is it that Ali bought? (Class II resumptive strategy)

b. min/ʕin *hiyya lli* ga:bal-**ha** ʕali
who she that meet.3.M.PERF-her Ali
‘Who is she that Ali met? (Class II resumptive strategy)

c. min/ʕin *him lli* ga:bal-**him**

who they.M that meet.3.M.PERF-them.M
 ʕali
 Ali
 ‘Who are they that Ali met? (Class II
 resumptive strategy)

d. min/ʃin hin illi ga:bal-**hin**
 Who they.F that meet.3.M.PERF-them.F
 ʕali
 Ali
 ‘Who are they that Ali met? (Class II
 resumptive strategy)

Second, Class II resumptive strategy in BA allows the simple wh-words to be followed by an optional pronoun plus an optional NP as illustrated in (51).

51. a. maða (huwwa) (ib-kða:b) illi
 what it the-lies that
 ga:law-**h** ʕali
 say.3.M.PERF-it Ali
 ‘What are the lies that Ali said?
 (Class II resumptive strategy)

b. min/ʃin (hiyya) (im-bint) illi
 who she the-girl that
 ga:bal-**ha** ʕali
 meet.3.M.PERF-her Ali
 ‘Who is the girl that Ali met? (Class
 II resumptive strategy)

The NP cannot precede the pronouns at all as manifested in the infelicitous data below.

52. a. *maða ab-kða:b huwwa illi
 what the-lies it.M that
 ga:law-**h** ʕali
 say.3.M.PERF-it.M Ali
 ‘What are the lies that Ali said?

(Class II resumptive strategy)

b. *min/ʃin im-bint hiyya illi
 who the-girl she that
 ga:bal-**ha** ʕali
 meet.3.M.PERF-her Ali
 ‘Who is the girl that Ali met? (Class
 II resumptive strategy)

Bringing these facts together, Class II resumptive strategy in BA takes the representation in (53) and disallows the one in (54).

53. *maða, min/ʃin_i* (pronoun) (NP) *illi*.... pro_i
 (Class II Resumptive strategy)

54. **maða, min/ʃin_i* (NP) (pronoun) *illi*.... pro_i
 (Class II Resumptive strategy)

Let us now turn to Class II gap strategy that resembles Class II resumptive strategy in that both occur inside relative clauses. However, the former employs a gap in the variable position whilst the latter consists of a resumptive pronoun inside the clause as in (55a) and (55b) respectively.

55. a. maða illi ʃtra: Ø ʕali
 what that buy.3.M.PERF Ali
 ‘What is it that Ali bought?’ (Class II
 gap strategy)

b. min/ʃin illi ga:bal-**ha** ʕali
 who that meet.3.M.PERF-her Ali
 ‘Who is she that Ali met? (Class II
 resumptive strategy)

Illustrating the differences between the two types of gap strategy, Class II

gap strategy contrasts with the standard gap strategy from an interpretative perspective. Consider the following examples.

56. a. *min/fin* *ga:bal* Ø *ʕali*
 who meet.3.M.PERF Ali
 ‘Who did Ali meet? (Gap strategy)’

b. *min/fin* *illi* *ga:bal* Ø *ʕali*
 who that meet.3.M.PERF Ali
 ‘Who is it that Ali met? (Class II gap strategy)’

Although both strategies in (56a) and (56b) have the same truth value, they differ in terms of presupposition (see Shlonsky, 2002, for the same phenomenon in PA). Class II gap strategy in (56b) presupposes that Ali met someone known from the discourse. By contrast, gap strategy in (56a) does not have this presuppositional information. There is no a presupposed set from which an answer can be given for the question (56a).

Another difference between the two strategies can be discerned when a subject is interrogated using the wh-word *min/fin* ‘who’. In such contexts, gap strategy requires that the verb takes only a default masculine singular agreement as in (57a). On the contrary, the verb in Class II gap strategy in (57b) inflects for number and gender based on the expected answer. The same behaviors are noted

in Moroccan Arabic (Shlonsky, 2002:142).

57. a. *min/fin* *ragad* / **ragad-an* /
 who sleep.3.M.S.PERF/ sleep.3.F.S.PERF/
 **ragadaw*
 sleep.3.M.PL.PERF
 ‘Who slept? (Gap strategy)’

b. *min/fin* *illi* *ragad* /*ragad-an*/
 who that sleep.3.M.S.PERF/sleep.3.F.S.PERF/
ragadaw
 sleep.3.M.PL.PERF
 ‘Who is that who slept? (Class II gap strategy)’

Let us now consider the (dis)similarities between Class II resumptive and Class II gap strategies. Like Class II resumptive strategy, Class II gap strategy only use simple (argument) wh-words *maða* ‘what’ and *min/fin* ‘who’ as in (55a) and (56b) above and bans the use of complex wh-phrases and adverbial wh-words as manifested in the following data.

58. a. **ʔay* *ab-kutib* *illi* *iftara* Ø *ʕali*
 what the-books that buy.3.M.PERF Ali
 ‘Which book is it that Ali bought?’

b. **kam* *kita:b-in* *illi* *katab* Ø
 how-many book-INDEF that write.3.M.PERF
ʕali
 Ali
 ‘How many books are they that Ali wrote?’

c. **wayn* *illi* *ra:han* Ø *im-bint*
 where that go.3.M.PERF the-girl

‘Where is it that the girl went?’

- d. *mata illi b-tuʃʃuf Ø
when that will-return.2.M.S.IMPERF
bukrah
tomorrow
‘When is it that you will come
tomorrow?’

- e. *kayf illi ragad Ø
how that sleep.3.M.PERF
‘How is it that he slept?’

who she the-girl that
ga:bal Ø ʃali
meet.3.M.PERF Ali
‘Who is the girl that Ali met? (Class
II gap strategy)

- c. *min/ʃin im-bint (hiyya) lli
who the-girl she that
ga:bal Ø ʃali
meet.3.M.PERF Ali
‘Who is the girl that Ali met? (Class
II gap strategy)

Similar to Class II resumptive strategy, Class II gap strategy allows simple wh-words to be followed by an optional pronoun as in (59) below.

59. a. min/ʃin (him) illi ga:bal Ø ʃali
who they.M that meet.3.M.PERF Ali
‘Who are they that Ali met? (Class II
resumptive strategy)
- b. maða (huwwa) illi aʃtra Ø ʃali
what it.M that buy.3.M.PERF-it.M Ali
‘What is it that Ali bought? (Class II
resumptive strategy)

As opposed to Class II resumptive strategy, Class II gap strategy does not allow an NP after the optional pronoun as in (60a,b) nor before it as in (60c).

60. a. *maða (huwwa) ab-kða:b illi
what it the-lies that
ga:l Ø ʃali
say.3.M.PERF Ali
‘What are the lies that Ali said?
(Class II gap strategy)
- b. *min/ʃin (hiyya) im-bint illi

Before bringing this comparison to a close, let us emphasize the final contrast between Class II gap and Class II resumptive strategies which relates to island sensitivity as this distinction has major consequences for their proposed analyses. It is clear from the following data that Class II gap strategy respects island conditions.

61. a. *min/ʃin illi safarata [gablma
who that travel.2.M.S.PERF [before
tʃu:f Ø]
see.3.M.PERF]
‘Who_i is the one that you travelled
before you see him_i?’ (Adjunct
clause)
- b. *min/ʃin illi tiʃrifu:n
who that know.2.M.PL.IMPERF
aw-walad [illi ga:bal Ø]
the-boy [who meet.3.M.PERF]
‘Who_i is the one that you know the boy
who met him_i?’ (Relative clause)
- c. *maða illi ʃrifta
what that know.2.M.S.PERF
[in ʃali aʃtra Ø]
[whether Ali buy.3.M.PERF]

‘What_i is the thing that you know whether Ali bought it?’ (Wh-island)

Nonetheless, Class II resumptive strategy violates islands in the corresponding examples.

62. a. min/fin illi safarata
 who that travel.2.M.S.PERF
 [gabлма tʃu:fu:-h]
 [before see.2.M.PERF-him]
 ‘Who_i is the one that you travelled before you see him_i?’ (Adjunct clause)

b. maða illi ʃrifta
 what that know.2.M.S.PERF
 [in ʃali aʃtra:-ha]
 [whether Ali buy.3.M.PERF-it]
 ‘What_i is the thing that you know whether Ali bought it?’ (Wh-island)

c. min/fin illi tiʃrifu:n aw-wlad
 who that know.2.M.PL.IMPERF the-boy
 [illi ga:blaw-h]
 [who meet.3.M.PERF-him]
 ‘Who_i is the one that you know the boy who met him_i?’ (Relative clause)

In light of the discussion above, Class II gap strategy can be schematically represented as in (63). The representation in (64) is prohibited in this strategy.

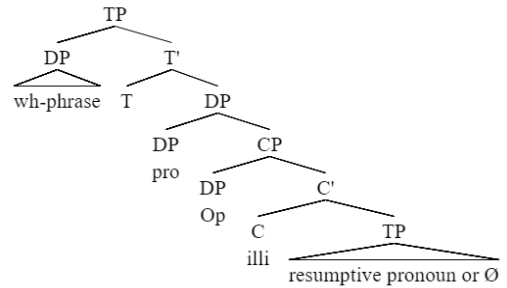
63. *maða/min/fin_i* (pronoun) *illi*.... copy_i
 (Class II gap strategy)

64. **maða/min/fin_i* NP-(pronoun)-NP *illi* copy_i
 (Class II gap strategy)

Building on Shlonsky’s (2002) analysis of PA constituent-questions,

I will provide a unified account for both Class II resumptive and Class II gap strategies. Given that both strategies include a relative clause, their structural representation will be as presented in (65) (cf. Shlonsky, 2002:150).

65.



The analysis outlined in Shlonsky (2002) underlies a number of assumptions. In (65), Shlonsky establishes a predication relationship between the two DPs in Class II resumptive strategy: (i) the wh-expression (i.e. DP) which is presumably base-generated in spec,TP as a clausal subject and (ii) the lower DP predicate, i.e. the complement of the head T. Another predication relationship is invoked between the pronominal head (pro) which functions as a subject for the predicate CP headed by the relativizer *illi* and the lower TP. The third core assumption pertains to the null operator in spec,CP that binds the resumptive pronoun within the clause.

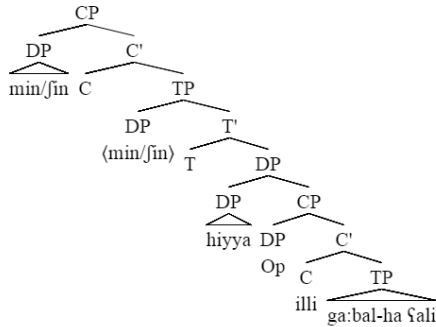
Espousing the same analysis, Aoun et al (2009) argues that there is a

three-way agreement between the resumptive element and the null operator on one hand, and between the null operator and the pronominal on the other hand. In BA, we can see this agreement in (50b) repeated in (66) between the pronoun *hiyya* ‘she’ and the resumptive pronoun *-ha* ‘her’.

66. min/fin *hiyya illi ga:bal-ha* ʕali
 who she that meet.3.M.PERF-her Ali
 ‘Who is she that Ali met? (Class II resumptive strategy)’

Thus, based on this analysis, the structure for (66) will be as follows.

67.



The *wh*-element in Class II resumptive strategy is base-generated in spec,TP as a subject. This base-generation analysis can account for the island effects attested in (62). To derive the interrogative interpretation, the *wh*-word *min/fin* ‘who’ must be extracted from spec,TP to spec,CP. Returning to the pronoun *hiyya*, it should be remembered that this pronoun is null in most cases as in

(45b) and (46). Under that circumstance, the phonetically realized DP *hiyya* in (67) is replaced with the null *pro*.

Let us now recall that these *wh*-words can be followed by a pronoun plus an NP in (68).

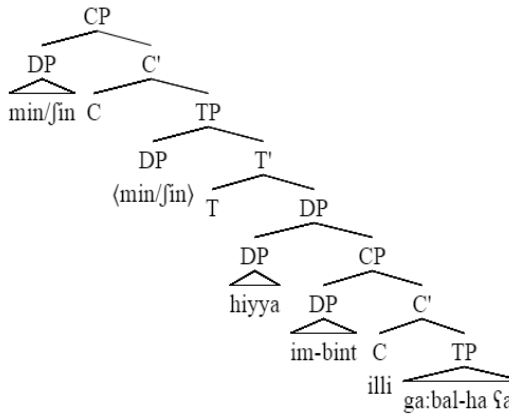
68. min/fin *hiyya im-bint illi*
 who she the-girl that
ga:bal-ha ʕali
 meet.3.M.PERF-her Ali
 ‘Who is the girl that Ali met? (Class II resumptive strategy)’

This fact, in particular, led us to propose the following representation for Class II resumptive strategy.

69. *mada/min/fini* (pronoun) (NP) *illi...proi*
 (Class II Resumptive strategy)

To generate the construction in (68), I propose that the NP occupies the position of the null operator in (67). This NP binds the resumptive pronoun inside the clause, as they are co-referential. Under this view, the derivation of (68) will be as projected in (70).

70.



who she the-girl that
 ga:bal Ø ʕali
 meet.3.M.PERF Ali
 ‘Who is the girl that Ali met? (Class II
 gap strategy)

b. *min/fjin im-bint (hiyya) lli
 who the-girl she that
 ga:bal Ø ʕali
 meet.3.M.PERF Ali
 ‘Who is the girl that Ali met? (Class II
 gap strategy)

As concerns Class II gap strategy, it can be still accommodated under the same account. Recall that wh-interrogatives formed via this strategy respect island conditions. They also involve gaps in their relative clauses. These behaviors indicate that they are better derived via wh-movement. As can be seen in (71), this construction allows an optional pronoun between the wh-expression and the relativizer *illi*.

71. min/fjin (hiyya) lli ga:bal Ø ʕali
 who she that meet.3.M.PERF Ali
 ‘Who is the girl that Ali met? (Class II gap
 strategy)

In contrast to Class II resumptive strategy, Class II gap strategy does not allow NP after or before the pronoun as documented in (59b,c) repeated below in (72a,b). The example in (72) is prohibited with or without the pronouns.

72. a. *min/fjin (hiyya) im-bint illi

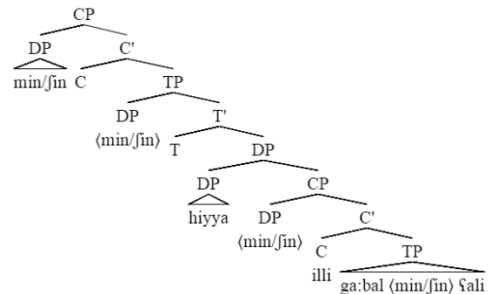
Thus, the main findings for Class II gap strategy were summarized as follows.

73. *maða/min/fjin_i* (pronoun) *illi* copy_i
 (Class II gap strategy)

74. **maða/min/fjin_i* NP-(pronoun)-NP
illi.... copy_i (Class II gap strategy)

For this strategy, I will propose the structure (75) for (71).

75.



In this proposal, I differ from Shlonsky (2002) in that the null operator is not available any longer in spec,CP. The absence of the operator is correlated with the absence of the

resumptive pronoun, with which it is related. Under this assumption, the *wh*-element can move from its extraction site via this empty *spec,CP* of the relative clause in successive movements until it lands in the specifier of the highest *CP*.

This analysis is desirable by virtue of the fact that it disallows the generation of the *wh*-questions in (72) as well. In (72), NP is not allowed before or after the pronoun. If NP is introduced to the question, it will surely occupy *spec,CP* of the relative clause as is the case in Class II resumptive strategy in (70), thus blocking the *wh*-movement. Under that scenario, the *wh*-expression will not find an escape hatch through which it raises from its original position to the highest *spec,CP*. The *wh*-extraction across a filled *spec,CP* violates subadjacency (Chomsky, 1973).

In this section, I have discussed the patterns of Class II resumptive and Class II gap strategies. Class II resumptive strategy involves a resumptive pronoun within the relative clauses while Class II gap strategy leaves a gap in the same position. I have demonstrated that both strategies occur exclusively in the contexts of simple *wh*-words such as *maða* ‘what’ and *min/fin* ‘who’. They cannot appear with adverbial *wh*-words or complex *wh*-phrases. As for island sensitivity, Class II

resumptive strategy, unlike Class II gap strategy, violates islands.

I have maintained Shlonsky’s (2002) analysis for both strategies. Empirically speaking, both strategies allow optional linking pronouns between the *wh*-expressions and the relativizer *illi*. While Class II resumptive strategy allows an NP after the optional pronoun but not before it, Class II gap strategy disallows NPs pre or post-pronominally. These facts straightforwardly capture an interesting fact about *wh*-movement in Class II gap strategy. The non-availability of NP in Class II gap strategy in *spec,CP* (of the relative clause) allows *wh*-fronting to take place. Like the canonical gap and resumptive strategies, Class II resumptive strategy is given a base-generation account while Class II gap strategy is derived via *wh*-movement.

3.2.3. *In-situ strategy*

With respect to *in-situ* strategy, it is banned in MSA as in (76a) while it is the default operation in Egyptian Arabic (EA) in (76b) (Wahba, 1984; Soltan, 2009).

76. a. **ʕali ijtara ma:ða*
 Ali buy.3.M.PERF what
 ‘What did Ali buy?’
 b. *mona nisit tiktib ?eh*
 Mona forget.3.F.PERF write.3.F.IMPERF what
 ‘What did Mona forget to write?’

(cf. Wahba, 1984)

In BA, in-situ strategy is exclusively employed with adverbial wh-words such as *wayn* ‘where’, *mata* ‘when’ and *kayf* ‘how’.

77. a. ?ali ra:h wayn
Ali go.3.M.PERF where
‘Where did Ali go?’ (In-situ strategy)

b. b-ysa:fir sa?ad mata
will-travel.3.M.S.IMPERF Saad when
‘When will Saad travel?’ (In-situ strategy)

c. ga:l ib-ha s?a:lih kayf
do.3.M.PERF with-it Salih how
‘How did Saleh do with it?’ (In-situ strategy)

All other simple or complex wh-phrases appear ex-situ and cannot remain in-situ as shown in the following data.

78. a. *?ali ga:bal min/?in
Ali meet.3.M.PERF who
‘Who did Ali meet?’ (In-situ strategy)

b. *?a?fran imm-i ma?a
buy.3.F.PERF mother-my what
‘What did my mother buy?’ (In-situ strategy)

c. *?arsalta li-him ?ay
send.2.M.S.PERF to-them which
ab-kutib
the-books
‘Which books did you send to them?’
(In-situ strategy)

d. *?arsalta li-him kam
send.2.M.S.PERF to-them how-many
kita:b-in

book-INDEF

‘How many books did you send to them?’
(In-situ strategy)

e. *?aftara:-hu ?ali kam bu:-h
buy.3.M.PERF-it Ali how-much with-it
‘How much did Ali buy it?’
(In-situ strategy)

f. *?aftara:-hu ?ali ma?a law-h
buy.3.M.PERF-it Ali what for-it
‘Why did Ali buy it?’ (In-situ strategy)

Based on these facts, the representation of wh-in-situ in BA is as schematized in (79).

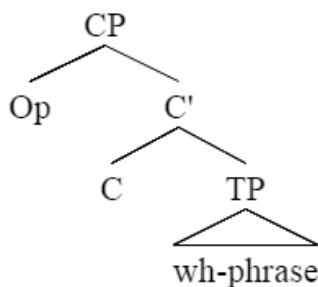
79. subject..... *mata/wayn/kayf* (In-situ strategy)

Although a huge amount of research has been conducted on wh-in-situ phenomenon, only two approaches gain a wide acceptance: the covert LF-movement analysis (Huang, 1982, 1995) and the unselective binding account (Pesetsky, 1987; Aoun & Li, 1993; Cole & Hermon, 1994).

In his analysis of Chinese wh-in-situ interrogatives, Huang (1982, 1995) proposes that all wh-expressions undergo movement (see also Lasnik & Saito, 1992, for the same treatment of Japanese wh-in-situ). Wh-elements that appear in-situ, however, undergo movement at LF, i.e. they move covertly. With respect to the unselective binding, Pesetsky

(1987) argues that *wh*-phrases in situ do not undergo movement at LF but remain in their clause-internal positions and are bound by a null operator in spec,CP as represented in (80).

80. Unselective Binding (cf. Pesetsky, 1987)



BA provides data that supports the covert LF-movement over the unselective binding proposal. Given that covert movement is by definition a movement operation, Pesetsky (1987), Aoun & Li (1993), Mathieu (1999) and Bruening & Tran (2006) argue that it should be also susceptible to the locality constraints such as subjacency (Chomsky, 1973). In their analyses, they found out that all the *wh*-expressions in-situ violate subjacency, i.e. they are insensitive to island conditions. Albaty (2013:6-7), for instance, takes the island violations in (81) from NA as an indication that LF-movement is an untenable proposal, favoring unselective binding over it.

81. a. ?ahmad iʃtaka il-redʒel
Ahmad sue.3.M.PERF the-man

[illi dʕarab miin]
[who hit.3.M.PERF who]
‘Who_i did Ahmed sue the man that hit him_i?’ (Relative clause)

b. ʕali tawaðʕaf [baʕadma
Ali hire.3.M.PERF [after
miin istiqa]l
who resign.3.M.PERF]
‘Who_i was Ali hired after he_i retired?’
(Adjunct clause)

c. ʕali rakkab [ʔahmad
Ali pick.3.M.PERF [Ahmad
wa miin]
and who]
‘Who_i did Ali give a ride to Ahmad and him_i?’ (Coordinate Structure)

BA, however, provides arguments for the covert movement. Consider the following examples from BA where *wh*-words in situ respect islands.

82. a. *ʔahmad sa:far [gablmā
Ahmed travel.3.M.PERF [before
yuru:h wayn]
go.3.M.PERF where]
‘Where did Ahmed go before he travelled?’
(Adjunct clause)

b. *tiʕrifu:n aw-wlad [ill
know.2.M.PL.IMPER the-boy [who
ga:bal Fatima mata]
meet.3.M.PERF Fatima when]
‘When did you know the boy who met Fatima?’ (Relative clause)

c. *ʕrifta [in ʕali
know.2.M.S.PERF [whether Ali
aʕtra:-ha kayf]
buy.3.M.PERF-it.F how]
‘How do you know whether Ali bought?’
(Wh-island)

The examples above suggest that these wh-words surface in their clause-internal positions yet they undergo a covert movement at LF. Thus, the derivation of the question (77a) reproduced in (83a) will be represented as in (83b).

83. a. ?ali ra:h wayn
 Ali go.3.M.PERF where
 ‘Where did Ali go?’ (In-situ strategy)

b.

CP



Given that the verb in the past tense must undergo a head-movement to T, I assume that the subject is also transformed from spec,VP to spec,TP to capture the SVO order. The wh-expression remains in its original position at the syntactic level; yet, it covertly moves at LF to spec,CP for semantic interpretation. In other words, the LF-movement in (83b) has no ramifications on the surface

position of wh-elements in the clause.

4. Conclusion

In conclusion, this paper provides valuable insights into the syntactic phenomenon of wh-constructions language-internally or cross-linguistically. It presents new data from BA that supports the mainstream view in the literature, i.e. BA, like Arabic dialects, makes use of all the four strategies attested in LA or NA (Aoun et al, 2009; Albaty, 2013). However, BA employs a new strategy, namely Class II gap strategy, which is a novel contribution to the field of Arabic dialectology.

Analyzing the internal syntax of wh-phrase, I drew an analogy between wh-phrases and CS. I also discussed the distributional patterns between the strategies that generate wh-interrogation in BA. This detailed discussion yields the following results: unlike gap strategy (of both types), resumptive strategy (of both types) is insensitive to islands. The generalization that can be made from these contrastive properties is that a movement analysis should be assigned to gap strategy whereas the resumptive strategy should be given a base-generation account.

Although the common resumptive and gap strategies can be accommodated under the available analyses in the generative literature,

resumptive and gap strategies of Class II needed a special attention. I accounted for these strategies adopting Shlonsky's (2002) analysis to parallel constructions from PA. While Class II gap strategy is not available in PA, the analysis sketched in Shlonsky (2002) is still capable of generating the *wh*-interrogative in this category and under-generating their ill-formed counterparts. Finally, BA casts doubts on the unselective binding proposal (Pesetsky, 1987) and provides evidence for an LF-movement analysis to *wh*-in-situ, given that all in-situ *wh*-expressions in BA display island violations.

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