



**The Syntax of Temporal and Conditional Adverbial Clauses in  
Najdi Arabic**

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## **ABSTRACT**

This thesis investigates the syntax of temporal and conditional adverbial clauses in Najdi Arabic (NA, henceforth). It essentially brings several pieces of empirical evidence that such clauses maintain the peripheral vs. central dichotomy which has been attested in some other (un)related languages (see, mainly, Haegeman 2003, 2004, 2006, and subsequent works). This means that conditional adverbial clauses are sub-classified into peripheral conditional adverbial clauses and central conditional adverbial clauses. The same classification is applied to temporal adverbial clauses, i.e. peripheral temporal adverbial clauses and central temporal adverbial clauses. The study also furnishes empirical evidence that the two types of clauses (peripheral vs. central) are at odds over their external syntax (i.e. the adjunction site within the accompanying main clause) and their internal syntax (with particular focus on their CP structure). The study shows that NA peripheral adverbial clauses (both temporal and conditional) are ‘less’ integrated with the accompanying main clause. They are adjoined to the CP of the accompanying clause; hence they do not fall within the syntactic domain of several operators of the accompanying main clause. As for the inner structure of NA peripheral adverbial clauses, the study shows that such clauses obtain a richer CP inner structure; no functional phrases within the CP layer are truncated. I mainly dwell on the observation that movement to the left periphery of NA peripheral adverbial clauses is allowed. The only exception is that such clauses lack the upper Topic Phrase. On the other hand, NA central adverbial clauses (both temporal and conditional) are ‘much’ integrated with the accompanying main clause. They are adjoined to the vP/VP/TP layers of the accompanying clause. This indicates that such clauses fall within the domain of several operators of the accompanying main clause. Such a type of clauses does not, e.g., have their independent temporal anchoring. As for the inner structure of NA central adverbial clauses, the current thesis argues that such clauses have a truncated CP structure in that functional phrases of Topic Phrase and Focus Phrase are truncated. The lack of such phrases gives consequently rise to the observation that no topicalization nor focalization is permitted in such clauses. As for why such clauses begin with a verb (i.e. the VSO word order is the only option allowed), the study argues that the lexical verb undergoes a head movement to adjoin to the head of Finiteness Phrase (FinP; cf. Rizzi 1997). The study argues the head of FinP has no Edge Feature (EPP), something that results in that no element such as subject or object is permitted to move to Spec,FinP.

## **Declaration and Statement of copyright**

### **Declaration**

No part of the material within this thesis has previously been submitted for a degree at Newcastle University or any other university.

### **Statement of Copyright**

The copyright of this thesis rests with the author. No quotation should be published from it without his prior written consent and information derived from it should be acknowledged.

## **Dedication**

TO MY PARENTS

## **Acknowledgements**

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## Abbreviations

*	Ungrammatical
Φ features	Agreement features
1,2,3	Person
ACC	Accusative
CLLD	Clitic Left Dislocation
C/COMP	Complementizer
CP	Complementizer Phrase
DEF	The definite article
EPP	Extended Projection Principle
EPS	Epistemic
F	Feminine (gender)
Fin	Finiteness
M	Masculine (gender)
MCP	Main Clause Phenomena
MSA	Modern Standard Arabic
NA	Najdi Arabic
Neg	Negation
NOM	Nominative
O	Object
P	Plural
PRES	Present tense
PRT	Particle
Q	Question particle
S/SG	Singular
Spec	Specifier
Sub	Subordinator
T	Tense
TP	Tense Phrase
Top	Topic
V	Verb
v	Little verb
VP	Verb Phrase

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## **Maps**

**Map1.** The Najd Region of Saudi Arabia





## **Chapter ONE: Introduction**

### **1.1 The scope and significance of the thesis**

Adverbial clauses have attracted much attention from several researchers who have been working on subordination across languages. This attention has been mainly invoked due to the discrepancies such clauses show with respect to their structure of the operator layer of the clause (i.e. the CP) in general and the possibility of argument fronting vs. adjunct fronting in particular. The underlying importance of investigating adverbial clauses in the current syntactic theory has also been attributed to the fact that they provide us with tangible clues about the actual structural structure of the left periphery and whether the type of the clause, i.e., matrix vs. subordinate, is subject to the differences regarding the hierarchical structure of the left periphery. Since the seminal paper by Rizzi (1997), much attention has been drawn to exploring how the left periphery of matrix clauses and subordinate clauses is derived and structured (see, Haegeman 2003). Given this, what makes the current thesis significant are two points. Firstly, it sheds light on the syntactic derivation of temporal and conditional adverbial clauses with particular emphasis on the syntactic structure of their left periphery in one Arabic dialect, namely Najdi Arabic (NA, henceforth), which makes available interesting observations that pertain to adverbial clauses (as will be explained later) which are worth investigating. In doing so, the current research addresses a less-investigated Arabic dialect, i.e. NA, which has not received enough attention from researchers in different linguistic domains, including the syntax of subordinate clauses. The current thesis is thus a continuation of the ongoing research on the left periphery as well as its structure in natural languages in general and NA in particular.

This chapter aims to provide the descriptive data concerning the clause structure of NA and the primary information pertaining to temporal and conditional adverbial clauses in this dialect. This chapter is structured as follows. Section 1.2 introduces NA with respect to its origin, whereas section 1.3 presents the basic facts of NA, e.g., the word order facts, subject-verb agreement, morphological aspects of the tense and the property of NA being a null subject language. Section 1.4 discusses the basic observations that are related to temporal and conditional adverbial clauses in NA. This section also includes the main questions of the current thesis. Section 1.5 has the conclusion of the chapter.

## 1.2 Najdi Arabic (NA): An introduction

In addition to Modern Standard Arabic (MSA), a number of Arabic varieties spread across the Arab World, from the Arabian Gulf to the Atlantic Ocean (Zughoul 1980 and Fassi Fehri 1993, 2012). In this regard, Brustad (2000) and Versteegh (2001), among others, provide a classification of these varieties according to their geographical areas: Maghreb, Egypt, Levant and Gulf. Najdi Arabic is a variety of the Gulf dialects (cf. Ingham 1994b).<sup>1</sup> Najd is locally used to refer to the area from Yemen to the south, to the borders of Jordan to the north, and from the oasis of Ahsa to the east, to the mountains of Hijaz to the west (Al-Sweel 1981). The map below shows the Najd region which is shaded in red.<sup>2</sup>

**Map 1. Najd Region of Saudi Arabia**



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<sup>1</sup> Najdi Arabic as an Arabic vernacular is acquired at home and used widely in everyday communication. On the other hand, it is not used in education in Saudi Arabia, as is the case with other Arabic countries where diglossia is evident. See Ferguson (1959) for the fact that MSA and the spoken Arabic appear to be in a diglossic situation.

<sup>2</sup> The map is adapted from Lewis (2013: 3)



According to Ingham (1994: 5), there are four sub-varieties of NA, which are the following:<sup>3</sup>

- i. Central Najd. The dialects of Central Najd and the central Bedouin tribes.
- ii. Northern Najdi. The dialects of Jabal Shammar and the Shammar tribes of Northern Najd and the Jazirah.
- iii. Mixed Northern-Central. The dialect of Qasim and of the Dhafir tribe.
- iv. Southern. The dialect of Najran, the Ghtan tribe of the south, the Al Murrah and Ajman tribes of the east.

This research analyses adverbial clauses in the sub-variety of NA that is spoken in Hail city and its surroundings (Northern Najdi). The main reason for this particular selection is mainly that this NA sub-variety is the native language of the researcher of the current thesis. Also, linguistically speaking, the focus on this variety, in particular, is due to the fact that it has several particles that are used to introduce temporal and conditional clauses. The interesting point here is that these particles show different word order as will be discussed in the thesis.

In the next section, I explore some syntactic facts of NA, including word order, subject-verb agreement, tense, and pro-drop property. This exploration is important for the syntactic account of NA adverbial clauses and the related observations I will advance in the following chapters.

### **1.3 Descriptive facts of NA**

In this section, I explore certain syntactic properties of NA, whose descriptions are important for our investigation of the adverbial clauses in this Arabic dialect, the main concern of the current thesis. Let's start first with the (un)marked word orders which are used in NA.

#### *1.3.1 Word Orders in NA*

Recent research works on NA have argued that this dialect obtains the SVO as the unmarked word order, while the VSO word order as a common, but marked word order (Al-Sweel 1981 and Ingham 1994b). The same case we find in other Arabic varieties such as Hijazi Arabic and Jordanian Arabic (see, Holes 1995, 1996 and Jarrah 2017 for a related discussion). The SVO word order is called by Arab traditional grammarians as a “nominal clause”, which is defined as a sentence that does not begin with a verb. Moutaouakil (1989) and Aoun *et al.*

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<sup>3</sup> The number of NA speakers is around ten million speakers (Lewis 2013).

(2010) argue that the SVO word order reflects the speaker’s focus on the subject as a doer of an action. The following sentences provide grammatical examples containing an SVO word order:<sup>4</sup>

- (1) a. Fahd            arsal                            al-barīd  
       Fahd            send.3SG.M.PAST    DEF-post  
       “Fahd sent the post.”
- b. al-walad      katab                            ad-dars  
           DEF-boy      write.3SG.M.PAST    DEF-lesson  
       “The boy wrote the lesson.”
- c. al-bint        rāḥ-at                            li-l-mədrasəh  
           DEF-girl      go.PAST-3SG.F        to-DEF-school  
       “The girl went to the school.”
- d. Ahmad        gara                                al-qiṣṣəh  
           Ahmad        read.PAST.3SG.M        DEF-story  
       “Ahmad read the story.”

On the other hand, the VSO word order is called by Arab traditional grammarians as a ‘verbal sentence’, as it begins with a verb. Moutaouakil (1989) and Aoun *et al.* (2010) argue that the speaker uses the VSO word order to attract the listener’s attention to the action that has been carried out by the doer. The following sentences provide grammatical examples that involve a VSO word order:

- (2) a. arsal                            Fahd                            al-barīd  
       send.3SG.M.PAST    Fahd                            DEF-post  
       “Fahd sent the post.”
- b. katab                                al-walad                            ad-dars  
           wrote.3SG.M.PAST      DEF-boy                            DEF-lesson  
       “The boy wrote the lesson.”

---

<sup>4</sup> All examples in this thesis are from NA, unless stated otherwise.

c. rāḥ-at	al-bint	l-l-mādrasəh
go.PAST-3SG.F	DEF-girl	to-DEF-school

“The girl went to the school.”

d. gara	Ahmad	al-qišṣəh
read.3SG.M.PAST	Ahmad	DEF-story

“Ahmad read the story.”

With this being the case, NA patterns with other Arabic vernaculars that the SVO word order is used as an unmarked word order (see, Fassi Fehri 1993, 2012, Aoun *et al.* 1994, Aoun and Benmamoun 1998, Benmamoun 1999, 2000, 2003, 2008, Musabhien 2009, and Jarrah 2017, among many others). See also Lewis (2013) and Alshamari and Jarrah (2016) for a similar stand on NA.

This discussion does not imply though that other word orders are not permissible in NA. As is the case with other Arabic varieties, all permutations of other word orders (e.g. OSV, OVS, VOS, etc.) are approximately acceptable under suitable pragmatic and dialogical situations (See, Mohammad 2000 for a related discussion on MSA and Palestinian Arabic and Alshamari and Jarrah 2016 for a recent study of the derivation of some marked word orders in Haili Arabic). Examine the following examples that demonstrate this fact:<sup>5</sup>

- (3) a. arsal                      al-barīd              Fahd              (VOS)  
       send.3SG.M.PAST    DEF-post            Fahd  
       “Fahd sent the post.”
- b. al-barīd                      arsal-uh              Fahd              (OVS)  
       DEF-post                      send.3SG.M.PAST-it      Fahd  
       “The post Fahd sent (it).”

---

<sup>5</sup> There are interpretive differences between the examples in (3). I do not deal with these differences here, but see the following chapters for related discussion.

c. al-barīd      Fahd              arsal-uh                      (OSV)  
          DEF-post      Fahd              send.3SG.M.PAST-it  
          “The post Fahd sent (it).”

d. Fahd              al-barīd              arsal-uh                      (SOV)  
          Fahd              DEF-post              send.3SG.M.PAST-it  
          “The post Fahd sent (it).”

Note here that NA does not have Case markings on nouns. However, this does not affect the possibility that NA has several word orders (see, Fassi Fehri 1993 and Ryding 2005 for more discussion on Case systems in Arabic).

Having discussed some brief information about word orders of NA, let’s now discuss the morphological manifestations of the subject-verb agreement in NA, a matter I take up in the next sub-section.

### 1.3.2 Subject-verb Agreement in NA

Unlike MSA, NA obtains full agreement between the verb and the subject. In other words, the verb in NA agrees in Number, Gender, and Person (i.e. the  $\phi$ -features) with its subject, regardless of the word order used. Consider first the example in (4) where the verb *ʔarsal* ‘sent’ agrees fully with the pre-verbal subject *Fahd* ‘Fahd’.

(4) Fahd              arsal                      al-barīd  
          Fahd              send.3SG.M.PAST      DEF-post  
          “Fahd sent the post.”

If we change the subject into a plural element, the verb becomes necessarily inflected for the new subject, expressing the  $\phi$ -content of the new subject, as shown in the following example:

(5) al-ʕyāl              arsal-u                      al-barīd  
          DEF-boys              send.PAST-3PL.M      DEF-post  
          “The boys sent the post.”

If the verb does not agree with the subject, the respective sentence would be ungrammatical, as demonstrated by the following ill-formed examples:

(6) a. \*Fahd                      arsal-t                      al-barīd  
       Fahd                      send.PAST-3SG.F        DEF-post  
       Intended: “Fahd sent the post.”

      b. \*al-ḡyāl                arsal                      al-barīd  
       DEF-boys    send.3SG.M.PAST        DEF-post  
       Intended: “The boys sent the post.”

The same situation is obtained in the clauses with a VSO word order, as the sentences in (7) demonstrate.

(7) a. arsal-t                      al-bint                      al-barīd  
       send.PAST-3SG.F    DEF-girl                DEF-post  
       “The girl sent the post.”

      b. arsal-n                      al-banāt                      al-barīd  
       send.PAST-3PL.F    DEF-girls                DEF-post  
       “The girls sent the post.”

      c. arsal-u                      al-ḡyāl                      al-barīd  
       send.PAST-3PL.M    DEF-boys                DEF-post  
       “The boys sent the post.”

If the verb shows different agreement inflections than that of the subject, the respective sentences become ungrammatical, as shown in the following ill-formed examples that show this fact:

(8) a. \*arsal-t                      al-banāt                      al-barīd  
       send.PAST-3SG.F    DEF-girls                DEF-post  
       Intended: “The girls sent the post.”

      b. \*arsal-n                      al-bint                      al-barīd  
       send.PAST-3PL.F    DEF-girl                DEF-post  
       Intended: “The girl sent the post.”

c. \*arsal-u                      al-walad                      l-barīd  
       send.PAST-3PL.M    DEF-boy                      DEF-post  
 Intended: “The boy sent the post.”

In view of this, the subject-verb agreement in NA is not tied to the word order used. By contrast, in MSA, the verb agrees fully with its subject in the SVO word order, whereas it agrees only in Person and Gender with its subject (but not Number) in a VSO word order (see, among many others, Fassi Fehri 1993, 2012, Soltan 2007, and Ouhalla 2013). Consider the following examples from MSA, taken from Soltan (2007: 34):<sup>6</sup>

(9) a. al-ʔawlād-u              qarʔa-ū              ad-dars-a              (SV+full agreement)  
       DEF-boys-NOM            read-3P.M            DEF-lesson-ACC  
       ‘The boys read the lesson.’

b. qarʔa              al-ʔawlād-u              ad-dars-a              (VS+partial agreement)  
       read.3SG.M            DEF-boys-NOM            DEF-lesson-ACC  
       ‘The boys read the lesson.’

c. \*al-ʔawlād-u              qarʔa              ad-dars-a              (\*SV+partial agreement)  
       DEF-boys-NOM            read.3SG.M            DEF-lesson-ACC  
       Intended: ‘The boys read the lesson.’

d. \*qarʔa-ū              al-ʔawlād-u              ad-dars-a              (\*VS+full agreement)  
       read-3PL.M            DEF-boys-NOM            DEF-lesson-ACC  
       Intended: ‘The boys read the lesson.’

It should be noted at this point that the verb agrees with its pronominal subject in NA, as well. In other words, the rich agreement between the subject and the verb is also manifested when the subject is a pronoun.<sup>7</sup> Consider the following examples:

<sup>6</sup> The gloss of the examples in (9) is slightly changed to be consistent with the gloss followed in this thesis.

<sup>7</sup> It has also been shown elsewhere that the verb agrees ‘fully’ with its pronominal subject in MSA, irrespective of the word order used (see, Bahloul and Harbert 1993, Harbert and Bahloul 2002, and Soltan 2007).

(10) a.	hū	arsal	al-barīd
	he	send.3SG.M.PAST	DEF-post
		“He sent the post.”	
b.	hum	arsal-u	al-barīd
	they.M	send.PAST-3PL.M	DEF-post
		“They sent the post.”	
c.	arsal-t	hī	al-barīd
	send.PAST-3SG.F	she	DEF-post
		“She sent the post.”	
d.	arsal-n	hin	al-barīd
	send.PAST-3PL.F	they.F	DEF-post
		“They sent the post.”	
e.	arsal-u	hum	al-barīd
	send.PAST-3PL.M	they.M	DEF-post
		“They sent the post.”	

According to the examples above, we are led to the conclusion that the verb in NA fully agrees with its subject, regardless of the word order used and regardless of the status of the subject (being a pronoun or a full NP). This essentially conflicts with the case in MSA whereby the verb shows full agreement with its subject in an SVO word order, whereas it shows an impoverished agreement with its subject in a VSO word order.

In the next subsection, I explore the tense system in NA. This system is significant for the current thesis as it interacts with the movement of the verb, as we will show later.

### 1.3.3 *The morphological form of the verb in NA*

We have shown above that the verb agrees fully with the subject in NA, irrespective of the word order used and irrespective of the status of the subject (being a pronoun or a full NP). In this subsection, I explore the morphological form of the verb. In NA, the verb may appear in the perfective form or in the imperfective form, depending mainly on the tense of the clause where the verb emerges. The imperfective form of the verb is used to express the present

tense in NA, whereas the perfective form of the verb is used for the past tense, the same case we find with other Arabic varieties (see, in particular, Benmamoun 2000, 2003 and Aoun *et al.* 2010).

Note here that although the verb agrees with its subject regardless of its form (perfective or imperfective), the form of the verb is relevant with respect to the position of the agreement affixes on the verb. To illustrate, in the perfective form, the subject-verb agreement appears as a suffix that is attached to the verb as shown in (11).

(11) a. arsal-n                      al-banāt                      al-barīd  
           send.PERF-3PL.F    DEF-girls                      DEF-post  
           “The girls sent the post.”

b. al-banāt    arsal-n                      al-barīd  
           DEF-girls    send.PERF-3PL.F    DEF-post  
           “The girls sent the post.”

When the verb appears in the imperfective form, the subject-verb agreement morpheme is discontinuous. It consists of a prefix that refers to the Person and Gender features of the subject, while the Number morpheme is surfaced as a suffix, as shown in the following examples:

(12) a. al-banāt                      y-rsil-n                      al-barīd  
           DEF-girls                      3.F-send. IMPERF-PL                      DEF-post  
           “The girls send the post.”

b. y-rsil-n                      al-banāt                      al-barīd  
           3.F-send.IMPERF-PL                      DEF-girls                      DEF-post  
           “The girls send the post.”

Tables (1 and 2) summarize perfective and imperfective forms that also show the inflectional affixes paradigms utilized in NA.



Table 1: Perfective aspect in NA.

Person	Number	Gender	Affix	Verb + Affix
1	Singular	M / F	-t	kitab- <b>t</b>
2	Singular	M	-t	kitab- <b>t</b>
2	Singular	F	-ti	kitab- <b>ti</b>
3	Singular	M	-0	kitab
3	Singular	F	-at	kitab- <b>at</b>
1	Plural	M / F	-na	kitab- <b>na</b>
2	Plural	M	-tu	kitab- <b>tu</b>
2	Plural	F	-tin	kitab- <b>tin</b>
3	Plural	M	-au	kitab- <b>au</b>
3	Plural	F	-an	kitab- <b>an</b>

Table 2: Imperfective aspect in NA.

Person	Number	Gender	Affix	Verb + Affix
1	Singular	M / F	ʔa-	<b>ʔa</b> -ktub
2	Singular	M	ta	<b>ta</b> -ktub
2	Singular	F	ta-V-īn	<b>ta</b> -ktub- <b>īn</b>
3	Singular	M	ya-	<b>ya</b> -ktub
3	Singular	F	ta-	<b>ta</b> -ktub
1	Plural	M / F	na-	<b>na</b> -ktub
2	Plural	M	ta-V.-ūn	<b>ta</b> -ktub- <b>ūn</b>
2	Plural	F	ta V.-in	<b>ta</b> -ktub- <b>in</b>
3	Plural	M	ya- V.-ūn	<b>ya</b> -ktub- <b>ūn</b>
3	Plural	F	y-V-in	<b>y</b> -ktub- <b>in</b>

In the next sub-sections, I investigate the tense and aspect in NA. Also, I will investigate the property of NA as a null-subject language. This property is our last description of NA clause structure. Afterwards, emphasis is placed on the formation of adverbial clauses of NA, the main concern of the current thesis.

### 1.3.4 Tense and aspect in NA

NA uses some particles to express various types of aspect/tense<sup>8</sup>. I will discuss the three types of tense and the particles that are used in each tense.

#### 1.3.4.1 Past tense

The past tense in NA can be expressed by the particle *kān* or *gid*<sup>9</sup>. Both particles are sensitive to the aspect of the lexical verb. That is, *gid* can only precede verbs in the perfective aspect, whereas *kān* only precedes verbs in the imperfective aspect. Consider the following examples:

(13) a.	Ahmad	gid	zār	London	al-ṣām
	Ahmad	AUX.3SM	visit.3SM.PERF	London	DEF-year

‘‘Ahmad has already visited London last year.’’

b.	Ahmad	kān	yagra	giṣṣəh
	Ahmad	AUX.3SM	read.3SM.IMPERF	story

‘‘Ahmad was reading a story.’’

Also, *kān* differs from *gid* in that the former can have two interpretations, whereas the latter has only one reading, namely, past simple. The particle *kān* can have either a habitual past interpretation or a progressive past interpretation as shown in (14a&b), respectively:

(14) a.	Ahmad	kān	yagra	giṣṣəh	kill	yūm
	Ahmad	AUX.3SM	read.3SM.IMPERF	story	every	day

‘‘Ahmad used to read a story every day.’’

b.	Ahmad	kān	yagra	giṣṣəh	ʔms
	Ahmad	AUX.3SM	read.3SM.IMPERF	story	yesterday

‘‘Ahmad was reading a story yesterday.’’

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<sup>8</sup> For further information about Tense/Aspect in Arabic, see Elsadek (2016).

<sup>9</sup> These particles are argued to be auxiliaries as they have no semantic function when they are combined with lexical verbs. For more discussion on this topic, see Ingham (1994a) and Brustad (2000).

The interpretations in the above examples can be determined by the context and the adverbs. The adverb *kill yūm* ‘every day’ in (14a) shows clearly the habitual aspect. On the other hand, the adverb *ʔms* ‘yesterday’ in (14b) above indicates a progressive past interpretation.

#### 1.3.4.2 Present tense

The present tense in NA can be expressed by *gāʕid*. The particle *gāʕid* is used as an auxiliary and it only precedes a verb in the imperfective form. Furthermore, *gāʕid* has two interpretations, namely, a habitual present interpretation as in (15a) and a progressive present interpretation as in (15b) below.

(15) a.	Ahmad	gāʕid	yagra	gişşəh	kill	yūm
	Ahmad	AUX	read.3SM.IMPERF	story	every	day

‘‘Ahmad reads a story every day.’’

b.	Ahmad	gāʕid	yagra	gişşəh	ʔlḥīn
	Ahmad	AUX	read.3SM.IMPERF	story	now

‘‘Ahmad is reading a story now.’’

The use of the habitual adverb *kill yūm* ‘every day’ in (15a) above shows that the sentence is habitual present, whereas the adverb *ʔlḥīn* ‘now’ in (15b) denotes a progressive present interpretation.

#### 1.3.4.3 Future tense

NA uses the particle *rāḥ* for indicating the future. It has also three interpretations. These interpretations are indicated by *rāḥ* preceding a verb in the imperfective form. The three types of future are simple future, habitual future and progressive future which are shown below, respectively:

(16) a.	Ahmad	rāḥ	yagra	gişşəh	bukra
	Ahmad	AUX	read.3SM.IMPEF	story	tomorrow

‘‘Ahmad will read a story tomorrow.’’

- b. Ahmad      rāḥ                  yagra                                  giṣṣəḥ kill      yūm  
 Ahmad        AUX                  read.3SM.IMPEF                  story every day  
 ‘‘Ahmad will read a story every day.’’
- c. Ahmad      rāḥ                  yagra                                  giṣṣəḥ ʔlhīn  
 Ahmad        AUX                  read.3SM.IMPEF                  story now  
 ‘‘Ahmad will be reading a story now.’’

The following table summarizes the tense and aspect in NA.

Table3: Tense and Aspect in NA.

AUX	The form of the lexical verb	Tense/Aspect
gid	PERF	Simple past
kān	IMPERF	Habitual/progressive past
gāʕid	IMPERF	Habitual/progressive present
rāḥ	IMPERF	Simple/habitual/progressive future

### 1.3.5 NA as a null subject language

As I have shown above, the verb in NA agrees with its subject in all grammatical features (Number, Gender, and Person). This gives rise to the situation where the  $\phi$ -content of the subject can be determined through the rich morphological form of the lexical verb. This fact leads NA to be a null-subject language, where the subject can be dropped when it can be retrieved from the preceding context<sup>10</sup>. In the latter situations, it is widely proposed that there exists a *pro* in the subject position (see, Chomsky 1993, 1995). The following examples show this property of NA. All sentences do not have an ‘overt’ subject, which is in turn understood by the morphological form of the verb:

<sup>10</sup> For more discussion about Arabic as a null subject language, see Aoun et al (2010).

- (17) a.arsal                              al-barīd  
    send.3SG.M.PAST    DEF-post  
          “He sent the post.”
- b.arsal-u                            al-barīd  
          send.PAST-3PL.M    DEF-post  
          “They sent the post.”
- c. arsal-t                            al-barīd  
          send.PAST-3SG.F            DEF-post  
          “She sent the post.”
- d. arsal-n                            al-barīd  
          send.PAST-3PL.F            DEF-post  
          “They sent the post.”

As is shown by the examples in (17), the identity of the dropped subject is understood by the  $\phi$ -content of the verb. For instance, the agreement suffix *-u* in (17b) refers to the fact that subject of the sentence is a masculine, plural entity. On the other hand, the agreement suffix *-t* in (17c) refers to the fact that subject of the sentence is a feminine, singular entity, and the like. According to Moutaouakil (1989), the subject in the Arabic clause can be dropped when it expresses salient information that is accessible in discourse, the same observation obtained in almost all languages with rich subject-verb agreement paradigms (see, Biberauer *et al.* 2010).

Having explored the major syntactic characteristics of the NA clause structure, let’s now move to explain how adverbial clauses are formed in NA and the main observations relating to them.

#### **1.4 Adverbial clauses in NA**

In this thesis, I explore the syntactic structure of two types of adverbial clauses, namely the conditional adverbial clauses and the temporal adverbial clauses. The conditional adverbial clauses are introduced by several subordinators including *ʔiḍa*, *law*, *ʔin* and *ya/lya*. All of these subordinators can be translated into English as ‘if’. Consider the following sentences that include an example of each conditional subordinator.

(18) a. *ʔiða*    *šāf*                                  *Fahd*    *al-bint*                  *bi-s-sūg*  
 if    see.PAST.3SM    *Fahd*    DEF-girl                  in-DEF-market  
*rāḥ*                                  *ysāʕid-ah*  
 will                                  help.PRES.3SM-her

‘If Fahd sees the girl in the market, he will help her.’

b. *ʔin*                  *xallaṣ*                                  *Fahd*                  *al-wādʒib*                  *ba-laḥad*  
 if                  finish.3SM.PAST    *Fahd*                  DEF-assignment                  on-Sunday  
*rāḥ*                  *yslm-uh*                                                  *ba-laḥnayn*  
 will                  submit.3SM.PRES-it                  on-Monday

‘If Fahd finishes the assignment on Sunday, he will submit it on Monday.’

c. *ya/lya*                  *xallaṣ*                                  *Fahd*                  *al-wādʒib*                  *ba-laḥad*  
 if                  finish.3SM.PAST    *Fahd*                  DEF-assignment                  on-Sunday  
*rāḥ*                  *yslm-uh*                                                  *ba-laḥnayn*  
 will                  submit.PRES.3SM-it                  on-Monday

‘If Fahd finishes the assignment on Sunday, he will submit it on Monday.’

d. *law*                  *aṭ-ṭālib*                  *yštri*                                                  *al-kitāb*                  *min*  
 if                  DEF-student    buys.3SM.PRES    DEF-book                  from  
*al-ʔmazūn*                  *kān*    *waffər*                                                  *flūs*  
 DEF-amazon    Prt    save.3SM.PAST                  money

‘If the student buys the book from Amazon, he will save money.’

The most relevant point here is that NA conditional adverbial clauses do not show among themselves the same behaviour when it comes to the possibility of having a preverbal subject, a preverbal object, or a preverbal adjunct. Although NA has less restrictions on the possible word orders in root clauses (see section 1.3), adverbial clauses place strict constraints on the possible word orders used. For instance, the adverbial clauses introduced by *iða*, *ʔin* and *ya/lya* should be introduced by a verb (i.e. forming a case of a VSO word order). Interestingly enough here that other word orders are not possible, as shown in the following ill-formed examples:

(19) a. \*ʔin/ ya/ lya/ʔiḏa                      Fahd xallaṣ                      al-wādzib  
           if                                              Fahd finish.3SM.PAST            DEF-assignment  
           ba-laḥad                                    rāḥ            ysIm-uh                                      ba-laḏnayn  
           on-Sunday                                will            submit.3SM.PRES-it                      on-Monday  
           Intended: ‘If Fahd finishes the assignment on Sunday, he will submit it on  
                           Monday.’

b \*ʔin/ ya/ lya/ʔiḏa                      al-wādzib                      xallaṣ-uh                      Fahd  
           if                                              DEF-assignment                      finish.3SM.PAST-it            Fahd  
           ba-laḥad                                    rāḥ            ysIm-uh                                      ba-laḏnayn  
           on-Sunday                                will            submit.3SM.PRES-it                      on-Monday  
           Intended: ‘If, the assignment, Fahd finishes on Sunday, he will submit it on  
                           Monday’

The situation is quite different with respect to the adverbial clauses that are introduced by *law*. Consider the following examples that demonstrate this observation. In (20a) the subject appears in a preverbal position, whereas in (20b), the object is fronted and appears along with subject in a preverbal position:

(20) a. law                      at-tālib                      yṣtri                      al-kitāb  
           if                                              DEF-student                      buys.3SM.PRES                      DEF-book  
           min al-ʔmazūn                              kān            waffər                                      flūs  
           from DEF-amazon                            Prt            save.3SM.PAST                              money  
           ‘If the student buys the book from Amazon, he will save some money.’

b. law                      al-kitāb                      at-tālib                      yṣtri-h  
           if                                              DEF-book                      DEF-student                      buy.3SM.PRES-it  
           min al-ʔmazūn                              kān            waffər                                      flūs  
           from DEF-amazon                            Prt            save.PAST.3SM                              money  
           ‘The book if the student buys it from Amazon, he will save some money.’

All these examples provide empirical evidence that conditional adverbial clauses do not constitute one homogenous group with respect to the possibility of having the subject and the object in a preverbal position. Conditional adverbial clauses introduced by *iḏa*, *ʔin* and *ya/lya* should be introduced by a verb, whilst conditional adverbial clauses introduced by *law* do not

respect this constraint. The subject and the object may appear preverbally. It is one of the aims of the current thesis to explore the syntactic conditions that are responsible for this disparity of the behaviour of conditional clauses.

Additionally, the current thesis investigates temporal adverbial clauses. The striking observation lies in the fact that temporal adverbial clauses are also not alike with respect to the possibility of having the subject (and the object) in a preverbal position. To explain, the temporal adverbial clauses that are introduced by *yūm* ‘when’ do not obtain any constraints on the word orders used, provided that the appropriate pragmatic and contextual conditions are met for the given clause. Sentence (21a) provides evidence that the SVO word order is acceptable in the temporal adverbial clauses that are introduced by *yūm* ‘when’. Sentence (21b) demonstrates that the OSV word order is also acceptable in such clauses, whereas sentence (21c) provides evidence to the effect that the OVS word order is also acceptable in the temporal adverbial clauses introduced by *yūm* ‘when’.

(21) a. al-muwaDDaf      kān                      ġāyb              yūm  
 DEF-employee      was                      absent              when  
 al-mudīr              yʔakkid              an-natīdzeh      bi-l-ʔidztimāʕ  
 DEF-manager      confirm.3SM.PRES    DEF-result      in-DEF-meeting  
 ‘The employee was absent when the manager confirmed the result at the meeting.’

b. al-muwaDDaf              kān                      ġāyb              yūm  
 DEF-employee              was                      absent              when  
 an-natīdzeh              al-mudīr              yʔakkid-ah              bi-l-ʔidztimāʕ  
 DEF-result              DEF-manager              confirm.3SM.PRES-it    in-DEF-meeting  
 ‘The employee was absent when the manager confirmed the result at the meeting.’

c. al-muwaDDaf      kān                      ġāyb              yūm  
 DEF-employee      was                      absent              when  
 an-natīdzeh      yʔakkid-ah              al-mudīr              bi-l-ʔidztimāʕ  
 DEF-result      confirm.3SM.PRES-it DEF-manager              in-DEF-meeting  
 ‘The employee was absent when the result the manager confirmed it at the meeting.’

On the other hand, the temporal adverbial clauses introduced by *gablmā* ‘before’ and *baʕdma* ‘after’ do not accept any word order but the VSO word order, irrespective of the pragmatic



and contextual conditions of the given clause. The following sentences demonstrate this point. Sentence (22a) provides evidence that the temporal adverbial clauses that are introduced by *gabлма* ‘before’ and *baғdma* ‘after’ are compatible with the VSO word order. Sentence (22b) makes it clear that the SVO word order is not acceptable within such clauses, whereas sentence (22c) shows clearly that the use of the OSV word order in the temporal adverbial clauses introduced by *gabлма* ‘before’ and *baғdma* ‘after’, makes the whole sentence ungrammatical. The observation extends to (22d) where the word order used is the OVS word order.

(22) a. al-muwaDDaf      arsal                      al-ғimail      gabлма/ baғdma  
 DEF-employee      send.3SM.PAST      DEF-email      before/after  
 ғkkad                  al-mudīr              an-natīdзeh      bi-l-ғidзtimāғ  
 confirm.3SM.PAST      DEF-manager      DEF-result              in-DEF-meeting  
 Intended: ‘The employee sent the email before/after the manager confirmed the result  
 at the meeting.’

b.\* al-muwaDDaf      arsal                      al-ғimail      gabлма/ baғdma  
 DEF-employee      send.3SM.PAST      DEF-email      before/after  
 al-mudīr                  ғkkad                      an-natīdзeh      bi-l-ғidзtimāғ  
 DEF-manager      confirm.3SM.PAST      DEF-result      in-DEF-meeting  
 Intended: ‘The employee sent the email before/after the manager confirmed the result  
 at the meeting.’

c. \*al-muwaDDaf      arsal                      al-ғimail      gabлма/ baғdma  
 DEF-employee      send.3SM.PAST      DEF-email      before/after  
 an-natīdзeh              al-mudīr                  ғkkad-ah              bi-l-ғidзtimāғ  
 DEF-result              DEF-manager              confirm.3SM.PAST-it      in-DEF-meeting  
 Intended: ‘The employee sent the email before/after the manager confirmed the result  
 at the meeting.’

d. *al-muwaDDaf	arsal	al-ʔimail	gabлма/ baʕdma
DEF-employee	send.3SM.PAST	DEF-email	before/after
an-naʕidzeh	ʔkkad-ah	al-mudīr	bi-l-ʔidztimāʕ
DEF-result	confirm.3SM.PAST-it	DEF-manager	in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

All examples in (21 and 22) point to the fact that temporal adverbial clauses are not symmetric with respect to the possibility of having the subject and the object in a preverbal position. The temporal adverbial clauses introduced *gabлма* ‘before’ and *baʕdma* ‘after’ should be introduced by a verb. By contrast, the temporal adverbial clauses that are introduced by *yūm* ‘when’ allow for different word orders, as is the case with main clauses (see section 1.3.1 above). It is evident that the subject and the object can appear preverbally. It is also one of the main aims of the current thesis to account for this discrepancy between conditional and temporal adverbial clauses with respect to having an argument or an adjunct fronted within adverbial clauses.

Effectively, the thesis seeks to answer the following main questions:

- i. Why can subjects and objects appear pre-verbally in the conditional adverbial clauses that are introduced by *law* ‘if’, but not *iḏa*, *ʔin* and *ya/lya*?
- ii. Why can subjects and objects appear pre-verbally in the temporal adverbial clauses that are introduced by *yūm* ‘when’, but not *gabлма* ‘before’ and *baʕdma* ‘after’?

It can be argued that the conditional adverbial clauses that are introduced by *ʔin*, *ʔiḏa*, *ya/lya*, as well as the temporal adverbial clauses that are introduced by *gabлма* ‘before’ and *baʕdma* ‘after’ are instances of the so-called central adverbial clauses in the sense of Haegeman (2002, 2003, and other related works). On the other hand, the conditional adverbial clauses that are introduced by *law* as well as the temporal adverbial clauses that are introduced *yūm* ‘when’ are instances of the so-called peripheral adverbial clauses.<sup>11</sup> The explanation of the dichotomy between peripheral vs. central adverbial clauses will be the main topic of the following chapter. Generally speaking, central adverbial clauses are adverbial clauses that are more integrated into the main clause. They are subject to the effects of the operators of the main

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<sup>11</sup> The labelling (central vs. peripheral) is intended to reflect the different degree of integration of clauses with respect to the clause they modify (Haegeman 2012: 149). I will return to this point later.

clause. Peripheral adverbial clauses, on the other hand, are adverbial clauses that are less integrated into the main clause and, hence, less subject to the effects of the operators of the main clause. I will show how this analysis can provide us with an elegant account of the asymmetries between these clauses with respect to the possibility of argument (and adjunct) fronting or lack thereof. In addition, I will show how this analysis accounts for a series of other observations that are related to these clauses. The general lines of this analysis are provided in the following subsection where I also offer a brief picture of the chapters to come.

### **1.5 The organization of the thesis**

This thesis is divided into seven chapters which are organized as follows. The first chapter is an introduction and the last chapter is a conclusion. The second chapter provides a background about adverbial clauses. It mainly discusses a dichotomy of central vs. peripheral adverbial clauses. It explains the interpretive differences between these two types of clauses, i.e. their functions with respect to the matrix clause that they are adjoined to. For Haegeman (2002, 2003, 2004), central adverbial clauses have the main function of structuring the event which is expressed in the associated main clause, whereas peripheral adverbial clauses structure the discourse, i.e., the relation between the associated main clause and the surrounding discourse. Peripheral adverbial clauses express propositions which are processed as part of the discourse background of the proposition which is expressed in the associated main clause. Also, this chapter discusses other differences between central and peripheral adverbial clauses, including the impossibility of having an epistemic modal in central peripheral clauses. This chapter shows that constraints on the occurrences of such elements in central adverbial clauses follow from their adjunction position with the associated main clause. On the other hand, peripheral adverbial clauses may contain such elements given their high adjunction position with the associated main clause.

The third and fourth chapters of this thesis investigate the syntax of temporal adverbial clauses in NA. The third chapter focuses on the external syntax of such clauses. It provides evidence that NA exhibits a dichotomy of central vs. peripheral clauses in temporal adverbial clauses. The subordinators *gabлма* ‘before’ and *basлма* ‘after’ are exclusively used as subordinators in central adverbial clauses, as they modify the time of an event that is expressed in the main clause. On the other hand, the subordinator *yўm* ‘when’ can be used as a subordinator in both central adverbial clauses and peripheral adverbial clauses, depending crucially on its meaning. These facts will be backed by evidence coming from event vs. discourse, epistemic modality, and coordination, which all advocate for the view that central

adverbial clauses are adjoining to TP, whereas peripheral adverbial clauses adjoin to a higher position, namely CP.

The fourth chapter investigates the internal syntax of temporal adverbial clauses. It is divided into two parts. The first part will focus on the internal syntax of the peripheral temporal clauses which are introduced by *yūm* ‘when’. The main argument here is that there is a layer dedicated to topics and this layer is located under the Focus Phrase which is also available in such clauses. It argues that this topic layer is recursive, given that more than one topic can move there. This chapter also provides evidence that the structure of the left periphery in peripheral temporal clauses is somehow poorer than that of root clauses in that there is no upper Topic Phrase (the layer c-commanding the Focus Phrase), hence lending support to Bianchi & Frascarelli’s (2010) proposal that this topic layer is only projected in root clauses.

The second part of this chapter investigates the internal syntax of the central temporal adverbial clauses which are introduced by *gabлма* ‘before’ and *baɕdma* ‘after’. It focuses primarily on the observation that the VSO word order is the only available word order in this type of clauses. It first introduces the competing proposals advanced in the literature to account for a similar observation in other languages, most notably the operator proposal. It shows that this proposal is invalid in accounting for the word order facts of central temporal adverbial clauses in NA, given that it cannot account for adjunct fronting. Following Haegeman (2003), it argues that in the central temporal adverbial clauses which are introduced by *gabлма* ‘before’ and *baɕdma* ‘after’, the verb moves to the Finiteness Phrase. The verb is attracted by +V feature on  $\text{Fin}^\circ$ , the head of the Finiteness Phrase. The fact that there is no adjunct nor argument fronting is accounted for, suggesting that  $\text{Fin}^\circ$  does not have an EDGE feature; so, there is no movement whatsoever to its Spec. This chapter argues also that Topic Phase and Focus Phrase are not projected in the left periphery of NA central temporal adverbial clauses.

The fifth and sixth chapters of this thesis investigate conditional adverbial clauses in NA. The fifth chapter explores the external syntax of these clauses. It argues that *ɔiɕa*, *ɔin* and *ya/lya*, which are all translated into English as ‘if’, are exclusively used as subordinators in central conditional clauses, as they modify the time of an event expressed in the main clause. On the other hand, the subordinator *law* ‘if’ can be used as a subordinator in central and peripheral conditional clauses, depending on its meaning. This chapter provides several diagnostic tests that confirm that NA conditional adverbial clauses exhibit a dichotomy of peripheral vs.

central adverbial clauses. These tests include event vs. discourse, the scope of tense, the intended meaning of the conditional subordinator, epistemic modality, and coordination of likes. All these tests vindicate also the view that central conditional clauses adjoin to TP, whereas peripheral conditional clauses adjoin to CP.

The sixth chapter investigates the internal syntax of conditional adverbial clauses in NA. This chapter is divided into two main sections. The first section is devoted to the internal syntax of peripheral conditional clauses which are introduced by *law*. Here the focus is placed on the left periphery in these clauses. Following Bianchi & Frascarelli's (2010) proposal that the higher Topic layer is only projected in root clauses, this chapter argues that the left periphery of peripheral conditional clauses allows all projections except the higher Topic Phrase. For instance, it shows that the particle *binsbah* 'as for', which has been argued to be a marker for the higher topic phrase (Alshamari 2016), is not licensed in the left periphery of peripheral conditional clauses. This is evidence in favour of the lack of the higher Topic Phrase in peripheral conditional clauses. The second section of this chapter investigates the internal syntax of the central conditional clauses introduced by *ʔiða,ʔin ,ya/lya*, and central *law* 'if. It will be clear that the only word order available in this type of clauses is the VSO word order. This chapter introduces the competing proposals advanced in the literature to account for this observation, most notably the operator proposal. I show here that this proposal is again invalid in accounting for the word order facts of central conditional clauses of NA. Afterwards, I propose that the VSO word order being the only possible word order licensed in this type of clauses is accounted for assuming that the verb moves to Finiteness Phrase by [+V] feature on  $\text{Fin}^\circ$ , in the same way that is argued for with respect to central temporal clauses. Likewise,  $\text{Fin}^\circ$  does not have an EDGE feature, resulting in that no movement whatsoever is allowed to its Spec. Note also that Topic Phrase and Focus Phrase are argued not to project in the left periphery of NA central conditional clauses.



## **Chapter TWO: Peripheral vs. central adverbial clauses: An overview**

### **2.1 Introduction**

This chapter provides an overview of central vs. peripheral adverbial clauses as a background about the study of adverbial clauses. This chapter is divided into three parts. The first part introduces central/peripheral adverbial clauses. It introduces a general overview of central vs. peripheral adverbial clauses. The second part provides a sketch of the main diagnostics that are used to show the asymmetry between adverbial clauses and, hence, the distinction between central and peripheral adverbial clauses. The main argument here is that unlike peripheral adverbial clauses, central adverbial clauses are more syntactically integrated into the associated main clause. This integration makes central adverbial clauses local to their associated clauses and subject to the scope of (the operators of) the associated main clause. Accordingly, central adverbial clauses are proposed to merge with the matrix clause at an earlier point in the derivation than that of peripheral adverbial clauses. Central adverbial clauses are adjoined to TP/vP, while peripheral adverbial clauses are adjoined to CP. The third part of this chapter discusses two major approaches that have been advanced in the related literature to account for the discrepancies between central adverbial clauses and peripheral adverbial clauses with respect to argument/adjunct fronting or lack thereof: the so-called CP-truncation approach and the operator movement approach.

This chapter is organized as follows. Section 2.2 provides a general overview of adverbial clauses. Section 2.3 introduces a sketch of the main diagnostics that are used to argue for an asymmetry between adverbial clauses and, hence, the distinction between central and peripheral adverbial clauses. It shows that all these diagnostics advocate for the view that central adverbial clauses are adjoined to TP/vP, while peripheral adverbial clauses adjoin to CP. Section 2.4 discusses the two major approaches proposed to account for the discrepancies between central adverbial clauses and peripheral adverbial clauses with respect to argument/adjunct fronting or lack thereof. Section 2.4.1 discusses the truncation approach, whereas section 4.2.2 discusses the operator movement approach. Section 2.5 concludes the chapter.

## 2.2 A general overview

It is well-known that there exists a range of syntactic phenomena whose application is limited to root clauses as well as embedded clauses with root properties (Haegeman 2004b: 158). For instance, Emonds (1970), Maki *et al* (1999), and Heycock (2006), among many others, argue that English topicalization is one of these phenomena. Such phenomena were termed under the title ‘root phenomena’ (Emonds 1970, 2000) or ‘Main clause phenomena’ (MCP, henceforth) (cf. Hooper and Thompson 1973). In a pioneering work, Haegeman (2002, 2003, 2004, 2009, and 2010) argues extensively that these phenomena also exist in adverbial clauses. She proposes that the MCP are not available in the so-called central adverbial clauses, while they are available in the so-called peripheral adverbial clauses.

To illustrate, Haegeman (2002, 2003, 2004, 2009, and 2010) hypothesises that adverbial clauses are different with respect to their syntactic integration into the associated main clause (i.e. main clause). This difference affects the external syntax of adverbial clauses in that those adverbial clauses with much syntactic integration into the main clause are argued to be merged with the matrix clause at an earlier point in the derivation than those with less syntactic integration with the associated main clause (Haegeman 2004a: 71). Haegeman termed the former type of adverbial clauses which are more integrated with the associated main clause as ‘Central Adverbial Clauses’, whilst the latter with a less syntactic integration with the associated main clause as ‘Peripheral Adverbial Clauses’. Accordingly, central adverbial clauses and peripheral adverbial clauses are different with respect to their (semantic) interpretation as well as their relationship with the event being expressed in the matrix clause. For Haegeman (2004a) and depending on English data, the main semantic function of central adverbial clauses is to structure the event being expressed in the associated main clause. On the other hand, the main function of peripheral adverbial clauses is rather to structure the discourse. Peripheral adverbial clauses express propositions which are processed as part of the discourse background about the proposition which is expressed in the associated main clause. In order to appreciate this point, consider the following examples in (1a) and (1b) (both adapted from Haegeman 2004a: 62):

- (1) a. According to Smith, a group of Arkansas state troopers who worked for Clinton while he was a governor wanted to go public with tales of Clinton’s womanising.  
(event time: ‘during the time that’)



b. While [Dr Williams'] support for women priests and gay partnerships might label him as liberal, this would be a misleading way of depicting his uncompromisingly orthodox espousal of Christian belief. (background assumption: 'whereas',)

In (1a), the adverbial clause introduced by *while* provides a temporal specification of the event, whereas in the example in (1b) the adverbial clause introduced by *while* provides a background-information proposition which will yield contextual implications when it is combined with the proposition of the associated main clause. In order to confirm this dichotomy of the central adverbial clauses and peripheral adverbial clauses, especially with respect to the degree of their syntactic integration into the associated main clause, many diagnostics have been provided in the literature, including argument fronting, coordination of likes, scope phenomena, and parasitic gaps.

I provide a discussion of these diagnostics in the following subsection.

### **2.3 Diagnostics of peripheral vs. central adverbial clauses**

This section provides a sketch of the main diagnostics that are used to show the asymmetry between adverbial clauses and, hence, the underlying distinction between central and peripheral adverbial clauses.

#### *2.3.1 Argument fronting*

Haegeman (2002, 2003, 2004, 2009, and 2010) builds her argument about the existence of a dichotomy of central clauses and peripheral clauses within adverbial clauses on a set of diagnostics. She first observes that argument fronting is not possible in all adverbial clauses. While argument fronting is available in root clauses and peripheral adverbial clauses, it is prohibited in central adverbial clauses. Consider the contrast between sentences in (2) which include central adverbial clauses and sentences in (3) which include peripheral adverbial clauses (Haegeman 2004b: 159-160) (the fronted topic in sentences (2-3) is underlined.):

(2) a. \*If these exams you don't pass you won't get the degree.

b.\*When her regular column she began to write for the Times, I thought she would be OK.

- (3) a. If these problems we cannot solve, there are many others that we can tackle immediately.
- b. His face not many admired, while his character still fewer felt they could praise. (Haegeman 2004b:160, citing in Quirck et al 1985: 1378).

Notice here that adverbial clauses that provide a temporal specification of the event (i.e. central adverbial clauses) do not allow fronting as shown in (2a, b), whereas the ones that provide background-information presuppositions (i.e. peripheral adverbial clauses) do. Fronting is thus a diagnostic test of the existence of a dichotomy of central clauses and peripheral clauses; peripheral adverbial clauses allow it, whilst central adverbial clauses disallow it. In (2), *these exams* and *her regular column* are both topicalized in central adverbial clauses, hence the ungrammaticality of the respective examples. On the other hand, topicalization does cause sentence ungrammaticality when it occurs inside peripheral adverbial clauses as clearly shown in sentences (3) where *these problems* and *his character* are topicalized.

This contrast is also attested in some other languages which are not related to English, including, e.g., Japanese (Heycock 2002) and Bulgarian (Krapova 2002). In Japanese, for example, *wa-topicalization* is disallowed in the central conditional adverbial clauses (Maki *et al.* 1999). To the contrary, it is licit in the peripheral conditional adverbial clauses. Consider the following examples (taken from Haegeman 2004b: 162):

- (4) a. \*Mosi        sono    yoona    zassi-wa,                    (anata-ga)  
           if            that    like     magazine-top                you-NOM  
           yome-ba,                                    anata-wa    yasai-ga        skuini    narimasu  
           read(conditional)-if                    you-top        vegetable     like        become  
           ‘If these magazines, you read, you will come to like vegetables’

- b. Mosi            sono    yona    zassi-wa                    (anata-ga)  
       if                that    like    magazine-top                you-NOM  
 sukide-nai (CONCLUSIVE)-naraba,            naze    (anata-wa)  
 like-NEG-if                                        why    you-top  
 (sorera-o)        kai-tuzukerunodesu ka?  
 (them-ACC)    buy-continue,Q  
 ‘If such magazines, you don’t like, why do you keep buying them?’

With this in mind, it can be suggested that central adverbial clauses and peripheral adverbial clauses are also different with regard to their internal syntax. Haegeman (2003) illustrates that such a difference of the internal syntax of central adverbial clauses and peripheral adverbial clauses can also be corroborated by a series of certain diagnostics (in addition to argument fronting), including speaker-oriented epistemic modals as well as illocutionary Force. Let us sketch these two differences in the following section.

### 2.3.2 *The speaker-oriented epistemic modals*

Central adverbial clauses are different from peripheral adverbial clauses in that they (i.e. the latter) may contain expressions of epistemic modality which are in principle speaker-related. Epistemic modality expresses the speaker's evaluation of the likelihood of event as shown in (5b). However, such expressions are blocked to occur in central adverbial clauses as clearly shown in (5a). (Haegeman 2004a: 73)

- (5) a. \*Mary accepted the invitation without hesitation after John may have accepted it.  
       b. The ferry will be fairly cheap, while/whereas the plane may/will probably be too expensive.

The ban against the use of an epistemic expression in central adverbial clauses is accounted for, assuming that such clauses are much integrated into their associated main clause, and hence they do not have an independent speaker-oriented stand that might be different from that of the associated main clauses.

### 2.3.3 *Illocutionary force*

Following Declerck and Reed (2001), Haegeman (2002 and 2003) shows that peripheral adverbial clauses have independent illocutionary force, whereas central adverbial clauses do

not have independent illocutionary force being integrated into the speech act that is conveyed by the associated main clause. One piece of evidence in favour of the availability of illocutionary force of the peripheral adverbial clauses but its absence in the central adverbial clauses comes mainly from the observation that the latter clauses may not have their own question tags (whose presence is evidence of independent illocutionary force) associated with them (Haegeman 2004a: 73). See the contrast in (6):

(6) a. Mary went back to college after/before her children had finished school, didn't she?

b. \*Mary went back to college after/before her children had finished school, hadn't they?

In (6a) the question tag *didn't she* is related to the matrix clause, whereas the question tag *hadn't they* in (6b), which would be related to the central adverbial clause, *after/before her children had finished school*, is not possible, whence the ungrammaticality of sentence (6b). On the other hand, the contrastive *while* clause (a type of peripheral adverbial clauses) may have its own tag. Consider the examples in (7): (Haegeman 2004a:74).

(7) a. Bill took a degree at Oxford, didn't he, while his daughter is studying at UCL.

b. Bill took a degree at Oxford, while his daughter is studying at UCL, isn't she?

The fact that peripheral adverbial clauses have their own question tags lends support to the assumption that such type of clauses have independent illocutionary force of their own, something that makes them independent clauses.

#### 2.3.4 Co-ordination of likes

Further evidence for the distinction between central adverbial clauses and peripheral adverbial clauses comes from what is known as coordination of likes. Haegeman (2012) shows that coordination between central *while* clauses and peripheral *while* clauses is unacceptable in English. Consider the following illustrative sentences, taken from Haegeman (2012: 165):

(8) a. **While**<sub>2</sub> [the lawsuit challenging the legitimacy of lethal injection] probably won't stop the use of lethal injection altogether, it will certainly delay its use **while**<sub>1</sub> the Supreme Court decides what to do. (Guardian, G2, December 12, 2003: 4, col. 4).

b. \* **While**<sub>2</sub> [the lawsuit challenging the legitimacy of lethal injection] probably won't stop the use of lethal injection altogether and **while**<sub>1</sub> the Supreme Court decides what to do, it will certainly delay its use.

c. \* The lawsuit challenging the legitimacy of lethal injection will certainly delay its use **while**<sub>1</sub> the Supreme Court decides what to do and **while**<sub>2</sub> it probably won't stop the use of lethal injection altogether.

Haegeman shows that the sentences in (8) contain each two *while* clauses, one central and one peripheral. Note here that even though the two *while* clauses are associated with the same clause, the conjunction of the two *while* clauses is unacceptable. For her, this follows from the fact the two clauses are different with respect to their structural position relative to the associated main clause, leading to the situation that the two *while* clauses cannot be coordinated. Central adverbial clauses adjoin to TP/VP of the main clause, whereas peripheral adverbial clauses adjoin to the CP of the main clause.

This proposal is also supported by what is called *scope phenomena*, the topic of the following section.

### 2.3.5 *Scope phenomena*

Haegeman (2004) shows that scopal properties can distinguish between central adverbial clauses and peripheral adverbial clauses. The main argument here is that central adverbial clauses can be interpreted (i.e. fall) within the scope of the operators of the associated main clause. By contrast, peripheral adverbial clauses are shown to be located outside the scope of the operators of the associated main clause. This scopal difference can be attested in a number of different ways, including: temporal subordination, adjunct scope, negation, and focus. Let's begin with the temporal subordination.

#### 2.3.5.1 *Temporal subordination*

In order to explain how temporal subordination is related to the scope phenomena, Haegeman (2004b) makes recourse to the so-called 'contrastive-*while* clauses', one manifestation of peripheral adverbial clauses. She explains that contrastive *while* is semantically close to a coordinating conjunction because this *while* can be replaced with *but* or with *and*, as demonstrated in the following data: (Haegeman 2004a: 64).

- (9) a. John does a Ph.D in Oxford while he did his first degree in Cambridge.  
 b. John does a Ph.D in Oxford and/but he did his first degree in Cambridge.
- (10) a. John reads the Guardian while Mary reads the Times.  
 b. John reads the Guardian and/ but Mary reads the Times.

On the other hand, contrastive *while* clauses, Haegeman (2004b: 65) adds, do not share all of the properties of coordinated clauses. For instance, ellipsis of the subject of the second coordinated clause is possible in coordinated clauses, whereas it is prohibited in the adverbial clauses, introduced by contrastive *while*. In other words, the subject cannot be ellipied in the adverbial clauses introduced by the contrastive *while*, which is an instance of a peripheral adverbial clause. The following examples (taken from Haegeman 2004a: 65) show this fact.

- (11) a. John does a Ph.D. in Oxford but did his first degree in Cambridge.  
 b. \*John does a Ph.D. in Oxford while did his first degree in Cambridge.

Haegeman takes the ungrammaticality of example (11b) as evidence for the claim that the subject of the adverbial clause introduced by contrastive *while* is outside the scope of the operators of the associated main clause.

On the other hand, what corroborates the idea that central adverbial clauses are located within the scope of the operators of the associated main clause while peripheral adverbial clauses are not is the obvious observation that tense in central adverbial clauses are interpreted depending on the tense reading of the matrix clause. Consider the following example in (12) in which case the tense in central adverbial clauses is interpreted with a future reading as it is within the scope of a matrix future time expression. (Haegeman 2004a: 62)

- (12) If your back-supporting muscles tire, you will be at increased risk of lower-back pain

On the other hand, peripheral adverbial clauses are not temporally subordinated, i.e. they have their own independent tense interpretation (Haegeman 2012: 166). For instance, the future time expression (*should*) in the matrix clause does not affect the interpretation of that of the peripheral conditional clause which has a present tense form (*is*), as shown in the following sentence (Haegeman 2012: 166)

- (13) If Tony Blair is worried about public confidence already, in this bright weather, he should think about what it's going to be like when we are huddled into the December winds.

In view of this, it can be concluded that unlike central adverbial clauses, peripheral adverbial clauses exhibit a temporal expression that is independent of that of the associated main clause.

Another scope-related aspect that is used to distinguish between central adverbial clauses and peripheral adverbial clauses is the so-called adjunct scope. I discuss this phenomenon in the next subsection.

#### 2.3.5.2 *Adjunct scope*

The adverbial operators of the associated main clause may have scope over central adverbial clauses. By contrast, they do not maintain this scope over peripheral adverbial clauses. Consider the following examples taken from Haegeman (2004b: 66)

- (14) a. I always get home before the programme starts.  
b. While Mary always drives to school, John often goes by bike.

In sentence (14a), the adverb *always* has a scope over the central adverbial clause '*before the programme starts*', but the frequency adjunct *often* in (14b) does not scope over the peripheral adverbial clause '*While Mary always drives to school*'. That is because the latter has its own independent adverb of frequency, i.e. *always*:

Another scope-related aspect that is utilized to draw a line between central adverbial clauses and peripheral adverbial clauses is negation. I discuss this phenomenon in the next subsection.

### 2.3.5.3 Negation

Haegeman (2004) shows that the matrix clause negation has scope over central adverbial clauses but not over peripheral adverbial clauses which are shown not to fall within the scope of a negative operator of an associated main clause. The following examples illustrate this point (Haegeman 2004a: 66):

- (15)
- a. He doesn't drink while he is driving.
  - b. He never drinks while he is driving.
  - c. My husband doesn't smoke cigarettes, while he does occasionally smoke a cigar.

In sentences (15a-b), the negation can be said to range over the whole complex event: '*he does not drink-drive*', while in (15c) the two propositions (that of the matrix clause and that of the peripheral adverbial clause) are interpreted in parallel. This entails that only one of them is negated (see, Haegeman 2004a for further discussion).

Focus scope is also used to distinguish between central adverbial clauses and peripheral adverbial clauses. Focus scope will be discussed in the next subsection.

### 2.3.5.4 Focus scope

A focus operator in the matrix clause may range over a central adverbial clause, as sentence (16a) shows. In contrast, a focus operator in the matrix clause does not range over a peripheral adverbial clause as (16b) illustrates (the two examples are taken from Haegeman 2004a: 68)

- (16)
- a. It is after I left that I realised he was my former teacher.
  - b. \*It is while my mother was a housewife that my father used to work in a brickyard.

In (16a), clefting, one manifestation of focus, is grammatical in the sentence containing a central adverbial clause, while it is ungrammatical in the sentence that involves a peripheral adverbial clause which is argued to be located outside the scope of the focus operator of the matrix clause.



Haegeman (2002, 2003, 2004a, b) argues also that a difference between central adverbial clauses and peripheral adverbial clauses can be supplied with reference to the so-called parasitic gaps. I explore this evidence in the following section.

### 2.3.6 *Parasitic gaps*

Haegeman (2004) argues that parasitic gaps provide ancillary evidence that supports that central adverbial clauses and peripheral adverbial clauses are different with respect to their integration into the associated main clause. Central adverbial clauses allow for parasitic gaps which are bound by an operator that is located in the associated main clause. On the other hand, such gaps are unacceptable in the peripheral adverbial clauses, because their existence makes the grammaticality of the respective sentence degraded. Consider the following sentences (Haegeman 2004a: 70) ( $\emptyset$  refers to the gap).

(17) He is a man who if you know [ $\emptyset$ ] you will love [ $\emptyset$ ]

(18) a. This is the paper which I memorised [ $\emptyset$ ] while I was copying [ $\emptyset$ ].

b. #This is the paper which I myself enjoyed [ $\emptyset$ ] very much, while/whereas you will probably dislike [ $\emptyset$ ].

If the parasitic gap phenomenon relies on a kind of the semantic composition between the adverbial clause with the parasitic gap and the matrix clause with the operator and the 'real gap', it is plausible to suggest that this complex predicate formation is subject to the constraints of locality. The syntactic independence of peripheral adverbial clauses speaks for the assumption that they lack the required local relation with the associated main clause. This leads the formation of a complex predicate to be impossible (Haegeman 2004a: 70).

### 2.3.7 *Conclusion*

This section has given a general overview of central vs. peripheral adverbial clauses. It has first provided a sketch of the main diagnostics, used to argue for an asymmetry between adverbial clauses and, hence, the distinction between central and peripheral adverbial clauses. Unlike peripheral adverbial clauses, central adverbial clauses are much syntactically integrated into the associated main clause. This integration makes central adverbial clauses local and subject to the scope of (the operators of) the associated main clause. Accordingly, the central adverbial clauses are proposed to merge with the matrix clause at an earlier point

in the derivation than that of peripheral adverbial clauses. Central adverbial clauses are adjoined to TP/vP, while peripheral adverbial clauses are adjoined to CP.

## 2.4 The syntactic analysis of the internal syntax of central adverbial clauses

In this section, I discuss the two major approaches that have been advanced in the related literature to account for the discrepancies between central adverbial clauses and peripheral adverbial clauses with respect to argument/adjunct fronting or lack thereof. I first discuss the so-called CP-truncation approach, then I discuss the operator movement approach.

### 2.4.1 The CP-truncation approach

Under this proposal, the reason why no fronting is permitted in central adverbial clauses is that fronting, e.g., topicalization, is related to the assertive illocutionary force, encoded by the functional head Force in the left periphery (Haegeman 2002).

Rizzi (1997) argues convincingly that what had been known as CP has a richer articulated structure. Consider the following figure (Rizzi 1997) that shows the richly articulated structure within the CP, the domain known as the left periphery:

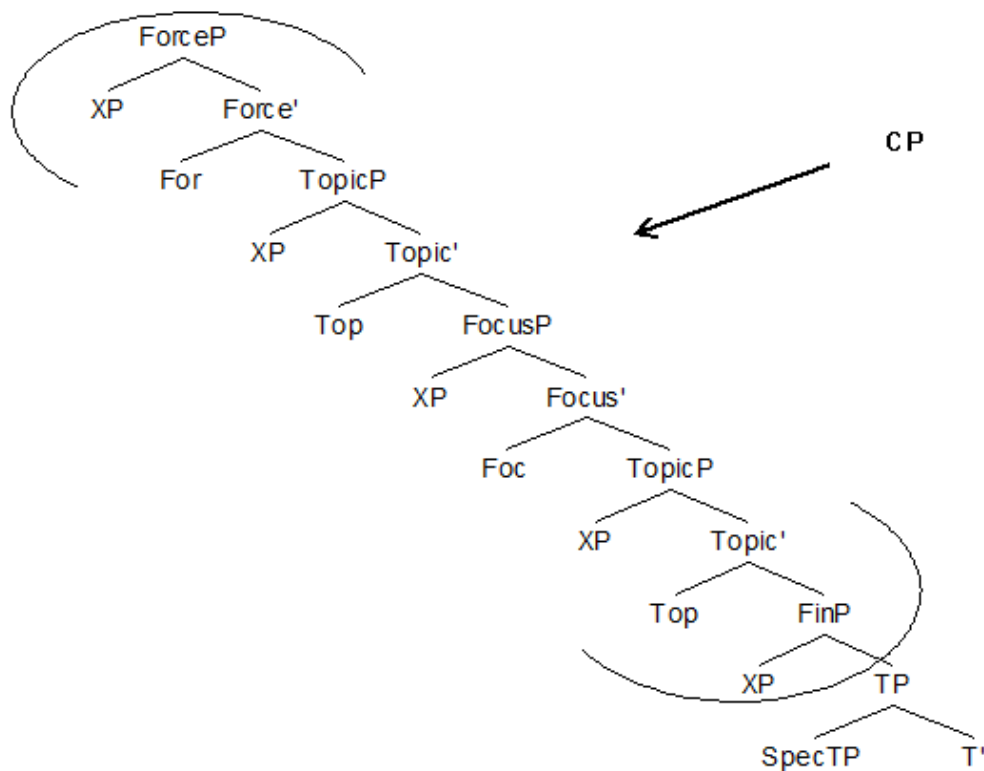


Figure 1: CP's richly articulated inner structure

As is indicated in Figure (1): the highest projection of the articulated CP is the Force Phrase, while the lowest one is labelled as Fin(iteness) Phrase. Between these two syntactic layers lie the Focus Phrase where contrastive information moves to and the Topics Phrase where old, given information moves to.

For Haegeman, in the central adverbial clauses, there is no assertive illocutionary force. Such clauses are thus structurally deficient in the sense that their left periphery is reduced. They lack the functional projection 'Force' which encodes assertive illocutionary force. Due to this deficiency, Topic Phrase and Focus Phrase being dependent on Force Phrase to license are not projected in central adverbial clauses. As a result, argument fronting is ungrammatical (Haegeman 2004b: 188). In other words, a constituent that is affected by a root transformation such as topicalization and focalization is moved to a particular domain within the peripheral part of a clause (i.e. CP layer). A clause without such projections (e.g., central adverbial clauses) cannot offer a landing site for a preposed constituent, and hence, blocks the relevant transformation (see, Haegeman 2003, 2006, Munaro 2005, Bocci 2007, Julien 2007, and Nasu 2014, among many others).

This approach crucially suggests that there is an apparent distinction between the head which encodes illocutionary force (i.e., Force Phrase) and the head which serves simply to subordinate a clause (i.e., to make it available for categorial selection independently of its force) (Haegeman 2003: 335). The Force Phrase (in the sense of Rizzi 1997) is split here into two different projections: Sub (a place where the subordinator is positioned) and Force (encoding the illocutionary force of the clause). In central adverbial clauses, only Sub is available, while Force Phrase and other projections that depend on it to project (i.e., Topic Phrase and Focus Phrase) are truncated, a matter that prevents argument fronting.

On the other hand, in peripheral adverbial clauses all projections of the left periphery (i.e., Sub, Force Phrase, Topic Phrase, and Focus Phrase) are available for argument fronting. This availability results in that no restrictions are placed on argument and/or adjunct fronting. In such clauses, the CP-truncation is prohibited because peripheral adverbial clauses, like root clauses, have their own assertive illocutionary force. Table 4 summarizes this discussion (adapted from Haegeman 2003: 335).

Table 4: The left periphery of clauses

Clause Type	Projections available
Central adverbial	Sub>Fin
Peripheral adverbial	Sub>Force>Top>Focus>Top>Fin
Root clauses	Force>Top>Focus>Top>Fin

On the basis of Table 4, it can be generalized that central adverbial clauses, peripheral adverbial clauses, and root clauses differ with regard to projections allowed in their left periphery.

On the other hand, the CP-truncation approach to central adverbial clauses has received criticism as it fails to account for some phenomena. I take up this criticism in the next subsection.

#### 2.4.2 *Problems with the truncation approach*

The first problem that has faced the plausibility of the CP-truncation is the fact that adjuncts are allowed to be fronted in English adverbial clauses, as demonstrated in the following sentence: (Haegeman 2010: 632).

- (19) If on Monday we haven't found him, we will call the RSPCA.

The adverbial *on Monday* appears in a pre-subject position which is proposed to be in the CP area. This being the case, adjuncts are allowed to appear in the left periphery, implying that there is a CP-related phrase projected where fronted adjuncts should be adjoined to. Pursuing the CP-truncation approach, the sentence in (19) would be ungrammatical, contrary to fact.

Additionally, the fact that elements are fronted within central adverbial clauses is also attested from the so-called Clitic Left Dislocation (henceforth, CLLD; cf. Cinque 1990) constructions in Romance languages. In these languages, even arguments can be left-dislocated provided that they are co-referenced with a clitic inside the clause. Consider the following examples taken from Haegeman (2010: 632)<sup>12</sup>.

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<sup>12</sup> Glosses in (20a, b) have been amended to be consistent with the glosses followed in this thesis.

(20) a. Se gli esami finali non **li** superi non otterrai li diploma  
 If DEF exam final NEG them pass-2S NEG obtain DEF degree  
 ‘If you don’t pass the final exam, you won’t get the degree.’ (Italian)

b. Si ce livre-là tu **le** trouves à la Fnac achète-le  
 If this book-there you it find-2SG at DEF FNAC buy-1PM  
 ‘If you find this book at FNAC, buy it.’ (French)

In examples (20), the direct object is fronted, leaving behind a clitic which I put in boldface. Note here the two sentences in (20) are central adverbial clauses, as mentioned in Haegeman (2010). The CP-truncation analysis leaves us with no opportunity but consider the examples in (20) as ungrammatical, which is clearly not the case. The examples in (20) imply that Topic Phrase is projected in the left periphery of central adverbial clauses, contrary to what would be expected under the CP-truncation analysis. These facts have cast doubt on the plausibility of the CP-truncation analysis, paving the way, at the same time, for the so-called the operator movement approach, which I discuss in the following subsection.

#### 2.4.3 *The operator-movement approach*

Under this approach, a subordinate clause that resists a root transformation (such as central adverbial clauses) should witness a movement of an operator to its CP domain. This operator is blocked by a fronted argument (see, Haegeman 2007, 2010, and Haegeman & Ürögdi 2010). Following this approach, a central adverbial clause is derived through the movement of an operator to a clause-initial position. As a result, a topicalized argument which lands in the peripheral CP position intervenes between the base position and the surface position of the moving operator, giving rise to an intervention effect (Haegeman 2010). Consider the following sentence (taken from Haegeman 2010: 635) and its schematic representation

- (21) a. \*John left when the office Sheila left.  
 b. \*John left [CP when<sub>i</sub> the office<sub>j</sub> [IP Sheila left t<sub>j</sub> t<sub>i</sub>]]

On the other hand, adjuncts place no restrictions on the movement of the temporal operator. Consider the example below (Haegeman 2011: 597).

- (22) When last year she started to write this column, I thought she would be fine.

Haegeman (2010:597) argues that ‘the argument-adjunct asymmetry follows from the movement analysis<sup>13</sup>, because it is independently known that operator movement may cross a circumstantial adjunct but may not cross an argument in the left periphery’. Consider the following examples which illustrate this asymmetry in relative clauses (Haegeman 2010: 597).

- (23) a. These are the students who in the next semester will study these texts.  
b. \*These are the students who these texts will study in the next semester.

The main advantage of this approach over the truncation approach is that the latter cannot account for the adjunct fronting in central adverbial clauses. The CP-truncation approach predicts that the left periphery of central adverbial clauses is truncated. So, there is no conceivable way of accounting for how the adjunct fronting within the given central adverbial clauses both in English and in some other languages.

#### 2.3.4 Summary

This section discusses the two major approaches that have been advanced in the related literature to account for the discrepancies between central adverbial clauses and peripheral adverbial clauses with respect to argument/adjunct fronting or lack thereof. It introduced the so-called CP-truncation approach, showing afterward how it fails to account for some phenomena. Then this section discussed the operator movement approach and how it accounts for these phenomena.

## 2.5 Conclusion

This chapter has provided a general overview of central vs. peripheral adverbial clauses. It has been divided into two parts. The first part has provided a sketch of the main diagnostics that are used to argue for an asymmetry between adverbial clauses and, hence, the distinction between central and peripheral adverbial clauses. Unlike peripheral adverbial clauses, central adverbial clauses are much integrated with the associated main clause. This integration makes central adverbial clauses local and subject to the scope of (the operators of) the associated main clause. Accordingly, central adverbial clauses are proposed to merge with the matrix clause at an earlier point in the derivation than that of peripheral adverbial clauses. Central

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<sup>13</sup> On the other hand, Cinque (1990) points out that the argument-adjunct asymmetry follows from the assumption that adjuncts are merged in the left periphery. For more details, see also Haegeman (2003a).

adverbial clauses are adjoined to TP/vP, while peripheral adverbial clauses are adjoined to CP. The second part of this chapter has discussed the two major approaches that have been advanced in the related literature to account for the discrepancies between central adverbial clauses and peripheral adverbial clauses with respect to argument/adjunct fronting or lack thereof. It introduced the so-called CP-truncation approach, showing afterward how it fails to account for some phenomena. Then this section has discussed the operator movement approach and how it accounts for these phenomena.

The following chapters (chapter 3 & 4) will investigate the syntax of temporal adverbial clauses in NA. Chapter 3 will be particularly devoted to the external syntax of temporal adverbial clauses in NA, while chapter 4 will explore the internal syntax of such clauses.





## Chapter THREE: The external syntax of temporal adverbial clauses in NA

### 3.1 Introduction

This chapter investigates the external syntax of NA temporal adverbial clauses. It essentially provides evidence to the effect that NA exhibits a dichotomy of central vs. peripheral clauses in temporal adverbials. It argues that the subordinators *gabлма* ‘before’ and *baɫdma* ‘after’ are exclusively used as subordinators of central temporal clauses. That is because temporal clauses introduced by these two subordinators modify the time of an event expressed in the main clause. On the other hand, the subordinator *yūm* ‘when’ can be used as a subordinator of both central temporal clauses and peripheral temporal clauses, depending mainly on its meaning and the tense of the verb within the adverbial clause. These observations will be backed by empirical evidence that comes from event vs. discourse, epistemic modality, and coordination, which all together advocate for the view that central adverbial clauses adjoin to TP, whereas peripheral adverbial clauses adjoin to CP.

This chapter is structured as follows. Section 3.2 introduces some diagnostic tests which show that a dichotomy of central vs. peripheral adverbial clauses does exist in NA temporal adverbial clauses. This section in turn is divided into three subsections. Section 3.2.1 argues that temporal adverbial clauses introduced by *gabлма* ‘before’ and *baɫdma* ‘after’ are central as such clauses structure the event expressed in the main clause. On the other hand, this section shows temporal adverbial clauses introduced by *yūm* can be central (i.e. structuring the event) or peripheral (i.e. structuring the discourse), depending on the meaning of the particle *yūm*. Section 3.2.2 discusses how epistemic modality can be used as evidence to bolster this point. It shows that temporal adverbial clauses introduced by *gabлма* ‘before’ and *baɫdma* ‘after’ (i.e. central temporal adverbial clauses) are incompatible with epistemic expressions. On the other hand, epistemic expressions can be used in temporal adverbial clauses introduced by *yūm* (meaning *when*). Section 3.2.3 discusses how coordination is impossible between temporal adverbial clauses introduced by *gabлма* ‘before’ and *baɫdma* ‘after’ and those introduced by *yūm* (meaning *when*). This restriction on coordination comes from the fact that these clauses are different; the former is central, whereas the latter is peripheral. Section 3.3 includes the conclusion of the whole.

### 3.2 Diagnostics of peripheral vs. central temporal clauses

In this section, I provide some diagnostics that are used in the related literature to argue for an asymmetry between temporal clauses and, hence, the distinction between central and peripheral temporal clauses. These diagnostics include event vs. discourse readings, epistemic modality, and coordination.

#### 3.2.1 *Event vs. discourse*

First, temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baɫdma* ‘after’ have the function of structuring the event that is expressed in the associated main clause. Consider the following sentence, as an example:

- (1) Fahd                      fahm                                      ad-dars                      gabлма  
       Fahd                      understand.3SM.PAST                      DEF-lesson                      before  
       yšrah-uh                                      al-mudarris  
       explain.3SM.PRES-it                      DEF-teacher  
       ‘Fahd had understood the lesson before the teacher explained it.’

The temporal adverbial clause introduced by the subordinator *gabлма* ‘before’ structures the event that is expressed in the matrix clause. The subordinator *gabлма* indicates that the event of the associated main clause happens prior to the event of the temporal adverbial clause. This temporal entailment is dependent on the lexical meaning of the temporal subordinator *gabлма* ‘before’. Using the temporal subordinator *gabлма* ‘before’, the speaker structures the two sub-events chronologically.

The same logic carries over to the subordinator *baɫdma* ‘after’ which exhibits the same structuring role except for the fact that it entails the reverse chronological order between the sub-events of the entire sentence. Consider the following sentence which includes the subordinator *baɫdma* ‘after’:

- (2) baɫdma                      šrah                                      al-mudarris                      ad-dars  
       after                      explain.3SM.PAST                      DEF-teacher                      DEF-lesson  
       fham-uh                                      Fahd  
       understand.3SM.PAST-it                      Fahd  
       ‘After the teacher had explained the lesson, Fahd understood it.’

In sentence (2), the speaker states that Fahd understood the lesson after it had been explained by the teacher. It is obvious that the event of the temporal adverbial clause occurs before the event of the main clause. The ordering role these two temporal subordinators maintain with respect to the main clause is used to structure the sub-events of the entire clause. This can be diagrammed as follows (>>>>>= preceding; <<<<<= following):

(3)

- [*gabлма* ‘before’]: Event of matrix clause >>>>>Event of temporal adverbial clauses
- [*baғdma* ‘after’]: Event of matrix clause <<<<<<Event of temporal adverbial clauses

With the use of the subordinators *gabлма* ‘before’ and *baғdma* ‘after’, it is evident that there are specific tense-concord restrictions that should be considered between the tense of the matrix clause and the tense of the modifying clause (which is here the adverbial clause). Note also that there is no other function associated with the subordinators *gabлма* ‘before’ and *baғdma* ‘after’ in NA. This implies that the NA the subordinators *gabлма* ‘before’ and *baғdma* ‘after’ are similar to their English counterparts (‘before’ and ‘after’, respectively) in that such temporal conjunctions have only a temporal function. In relation to this point, Haegeman (2012: 160) argues that temporal conjunctions ‘before’ and ‘after’ are temporal subordinators which only introduce central adverbial clauses, given that they have no additional non-temporal reading but only specifying the eventuality which is introduced by the proposition of the main clause (see, Frey 2012 for a similar discussion on German).

On the other hand, this structuring role is not exhibited with respect to peripheral temporal adverbial clauses which are introduced by the subordinator *yūm* (meaning *when*). I argue that the event of the adverbial temporal clause that is introduced by the subordinator *yūm* ‘when’ is intended to structure the discourse. To illustrate, using this temporal subordinator, the speaker provides some background information that is related to the event introduced in the matrix clause. This background information depends on the situational context, i.e. the discourse of the event of the matrix clause. In order to substantiate this point, consider the following sentence:

(4) <i>yūm</i>	<i>tidigg</i>	<i>ʕla-i</i>	<i>ʔams</i>
when	ring.3SM.PRES	on-me	yesterday
<i>kint</i>	<i>mušgūl</i>		
was.1SM	busy		

‘When you rang me yesterday, I was busy.’

The speaker introduces some discourse-related information about the reason why s/he did not answer her/his mobile (i.e. s/he was busy so s/he could not answer her/his mobile) by virtue of the use of the temporal subordinator *yūm* ‘when’.

It should be noted here that the same subordinator *yūm* can be used to introduce a temporal specification of the event in the main clause (i.e. it can be used to introduce central temporal adverbial clauses). The tense of the verb within the adverbial clause plays an important role in the centrality vs. peripherality of adverbial clauses in NA. First, it determines the meaning of the particle *yūm* (after/when). Second, it determines the type of the adverbial clause (central/peripheral). In other words, if the adverbial clause has a past tense verb, the particle *yūm* means ‘after’, and the temporal adverbial clause is central. On the other hand, if the verb of the adverbial clause is in the present tense, the particle *yūm* should be used in the meaning of ‘when’, and it is peripheral. Consider the following illustrative example in which the subordinator *yūm* is used in the sense of ‘after’.

(5)	<i>yūm</i>	<i>šarah</i>	<i>al-mudarris</i>	<i>ad-dars</i>
	after	explain.3SM.PAST	DEF-teacher	DEF-lesson
	<i>fahim-n-ah</i>			
	understand.PAST-1MP-it			

‘After the teacher had explained the lesson, we understood it.’

The use of the subordinator *yūm* in (5) has a temporal reading rather than a distinct, discourse-related, interpretation. This is because past verbs like *šarah* ‘explain’ are only compatible with central temporal clauses. The sentence in (5) is read as that the event of the adverbial clause occurs before the event of the main clause. Here the teacher explained the lesson and then we understood it. The subordinator *yūm* in (5) modifies the event of the matrix clause and, thus, places an eventuality in that the event of the matrix clause follows the event of the adverbial clause. This use of the subordinator *yūm* (meaning ‘after’) cannot be replaced by the

adverbial subordinator *yūm* (meaning ‘when’). For instance, if the subordinator *yūm* (meaning ‘after’) is replaced with the subordinator *yūm* (meaning ‘when’) as in (6) below, the resulting sentence would become ungrammatical<sup>14</sup>:

- (6) \**yūm*      *yšarah*                                      *al-mudarris*                                      *ad-dars*  
           when    explain.PRES.3SM    DEF-teacher                                      DEF-lesson  
           *fahim-n-ah*  
           understand.PAST-1PM-it  
           Intended: ‘When the teacher explained the lesson, we understood it.’

A point worthy of note here is that the use of one subordinator to introduce central adverbial clauses and peripheral adverbial clauses at the same time is attested in several languages. For instance, Haegeman (2006, 2012) shows that the lexical item *while* in English can be used as a central adverbial clause conjunction and as a peripheral adverbial clause subordinator, relying mainly on its meaning. Consider the following sentence (Haegeman 2012: 165):

- (7) **While** the lawsuit [challenging the legitimacy of lethal injection, lh] probably won’t stop the use of lethal injection altogether, it will certainly delay its use **while** the Supreme Court decides what to do. ( *Guardian* , G2, December 12, 2003: 4, col. 4)

The sentence in (7) contains two *while* clauses: (i) a peripheral *while* clause, which highlights a proposition that provides information background for the associated main clause; and (ii) a central *while* clause, which expresses a temporal modification for the associated main clause.

Likewise, Antomo (2009) discusses the duality of interpretations of the German conjunction *weil* ‘because’. Consider the following sentences which are cited in Haegeman (2012: 178):

- (8) a. *Es*            *hat*            *einen Unfall gegeben*    ***weil***            *der Airbag aufgegangen*    *ist*  
           there    have-3S    an accident    give-part    because    DEF airbag deploy-part    be-3S  
           ‘An accident has happened because the airbag has opened.’

<sup>14</sup> The ungrammatical sentence in (6) can be attributed to the mismatch between the tense of the verb within the adverbial clause, on the one hand, and the relationship between the main clause and the adverbial clause, on the other hand. Present tense is only compatible with peripheral adverbial clauses (i.e. discourse-related interpretation) which is not the case in (6). As the main focus of this thesis is to investigate the left periphery in adverbial clauses, the issue of the tense of the verb within adverbial clauses and its effect on the centrality/peripherality of adverbial clauses will be explored in future research.

- b. Es hat einen Unfall gegeben weil der Airbag ist aufgegangen  
 there have-3S an accident give-part because DEF airbag be-3S deploy-part  
 ‘An accident has happened because the airbag has opened.’

Haegeman (2012) takes the contrast between the examples in (8a) and (8b) as evidence that a dichotomy of peripheral and central adverbial clauses is found with German *weil* clauses<sup>15</sup>.

In the next section, I bring further evidence from epistemic modality in favour of the dichotomy of central temporal adverbial clauses vs. peripheral temporal adverbial clauses. As I have shown earlier, epistemic modality is used as a diagnostic tool to distinguish between central adverbial clauses and peripheral adverbial clauses (see Chapter 2 for details). I explore this point in the next section.

### 3.2.2 Epistemic modality

An additional argument for the difference between temporal adverbial clauses in NA can be adduced with reference to the observation made by Haegeman (2002, and elsewhere) that the expressions of epistemic modality cannot be used in central adverbial clauses, whereas they are compatible with peripheral adverbial clauses. When we apply this observation to temporal adverbial clauses in NA, it turns out that adverbial clauses introduced by the subordinators *gablmā* ‘before’, *baʕdma* ‘after’, and *yūm* ‘after’ are ill-formed with epistemic expressions, whilst adverbial clauses introduced by *yūm* ‘when’ allow such expressions. Consider the contrast in the following sentences (ESP= epistemic):

- |                |                        |             |
|----------------|------------------------|-------------|
| (9) a. *gablmā | ymkin yšraḥ            | al-mudarris |
| before         | ESP explain.3SM.PAST   | DEF-teacher |
| ad-dars        | fahim-na-uh            |             |
| DEF-lesson     | understand.PAST-1PM-it |             |

Intended meaning: ‘We had understood the lesson before the teacher might have explained it.’

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<sup>15</sup> Weil-V2 clauses as in (8b) differ systematically from their verb-final counterparts as in (8a). The former yields causal interpretations which are not available in the later. For more details, see Antomo (2009).

b. \* *baʕdma* *ymkin*                      *šraḥ*                                      *al-mudarris*  
       after        EPS                              explain.PAST.3SM    DEF-teacher  
       *ad-dars*                              *fahim-na-uh*  
       DEF-lesson                      understand.PAST-1P-it

Intended meaning: ‘We might understand the lesson after the teacher had explained it.’

c. *yūm*                      *ymkin*                      *tidigg*                                      *ʕala-i*                      *ʔams*  
       when                      EPS                              ring.2SM.PRES                      on-me                      yesterday  
       *kint*                      *mušgūl*  
       was.1SM    busy

‘When you might ring me yesterday, I was busy.’

The ungrammatical sentences in (9a) and (9b) demonstrate that adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’ are different from adverbial clauses introduced by the subordinator *yūm* ‘when’. In other words, the examples in (9) are compelling evidence that central adverbial clauses are incompatible with epistemic modality as shown in (9a) and (9b). On the other hand, the examples that are introduced by the subordinator *yūm* ‘when’ (i.e. peripheral adverbial clauses) are compatible with epistemic modality as clearly shown in (9c) above. Also, it should be noted that if the subordinator *yūm* is forced to mean ‘after’ (i.e. if it is used to introduce central adverbial clauses), the resulting sentence will be incompatible with modal particles, witness:

(10) \**yūm*                      *ymkin*                                      *šraḥ*                                      *al-mudarris*  
       after                      EPS                                      explain.3PM.PAST    DEF-teacher  
       *ad-dars*                              *fahim-na-uh*  
       DEF-lesson                      understand.PAST-1P-it

Intended: ‘After the teacher may have explained the lesson, we understood it.’

This discrepancy can be accounted for suggesting that the two types of adverbial clauses are different regarding their syntactic structure (as we argued for in the previous two chapters). Unlike peripheral adverbial clauses, central adverbial clauses do not maintain a projection that is dedicated to epistemic modality while the latter does.

In the next section. I bring further evidence from coordination of likes in favour of the dichotomy of central temporal adverbial clauses vs. peripheral temporal adverbial clauses. As

I have shown earlier, coordination of likes is used as a diagnostic tool to distinguish between central adverbial clauses and peripheral adverbial clauses (see Chapter 2 for details).

### 3.2.3 Coordination of likes

Coordination is possible between temporal adverbial clauses from the same type. That is to say, it is possible to coordinate peripheral adverbial clause with another peripheral adverbial clause as shown in (11a) below. It is also possible to coordinate two central adverbial clauses as shown in (11b).

- (11) a. 

yūm	yšraḥ	al-mudarris	ad-dars	wa	
when	explain.PRES.3SM	DEF-teacher	DEF-lesson	and	
yūm	yŕī-na	al-wādʒib	kint	ġāyb	
when	give.PRES.3SG-1MP	DEF-assignment	was.1SM	absent	

‘When the teacher explained the lesson, and when he gave us the assignment, I was absent.’

- b. 

yūm	šaraḥ	al-mudarris	ad-dars	wa	yūm
after	explain.PAST.3SM	DEF-teacher	DEF-lesson	and	after
ʔŕaṭā-ana		al-wādʒib	ḥal-lina		kill
give.PAST.3SM-1MP		DEF-assignment	answer.PAST-1MP		all
al-ʔasʔilah					
	DEF-questions				

‘After the teacher had explained a lesson, and after he had given us the assignment, we answered all questions.’

However, the coordination between two different types of temporal adverbial clauses (central and peripheral) is not possible, as demonstrated in the following sentence:

- (12) \*

yūm <sub>1</sub>	iʔḥtimāl	yšraḥ	al-mudarris	ad-dars	
When	probably	explain.PRES.3SM	DEF-teacher	DEF-lesson	
wa	yūm <sub>2</sub>	ʔŕaṭā-ana	al-wādʒib	kint	ġāyb
and	after	give.PAST.3SM-1MP	DEF-assignment	was.1SM	absent

‘When the teacher probably explained the lesson and after he had given us the assignment, I was absent.’



The example in (12) shows that although the two temporal adverbial clauses are introduced by the same subordinator *yūm*, coordination is still impossible. This is because the subordinator *yūm* in NA introduces two types of temporal adverbial clauses. In other words, *yūm*<sub>1</sub> (as *when*) introduces peripheral adverbial clauses, whereas *yūm*<sub>2</sub> (as *after*) introduces central adverbial clauses.

Similar observations are cross-linguistically attested. For instance, Haegeman (2012: 165) shows that coordination between central *while* clauses and peripheral *while* clauses is unacceptable in English. Consider sentence (13) below:

(13) a. While<sub>2</sub> [the lawsuit challenging the legitimacy of lethal injection] probably won't stop the use of lethal injection altogether, it will certainly delay its use while<sub>1</sub> the Supreme Court decides what to do. (*Guardian*, G2, December 12, 2003: 4, col. 4)

b. \* While<sub>2</sub> [the lawsuit challenging the legitimacy of lethal injection] probably won't stop the use of lethal injection altogether and while<sub>1</sub> the Supreme Court decides what to do, it will certainly delay its use.

c. \* The lawsuit challenging the legitimacy of lethal injection will certainly delay its use while<sub>1</sub> the Supreme Court decides what to do and while<sub>2</sub> it probably won't stop the use of lethal injection altogether.

Haegeman indicates that (13a) contains two *while* clauses; one is central but the other is peripheral. She shows that even though the two *while* clauses are associated with the same clause, conjoining the two *while* clauses is unacceptable.

Following Williams's (1978) Law of Coordination of Likes (a constraint that requires that conjuncts should be of the same syntactic category), it can be postulated that adverbial clauses introduced by *yūm* 'when' are different from adverbial clauses introduced by *yūm* (as after) with respect to syntactic structures. What is important here to capitalize on is the proposal made by Huddleston and Pullum (2006) who link Williams's (1978) Law of Coordination of Likes to the base-generation of coordinated phrases. Huddleston and Pullum's (2006) characterization of Williams's (1978) Law of Coordination of Likes is mentioned in (14):

- (14) A coordination of  $\alpha$  and  $\beta$  is admissible at a given place in sentence structure if and only if each of  $\alpha$  and  $\beta$  is individually admissible *at that place* with the same function

Adopting Huddleston and Pullum's (2006) characterization of Williams's (1978) Law of Coordination of Likes, Haegeman (2012: 165) argues that the constituents which are merged in different positions in the tree do not coordinate. Applying this line of analysis to NA data, it follows that adverbial clauses introduced by *yūm* 'when' (i.e. peripheral adverbials) are different from adverbial clauses introduced by *baʕadma* 'after', *gablama* 'before', and *yūm* (as after) (i.e. central adverbials) with respect to their adjunction of the host clause. The former is adjoined to CP, whereas the latter is adjoined to TP.

### 3.3 Conclusion

This chapter has investigated the external syntax of NA temporal adverbial clauses. It has shown that NA exhibits a dichotomy of central vs. peripheral clauses in temporal adverbial clauses. The subordinators *gablama* 'before' and *baʕadma* 'after' are exclusively used as subordinators in central adverbial clauses, because adverbial clauses introduced by them modify the time of an event expressed in the main clause. On the other hand, the subordinator *yūm* can be used as a subordinator in both central temporal adverbial clauses and peripheral temporal adverbial clauses, depending on its meaning. These facts are backed by evidence coming from event vs. discourse readings, epistemic modality, and coordination, which all advocate for the view that central temporal adverbial clauses adjoin to TP, whereas peripheral temporal adverbial clauses adjoin to CP.

The following chapter will investigate the internal syntax of temporal adverbial clauses.

## Chapter FOUR: The internal syntax of temporal adverbial clauses in NA

### 4.1 Introduction

This chapter investigates the internal syntax of NA temporal clauses. It is divided into two main sections. The first section will investigate the internal syntax of peripheral temporal clauses which are introduced by the subordinator *yūm* ‘when’ (i.e. peripheral *yūm*). It argues that these clauses allow Topic Phrase and Focus Phrase to be projected in their left periphery. This section also argues that the topic layer which is located below Focus Phrase is recursive, given that more than one topic can move there. On the other hand, this section argues that the structure of the left periphery of peripheral temporal clauses introduced by the subordinator *yūm* ‘when’ is somehow poorer than that of root clauses in that there is no upper topic phrase (the layer c-commanding the focus phrase). This section provides credence to Bianchi & Frascarelli’s (2010) proposal that the upper Topic layer is only limited to root clauses. It shows that while the particle *binisbah* ‘as for’, which marks the higher topic phrase, is available in NA main clauses, such marker is missed in the peripheral temporal adverbial clauses. The second section will investigate the internal syntax of central temporal clauses which are introduced by *gabлма* ‘before’ and *baɟdma* ‘after’. It shows that the only word order available in these clauses is the VSO word order. It introduces the competing proposals advanced in the related literature, most notably the operator proposal. It shows that this proposal is incapable of accounting for the word order facts of central temporal adverbial clauses in NA. It argues that neither Topic Phrase nor Focus Phrase is projected in central temporal adverbial clauses. Here the main argument is that the verb moves to Finiteness Phrase, attracted by +V feature on  $\text{Fin}^\circ$ . Also, it argues that  $\text{Fin}^\circ$  does not have EDGE feature; so there is no movement whatsoever to its Spec.

This chapter is divided into two main sections. Section 4.2 clarifies the notion of topic and focus in NA. Section 4.3 investigates the internal syntax of peripheral temporal adverbial clauses. This section is divided into four subsections. Section 4.3.2 looks at the derivation of the default SVO order in NA. Section 4.3.3 discusses the derivation of the marked word orders used in peripheral temporal adverbial clauses. Also, it discusses the CP structure of these clauses. This section argues that Bianchi & Frascarelli’s (2010) proposal that the upper topic phrase (the layer c-commanding the focus phrase) is only a root phenomenon, is valid for NA peripheral temporal adverbial clauses. Section 4.3.4 provides more evidence that the

upper Topic Phrase does not exist in NA peripheral temporal adverbial clauses, appealing to discourse particles as a test. Section 4.3.5 concludes section 4.3. Section 4.4 investigates the internal syntax of central temporal adverbial clauses. This section is also divided into three subsections. Section 4.4.1 discusses the word order used in central temporal adverbial clauses. It shows that the only word order allowed in these clauses is the VSO word order (i.e. arguments and adjuncts are not allowed to be fronted). Section 4.4.2.3 and section 4.4.2.4 discuss the two approaches that have been advanced in the literature. Section 4.3.2.3 discusses the operator movement approach. It shows that this approach is unable to account for the word order facts of the central temporal adverbial clauses in NA. Section 4.4.2.4 discusses the truncation approach which proves valid for NA central adverbial clauses. Section 4.5 concludes the whole chapter.

## 4.2 Topic and focus in NA

Before I discuss the CP structure of adverbial clauses, it is important to clarify the notion of topic and focus in NA as these terms are ambiguously discussed in the literature.

### 4.2.1 *Topic in NA*

It is well-known in the literature that topic refers to an entity that expresses old/given information (cf. Szendrői 2004 and Erteschik-Shir 2007). In NA, there are two characteristics of topic. The first characteristic is that topicalized nouns must be definite. Second, they should be coindexed with a clitic (in boldface)<sup>16</sup>. Consider the following illustrative example:

(1) A: wš        sawwa        Ahmad        b-as-sayyarəh?

What    did                    Ahmad        with-DEF-car

‘What did Ahmad do with the car?’

a. B1: as-sayyarəh Ahmad        bāf-**ah**

DEF-car        Ahmad        sell.3SM.PAST-it

‘The car, Ahmad sold it.’

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<sup>16</sup> For more discussion about topic and focus in Arabic, see Moutaouakil (1989), Ouhalla (1994b), and Aoun et al (2010).

b. B2: \*sayyarəh    Ahmad    bāʕ-**ah**  
                  car           Ahmad    sell.3SM.PAST-it

‘A car, Ahmad sold it.’

The infelicitous answer in (1b) can be attributed to the fact that the topicalized item *sayyarəh* ‘car’ does not meet one of the requirements of topicalization in NA. That is, it is indefinite (i.e. lack the definite article *as* ‘the’) and hence it is ungrammatical.

Another important fact about topicalization in NA is that indefinite noun phrases cannot be topicalized even if they are specific (i.e. modified)<sup>17</sup>. Consider the following example:

(2) \*sayyarəh            dʒədīdəh    Ahmad    iʔštra-**ah**  
                  car            new           Ahmad    buy.3SM.PAST

‘A new car, Ahmad bought it.’

Having discussed the notion of topic in NA, now I will clarify the definition and categories of focus in NA.

#### 4.2.2 *Focus in NA*

The term ‘focus’ has been widely discussed in the literature. It is often taken to correspond to the most informative part of a proposition (Halliday 1967b, Lambrecht 1994, Kiss 1998). Kiss (1998) distinguishes two types of focus: identificational focus vs. information focus<sup>18</sup>. The dichotomy is based on syntactic realization and semantic content. According to Kiss (1998), identificational focus expresses contrastive information/exhaustive identification, whereas information focus expresses new, non-presupposed information.

<sup>17</sup> Unlike NA, MSA allows indefinite noun phrases which are specific (i.e. modified) to be topicalized. Consider the following example: (Aoun et al 2010: 195)

(i) kull-u            sayyārāt-in    yurīdūna    ʔan    yaʕsilū-**ha**  
       every-NOM    car.3FS.GEN    want.3P    that    wash.3P-it  
       ‘Every car, they want to wash it.’

<sup>18</sup> Identificational focus is widely known in the literature as contrastive focus.

Also, Kiss (1998) shows that while contrastive focus in Hungarian is realized preverbally (i.e. ex-situ) as in (3b), information focus is realized postverbally (i.e. in-situ) as in (3c)<sup>19</sup>.

- (3) a. hol            jártál            a            nyáron?  
 Where            went.you        DEF        summer.in  
 ‘Where did you go in the summer?’
- b. jártam            OLASZORSZÁGBAN  
 went.I            Italy.to  
 ‘I went TO ITALY [among other places].’
- c. **Olaszországban**        jártam  
 Italy.to                        went.I  
 ‘It was **Italy** where I went.’

Following Kiss (1998), I propose that there are two categories of focus in NA: contrastive focus and new information focus. There are in general two main characteristics of focus in NA. The first characteristic is that the focused item must bear focal stress. Second, it should not be co-referenced with a ciltic. Contrastive focus and information focus exhibit these properties as exemplified in (4) and (5), respectively:

- (4) a. A: min                        darrəs                        Ahmad?  
 Where                        teach.3SM.PAST        Ahmad?  
 ‘Whom did Ahmad teach?’
- b. B: Khaled        muhu    Fahd            Ahmad        darrəs-(uh\*)  
**Khaled        not    Fahd**            Ahmad        teach.3SM.PAST-(him)  
 ‘**Khaled not Fahd**, Ahmad taught.’

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<sup>19</sup> Note that contrastive focus is boldfaced, whereas information focus is capitalized.

(5) A: min            darrəs                            Ahmad?

Who                    teach.3SM.PAST                    Ahmad

‘Whom did Ahmad teach?’

B: Ahmad            darrəs-(uh\*)                            FAHD

Ahmad            teach.3SM.PAST-(him)                    FAHD

‘Ahmad taught FAHD.’

However, contrastive focus differs from information focus in two respects. First, the information expressed by contrastive focus should stand in a contrastive relationship with other entities as shown in (4b) above<sup>20</sup>. The second difference between contrastive focus and information focus is related to their syntactic position. While the contrastive focus is obligatorily realized ex-situ (i.e. at the left periphery), the new information focus must remain in-situ. The ex-situ contrastive focus and in the in-situ information focus are exemplified in (6) and (7), respectively:

(6) a. A: min            darrəs                            Ahmad?

Where            teach.3SM.PAST                    Ahmad?

‘Whom did Ahmad teach? Khaled?’

b. B1: **Khaled**    **muhu Fahd**                    Ahmad            darrəs

**Khaled**    **not**    **Fahd**                    Ahmad            teach.3SM.PAST

‘**Khaled not Fahd**, Ahmad taught.’

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<sup>20</sup> Contrast is a notion that is frequently associated with focus or topic (Repp 2010, Winkler & Molnár 2010). Vermuelen (2011: 3) assumes that ‘contrast implies the negation of at least one alternative in a set of relevant alternatives generated by a contrastive focus or a contrastive topic’. In NA, topic can also be contrastive. However, it differs from contrastive focus in at least two important respects. First, contrastive topic does not bear focal stress. Second, contrastive topic must be co-referenced with a reumptive pronoun (in boldface). Consider the following illustrative example:

i A: min            darrəs                            Ahmad?

Who                    teach.3SM.PAST                    Ahmad

‘Whom did Ahmad teach?’

B: Fahd muhu    **Khaled** Ahmad darres-**uh**

Fahd not        **Khaled** Ahmad teach.3SM-him

‘Fahd not **Khaled**, Ahmad taught him.’

c. B2: \*Ahmad                    darrəs                    Khaled                    muhu Fahd  
                  Ahmad                    teach.3SM.PAST                    **Khaled**                    **not**                    **Fahd**  
 ‘Ahmad taught **Khaled not Fahd.**’

(7) a. A: min                    darrəs                    Ahmad?  
                  Who                    teach.3SM.PAST                    Ahmad  
 ‘Whom did Ahmad teach?’

b. B1: Ahmad                    darrəs                    Fahd  
                  Ahmad                    teach.3SM.PAST                    FAHD  
 ‘Ahmad taught FAHD.’

c.B2: \*Fahd                    Ahmad                    darrəs  
                  FAHD                    Ahmad                    teach.3SM.PAST  
 ‘FAHD, Ahmad taught.’

The ungrammaticality in (6c) and (7c) shows clearly that the two types of focus in NA should occupy two different positions in the syntax.

### 4.3 Internal syntax of peripheral temporal adverbial clauses

#### 4.3.1 Introduction

In this section, I investigate the internal syntax of peripheral temporal adverbial clauses introduced by the subordinator *yūm* ‘when’. I argue that such clauses have a richer left periphery than central adverbial clauses in that all projections except for the higher topic phrase are allowed in such clauses.



To start, in unmarked cases, peripheral temporal adverbial clauses are followed by the subject which is in turn followed by the verb and the rest of the clause. Consider the following example:

(8)	al-muwaDDaf	kān	ġāyb	yūm	
	DEF-employee	was.3SM	absent	when	
	al-mudīr	yʔakkid	an-natīdzeh	bi-l-ʔidzīmāʕ	
	DEF-manager	confirm.3SM.PRES	DEF-result.F	in-DEF-meeting	

‘The employee was absent when the manager confirmed the result at the meeting.’

Notice that the subject *al-mudīr* ‘the manager’ precedes the verb *yʔakkid* ‘confirmed’ which in turn precedes the object and the rest material in the subordinate clause, resulting in the unmarked SVO word order. There is a near unanimity among many works on Arabic that the SVO word order is the predominant unmarked word order in the local varieties of Arabic. (See El-Yasin (1985), Musabahin (2009) and Jarrah (2017) for Jordanian Arabic, Aoun *et al.* (1994) for Lebanese Arabic, Shlonsky (1997) and Mohammad (2000) for Palestinian Arabic, Mahfoudhi (2002) for Tunisian Arabic and Fassi Fehri (1993) for Moroccan Arabic)<sup>21</sup>. As I have mentioned in Chapter 1, this observation has been independently reported for NA in Lewis (2013) and Alshamari and Jarrah (2016), among many others.

Before I discuss the internal syntax of peripheral temporal adverbial clauses, I will explore the derivation of the default SVO word order, something that is relevant to explore other word orders allowed in such types of clauses.

#### 4.3.2 *The syntactic derivation of the SVO word order:*

As is shown in the sentence in (1) above, the SVO word order is used in NA peripheral temporal adverbial clauses. Note here that if we turn the subject indefinite, the respective sentence becomes ungrammatical, as shown in (2a). If the subject is indefinite, the word order VSO should be used, instead, as shown in (2b).

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<sup>21</sup>Note that VSO can also be the basic word order in some other dialects of Arabic. For example, Dahlgren (1998) shows that VSO is the unmarked word order in modern eastern colloquial Arabic. Dahlgren (1998) also demonstrates that the basic word order in Arabic depends on other linguistic areas like tense, aspect and pragmatic information.

(9)\*a. al-muwaDDaf      k̄an              ġāyb              yūm  
 DEF-employee      was.3SM      absent      when  
 mudīr      yʔakkid              an-natīdzeh              bi-l-ʔidztimāʕ  
 manager      confirm.3SM.PRES      DEF-result.F              in-DEF-meeting  
 Intended: ‘The employee was absent when a manager confirmed the result at the meeting.’

b. al-muwaDDaf      k̄an                              ġāyb              yūm  
 DEF-employee      was.3SM                              absent      when  
 yʔakkid                              mudīr              an-natīdzeh              bi-l-ʔidztimāʕ  
 confirm.3SM.PRES              manager              DEF-result              in-DEF-meeting  
 ‘The employee was absent when a manager confirmed the result at the meeting.’

In (9a), the subject of the peripheral temporal clause introduced by the subordinator *yūm* ‘when’ is indefinite, *mudīr* ‘a manager’, hence the impossibility of the subject to appear preverbally. In (9b), the subject is indefinite and appears post-verbally, hence the grammaticality of the given sentence. The question that arises now is, why this must be the case?

There are two proposals in the literature for why the preverbal subjects appear in a preverbal position in Arabic clause structure. The first proposal is that what appears as a preverbal subject in the peripheral temporal clause introduced by the subordinator *yūm* ‘when’ should count as a topic rather than a true subject. This proposal is argued for by a number of authors for the main clause in Arabic, including Bakir (1980), Fassi Fehri (1993), Ouhalla (1992, 1994), Demirdache (1991), Plunkett (1993, 1996), and Aoun *et al.* (2010). Under this proposal, the preverbal subject is analysed as a topic or a clitic-left dislocated element.

The second proposal draws on Holmberg’s (2000) claim that T° enters the derivation endowed with a [D] feature whose presence renders the argument bearing it referential. The [D] feature must be checked by means of subject movement to [Spec, TP]. Holmberg (2000: 456) claims that in case that there is no subject (as in impersonal passives) or the subject is indefinite (hence lacks the D-feature), [D] on T will be checked by virtue of the movement of the verb to T only, without requiring the subject to move to the Spec position of TP. If the subject is definite and thus has a [D] feature within its featural bundle, it moves to Spec,TP along with the movement of the verb to adjoin to T°. In cases where the subject is not referential (being,

e.g., indefinite), the [D] feature is only checked by the movement of the verb, hence the appearance of the indefinite subject in situ, i.e., post-verbally.

Following Holmberg (2000), I argue that the subject in NA can only move to Spec TP. I will show that such a claim can account for the impossible (\*SOV) word order in NA adverbial clauses.

Having explored the syntactic derivation of the unmarked SVO word order, let's now explore the derivation of other possible word order permutations that may appear in the peripheral temporal clause introduced by the subordinator *yūm* 'when'. This exploration is important as it reveals the actual structure of the left periphery of the peripheral temporal clause introduced by the subordinator *yūm* 'when'.

#### 4.3.3 *Marked word orders in the peripheral temporal clause and the structure of the CP*

The first observation I will investigate below is that the fact that in the peripheral temporal clause introduced by the subordinator *yūm* 'when', the VSO word order can be used although the subject is definite. Here, the verb should bear contrastive focus, as in (10) (Contrastive focus is boldfaced, and fronted topic is underlined.)

- (10) al-muwaDDaf      k̄an              ġāyb              yūm  
 DEF-employee      was.3SM      absent              when  
yʔakkid              mahw              yʕlin              al-mudīr  
 confirm.3SM.PRES    not              announce.3SM.PRES    DEF-manager  
 an-natīdzəh      bi-l-dʒtimāʕ  
 DEF-result      in-DEF-meeting  
 'The employee was absent when the manager **confirmed not announced** the result at the meeting.'

The claim the definite subject should leave its canonical position is apparently violated by the sentence in (10). That is because the definite subject appears post-verbally. However, relying on the fact that verbs preceding definite subjects in the peripheral temporal clause introduced by the subordinator *yūm* 'when' should have contrastive focus, I argue that the subject in (10) is not in the Spec position of vP but rather higher, in the Spec position of TP (following D-feature hypothesis). The position of the verb to the left of the moved definite subject is accounted for, suggesting that the main verb in (10) adjoins to the head of the Focus Phrase,

Foc<sup>o</sup>, that instantiates Focus Phrase in the sense of Rizzi (1997)<sup>22</sup>. As I explained above (Ch. 2), Rizzi (1997) argues convincingly that what had been known as CP has a richer articulated structure. Rizzi (1997) argues that Focus Phrase is not recursive, meaning that only one focus is permitted per a single clause. On the other hand, Rizzi (1997) argues that Topic Phrase is recursive, hence the possibility that a single clause has more than one topic. These assumptions of non-recursivity of Focus Phrase and recursivity of Topic Phrase are confirmed by a wide array of studies that investigate the fine structure of the left periphery in different languages (cf. Roussou 2000, and Haegeman 2006c, among others).

Let us now explore how Rizzi's (1997) proposal of the left periphery can provide us with an analysis of the surface form of the VSO word order where the subject is definite, while the verb bears contrastive focus. Since the verb should have contrastive focus in such examples, the argument here is that the verb moves to adjoin to Foc<sup>o</sup>, the head of Focus Phrase, through a head-movement fashion. To yield the surface form, the VSO word order, the verb moves to adjoin to T<sup>o</sup>, the unmarked case in the Arabic sentence (see Benmamoun 2000 and Aoun *et al.* 2010). Afterwards, the verb whose content expresses contrastive information of the peripheral temporal clause moves to adjoin to Foc<sup>o</sup>, resulting in having contrastive focus on the verb. The definite subject moves to the Spec position of TP.

The significant point here to mention is that the word order fact in (10) above shows that temporal adverbial clauses introduced by *yūm* 'when' have a richly articulated left periphery, hence more evidence that such clauses are peripheral rather than central, if we follow the finding of the previous chapter that the fully-fledged CP is a syntactic property of peripheral adverbial clauses but not that of central adverbial clauses. Recall that Rizzi (1997) argues that what had been known as CP has a richer articulated structure. The highest projection of the articulated CP is the Force Phrase, while the lowest one is labelled as Fin(iteness) Phrase. Sandwiched between these two syntactic layers lie the Focus Phrase where contrastive information moves to and the Topics Phrase where old, given information moves to.

Further compelling evidence supporting for the claim that peripheral temporal clauses introduced by the subordinator *yūm* 'when' have a richly articulated left periphery comes

<sup>22</sup> One may suggest that peripheral adverbial clauses are similar to central adverbial clauses in that the verb is in Fin. Such a claim is not true. This is because if we adopt this suggestion, then we will not be able to account for the VOS order which is acceptable in peripheral adverbial clauses as shown below:

i.	yūm	Y?AKKID	an-natīdʒeh	al-mudīr	-----
	When	confirm.3SM.PRES	DEF-result	DEF-manager	

'When the manager confirmed the result ----'

from the fact that object fronting is compatible with such clauses. For instance, if the direct object *an-natīdzeh* ‘the result’ appears preverbally to the left of the subject *al-mudīr* ‘the manager’, the sentence remains grammatical.

(13) al-muwaDDaf	kān	ġāyb	yūm
DEF-employee	was.3SM	absent	when
<u>an-natīdzeh</u>	al-mudīr	yʔakkid-ah	bi-l-ʔidztimāʕ
DEF-result	DEF-manager	confirm.3SM.PRES-it	in-DEF-meeting

‘The employee was absent when the manager confirmed the result at the meeting.’

Notice here the moved direct object triggers a clitic of its own on the verb. Aoun *et al.* (2001) argue that there are two types of resumption in Arabic: true resumption and apparent resumption. The former is resulted when movement is not available, i.e. there is an island between the object and the resumptive pronoun, while the latter is generated by the movement of the object when the resumptive pronoun and the antecedent are not separated by an island. Under this approach, the occurrence of a resumptive clitic on the verb while there is no an island between the preposed object and the verb (that bears the resumptive clitic) is an indication of movement of the object to the left periphery.

If we compare sentence (13) with the sentence in (8) which contains the unmarked word order SVO, repeated below as (14), it becomes clear that the two sentences are similar with the exclusion of the fact that the former includes object fronting, and there is a clitic appearing on the verb:

(14) al-muwaDDaf	kān	ġāyb	yūm
DEF-employee	was.3SM	absent	when
al-mudīr	yʔakkid	an-natīdzeh	bi-l-ʔidztimāʕ
DEF-manager	confirm.PRES.3SM	DEF-result	in-DEF-meeting

‘The employee was absent when the manager confirmed the result at the meeting.’

If the object clitic appears on the verb without any accompanying movement of the direct object to the left of the subject, the resulting sentences are ungrammatical, as shown in the following ill-formed example:

(15) *al-muwaDDaf	kān	ġāyb	yūm
DEF-employee	was.3SM	absent	when
al-mudīr	yʔakkid-ah	an-natīdzeh	bi-l-ʔidztimāʕ
DEF-manager	confirm.3SM.PRES-it	DEF-result	in-DEF-meeting

Intended: ‘The employee was absent when the manager confirmed the result at the meeting.’

The ungrammaticality of the sentence in (15) demonstrates clearly that the clitic appearing on the verbs while the direct object is fronted is triggered by the movement of the latter to the left periphery (see, Aoun *et al.* 2001 along these lines). The claim that the direct object in sentence (13) moves to the left periphery is corroborated by the fact that it must appear to the left of the preverbal subject, which is argued to be in the Spec position of TP.

The question to be asked here is, what is the precise position occupied by the fronted direct object in the left periphery? The answer to this question lies in the characteristics of the direct object. If the fronted direct object is definite and co-referenced with a resumptive pronoun, the direct object is a topic. If it bears focal stress and expresses contrastive information, it is in Spec of the focus phrase<sup>23</sup>. I below provide some empirical evidence in favour of this suggestion.

First and foremost, the discussion above does not imply that the moved direct object must trigger a clitic on the verb. Indeed, the clitic is only acceptable when the direct object is topicalized. This clitic is cross-linguistically known as a resumptive clitic, signalling topicalization movement (see, e.g., Cinque 1990, 2001, Benincà & Poletto 2004, and Cruschina 2010). Put it another way, the appearance of a resumptive clitic (on the verb) indicates that the phrase with which this clitic is co-indexed undergoes topicalization rather than focalization. For example, in sentence (13) the resumptive clitic appearing on the verb *yʔakkid* ‘confirmed’ is co-indexed with the fronted direct object *an-natīdzeh* ‘the result’. The clitic signals therefore that the DP *an-natīdzeh* ‘the result’ undergoes topicalization. What bears out this argument is that the DP *an-natīdzeh* ‘the result’ is definite and specific; thus, it is compatible with the definition of topics discussed in section 4.2.

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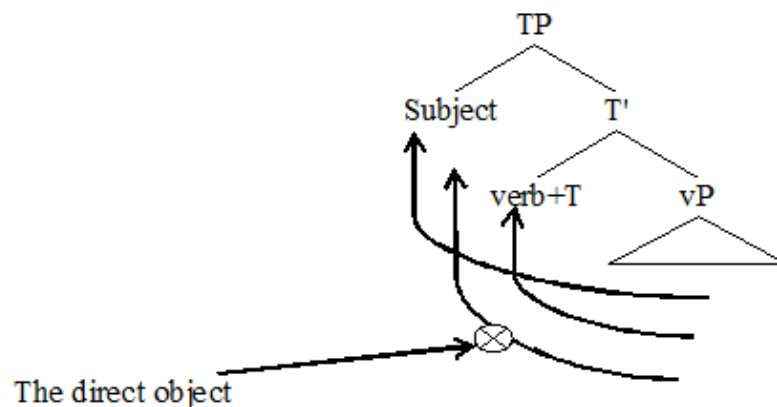
<sup>23</sup> For more discussion about the characteristics of topic and focus in NA, see section 4.2.

What is worth noting at this point is that the definite subject must appear to the right of the fronted definite direct object; otherwise the resulting sentence is ungrammatical. Consider the following ungrammatical sentence where the subject appears to the left of the moved object:

- (16)\*al-muwaDDaf      kān              ġāyb              yūm  
 DEF-employee        was.3SM        absent            when  
 al-mudīr              an-natīdzeh      y?akkid-ah              bi-l-?idztimā?  
 DEF-manager        DEF-result      confirm.3SM.PRES-it      in-DEF-meeting  
 Intended: ‘The employee was absent when the manager confirmed the result at the meeting.’

As it stands, the movement of the subject to the left of the fronted direct object is blocked (i.e. \*SOV) while the direct object is fronted. I argue that sentence in (16) is ungrammatical because the direct object does not move to the left periphery but to a position to the right of the subject between T° and the Spec position of TP, where the subject resides, as shown below:

(17)



In NA grammar, there is no structural position available between the Spec position of TP and the verb, whence the impossibility of the direct object to appear between the subject and the verb. If we suggest that the subject is a topic (following the Topic-hypothesis) and hence is not in the Spec position of TP, the direct object can move to the Spec position of the lower topic which is argued to be recursive. However, this is not true in NA adverbial clauses as shown in (16) and (17) above. It can therefore be claimed that the preverbal definite subject in NA can only move to Spec TP.

Furthermore, in cases where the fronted direct object expresses contrastive information (i.e. contrastive focus), no resumptive pronoun appears on the verb, and the direct object should have contrastive focus to be licensed. These two facts imply that the fronted direct object is a focus. Consider the following sentences.

- (18) al-muwaDDaf      kān              ġāyb              yūm  
 DEF-employee      was.3SM      absent              when  
**an-natīdzəh mahw at-təgrīr**      al-mudīr              yʔakkid-(\*ah)  
**DEF-result not DEF-report**      DEF-manager              confirm.3SM.PRES-it  
 bi-l-ʔidztimāʕ  
 in-DEF-meeting  
 ‘The employee was absent when the manager confirmed **the result not the report** at the meeting.’

Sentence (18) indicates that if the object’s resumptive clitic appears on the verb while the fronted direct object is contrastively focused, the sentence would become ungrammatical. In this regard, several works have stressed the idea that resumption is not compatible with the focalization. Foci are not resumed by resumptive clitics on the verb or elsewhere (Cruschina 2012, Féry 2013, Bianchi 2013). The direct object in sentence (18) moves to the Spec position of the Focus Phrase in the sense of Rizzi (1997).

Again here, the subject cannot appear to the left of the focalized object (\*SOV). Consider the following examples:

- (19)\*al-muwaDDaf      kān                              ġāyb              yūm  
 DEF-employee      was.3SM                              absent              when  
 al-mudīr              **an-natīdzəh**      yʔakkid                              bi-l-ʔidztimāʕ  
 DEF-manager      DEF-result      confirm.3SM.PRES      in-DEF-meeting  
 Intended: ‘The employee was absent when the manager confirmed **the result** at the meeting.’

Theoretically speaking, sentence (19) should be grammatical, contrary to fact. The reason why sentence (19), would be grammatical is that following Rizzi’s (1997) fine structure of the left periphery, there is an upper Topic Phrase, where the subject, when topicalized, can move



to. Consider Figure 1 above which I repeat below for ease of exposition (The upper topic phrase is circled)

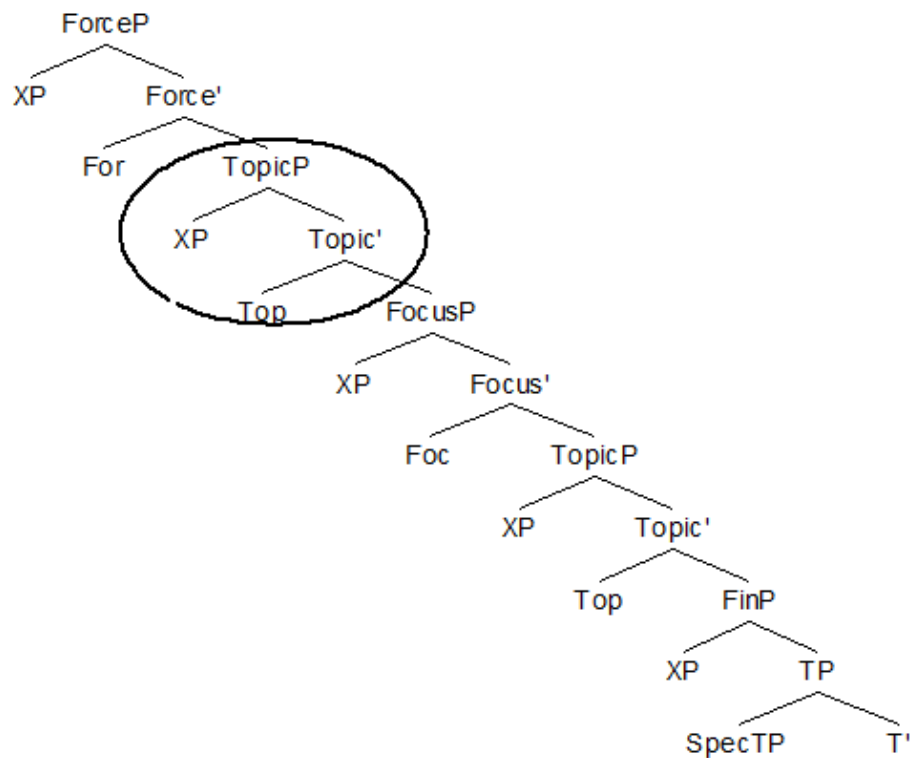
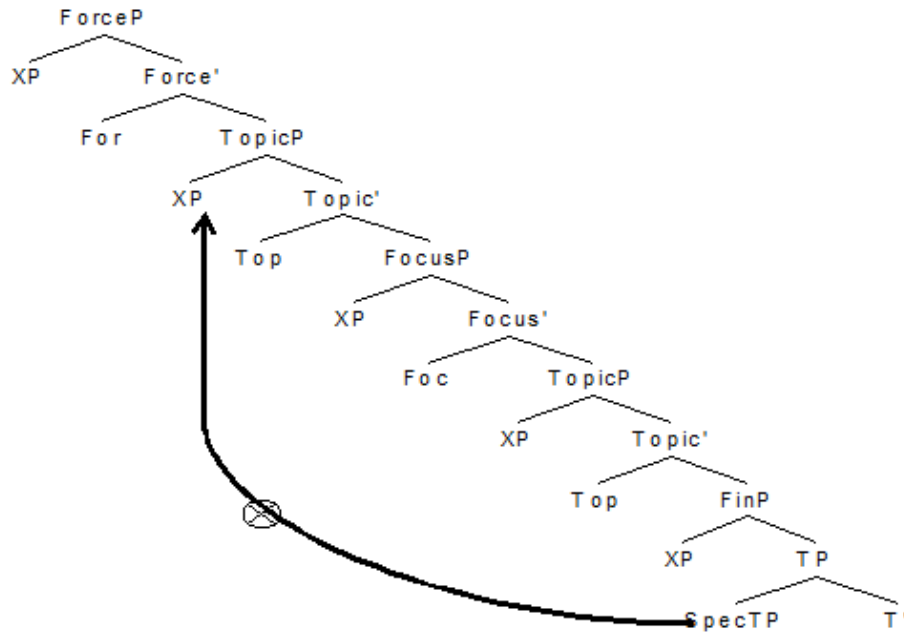


Figure 1: CP's richly articulated inner structure

Granted the assumption that the fronted direct object moves to the Spec position of Focus Phrase, nothing in principle blocks the subject from moving to the Spec position of the upper Topic phrase. However, the fact that the subject cannot appear to the left of the fronted direct object entails that the subject is disallowed to move to the Spec position of upper Topic Phrase:

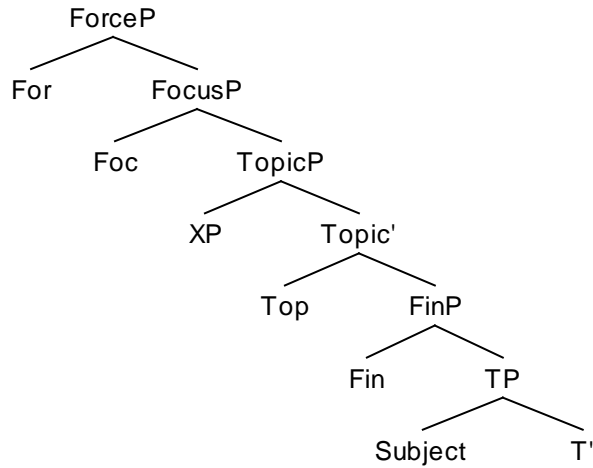
(20)



In order to account for this observation, I propose that in the peripheral temporal clauses introduced by the subordinator *yūm* ‘when’, there is no upper Topic phrase. This results in that the subject is disallowed from appearing to the left of focalised direct object. Recent works have advocated this proposal. Bianchi & Frascarelli (2010) argue that the upper topic phrase (for them is called ‘the shifting topic’) is only a root phenomenon. What this means is that the upper topic phrase appears only in main clauses rather than in embedded clauses. The same finding is adopted in, among others, Haegeman (2012) and Frascarelli (2010) for Romance. This so being, this possibility is cross-linguistically corroborated (I bring further evidence for this suggestion below).

In view of this, the structure of the left periphery of the peripheral temporal clause introduced by the subordinator *yūm* ‘when’ is reduced, as compared to what originally advanced by Rizzi (1997) for main clauses. The Focus Phrase is directly dominated by the Force Phrase, which is the highest layer in the richly articulated CP. This possibility is viewed as follows:

(21)



Given that there is only one Focus position per clause, the topicalized subject should move to a position lower than the focused element, resulting in the word order OSV which is obligatory when the direct object is focalized while the subject is in Spec TP.

What also bears out this proposal (that the left periphery of the peripheral temporal clause introduced by the subordinator *yūm* ‘when’ has focus and topic projections) comes from the fact that there are no restrictions against adjunct fronting. That is to say, adjuncts can be preposed to the left periphery. For instance, the locative adjunct *bi-l-ʔidʒtimāʕ* ‘at the meeting’ can appear at the beginning of the peripheral temporal clause introduced by the subordinator *yūm* ‘when’, as demonstrated in the following sentence:

- (22) al-muwaDDaf      kān                      ġāyb              yūm  
DEF-employee      was.3SM                      DEF-email      when  
bi-l-ʔidʒtimāʕ      al-mudīr                      yʔakkid              an-natīdʒeh  
in-DEF-meeting      DEF-manager              confirm.PRES.3SM      DEF-result  
‘The employee was absent when the manager confirmed the result at the meeting.’

As is clearly shown from sentence (22) the adjunct *bi-l-ʔidʒtimāʕ* ‘at the meeting’ appears to the left of the subject *al-mudīr* ‘the manager’. This implies the movement of this adjunct to the left periphery. Note here that adjuncts in NA normally appear after the in-situ direct object or scramble between the verb and the subject. In this light, the occurrence of an adjunct to the left of the subject counts as evidence supporting the argument that a fronted adjunct is now located in the left periphery rather than being in its in-situ position.

Further evidence in favour of adjunct fronting can be adduced from the fact that fronted adjuncts are acceptable with object fronting as well, as shown in the following sentences. Notice here that there is no particular order to maintain between the fronted direct object and the fronted adjunct as long as the direct object is topicalized. Consider the following sentences:

(23)a. al-muwaDDaf      k̄an                      ġāyb              yūm  
           DEF-employee    was.3SM              absent            when  
           bi-l-ʔidʒtimāʃ      an-natīdʒeh      al-mudīr            yʔakkid-ah  
           in-DEF-meeting    DEF-result      DEF-manager      confirm.PRES.3SM-it  
           ‘The employee was absent when the manager confirmed the result at the meeting.’

b. al-muwaDDaf                      k̄an                      ġāyb              yūm  
           DEF-employee                      was.3SM              absent            when  
           an-natīdʒeh                      bi-l-ʔidʒtimāʃ              al-mudīr            yʔakkid-ah  
           DEF-result                      in-DEF-meeting              DEF-manager      confirm.3SM.PRES-it  
           ‘The employee was absent when the manager confirmed the result at the meeting.’

The examples in (23) reveal first the fact that it is possible to have a topicalized direct object and a fronted adjunct in the left periphery at the same time, and second the fact these elements can occur with either word order between them (the direct object >>> the adjunct or the adjunct >>> the direct object). The occurrence of a fronted adjunct to the left of the moved object by itself is empirical evidence that the given adjunct is now located in some position in the left periphery rather than being located in its in-situ position.

On the other hand, when the direct object is focalized, the fronted adjunct should occur to the right of the focalized direct object; otherwise the sentence is ungrammatical. Consider the following sentences in (24):

(24)a. al-muwaDDaf      k̄an                      ġāyb              yūm  
           DEF-employee    was.3SM              absent            when  
           **an-natīdʒəh**      bi-l-ʔidʒtimāʃ              al-mudīr            yʔakkid  
           **DEF-result**              in-DEF-meeting              DEF-manager      confirm.3SM.PRES  
           ‘The employee was absent when the manager confirmed **the result** at the meeting.’

b. *al-muwaDDaf	kān	gāyb	yūm
DEF-employee	was.3SM	absent	when
<u>bi-l-ʔidztimāʕ</u>	<b>an-natīdzəh</b>	al-mudīr	
in-DEF-meeting	<b>DEF-result</b>	DEF-manager	
yʔakkid			
confirm.3SM.PRES			

Intended: ‘The employee was absent when the manager confirmed **the result** at the meeting.’

The examples in (24) are strongly indicative of the fact that it is possible to have a focalized direct object and a fronted adjunct in the left periphery at the same time, however, under one condition which is that the focalized direct object must precede (i.e., c-command) the fronted adjunct. The next question that arises now immediately is why this should be the case. The answer to this question, I argue, lies also in Bianchi & Frascarelli’s (2010) proposal that the upper topic phrase (the topic layer that c-commands the Focus Phrase) is only a root phenomenon. Bianchi & Frascarelli (2010) argue that the upper topic which turns out to have the element which the sentence is about (in comparison with the lower topics which have the elements the speakers are familiar with and/or have contrastive value). To illustrate, consider the following examples from Bianchi & Frascarelli (2010: 77):

- (25) a. This book, leave it on the table! (imperative)  
b. Those petunias, did John plant them? (interrogative)  
c. Those petunias, when did John plant them?
- (26) a. \*This book, leave on the table! (imperative)  
b. \*Those petunias, did John plant? (interrogative)  
c. \*Those petunias, when did John plant?

In the sentences in (25), the initial constituents (separated from the rest of the given sentence by a comma) are understood to be topics situated in the upper Topic projection. On the other hand, the initial constituents in the sentences in (26) are understood to be topics in the lower topic domain in the sense of Rizzi (1997). Upper topics are independent of the illocutionary force of the following sentence (25), while lower topics are more restricted (26).

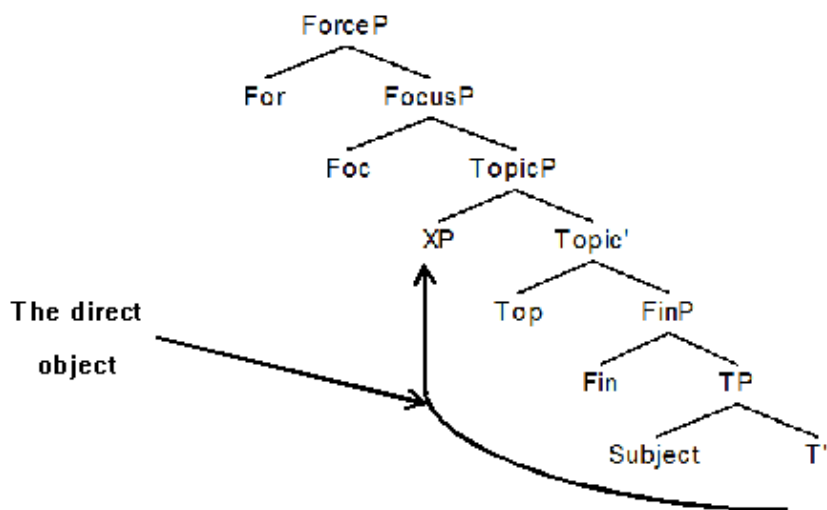
Let us see explore how this reasoning helps us account for the ungrammatical sentence in (24) above, which I repeat below for convenience. The main argument is that the upper topic phrase is not projected in the NA peripheral temporal adverbial clauses, patterning with Bianchi & Frascarelli (2010)'s proposal.

- (27)\* al-muwaDDaf                      kān                      ġāyb                      yūm  
 DEF-employee                      was.3SM                      absent                      when  
bi-l-ʔidz̄timāf                      **an-naʔidz̄əh**                      al-mudīr                      yʔakkid  
 in-DEF-meeting                      **DEF-result**                      DEF-manager                      confirm.3SM.PRES  
 Intended: ‘The employee was absent when the manager confirmed A RESULT at the meeting.’

The fronted adjunct cannot appear to the left of a focalized direct object even if the former is topicalized. This restriction on the position of the fronted adjunct in relation to the focalized direct object can be taken as evidence that the upper topic phrase is not projected in NA peripheral temporal adverbial clauses, hence lending support for Bianchi & Frascarelli (2010)'s proposal.

Consider the following schematic representation of the movement of a topicalized object to the left periphery:

(28)



Given that the lower Topic Phrase is recursive (cf. Rizzi 1997, 2001, 2004), a topicalized adjunct can move to the Topic Phrase even if there is a topicalized object. In case that the

adjunct is focalized (i.e. bearing contrastive focus), the adjunct would move to the Focus Phrase, hence ending up in a position higher than that of the topicalized object. Evidence for this can be adduced from the observation that adjuncts which bear contrastive focus should precede the topicalized direct object. Consider the following examples:

(29)a. al-muwaDDaf	kān	ġāyb	yūm
DEF-employee	was.3SM	absent	when
<b>bi-l-ʔidʔtimāʕ</b>	an-natīdzeh	al-mudīr	yʔakkid-ah
<b>in-DEF-meeting</b>	DEF-result	DEF-manager	confirm.PRES.3SM-it

‘The employee was absent when **at the meeting** the manager confirmed the result.’

b. *al-muwaDDaf	kān	ġāyb	yūm
DEF-employee	was.3SM	absent	when
an-natīdzeh	<b>bi-l-ʔidʔtimāʕ</b>	al-mudīr	yʔakkid-ah
DEF-result	<b>in-DEF-meeting</b>	DEF-manager	confirm.PRES.3SM-it

Intended: ‘The employee was absent when **at the meeting** the manager confirmed the result.’

There is no higher position that a topicalized object would move to, hence the restriction against the topicalized direct object to appear to the right of a focalized adjunct. Now the same picture occurs when the direct object is focalized while the adjunct is topicalized. The latter should follow the former, for the same reason. The focalized direct object moves to the Spec position of the Focus Phrase which can only be c-commanded by an element occurring in the Force Phrase. As a result, the relevant order between the direct object and the adjunct (while both are fronted to the left periphery) is predicted by the syntactic structure of the left periphery of the peripheral temporal clause introduced by the subordinator *yūm* ‘when’.

A relevant observation to be discussed here is the fact that it is not possible to have the direct object and the adjunct both focalized, as demonstrated in the following ill-formed examples:

(30)a. \*al-muwaDDaf kān ḡāyb yūm  
 DEF-employee was.3SM absent when  
**an-natīdzeh bi-l-ʔidztimāf** al-mudīr yʔakkid  
**DEF-result in-DEF-meeting** DEF-manager confirm.PRES.3SM  
 ‘The employee was absent when **the result, at the meeting**, the manager confirmed.’

b. \*al-muwaDDaf kān ḡāyb yūm  
 DEF-employee was.3SM absent when  
**bi-l-ʔidztimāf an-natīdzeh** al-mudīr yʔakkid  
**in-DEF-meeting DEF-result** DEF-manager confirm.PRES.3SM  
 ‘The employee was absent when **the result, at the meeting**, the manager confirmed.’

Ungrammaticality of the two sentences in (30) can be accounted for following the proposal that there is only one focused element allowed per clause. This means that either the fronted direct object or the fronted adjunct can be focalized, not both of them (see, Rizzi 1997, 2001, and 2004, among others).

In the following subsection, I bring more evidence that the upper Topic Phrase is not found in NA peripheral temporal clauses in NA.

#### 4.2.4 More evidence against upper Topic Phrase

In this section, I provide further evidence in favour of the argument that peripheral temporal clauses lack the upper Topic Phrase. Following some recent proposals concerning discourse particles (defined as functional heads which occupy fixed positions within the structure of the clause and have the effect that they change the interpretation of the proposition expressed by the clause; Biberauer *et al.* 2010, Coniglio 2008, and Zimmermann 2004), Alshamari (2016) argues that the particle *binisbah* ‘as for’ is better treated as a discourse particle that introduces the element functioning as a shifting topic (or the upper topic in our terms). He observes also that this discourse particle introduces the element which refers to an entity that a sentence is about, and which is newly introduced into the ongoing conversation. Additionally, in situations where the ongoing discussion revolves around one topic, but, for some reason, the conversation digresses from this topic to a different one, a speaker may return to the original topic by means of this particle. This observation fits exactly the definition of the upper topic



proposed by Frascarelli and Hinterhölzl (2007), as being the element that introduces either a new topic or a newly retrieved topic. Alshamari (2016: 24) discusses the following example:

(31)

Speaker (1): ʔafDal waqt li-l-qirāʔəh ʔi-ʃʃubuḥ  
 best time for-DEF-reading DEF-morning  
 ‘The best time for reading is morning.’

Speaker (2): bass mumkin ma yukūn al-waqt  
 but might NEG be.PRES.3SM DEF-time  
 al-ʔafDal ʔiḏa kint sahrān xuṣūṣan  
 DEF-best if be.PAST.1SM stayed up especially  
 ʔiḏa kint lāʃib mubarāt  
 if be.PAST.1SM play.PAST.3SM game  
 qadam rāḥ tkūn taʃbān min bukra  
 football will be.PRES.2MS tired from tomorrow  
 ‘But it might not be the best time if you stayed up all night, especially if you had already played a football game. You will be tired the following day.’

Speaker (3): laʃabt mubarāt qabul ʔams w-li-l-ḥīn  
 play.PAST.1SM game before yesterday and-till-DEF-now  
 taʃbān al-muškilah inn-i kill ʔisbūʃ  
 tired DEFproblem that-1SM every week  
 ʔalʃab ḡalāḡ mubarayāt  
 Play.PAST.1SM three games  
 ‘I played a game the day before yesterday, and I am still tired. The problem is that I play three games a week.’

Speaker (1): binisbah li-ʔafDal waqt lil-qirāʔəh ʔaDīn  
 for best time DEF-reading think.PAST.1SM  
 kill wāḥid l-uh barnāmadʒ-uh al-mufaDDal  
 every one to-him schedule-his DEF-favorite  
 ‘As for the best time for reading, I think everyone has his own favorite time.’

Alshamari (2016) argues that the particle *binisbah* is used to revive the main topic that is overridden by other topics. Note that the conversation was about the best time for reading, being the morning time. As the conversation proceeded, the speakers digressed from the main topic of their conversation. In his last utterance, speaker A shifted the conversation back to the main topic again, by means of the particle *binisbah*.

In view of this, the presence of the particle *binisbah* is a reliable sign of the presence of the upper topic (even if this topic has a different structural position in the NA left periphery). So, the test is that if the particle *binisbah* is used in the left periphery of NA peripheral temporal adverbial clauses, it follows that the upper topic is present, and hence the left periphery of NA peripheral temporal clauses has no reduced left periphery but rather, has a different configuration, unlike Italian, German, and other Arabic dialects. On the other hand, if the particle *binisbali* is disallowed from appearing in the left periphery of NA peripheral temporal adverbial clauses, then it follows that such clauses have a reduced left periphery and thus aligns with the cross-linguistic observation that the shifting topic is not present in non-root contexts, such as adverbial clauses.

NA data suggests that the upper topic phrase is not projected in peripheral temporal clauses as shown in (32a), whereas it is available in main clauses as in (32b). Consider the following examples:

(32)

a.*	yūm	binisbah	li-l-ʔidʒtimāʕ	an-natīdʒeh	al-mudīr
	when	Prt	for-DEF-meeting	DEF-result.F	DEF-manager
	yʔakkad-ah		al-muwaDDaf	kān	ġāyb
	confirm.3SM.PRES-it		DEF-employee	was	absent

‘When at the meeting, the result, the manager confirmed it, the employee was absent.’

b.	binisbah	li-Fahd	<b>kūrāh</b>	ʔištra
	Prt	for-Fahd	ball	buy.3SM.PAST

‘As for Fahd, **a ball**, he bought’

Following the general lines of Alshamari (2016), I argue that the particle *binisbah* marks the element that functions as a shifting topic, i.e. the upper topic. Note here that Alshamari

himself argues that in order to license the particle *binisbah* in a sentence, it must occupy a clause-initial position; otherwise the sentence would not be grammatical. This follows from the fixed position of the upper topic that the particle *binisbah* introduces. If we incorporate Alshamari's (2016) insight on the function of the particle *binisbah* with Bianchi and Frascarelli's insights that the upper topic does not project in non-root contexts, the restriction against the particle *binisbah* to occur in peripheral conditional adverbial clauses follows straightforwardly.

On the other hand, one might propose at this point that the restriction against the particle *binisbali* to appear in peripheral temporal adverbial clauses can be independently accounted for suggesting that discourse particles are infelicitous in peripheral conditional adverbial clauses, as their roles are more restricted in non-root contexts. This possibility is directly dismissed when we consider other particles that may occur at the left periphery of NA adverbial clause. Again, Alshamari (2016) himself argues that the discourse particle *tara* agrees with a special type of topics known as a Contrastive topic. The Contrastive Topic interpretation is associated with the lower topic position for him. If the discourse particle *tara* is used in the temporal peripheral adverbial clauses, then it follows that the lower topic is present in such clauses as discourse particles are allowed to appear in the left periphery of the conditional peripheral adverbial clauses, which is what the data really confirms:

- (33)      yūm    tar-uh            al-mudīr        yʔakkid            an-natīdʒeh  
           when    Prt                    DEF-manager    confirm.3SM.pres    DEF-result  
           bi-l-ʔidʒtimāʕ        al-muwaDDaf        kān    ǧāyb  
           in-DEF-meeting        DEF-employee        was    absent

‘When the manager confirmed the result at the meeting, the employee was absent.’

The fact the example in (33) is grammatical even with the presence of the discourse particle *tara* is concrete evidence that discourse particles are not prohibited from appearing in peripheral temporal adverbial clauses. Following this light, the particle *binisbah* is blocked from appearing in peripheral temporal adverbial clauses because the upper topic that houses it is not projected. On the other hand, the discourse particle *tara* can appear in such clauses because the lower topic phrase is present.

#### 4.3.4 Conclusion

This section has investigated the internal syntax of peripheral temporal clauses that are introduced by the subordinator *yūm* ‘when’. It has shown that Topic Phrase and Focus Phrase are available in the left periphery of this type of clauses. It has argued that the Topic layer which is located below the Focus Phrase is recursive, given that more than one topic can move there. Following Bianchi & Frascarelli’s (2010) proposal that the upper Topic layer is only prerogative of root clauses, this section argues that NA peripheral temporal clauses lack the upper Topic Phrase. It provides evidence for this argument from discourse particles used in NA. It has been shown that while the higher topic marker *binisbah* ‘as for’ is available in NA main clauses, it is missing in peripheral temporal clauses.

The following section will investigate the internal syntax of central temporal adverbial clauses.

#### 4.4 The internal syntax of central temporal adverbial clauses in NA

In this section, I explore the internal syntax of central temporal adverbial clauses in NA. I first begin with the descriptive facts which are important for the analysis that I will advance afterwards. I will show that temporal adverbial clauses introduced by *gabлма* ‘before’ and *baɟdma* ‘after’ have one invariant word order, i.e. the VSO word order. All other word orders, i.e., SVO, OVS, etc. are not possible options. The main argument I propose here is that the only word order available in such clauses (i.e. the VSO word order) is derived through the movement of the verb (i.e. the complex V+v+T) to the head of the Finiteness Phrase which does not have an EDGE feature. I also furnish evidence that neither Topic Phrase nor Focus Phrase can be projected in central temporal adverbial clauses, hence the ban against other word orders used in such clauses.

##### 4.4.1 Descriptive facts

It is quite clear from the NA data that the only word order that is allowed in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baɟdma* ‘after’ is the VSO word order.<sup>24</sup> All other word orders, i.e., SVO, OVS, etc. are not possible options. In order to appreciate this point, consider the following sentences:

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<sup>24</sup> Because central *yūm* has an identical syntactic behaviour of the subordinator *baɟdma* ‘after’, I do not discuss central *yūm* ‘after’ here.

(34)a. al-muwaDDaf      arsal                              al-ʔimail      *gabлма/ baʔdma*  
DEF-employee      send.3SM.PAST      DEF-email      before/after  
ʔakkad                      al-mudīr                      an-naʔidʒeh                      bi-l-ʔidʒtimāʕ  
confirm.3SM.PAST DEF-manager      DEF-result                      in-DEF-meeting

‘The employee sent the email before/after the manager confirmed the result at the meeting.’

b. \*al-muwaDDaf      arsal                              al-ʔimail      *gabлма/ baʔdma*  
DEF-employee      send.PAST.3SM      DEF-email      before/after  
al-mudīr                      ʔakkad                              an-naʔidʒeh      bi-l-ʔidʒtimāʕ  
DEF-manager      confirm.3SM.PAST      DEF-result      in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

c. \*al-muwaDDaf      arsal                              al-ʔimail      *gabлма/ baʔdma*  
DEF-employee      send.3SM.PAST      DEF-email      before/after  
an-naʔidʒeh                      ʔakkad                                              al-mudīr                      bi-l-ʔidʒtimāʕ  
DEF-result                      confirm.3SM.PAST                      DEF-manager      in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

Sentence (34a) is grammatical because the word order used in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʔdma* ‘after’ is the VSO word order. Sentence (34b) is ungrammatical because the word order used is the SVO word order. Sentence (34c) is ungrammatical because the word order used in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʔdma* ‘after’ is the OVS word order. This fact actually goes counter to the situation in NA root clauses where all word order options are possible. Consider the following examples which I bring from chapter 1:

- (35)
- |    |                       |                  |                  |       |
|----|-----------------------|------------------|------------------|-------|
| a. | arsal                 | al-barīd         | Fahd             | (VOS) |
|    | send.3SM.PAST         | DEF-post         | Fahd             |       |
|    | “Fahd sent the post.” |                  |                  |       |
| b. | al-barīd              | arsal-uh         | Fahd             | (OVS) |
|    | DEF-post              | send.3SM.PAST-it | Fahd             |       |
|    | “Fahd sent the post.” |                  |                  |       |
| c. | al-barīd              | Fahd             | arsal-uh         | (OSV) |
|    | DEF-post              | Fahd             | send.3SM.PAST-it |       |
|    | “Fahd sent the post.” |                  |                  |       |
| d. | Fahd                  | al-barīd         | arsal-uh         | (SOV) |
|    | Fahd                  | DEF-post         | send.3SM.PAST-it |       |
|    | “Fahd sent the post.” |                  |                  |       |

Another difference between the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’ and root clauses lies in the fact that adjunct fronting is also prohibited in the former clauses. All accompanying adjuncts should appear to the right of the verb; otherwise the resulting sentence would become ungrammatical. Consider the following example which includes a clause with a fronting adjunct:

- (36)\*al-muwaDDaf      arsal                      al-ʕimail      *gabлма/ baʕdma*  
 DEF-employee      send.3SM.PAST      DEF-email      before/after  
bi-l-ʕidʕtimāʕ      ʕakkad                      al-mudīr      an-natīdʕeh  
 in-DEF-meeting      confirm.3SM.PAST      DEF-manager      DEF-result

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

The example in (36) implies that adjunct fronting is prohibited. This points to the fact that the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’ show different behaviour as compared to the peripheral subordinator *yūm* ‘when’ with respect to argument/adjunct fronting. Recall that adjuncts and arguments are allowed to appear preverbally in the peripheral temporal adverbial clauses introduced by the subordinator peripheral *yūm* ‘when’.

On the basis on this, an obvious starting point which can be drawn here is that the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’ have only one invariant word order, i.e. the VSO word order. All other word orders, i.e., SVO, OVS, etc. are not possible options. Let us first now account for the VSO word order fact of the NA central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’. I take up this point in the following section.

#### 4.4.2 *The derivation of the VSO word order in NA central clauses*

##### 4.4.2.1 *Introduction*

In this section, I investigate the syntactic derivation of the VSO word order in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’. I start my analysis with refuting the immediate proposal that subject remains in situ, while the verb adjoins to T so as to account for the VSO order in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’. Then, I discuss the operator movement approach (Haegeman 2012, 2014) and show how this approach cannot accommodate NA central clauses facts. Next, I introduce my approach, depending on the truncation approach for the left periphery. The main argument is that there is no Topic Phrase nor Focus Phrase in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’. The lexical verb moves to Fin, the head of Finiteness Phrase attracted by the [V] feature that Fin carries.

##### 4.4.2.2 *The Subject is not in Spec-vP*

To account for the invariant VSO word order in the NA central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’, one can suggest that the verb adjoins to T, whereas the subject remains in situ, that is in the Spec position of vP/VP. Following this suggestion, the subject does not raise to the Spec position of TP, yielding as a result, the invariant VSO order in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’. However, this proposal does not account for other NA central clauses facts. First, what casts doubt on this approach is the fact that subject appears to the left of the adjuncts that are claimed to adjoin to Aspect Phrase (an intermediate projection between TP and vP; cf. Fassi Fehri 1993, 2012) in Arabic clause structure. According to Rahhali and Souâli (1997), Benmamoun (2000), and Fassi Fehri (2012), aspectual adverbs in Arabic are reliable sign to determine the movement of the verb to T and the movement of subject to the Spec position of TP. The main idea is that if the verb appears to the left of (aspectual) adverbs, the verb adjoins to T or adjoins to a head above T.

Consider the following examples where the subject appears to the left of the aspectual adjunct *taw* ‘just’:

(37)	al-muwaDaf	arsal	al-ʔimail	<i>gabлма/ baʔdma</i>
	DEF-employee	send.3SM.PAST	DEF-email	before/after
	ʔakkad	al-mudīr	tawuh an-natīdzeh	bi-l-ʔidztimāʕ
	confirm.PAST.3SM	DEF-manager	just DEF-result	in-DEF-meeting

‘The employee sent the email before/after the manager has just confirmed the result at the meeting.’

Note here if the subject in (37) appears to the right of the aspectual adverb *tawuh*, the resulting sentence would be ungrammatical, as shown in the following ill-formed example:

(38)*	al-muwaDDaf	arsal	al-ʔimail	<i>gabлма/ baʔdma</i>
	DEF-employee	send.3SM.PAST	DEF-email	before/after
	ʔakkad	tawuh al-mudīr	an-natīdzeh	bi-l-ʔidztimāʕ
	confirm.3SM.PAST	just DEF-manager	DEF-result	in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager has just confirmed the result at the meeting.’

As is clear from the above examples in (37-38), the aspectual adverb *taw* ‘just’ appears to the right of the subject *al-mudīr* ‘the manager’ and to the left of the object *an-natīdzeh*. In example (37), the verb *ʔakkad* ‘confirmed’ appears to the left of the aspectual adverb *taw* ‘just’, implying that the verb is either adjoining to T or in a position higher than T. What is important here to focus on is the observation that the subject *al-mudīr* ‘the manager’ appears also to the left of the aspectual adverb *taw* ‘just’. If we follow the claim that verb leaves the head of vP, little v, to adjoin to T or to move to a higher projection when it appears to the left of the aspectual adverb *taw* ‘just’, we can argue that the subject in such cases is also located in a position higher than the aspectual adverb *taw* ‘just’. Given the sentence derivation, the aspectual adverb *taw* ‘just’ enters the derivation in a position higher than vP whose Spec is the canonical position of the subject (cf. Cinque 1999). The fact that the subject *al-mudīr* ‘the manager’ appears to the left of the aspectual adverb *taw* ‘just’ is reliable evidence for the higher position of the subject *al-mudīr* ‘the manager’ in (38). The position of the aspectual adverb *taw* ‘just’ is thus indicative of two facts. Firstly, the subject is not in the Spec position of vP but in the Spec position of TP or even higher. Secondly, the verb does not adjoin to T.




The relative order between verb and subject, which is not in its canonical position, indicates that the verb leaves T to some position in the left periphery, i.e. CP. Given this, the proposal that the verb adjoins to T in the VSO word order, while the subject remains in situ is ruled out if we take into consideration the empirical evidence of the position of temporal adverbs relative the position of the subject and the verb.

Let us now examine whether the recent approach advanced by Haegeman (2007, 2010, 2012, 2014) and Haegeman & Ürögdi (2010) can account for the invariant VSO word order in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *бағдма* ‘after’ alongside the fact that there is no adjunct nor argument fronting.

#### 4.4.2.3 The operator movement approach and NA central adverbial clauses

As I have shown in Chapter 2, under this approach, a subordinate clause which disallows root transformations (such as the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *бағдма* ‘after’) involves the movement of an operator to its CP domain. This operator blocks any argument fronting because the relevant transformation is ruled out as a minimality violation (Haegeman 2007, 2010 and Haegeman & Ürögdi 2010). Following this approach, the central temporal clause introduced by the subordinators *gabлма* ‘before’ or *бағдма* ‘after’ is said to be derived by the movement of an operator to a clause-initial position. Therefore, the operator blocks the movement of any argument to land in any position that is higher than the operator, given the minimality violation invoked by the operator (Haegeman 2010). Consider the following sentence and its representation. (Haegeman 2010: 635).

- (39) a. \*John left when the office Sheila left.
- b. \*John left [<sub>CP</sub> when<sub>i</sub> the office<sub>j</sub> [<sub>IP</sub> Sheila left t<sub>j</sub> t<sub>i</sub>]]
- 

The operator movement to the left periphery blocks the movement of the topicalized DP *the office* to the left periphery. Haegeman (2010, 2012) argues that the impossibility of having a fronted argument is thus a reflex of the operator movement. On the other hand, peripheral adverbial clauses are not derived by operator movement; hence there are no restrictions placed on the argument fronting.

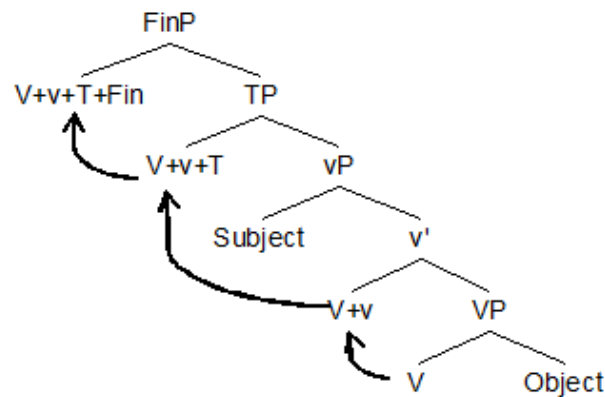
Following this approach and given the fact that there is only one invariant word order (namely the VSO word order) in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baḥdma* ‘after’, it can be suggested that the verb moves to Fin (i.e. the head of Fin Phrase) in the sense of Rizzi (1997), accompanied by an operator movement to the Spec position of Fin Phrase. Consider the following example:

(40)al-muwaDDaf	arsal	al-ḥimail	<i>gabлма/ baḥdma</i>
DEF-employee	send.PAST.3SM	DEF-email	before/after
ḥakkad	al-mudīr	an-natīdzeh	bi-l-ḥidztimāḥ
confirm.PAST.3SM	DEF-manager	DEF-result	in-DEF-meeting

‘The employee sent the email before/after the manager confirmed the result at the meeting.’

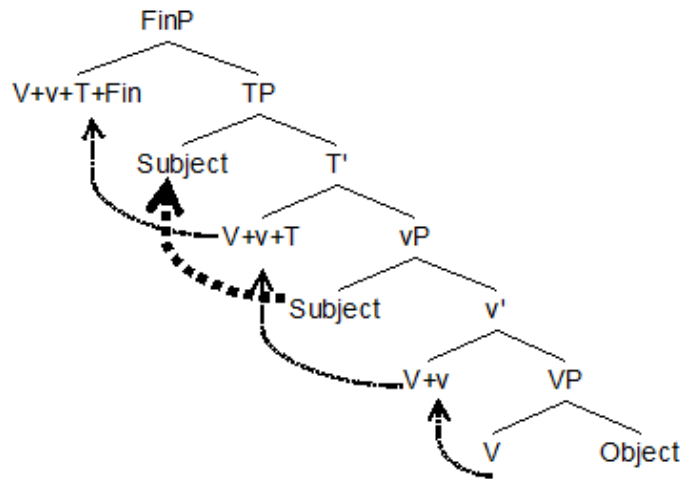
The verb *ḥakkad* ‘confirmed’ is base-generated as a head of the thematic VP shell (cf. Fassi Fehri 2012). Then it moves to adjoin to the functional head *v*, the head of *vP*. Then, the amalgamated head *V+v* moves to adjoin to *T* by head movement in order to satisfy the [V] feature on *T* (see, Benmamoun 2000). Afterwards, the amalgamated head *V+v+T* moves to adjoin to *Fin*, as schematically shown in the following structure.

(41)



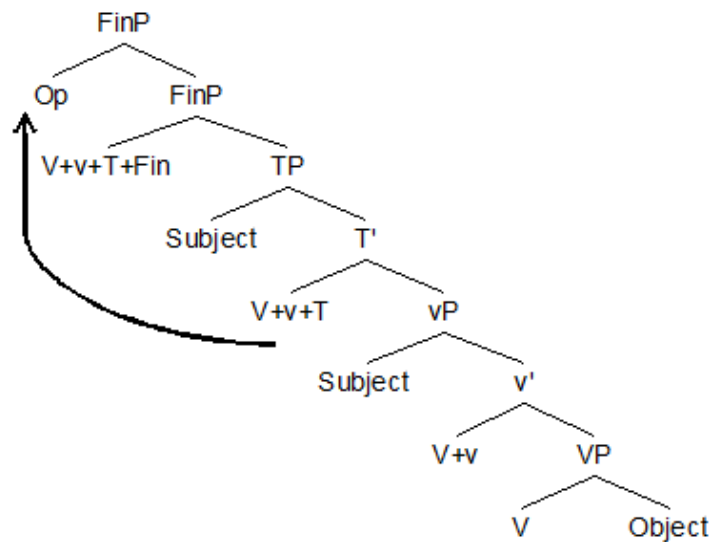
Following the D-hypothesis (Holmberg 2000, see chapter 2), the subject moves to the Spec position of TP because it has a [D] feature within its featural grid. Consider the following structure.

(42)



The requirement of T to have its Spec filled (by the subject) is hence satisfied. The requirements that are imposed by EPP and a D feature on T do not cause problems to this account, because the subject moves to Spec, TP, as desired. What is important here to highlight is that the verb movement to Fin Phrase is accompanied by an operator movement which lands in the Spec position of Fin, causing an intervention blocking effect to any argument movement (the subject or the object) to a higher position within the left periphery.<sup>25</sup> (Recall that this explanation assumes that there are projections above FinP). Consider the following structure (For Haegeman 2012, the operator moves to the left periphery from TP):

(43)



On the other hand, what casts doubt on this approach is the fact that this approach has been originally proposed to account for the observation that in English, adjuncts but not arguments

<sup>25</sup> I do not elaborate on the operator movement, given that I will argue against this approach in the following subsections.

can be fronted to the left periphery. Consider the following sentence (from Haegeman 2010: 632).

(44) If on Monday we haven't found him, we'll call RSPCA.

According to Haegeman (2010), the adjunct *on Monday* in (44) is fronted to the left periphery, given its position directly following the conditional *if* and before the subject. Under the operator approach, the movement of *on Monday* to the left periphery is expected, given that the operator does not block adjunct fronting. Additionally, this approach accounts for the fact that in Romance a CLLD constructions are allowed in central adverbial clauses. Recall that a CLLD is argued to be base-generated in the left periphery of the clause (see, Cinque 1990, among others). See chapter 2 and consider the following relevant examples taken from Haegeman (2010:632).

(45)a. Se gli esami finali non **li** superi non otterai li diploma  
If DEF exam final NEG them pass-2S NEG obtain DEF degree  
'If you don't pass the final exam, you won't get the degree.' (Italian)

b. Si ce livre-là tu **le** trouves à la Fnac achète-le  
If this book-there you it find-2S at DEF FNAC buy-1MP it  
'If you find this book at FNAC, buy it.' (French)

With this being the case, the apparent question to ask here is how this approach can account for the invariant VSO word order in the central temporal adverbial clauses introduced by the subordinators *gabлма* 'before' and *baɕdma* 'after', given that both arguments and adjuncts cannot appear preverbally, a fact that is unexpected under this approach. Consider the following sentences, where the sentences in (46, b) include a central temporal clause introduced by the subordinators *gabлма* 'before' and *baɕdma* 'after' with a word order rather than a VSO word order. Sentence (46c) includes a central temporal clause with a fronted adjunct.

(46)a.*	al-muwaDDaf	arsal	al-ʔimail	<i>gabлма/ baʔdma</i>
	DEF-employee	send.3SM.PAST	DEF-email	before/after
	<u>al-mudīr</u>	ʔakkad	an-natīdʒeh	bi-l-ʔidʒtimāʔ
	DEF-manager	confirm.PAST.3SM	DEF-result	in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

b.	*al-muwaDDaf	arsal	al-ʔimail	<i>gabлма/ baʔdma</i>
	DEF-employee	send.PAST.3SM	DEF-email	before/after
	<u>ʔan-natīdʒeh</u>	ʔakkad	al-mudīr	bi-l-ʔidʒtimāʔ
	DEF-result	confirm.PAST.3SM	DEF-manager	in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

c.*	al-muwaDDaf	arsal	al-ʔimail	<i>gabлма/ baʔdma</i>
	DEF-employee	send.3SM.PAST	DEF-email	before/after
	<u>bi-l-ʔidʒtimāʔ</u>	ʔakkad	al-mudīr	an-natīdʒeh
	in-DEF-meeting	confirm.3SM.PAST	DEF-manager	DEF-result

Intended: ‘The employee sent the email before/after the manager confirmed the result at the meeting.’

If we adopt the operator approach to account for the sentence derivation of central clauses in NA, it is hard to account for the fact that adjunct fronting is also illicit in this variety. The operator in the left periphery is set to block argument fronting rather than adjunct fronting, which is not the case in NA grammar, as shown in the examples above in (46).

In the following section, I propose my account to the invariant VSO word order in NA central temporal adverbial clauses. First, I re-introduce the basic information about the truncation approach on which I build my proposal to the invariant VSO word order in NA central temporal adverbial clauses.

#### 4.4.2.4 The CP-Truncation approach and NA central adverbial clauses

Under this proposal, central adverbial clauses are structurally deficient in the sense that their left periphery is reduced. They lack the functional projection ‘Force’ which encodes assertive illocutionary force. Due to this deficiency, Topic Phrase and Focus Phrase, being dependent

on the Force Phrase, are not projected in the central adverbial clauses. This means that argument fronting is ungrammatical (Haegeman 2004b: 188). In other words, a constituent affected by a root transformation such as topicalization and focalization does not move to a particular domain within the peripheral part of a clause. A clause without such projections (e.g., central adverbial clause) cannot offer a landing site for a preposed constituent, and hence, blocks the relevant transformation (Haegeman 2003, 2006, Munaro 2005, Bocci 2007, Julien 2007, and Nasu 2014).

This approach crucially suggests that there is a distinction between the head which encodes illocutionary force (i.e., Force Phrase) and the head which serves simply to subordinate a clause (i.e., to make it available for categorial selection independently of its force). (Haegeman 2003: 335). Force Phrase (in the sense of Rizzi 1997) is split into two different projections: Sub (a place where the subordinator is positioned) and Force (encoding the illocutionary force of the clause). In central adverbial clauses, only Sub is available, while Force and other projections depending on it (i.e., Topic Phrase and Focus Phrase) are truncated. On the other hand, in the peripheral adverbial clauses the projections of the left periphery (i.e. Sub, Force Phrase, Topic Phrase, and Focus Phrase) are available for any fronting, resulting in no apparent restrictions against argument and/or adjunct fronting. In such clauses, truncation is prohibited because peripheral adverbial clauses act as a root clause in that they have their own assertive illocutionary force. Consider Table 5 that summarizes the left peripheries of different types of clauses discussed here<sup>26</sup>

Table 5: The left periphery of clauses (modified)

Clause Type	Projections available
Central adverbial	Sub>Fin
Peripheral adverbial	Sub>Force>Focus>Top>Fin
Root clauses	Force>Top>Focus>Top>Fin

As summarized in Table 5, central adverbial clauses, peripheral adverbial clauses, and root clauses differ regarding the projections available in their left periphery.

Following the truncation approach of the left periphery of central adverbial clauses (Haegeman 2002, 2003), it is predicated that no arguments nor adjuncts are allowed to appear

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<sup>26</sup> In section 4.2, I have demonstrated that peripheral temporal adverbial clauses in NA lack the higher Topic Phrase.

in a preverbal position. I claim that the obligatory VSO word order in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baғdma* ‘after’ is derived by the movement of the verb to Fin Phrase. Said this, there are three important assumptions that can be obtained following this claim. These three assumptions account for all of the facts that are related to NA central conditional adverbial clauses. The first assumption is that the left periphery of NA central clauses is truncated in the sense that no Topic phrase nor Focus Phrase is projected (above Fin Phrase). The main evidence in favour of this assumption comes from the fact that verb cannot be contrastively focalized. Consider the following ill-formed sentence:

(47)*al-muwaDDaf	arsal	al-ғimail	<i>gabлма/ baғdma</i>
DEF-employee	send.3SM.PAST	DEF-email	before/after
<b>ғakkad</b>	al-mudīr	an-natīdzeh	bi-l-ғidztimāғ
confirm.3SM.PAST	DEF-manager	DEF-result	in-DEF-meeting

Intended: ‘The employee sent the email before/after the manager CONFIRMED the result at the meeting.’

Under the truncation approach, the verb is expected not to move to Focus Phrase, given that this phrase is not projected, which is truly the case, here. If we follow the operator movement approach, the potential operator that is situated in the left periphery (i.e. in the Spec position of Fin Phrase) does not block head movement. That is because the operator is proposed to be an XP element with the effect to block the movement of other XP elements but not the movement of X<sup>o</sup> elements like the verb. Within ill-formed sentence (40), the verb is suggested to move to the left periphery due to the contrastive stress that the verb bears, hence the sentence ungrammaticality. The operator approach cannot account for why the example in (40) is ungrammatical, whereas the CP-truncation approach does straightforwardly. The example in (40) is a clear piece of evidence for the unavailability of Focus Phrase above Fin Phrase.

In order to account for why elements cannot move to Spec, Fin Phrase, I argue that Fin Phrase does not have an EDGE feature within its featural bundle. So there is no movement of adjuncts and/or arguments forced to the Spec position of Fin Phrase. According to Chomsky (2005, 2007), phrases have specifiers because they have an EDGE feature within the featural grid of their heads. The fact that adjuncts and arguments cannot move to the left of the verb (which is in a structural position higher than TP, see section 4.2. above) indicates that the

phrase that houses the verb does not have an EDGE feature, which is the main reason for incompatibility of any movement to its Spec.

The next question to ask here is why the verb moves to Fin Phrase in the first place. Put differently, what is the real motivation of the verb to leave its position in TP and raises to the head of Fin Phrase? The answer of this question lies in the proposal that the head of the Fin Phrase has a [+V] feature which attracts the verb to Fin Phrase. According to Benmamoun (1999, 2000), the main difference between PAST tense and PRESENT tense in Arabic is that the former has [+V] feature within its featural bundle, which attracts the verb to T. On the other hand, PRESENT tense does not have such a feature, hence the verb remains adjoining to the little v. Benmamoun takes this proposal to account for several facts related to the positions of the verb in Modern Standard Arabic. For instance, when the verb occurs in the present tense, the subject appears to the left of the verb, while the subject appears to the right of the verb as long as verb appears in the past tense. I exploit this approach and extend it to Fin Phrase in NA. I claim that the head of Fin Phrase in the central temporal adverbial clauses introduced by the subordinators *gabлма* ‘before’ and *baЅdma* ‘after’ bears [+V] feature, which attracts verb from its position adjoining to T.

Seen this way, the invariant VSO word order in NA central conditional adverbial clauses is accounted for. First, the verb moves to Fin Phrase attracted by [+V] feature the head Fin bears. Secondly, Fin Phrase does not have the EDGE feature; the movement to its Spec is thus not allowed. Thirdly, the higher phrases, which are Focus Phrase and Topic Phrase, are truncated.

#### 4.4.3 Summary

This section has investigated the internal syntax of the central temporal adverbial clauses introduced by *gabлма* ‘before’ and *baЅdma* ‘after’. It has focused on the observation that the VSO word order is the only available word order used in temporal adverbial clauses introduced by these subordinators. This section has introduced the competing proposals advanced in the literature, most notably the operator proposal. It has shown that this proposal is invalid in accounting for the word order facts of NA central temporal adverbial clauses, given that it cannot account for adjunct fronting. Instead, following Haegeman (2003), this section has argued that in the central temporal adverbial clauses introduced by *gabлма* ‘before’ and *baЅdma* ‘after’, the verb moves to Finiteness Phrase which is attracted by [+V] feature on Fin°. The fact that there is no adjunct nor argument fronting is accounted for,



suggesting that  $\text{Fin}^\circ$  does not have an EDGE feature; so, there is no movement whatsoever to its Spec. Also, this section has argued that Topic Phase and Focus Phrase are not projected in the left periphery of NA central temporal adverbial clauses.

#### 4.5 Conclusion

This chapter has investigated the internal syntax of temporal adverbial clauses in NA. It has been divided into two main sections. The first section has investigated the internal syntax of the peripheral temporal adverbial clauses which are introduced by *yūm* ‘when’. It has argued that there is a layer dedicated to topics, and this layer is located below the Focus Phrase which is also available in such clauses. This section has also argued that the topic layer is recursive, given that more than one topic can move there. On the other hand, this section has provided evidence that the structure of the left periphery in the peripheral temporal clauses introduced by the subordinator *yūm* ‘when’ is somehow poorer than that of root clauses in that there is no upper topic phrase (the layer c-commanding the Focus Phrase), hence lending support to Bianchi & Frascarelli’s (2010) proposal that this Topic layer is only prerogative of root clauses. This section has shown that the higher topic marker *binisbah* ‘as for’ cannot be used in peripheral temporal adverbial clauses, whereas such a marker is available in NA main clauses.

The second section has investigated the internal syntax of the central temporal adverbial clauses introduced by *gabлма* ‘before’ and *baɣdma* ‘after’. It has focused on the observation that the VSO word order is the only word order available in the temporal adverbial clauses introduced by these subordinators. It has introduced the competing proposals advanced in the literature, most notably the operator proposal. It has shown that this proposal is invalid in accounting for the word order facts of central temporal adverbial clauses in NA. This approach has been proven incapable of accounting for adjunct fronting. Following Haegeman (2003), this section has argued that in central temporal adverbial clauses introduced by *gabлма* ‘before’ and *baɣdma* ‘after’, the verb moves to Finiteness Phrase which is attracted by [+V] feature on  $\text{Fin}^\circ$ . This section has also accounted for the fact that there is no adjunct nor argument fronting, suggesting that  $\text{Fin}^\circ$  does not have an EDGE feature. This means that there is no movement whatsoever to its Spec. Additionally, this section has argued that Topic Phase and Focus Phrase are not projected in the left periphery of NA central temporal adverbial clauses.

The following chapters (chapters 5 & 6) will investigate the syntax of conditional clauses in NA. While chapter 5 will be devoted to the external syntax of NA conditional clauses, chapter 6 will investigate the internal syntax of these clauses.

## Chapter FIVE: The External Syntax of Conditional Adverbial Clauses in NA

### 5.1 Introduction

This chapter investigates the external syntax of conditional adverbial clauses in NA. It provides evidence that NA exhibits a dichotomy of central vs. peripheral clauses in conditional clauses. The subordinators *ῖῖῖῖ*, *ῖῖῖ* and *ῖῖῖῖ*, which are all translated into English as ‘if’, are exclusively used as subordinators of central conditional clauses. The adverbial clauses introduced by them modify the time of the event that is expressed in the main clause.<sup>27</sup> On the other hand, the subordinator *ῖῖῖ* ‘if’ can be used as a subordinator of both central conditional clauses and peripheral conditional clauses, depending on its semantic use. I provide several diagnostic tests that confirm that NA conditional adverbial clauses exhibit a dichotomy of peripheral vs. central adverbial clauses. These tests include event vs. discourse readings, the scope of tense, the intended meaning of the conditional subordinator, epistemic modality, and coordination of likes. All of these pieces of evidence advocate for the view that central conditional clauses adjoin to TP, whereas peripheral conditional clauses adjoin to CP. Also, I explore the semantic difference between central *ῖῖῖ* ‘if’ and peripheral *ῖῖῖ* ‘if’.

This chapter is structured as follows. Section 5.2 presents some diagnostic tests that confirm that NA conditional adverbial clauses exhibit a dichotomy of peripheral vs. central adverbial clauses. This section is divided into five subsections. Section 5.3.1 shows that the conditional clauses introduced by *ῖῖῖῖ*, *ῖῖῖ*, *ῖῖῖῖ*, and central *ῖῖῖ* structure the event which is expressed in the main clause. On the other hand, the conditional clauses that are introduced by peripheral *ῖῖῖ* structure the discourse. Section 5.3.2 argues that *ῖῖῖῖ*, *ῖῖῖ*, *ῖῖῖῖ*, and central *ῖῖῖ* are located within the scope of tense of the operator associated with main clause, whereas peripheral conditional clauses are not. Section 5.3.3 discusses the intended meaning of the conditional subordinator. Following Haegeman (2012), this section argues that *ῖῖῖῖ*, *ῖῖῖ*, *ῖῖῖῖ*, and central *ῖῖῖ* (i.e. as central conditional particles) mean ‘if and when’, whereas *ῖῖῖ* (i.e. as a peripheral conditional particle) can only mean ‘if’. Section 5.3.4 shows that

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<sup>27</sup> The differences between *ῖῖῖ* and *ῖῖῖῖ* are subtle in terms of semantics/pragmatics. Additionally, according to NA informants’ intuitions, there seems a consensus that *ῖῖῖῖ* are used by elderly people. Given that the semantics/pragmatics of such conditional adverbial subordinators does not have any impact on the external and internal syntax of the clauses they introduce, I leave this issue aside.

epistemic expressions can only be used in peripheral conditional clauses. Section 5.3.5 argues that coordination is not allowed between different conditional clauses (i.e. central conditionals and peripheral conditionals). Section 5.4 concludes the chapter.

## 5.2 Diagnostics of peripheral vs. central conditional clauses in NA

In this section, I provide some diagnostics that are used to show the asymmetry between conditional clauses and, hence, the distinction between central and peripheral conditional clauses. These diagnostics include event vs. discourse readings, the scope of tense, the intended meaning of the conditional subordinator, epistemic modality, and coordination of likes.

### 5.2.1 Event vs. discourse

As can be noticed in the previous section, the key difference between central *law* ‘if’ and peripheral *law* ‘if’ lies in the fact that the former is used to introduce a real action (i.e. structure the event), whereas the latter is used to introduce an unreal action (i.e. structure the discourse). I argue here that conditional adverbial clauses which are introduced by the subordinators *ʔida, ʔin, ya/lya*, and central *law* ‘if’ have the function of structuring the event which is expressed in the associated main clause. Consider the following sentence:

(1) ʔin	xallaṣ	Fahd	al-wādʒib	al-laylah
If	finish.3SM.PAST	Fahd	DEF-assignment	DEF-tonight
rāḥ	yslm-uh		bukra	
will	submit.3SM.PRES-it		tomorrow	

‘If Fahd finishes the assignment tonight, he will submit it tomorrow.’

This example shows that the adverbial clause expresses a condition for the main clause event. The event expressed in the conditional antecedent is the cause of the event expressed in the consequent. They do not provide any background information related to the event that is introduced in the matrix clause, but just link the event of the associated main clause to that of the conditional clause, without structuring the discourse. On the other hand, the conditional adverbial clauses which are introduced by subordinator *law* ‘if’ (i.e. peripheral *law*) have the

function of structuring the discourse which is expressed in the associated main clause. Consider the following example<sup>28</sup>:

(2) law	aṭ-ṭālib	yštri	al-kitāb	min
if	DEF-student	buy.3SM.PRES	DEF-book	from
al-ṣamazūn	kān	waffər		flūs
DEF-amazon	Prt	save.3SM.PRES		money

‘If the student buys the book from the amazon, he will save money.’

The adverbial clause in (2) does not express a condition for the main clause event but provides background information related to the event expressed in the matrix clause.

### 5.2.2 *The scope of tense*

As I have shown in chapter 2, Haegeman (2004a, 2012) argues that matrix clause operators have scope over central adverbial clauses. That is because such clauses are base-generated in a position where they fall within the scope of the operators of the associated main clause. For instance, central adverbial clauses fall within the scope of the matrix tense. Haegeman (2012) argues that this leads to certain effects in English with respect to the expression of futurity. For instance, consider the following examples (taken from Haegeman 2012: 166).

- (3) a. If your back-supporting muscles tire, you will be at increased risk of lower-back pain.

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<sup>28</sup> The main difference between real vs. unreal conditional clauses in Arabic is that the main clause in the former cannot be introduced by the unreal marker *kān*, whereas *kān* is used to introduce the main clause in the later. (See Ryding (2005) and Ingham (1991a), (1994), for more details). Consider the following examples:

- i. \*in xallaṣ                      Fahd      al-wādʒib                      al-laylah  
 If finish.3SM.PAST      Fahd      DEF-assignment      DEF-tonight  
 kān                      yslm-uh                      bukra  
 Prt                      submit.3SM.PRES-it      tomorrow  
 ‘If Fahd finishes the assignment tonight, he will submit it tomorrow.’
- ii. law      aṭ-ṭālib                      yštri                      al-kitāb                      min  
 if      DEF-student      buy.3SM.PRES      DEF-book                      from  
 al-ṣamazūn      kān                      waffər                      flūs  
 DEF-amazon      Prt                      save.3SM.PRES                      money  
 ‘If the student buys the book from the amazon, he will save money.’

- b. If last week you had shown me the piece of pipe system that Laila and I built on Tuesday, I would never have believed it.
- c. If Tony Blair is worried about public confidence already, in this bright weather, he should think about what it's going to be like when we are huddled into the December winds.

In (3a), although the verb *tire* appears in the present tense, it refers to a future event of 'tiring'. This means that futurity is conveyed by the present tense by virtue of being in the scope of the matrix expression of future time (*will*). In (3b), the past tense *had shown* has an irrealis reading because of being subordinated to irrealis *would* in the main clause. Similarly, in (3c), the present tense *are* occurs in the when clause that is temporally subordinated to future *going to* in the superordinate clause and hence conveys futurity.

Applying this reasoning to the NA conditional adverbial clauses introduced by *ʔiḍa, ʔin, ya/lya*, and central *law* 'if', it is quite clear that such conditional adverbial clauses fall within the scope of the tense operator of the associated main clause (cf. Haegeman 2012). The tense of the conditional adverbial clauses introduced by *ʔiḍa, ʔin, ya/lya*, and central *law* 'if' are interpreted with reference to the tense of the main clause. Consider the following example.

(4) ʔin	xallaṣ	Fahd	al-wādʒib	al-laylah	rāḥ
	If finish.3SM.PAST	Fahd	DEF-assignment	DEF-tonight	will
	yslm-uh		bukra		
	submit.3SM.PRES-it		tomorrow		

'If Fahd finishes the assignment tonight, he will submit it tomorrow.'

Although the verb *xallaṣ* used in the conditional adverbial clauses introduced by *ʔin* and *ya/lya* occurs in the past tense, it is interpreted as future, which is the tense of the main clause. The verb *xallaṣ* 'finished' is classified as a past verb in Arabic, though its interpretation here is future. This discrepancy between the tense of verb and its semantic interpretation is straightforwardly accounted for assuming that the conditional adverbial clauses introduced by *ʔiḍa, ʔin, ya/lya*, and *law* 'if' are central, which are based-generated in a position that is commanded by the tense of the main clause.

On the other hand, when applying the same test to the conditional adverbial clauses introduced by peripheral *law* ‘if’, it will be clear that these clauses are peripheral. In other words, the conditional clauses introduced by *law* ‘if’ (i.e. peripheral *law*) are not temporally subordinated in the sense that they have their own independent tense interpretation. For instance, the past time expression *waffər* ‘saved’ in the matrix clause does not affect the interpretation of the peripheral conditional clause which has a present tense form *yštri* ‘buy’, as shown in the following sentence:

(5) <i>law</i>	<i>aṭ-ṭālib</i>	<i>yštri</i>	<i>al-kitāb</i>	<i>halḥīn</i>	<i>min</i>
if	DEF-student	buy.3SM.PRES	DEF-book	now	from
<i>al-ʔamazūn</i>	<i>kān</i>	<i>waffər</i>		<i>flūs</i>	
DEF-amazon	Prt	save.3SM.PAST		money	

‘If the student buys the book from the amazon, he will save money.’

From the previous examples, it can be concluded that the central conditional clauses, which are introduced by *iḍa,ʔin*, *ya/lya*, and central *law* ‘if’, are located within the scope tense of the operator of the associated main clause while peripheral conditional clauses are not.

### 5.2.3 *The intended meaning of the conditional subordinator*

Haegeman (2012) and Endo and Haegeman (2014) argue that central conditional adverbial clauses are different from peripheral conditional adverbial clauses in that a subordinator of the former means *if and when*, whereas in the latter the conditional subordinator only means *if*. Consider the following examples (taken from Endo and Haegeman 2014: 2):

- (6) a. If (and when) he has finished the text, we will show it to the editor.
- b. If (\*and when) he has finished the text, why did not he show it to me?

As for the NA data, it is clear that the conditional subordinators *iḍa,ʔin, ya/lya*, and central *law* ‘if’ mean *if and when* as in the examples in (7a), whereas the conditional subordinator *law* (i.e. peripheral *law*) can only be read as *if* as in (7b).

(7) a. *ʔin wa yūm xallaṣ Fahd al-baḥṯ rāḥ*  
 if and when finish.3SM.PAST Fahd DEF-research will  
*yslm-uh li-l-muḥrar*  
 submit.3SM.PRES-it to-DEF-editor

‘If and when Fahd finishes the research, he will submit it to the editor.’

b. *law (\*wa yūm) yxllaṣ Fahd al-baḥṯ kān*  
 if and when finish.3SM.PRES Fahd DEF-research Prt  
*slm-uh li-l-muḥrırır*  
 submit.PAST.3SM-it to-DEF-editor

‘If and when Fahd finishes the research, he will submit it to the editor.’

The grammatical sentence in (7a) indicates that the adverbial clause expresses a condition for the main clause event. The event expressed in the conditional antecedent is the cause of the event expressed in the consequent. They do not provide any background information that is related to the event introduced in the matrix clause, but link the event of the associated main clause to that of the conditional clause, without structuring the discourse.

#### 5.2.4 Epistemic modality

An additional argument in favour of the difference between NA conditional adverbial clauses can be adduced with reference to the observation made by Haegeman (2002, and elsewhere) that the expressions of epistemic modality cannot be used in central adverbial clauses, whereas they are compatible with peripheral adverbial clauses. When we apply this observation to NA conditional adverbial clauses, it turns out that the conditional adverbial clauses introduced by the subordinators *iḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’ are ill-formed with the use of epistemic expressions, whilst the conditional adverbial clauses introduced by *law* ‘if’ (i.e. peripheral *law*) allow such expressions. Consider the contrast in the following sentences (ESP= epistemic):

(8) a. *\*ʔin ymkin xallaṣ Fahd al-wādzib ba-laḥad*  
 If EPS finish.3SM.PAST Fahd DEF-assignment on-Sunday  
*rāḥ yslm-uh ba-laṯnayn*  
 will submit.3SM.PRES-it on-Monday

‘If Fahd might finish the assignment on Sunday, he will submit it on Monday.’



b. <i>law</i>	<i>aṭ-ṭālib</i>	<i>ymkin</i>	<i>yštri</i>	<i>al-kitāb</i>	<i>min</i>
if	DEF-student	EPS	buy.3SM.PRES	DEF-book	from
<i>al-ʔamazūn</i>	<i>kān</i>	<i>waffər</i>	<i>flūs</i>		
DEF-amazon	Prt	save.3SM.PAST	money		

‘If the student might buy the book from the amazon, he will save money.’

The ungrammatical sentence in (8a) illustrates that the conditional adverbial clauses introduced by the subordinators *iḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’ are different from the conditional adverbial clauses introduced by the subordinator *law* ‘if’ (i.e. peripheral *law*). In other words, such examples show that central conditional adverbial clauses are incompatible with epistemic modality as shown in (9a), whereas those introduced by the subordinator *law* ‘if’ (i.e. peripheral conditional clauses) are compatible with epistemic modality as in (8b) above.

This discrepancy can be accounted for assuming that the two types of conditional clauses are different with respect to their syntactic structure. Unlike the peripheral adverbial clauses, central adverbial clauses do not maintain a projection that is dedicated to epistemic modality while the latter does.

### 5.2.5 Coordination

Haegeman (2012) and Endo and Haegeman (2014) argue convincingly that central conditional adverbial clauses cannot conjoin a peripheral clause; therefore, there should be a syntactic distinction between the two types of adverbial clauses. It is worth mentioning that the idea that coordination can be used as a test to examine which structures are similar goes back to Williams’ (1978) Law of Coordination of Likes, a constraint that states that only constituents with the same structure can be conjoined. Endo and Haegeman (2014) interpret Williams’ (1978) Law of Coordination of Likes as a constraint that constituents which are merged in distinct positions in the tree cannot coordinate. Consider the following examples, which contain two while-clauses, one central and one peripheral (Haegeman 2012: 167):

(9) a. While<sup>2</sup> this ongoing lawsuit probably won't stop the use of lethal injection, it will certainly delay its use while<sup>1</sup> the Supreme Court decides what to do.

b. \*While<sup>2</sup> this ongoing lawsuit probably won't stop the use of lethal injection and while<sup>1</sup> the Supreme Court decides what to do, it will certainly delay its use.

c. \* This ongoing lawsuit will certainly delay the use of lethal injection while<sup>1</sup> the supreme court decides what to do and while<sup>2</sup> it probably won't stop its use.

Endo and Haegeman (2014) note that even though the two while-clauses modify the same clause and are introduced by the same conjunction, conjoining them is unacceptable, though. They take this as empirical evidence that adverbial clauses are not similar with respect to their base-generation and hence the degree of integration into the main clause.

In NA, coordination between conditional adverbial clauses that are similar is possible, whereas coordination between different types of conditional clauses (i.e. coordination between central clauses and peripheral clauses) is not possible. For instance, coordination in (10) is possible. This is because we coordinate two similar conditional clauses. In other words, we coordinate a central conditional clause with another central conditional clause as in (10a, b). We also coordinate a peripheral conditional clause with another peripheral clause as in (10c):

(10) a. ?in xallaş                      Fahd    al-wādʒib                      ba-laḥad  
           If finish.3SM.PAST    Fahd    DEF-assignment            on-Sunday  
           wa ya/lya      nadʒaḥ                      b-dʒmīʃ                      al-mawwād  
           and if                      pass.PAST.3SM.    in-all                      DEF-modules  
           rāḥ    ʔaʃtʰī-h                      dʒāʃizəh  
           will give.1S.PRES-3SM    prize  
           ‘If Fahd finishes the assignment on Sunday and passes all the modules,  
           I will give him a prize.’

b. ?in	xallaş	Fahd	al-wāz̄dib	ba-laḥad
If	finish.3SM.PAST	Fahd	DEF-assignment	on-Sunday
wa	?iḍa /law	nadzah	b-d̄zmīf	al-mawwād
and if	pass.3SM.PAST	in-all	DEF-modules	
rāḥ	?aʕtʕī-h	d̄zāʕizəh		
will	give.1S.PRES-3SM	prize		

‘If Fahd finishes the assignment on Sunday and passes all the modules, I will give him a prize.’

c. law	yxallaş	Fahd	al-wād̄zib	ba-laḥad
If	finish.3SM.PRES	Fahd	DEF-assignment	on-Sunday
wa	law	yndzah	b-d̄zmīf	al-mawwād
and if	pass.3SM.PRES	in-all	DEF-modules	
kān	?aʕtʕayt-uh	d̄zāʕizəh		
Prt	give.1S.PAST-3SM	prize		

‘If Fahd finishes the assignment on Sunday and passes all the modules, I will give him a prize.’

On the other hand, coordination between central conditional clauses and peripheral clauses is not possible, as shown in following example:

(11) *?in	xallaş	Fahd	al-wād̄zib	ba-laḥad
if	finish.3SM.PRES	Fahd	DEF-assignment	on-Saturday
wa	law	ynadzah	b-d̄zmīf	al-mawwād
and if	pass.3SM.PRES	in-all	DEF-modules	
rāḥ	?aʕtʕī-h	d̄zāʕizəh		
will	give.1S.PRES-3SM	prize		

‘If Fahd finishes the assignment on Sunday and passes all the modules, I will give him a prize.’

Also, coordination is impossible between conditional clauses which are different (i.e. central/peripheral), even if these clauses are introduced by same subordinator. Consider the following example:

(12) * <b>law</b> <sub>1</sub>	xallaṣ	Fahd	al-wādʒib	ba-laḥad
if	finish.3SM.PAST	Fahd	DEF-assignment	on-Sunday
wa <b>law</b> <sub>2</sub>	yndzaḥ	b-dʒmīʔ	al-mawwād	
and if	pass.PRES.3SM	in-all	DEF-modules	
rāḥ	ʔaʕtʔī-h		dʒāʕizəh	
will	give.1S.PRES-3SM		prize	

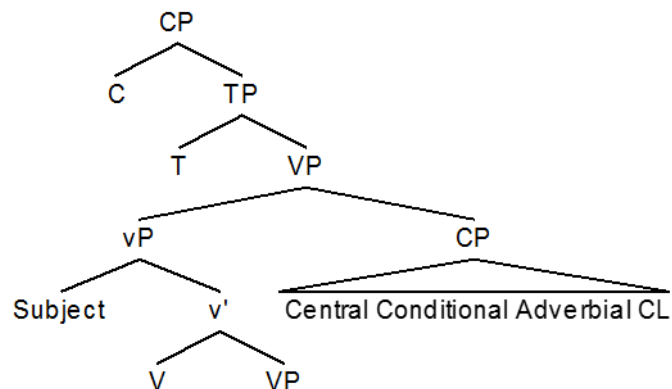
Intended: ‘If Fahd finishes the assignment on Sunday and passes all the modules, I will give him a prize.’

In (12), *law*<sub>1</sub> ‘if’ is central, whereas *law*<sub>2</sub> ‘if’ is peripheral. Coordination between them is impossible.

The ungrammaticality of the examples in (11-12) demonstrates that there is a difference between conditional adverbial clauses introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’ (i.e. central conditional clause) on the one hand and those introduced by *law* (i.e. peripheral conditional clause), on the other hand, with respect to base-generation with the associated main clause (cf. Haegeman 2012 and Endo and Haegeman 2014).

These observations suggest that conditional adverbial clauses introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’ are base-generated, adjoining to vP/VP of the associated main clause. As such, they fall within the scope of the tense operator of the main clause. Also, we can account for the fact that they provide information about the event of the main clause, instead of structuring the discourse. Against this background, I propose that the conditional adverbial clauses introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’ enter the derivation of the main clause, as explained in the following structure (adapted from Haegeman 2003):

(13)



Central conditional adverbial clauses are thus much integrated into the associated main clause. They fall within the tense operator of the main clause whose scope ranges over any respective central conditional adverbial clause.

### 5.3 Conclusion

This chapter has investigated the external syntax of conditional clauses in Najdi Arabic. It has argued that NA exhibits a dichotomy of central vs. peripheral clauses within conditional adverbial clauses. The subordinators *ʔiða*, *ʔin*, *ya/lya* ‘if’ are exclusively used as subordinators of central conditional clauses. The conditional clauses introduced by them modify the time of the event that is expressed in the main clause. On the other hand, the subordinator *law* ‘if’ can be used as a subordinator in both central conditional adverbial clauses and peripheral conditional adverbial clauses, depending crucially on the tense/aspect of the verb within the conditional clause. These facts are backed by evidence coming from event vs. discourse readings, the scope of tense, the meaning of the conditional subordinator used, epistemic modality, and coordination of likes, which all advocate for the view that central conditional adverbial clauses adjoin to TP, whereas peripheral conditional adverbial clauses adjoin to CP.

The following chapter will investigate the internal syntax of conditional clauses.



## Chapter SIX: The internal Syntax of Conditional Clauses in NA

### 6.1 Introduction

This chapter investigates the internal syntax of conditional clauses in NA. It is divided into two sections. The first section will investigate the internal syntax of the peripheral conditional clauses which are introduced by the subordinator *law* (i.e. peripheral *law*). It argues that these clauses have a layer dedicated to topics, and this layer is located below the Focus Phrase which is also available in such clauses. This section argues also that the lower topic layer in this type of clauses is recursive. This chapter argues that Bianchi & Frascarelli's (2010) proposal that the upper Topic layer is only limited to root clauses is supported by NA conditional clauses whose structure is somehow poorer than that of root clauses in that there is no upper Topic Phrase (the layer c-commanding the Focus Phrase). This section provides evidence supporting this argument from discourse particles. It shows that while the higher topic marker *binisbah* is available in root clauses, such a marker is not allowed in peripheral conditional clauses.

The second section in this chapter investigates the internal syntax of the central conditional clauses which are introduced by *ʔiða*, *ʔin*, *ya/lya* and central *law*. It shows that the only word order available in these clauses is the VSO word order. It introduces the competing proposals advanced in the literature, most notably the operator proposal. It shows that this proposal is invalid in accounting for the word order facts of the NA central conditional adverbial clauses, given that it cannot account for adjunct fronting. It argues that neither Topic Phrase nor Focus Phrase is projected in central conditional adverbial clauses. This chapter also argues that the verb moves to Finiteness Phrase which is attracted by [+V] feature on  $\text{Fin}^\circ$ , in the same way that is argued for central temporal clauses. This section also argues that  $\text{Fin}^\circ$  does not have an EDGE feature; hence there is no movement whatsoever to its Spec.

This chapter is divided into two main sections. It is organized as follows. Section 6.2 investigates the internal syntax of peripheral conditional clauses. It is divided into five subsections. Section 6.2.1 discusses the word orders used in peripheral conditional clauses. Section 6.2.2 investigates the CP structure of peripheral conditional clauses. Section 6.2.3 analyses in more depth the structure of the left periphery of peripheral conditional clauses. It argues that only the upper Topic Phrase is not available in the left periphery of these clauses. Section 6.2.4 gives more evidence for the argument that these clauses lack the upper Topic

Phrase. It shows that while the higher Topic marker *binisbah* is used in main clauses, such a particle cannot be used in peripheral conditional clauses. Section 6.2.5 concludes the whole section.

Section 6.3 investigates the internal syntax of central conditional adverbial clauses. It is also divided into three subsections. Section 6.3.1 discusses the word order used in central conditional adverbial clauses. It shows that the only word order allowed in these clauses in the VSO word order (i.e. arguments and adjuncts are not allowed to be fronted). Section 6.3.2 investigates the derivation of the VSO word order in central conditional clauses. Section 6.3.2.3 discusses the operator movement approach. It shows that this approach cannot account for the word order facts of the NA central conditional adverbial clauses, given that it cannot account for adjunct fronting. Section 6.3.2.4 discusses the truncation approach and shows that is suitable for NA relevant data. Section 6.3.3 concludes section 6.3. Section 6.4 concludes the whole chapter.

## **6.2 The internal syntax of peripheral conditional clauses in NA**

This section investigates the internal syntax of peripheral conditional clauses which are introduced by the subordinator *law* (i.e. peripheral law). Following Bianchi & Frascarelli's (2010) proposal that the upper Topic layer is only limited to root clauses, this section argues that the left periphery in peripheral conditional clauses introduced by the subordinator *law* allows all projections except for the upper Topic Phrase which does not project in this type of clauses. I make use of discourse particles as a test supporting the argument that the upper Topic Phrase is only limited to root clauses. While the higher topic marker *binisbah* is available in root clauses, such a marker is not allowed in peripheral conditional clauses. This implies that the conditional adverbial clauses introduced by the subordinator *law* 'if' are similar to the temporal adverbial clauses introduced by the subordinator *yūm* 'when'.

### *6.2.1 Word order in peripheral conditional clauses*

The unmarked word order used in peripheral conditional clauses is the SVO word order. Consider the following sentence:



- (1) *law aṭ-ṭālib yštri al-kitāb min al-ʔmazūn*  
 If DEF-student buys.3SM.PRES DEF-book from DEF-amazon  
*kān ma waffər flūs*  
 Prt NEG save.PRES.3SM money  
 ‘If the student buys the book from Amazon, he will not save money.’

Note that in the conditional adverbial clauses introduced by *law* ‘if’, the preverbal indefinite subjects are disallowed. Under such cases, the VSO word order is used, instead, giving rise to the same observation in the peripheral temporal adverbial clauses. Consider the following examples:

- (2) a. \**law ṭālib yštri al-kitāb min al-ʔmazūn*  
 If student buys.3SM.PRES DEF-book from DEF-amazon  
*kān waffər flūs*  
 Prt save.3SM.PAST money  
 Intended: ‘If a student buys the book from Amazon, he will save money.’

- b. *law yštri ṭālib al-kitāb min al-ʔmazūn*  
 If buys.3SM.PRES student DEF-book from DEF-amazon  
*kān waffər flūs*  
 Prt save.3SM.PAST money  
 ‘If a student buys the book from Amazon, he will save money.’

The ungrammaticality of (2a) shows that the indefinite subject *tālib* ‘a student’ cannot appear preverbally in the conditional adverbial clauses introduced by *law* ‘if’. It must appear post-verbally (consider sentence (2b)). The derivation of the SVO word order in NA is implemented through the following path as I have argued for in the previous chapter. The subject is base-generated in Spec, vP where it is assigned its  $\theta$ -role by the complex v+V head (see Chomsky 1995) and the structural case by T (see Soltan 2008 and Balushi 2011 for discussion). The next step is that the subject raises to Spec,TP attracted by the [EDGE] feature and [D] features on T. The lexical verb in turn head-moves to little v and amalgamates with it, producing the newly-composed complex (V+v) which then moves to head-adjoin to T (see the discussion in the preceding chapters for full details).

The question that arises now is whether there is a left periphery in NA peripheral conditional adverbial clauses and how it is structured. In the following discussion, I investigate the CP structure of peripheral conditional clauses. I examine several pieces of evidence supporting the existence of a reduced left periphery in NA peripheral conditional adverbial clauses. I start first with evidence from topicalization and then focalization.

## 6.2.2 CP structure of peripheral conditional clauses

In this subsection, I investigate the CP structure of peripheral conditional clauses. In particular, I focus on the left periphery of these clauses. First, I discuss topicalization, and then focalization.

### 6.2.2.1 Topicalization in peripheral conditional adverbial clauses

It is important to mention here that other word order permutations such as OSV, VSO and SVO are possible in the conditional adverbial clauses introduced by *law*. In other words, the object may appear to the left of the subject as well as the verb, and hence it is de facto left periphery material (see Chapter 4 for discussion). Additionally, adjuncts can appear to the left of the preverbal subject with the object separates between them, something that demonstrates the existence of CP. Let's capitalize on these observations as they are important in revealing the structure of the left periphery of peripheral conditional clauses.

Let's first look at cases with a fronted object. Consider the following example.

- |                |                           |                    |                   |                                   |
|----------------|---------------------------|--------------------|-------------------|-----------------------------------|
| (3) <i>law</i> | <u><i>an-natīdzeh</i></u> | <i>al-mudīr</i>    | <i>yʔakkid-ah</i> | <i>bi-l-ʔidzīmāʕ</i>              |
|                | if                        | DEF-result.F       | DEF-manager       | confirm.3SM.PRES-itin-DEF-meeting |
|                | <i>kān</i>                | <i>al-muwaDDaf</i> | <i>arsel</i>      | <i>al-ʔimail</i>                  |
|                | Prt                       | DEF-epmloyee       | send.3SM.PAST     | DEF-email                         |
- ‘If, the result, the manger confirms it at the meeting, the employee will send the email.’

In (3) the object of the subordinate clause *an-natīdzeh* ‘the result’ appears in a pre-subject position. It is clear that the object is co-indexed with a resumptive clitic (-ah) which appears on the verb. In other words, the fronted object and the resumptive must share the same  $\phi$ -features; otherwise the resulting sentence would be ungrammatical, as illustrated in (4) below where the clitic shows different  $\phi$ -features than the object.

(4) \*law an-natīdzeh al-mudīr yʔakkid-uh  
 If DEF-result.F DEF-manager confirm.3SM.PRES-it.3SM  
 bi-l-ʔidz̄timāʃ kān al-muwaDDaf arsel  
 in-DEF-meeting Prt DEF-employee send.PAST.3SM  
 al-ʔimail  
 DEF-email

‘If, the result, the manger confirms it at the meeting, the employee will send the email.’

An additional relevant point here related the sentence in (4) is that the preverbal subject is what fills Spec,TP in such clauses. One piece of empirical evidence that supports this view comes essentially from the observation that the fronted object cannot appear in a position between the preverbal subject and the tensed verb, as illustrated in the following example:

(5) \*law al-mudīr an-natīdzeh yʔakkid-ah  
 if DEF-manager DEF-result confirm.3SM.PRES-it  
 bi-l-ʔidz̄timāʃ kān al-muwaDDaf arsel  
 in-DEF-meeting Prt DEF-employee send.PAST.3SM  
 al-ʔimail  
 DEF-email

‘If, the result, the manger confirms it at the meeting, the employee will send the email.’

The object of the subordinate clause *an-natīdzeh* ‘the result’ intervenes between the subject *al-mudīr* ‘the manager’ and the tensed verb *yʔakkid* ‘confirmed’, which leads to the sentence being ungrammatical. Following Benmamoun (2000) and Aoun *et al.* (2010), the definite subject is expected to occupy Spec,TP whereas the verb adjoins to T; as such there is no structural position between the subject and the verb which can accommodate the shifted object. The ungrammaticality of the sentence in (5) is nonetheless significant in that it offers evidence that the fronted object occupies a CP-related position.

In the following subsection, I provide further evidence, drawing on focalization, for the existence of left periphery in NA peripheral conditional adverbial clauses.

### 6.2.2.2 *Focalization in peripheral conditional adverbial clauses*

Further evidence in favour of the existence of the left periphery in NA peripheral conditional adverbial clauses can be adduced from instances where the fronted object bears focal stress and it expresses contrastive information, i.e. the object is focalized. The fronted object here is not co-indexed with a resumptive clitic on the verb; if present, the sentence would become ungrammatical. Consider the following example:

(6) law	<b>an-naīdʒeh</b>		al-mudīr	yʔakkid (-*ha)
if	<b>DEF-result</b>		DEF-manager	confirm3SM.PRES-it
	bi-l-ʔidʒtimāʕ	kān	al-muwaDDaf	arsel
	in-DEF-meeting	Prt	DEF-employee	send.3SM.PAST
	DEF-ʔimail			
	DEF-email			

‘If it was **the result**, the manager confirmed at the meeting, the employee will send the email.’

Note first that the fronted object should bear contrastive stress, a reliable sign of focalization as reported in several works (Rizzi 1997, Ouhalla 1997, 1999, and Kiss 1998). In relation to this point, one might ask why the fronted/focalized should bear contrastive focus at the first place. The reason is that the speaker uses contrastive stress to presuppose other entities of which the selected element (which is the object, here) is a part (see, Selkirk 2008). This contrast can be made explicit, as illustrated by the following example:

(7) law	<b>an-naīdʒəh</b>	<b>mahw</b>	<b>at-taqrīr</b>	al-mudīr
if	<b>DEF-result</b>	<b>not</b>	<b>DEF-report</b>	DEF-manager
	yʔakkid		bi-l-ʔidʒtimāʕ	kān
	confirm3SM.PRES		in-DEF-meeting	Prt
	arsel		DEF-employee	
	send.3SM.PAST	al-ʔimail		
	DEF-email			

‘If it was **a result, not a report** that the manager confirmed at the meeting, the employee will send the email.’

The speaker in sentence (7) presupposes that there is a set of two alternatives which are *an-natīdʒāh* ‘the result’ and *at-taqrīr* ‘the report’. Kiss (1998) argues that it is a property of the focus (in the left periphery) to be contrasted, whereas the elements focalized in situ denote new pieces of information without inducing any alternatives (see Kiss 1998 for details in this matter)<sup>29</sup>. The latter type of foci do not correspond to a designated syntactic position into which overt movement is obligatory (see Zerbian 2006, 2007). The point that is most relevant here is that the existence of a contrastively focalized object is mounting evidence for the existence of a left periphery within NA peripheral conditional adverbial clauses.

Secondly, note that (7) above contains a gap in the position of the thematic object as shown in the following example:

- |                |                    |              |                  |           |
|----------------|--------------------|--------------|------------------|-----------|
| (8) law        | <b>an-natīdʒāh</b> | al-mudīr     | yʔakkid          | -----     |
| if             | <b>DEF-result</b>  | DEF-manager  | confirm.3SM.PRES |           |
| bi-l-ʔidʒtimāʕ | kān                | al-muwaDDaf  | ʔrsel            | al-ʔimail |
| in-DEF-meeting | Prt                | DEF-employee | send.PAST.3SM    | DEF-email |
- ‘If it was **the result**, the manager confirmed at the meeting, the employee will send the mail.’

The gap cannot be filled by any element (e.g. a resumptive pronoun) in the presence of a focalized object. So, it can be argued here that topicalized objects use the resumption strategy, whereas focalized objects use the gap strategy. The variation between these two strategies has been an active area of research within the last four decades in Arabic (or Semitic) syntax (cf. Fassi Fehri 1982, Sells 1984, Wahba 1984, Demirdache 1991, Aoun and Choueiri 1996, 1999, 2000, Aoun and Benmamoun 1998, Aoun, *et al.* 2001, Shlonsky 2002, Aoun and Li 2003, and Aoun *et al.* 2010).

Thirdly, regarding (6), (repeated here as (9)) note that nothing can precede the fronted focalized object.

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<sup>29</sup> For more discussion about contrastive focus in NA, see chapter 4.

(9) law **an-natīdzəh** al-mudīr yʔakkid (-\*ha)  
 if result. DEF-manager confirm.3SM.PRES-it  
 bi-l-ʔidz̄timāʕ kān al-muwaDDaf arsel  
 in-DEF-meeting Prt DEF-employee send.PAST.3SM  
 al-ʔimail  
 DEF-email

‘If it was **the result**, the manager confirmed at the meeting, the employee will send the email.’

To illustrate this point, consider the following example:

(10) \* law bi-l-ʔidz̄timāʕ **an-natīdzəh** al-mudīr  
 if in-DEF-meeting **DEF-result** DEF-manager  
 yʔakkid kān al-muwaDDaf arsel  
 confirm.3SM.PRES Prt DEF-employee send.3SM.PAST  
 al-ʔimail  
 DEF-email

‘If, in the meeting, it was **the result** that the manager confirmed, the manager will send the email.’

In (10), the PP *bi-l-ʔidz̄timāʕ* ‘in the meeting’ appears to the left of the fronted focalized object, hence the ungrammaticality of the sentence. One might argue here that the ungrammaticality of (10) might be related to the fact that adjunct fronting might be blocked. This argument is straightforwardly dismissed when the sentence in (11) is taken into consideration.

(11) law **an-natīdzəh** bi-l-ʔidz̄timāʕ al-mudīr  
 if **DEF-result** in-DEF-meeting DEF-manager  
 yʔakkid kān al-muwaDDaf arsel  
 confirm.3SM.PRES Prt DEF-employee send.PAST.3SM  
 al-ʔimail  
 DEF-email

‘If it was **a result**, at the meeting, the manager confirmed, the employee will send the email.’

In (11), the PP *bi-l-ʔidʒtimāʕ* ‘in the meeting’ appears to the right of the dislocated object and to the left of preverbal subject, which is by itself evidence for the position of the fronted adjunct in the left periphery.

Strong evidence that supports the view that adjunct fronting is permissible in peripheral NA conditional adverbial clauses comes from cases where the fronted object is topicalized. Here the adjunct can appear to the left of the dislocated object. This strongly indicates that adjunct fronting to the left periphery is allowed in NA, as is shown in the following examples:

- (12) a. al-muwaDDaf      kān      arsel                                      al-ʔimail      law  
 DEF-employee      Prt      send.3SM.PAST      DEF-email      if  
bi-l-ʔidʒtimāʕ                      an-natīdʒeh                                      al-mudīr  
 in-DEF-meeting                      DEF-result                                      DEF-manager  
 yʔakkid-ah  
 confirm.3SM.PRES-it

‘The employee will send the email if a result, at the meeting, the manager confirmed.’

- b. al-muwaDDaf      kān      arsel                                      al-ʔimail      law  
 DEF-employee      Prt      send.3SM.PAST      DEF-email      if  
an-natīdʒeh bi-l-ʔidʒtimāʕ      al-mudīr                                      yʔakkid-ah  
 DEF-result      in-DEF-meeting      DEF-manager                                      confirm.3SM.PRES-it

‘The employee will send the email if the result, at the meeting, the manager confirmed.’

- c. al-muwaDDaf      kān      arsel                                      ʔil-ʔimail      law  
 DEF-employee      Prt      send.PAST.3SM      DEF-email      if  
**an-natīdʒəh**      bi-l-ʔidʒtimāʕ                                      al-mudīr                                      yʔakkid-ah  
**DEF-result**      in-DEF-meeting                                      DEF-manager      confirm.3SM.PRES-it  
 ‘The employee will send the email if **the result**, at the meeting, the manager confirmed.’

The PP *bi-l-ʔidʒtimāʕ* ‘in the meeting’ appears to the left of the fronted topicalized object as in (12a) and to its right as in (12b) above. On the other hand, the same PP *bi-l-ʔidʒtimāʕ* ‘in the meeting’ can only follow the focalized object as in (12c).

The question to ask here is why fronted adjuncts cannot appear before a focalized object whereas they can precede a topicalized object? In answering this question, we will be able to reveal the actual underlying representation of the left periphery in NA grammar. In the following section, I bring evidence that peripheral conditional adverbial clauses are similar to peripheral temporal adverbial in that there is no upper Topic Phrase within their extended CP.

### 6.2.3 *Syntactic analysis of peripheral conditional clauses in Najdi Arabic*

I argue here that the upper Topic Phrase, the projection which c-commands the Focus Phrase in the articulate CP system of Rizzi (1997), is missing in conditional adverbial clauses introduced by *law*. Following Frascarelli and Hinterhölzl’s (2007) discussion of German and Italian topics as well as Bianchi and Frascarelli’s (2010), I argue that the upper topic (the shifting topic in their terminology) does not project in non-root contexts. In this way, we were able to account for the relevant observations relating to these clauses. One of these observations was that focalized elements are the topmost elements (apart from the subordinator) in the CP field of these clauses. The relevant data corroborates this fact: any topic and focus sequences in the left periphery must be ordered in a strict way such that the focalized element appears to the left of the topicalized element and hence, following the antisymmetric approach to syntax (Kayne 1994), c-commands it. The same observations are repeated here, something that can be indicative of a unified approach to the left periphery of NA peripheral adverbial clauses, both conditional and temporal. In this section, I examine these observations relating to the order between focalized elements and topicalized elements in conditional peripheral clauses.

First let’s begin examining the word order between topicalized and focalized elements. Consider the examples in (10 and 11) which I repeat below as (13a, b). (I underline topicalized elements, while focalized elements appear in block letters for clarification).



(13) a.*law	bi-l-ʔidʒtimāʕ	<b>an-natīdzəh</b>	al-mudīr
if	in-DEF-meeting	DEF-result	DEF-manager
yʔakkid	kān	al-muwaDDaf	arsel
confirm.3SM.PRES	Prt	DEF-employee	send.3SM.PAST
al-ʔimail			
DEF-email			

‘If, in the meeting, it was **the result** that the manager confirmed, the employee will send the email.’

b. law	<b>an-natīdzəh</b>	bi-l-ʔidʒtimāʕ	al-mudīr
if	<b>DEF-result</b>	in-DEF-meeting	DEF-manager
yʔakkid		kān	al-muwaDDaf
confirm.3SM.PRES		Prt	DEF-employee
al-ʔimail			send.3SM.PAST
DEF-email			

‘If it was **the result**, at the meeting, the manager confirmed, the employee will send the email.’

One glance at the two examples in (13) reveals that they are similar in everything except for the order between *an-natīdzəh* ‘the result’ and *bi-l-ʔidʒtimāʕ* ‘at the meeting’. The only grammatical order allowed is the one where the focalized element precedes the topicalized element. This follows from the fact that the highest phrase available in the CP layer of peripheral adverbial clauses is the Focus Phrase. This indicates that the Topic layer that dominates it in root clauses is not projected here. In other words, if we follow Rizzi’s (1997) fine structure of the left periphery (Force > Topic > Focus > Topic > Fin), we are led to the fact that the upper topic is not present in such clauses. Accordingly, the ungrammaticality (13a) is resulted by the pre-focus element PP *bi-l-ʔidʒtimāʕ* ‘at the meeting’ not having any structural position to land in. In other words, the NA left periphery of conditional peripheral clauses does not have a dedicated position for topicalized elements above Focus Phrase. Note here that the PP *bi-l-ʔidʒtimāʕ* ‘at the meeting’ does not serve as a focus in the sentence (13a) because it is not contrastively stressed.

The question to ask here is why two topicalized elements can be accommodated in a reduced left periphery as in the following examples:

(14) a. law	<u>bi-l-ʔidztimāʕ</u>	<u>an-natīdʒeh</u>	al-mudīr
if	in-DEF-meeting	DEF-result	DEF-manager
yʔakkid-ah		kān	al-muwaDDaf
confirm.3SM.PRES-it		Prt	DEF-employee
ʔrsel	al-ʔimail		
send.3SM.PAST	DEF-email		

‘If a result, at the meeting, the manager confirmed, the employee will send the email.’

b. law	<u>an-natīdʒeh</u>	<u>bi-l-ʔidztimāʕ</u>	al-mudīr
if	DEF-result	in-DEF-meeting	DEF-manager
yʔakkid-ah		kān	al-muwaDDaf
confirm.3SM.PAST-it		Prt	DEF-employee
ʔrsel		al-ʔimail	
Send.3SM.PAST		DEF-email	

‘If the result, at the meeting, the manager confirmed, the employee will send the email.’

The answer of this question lies in the argument that the lower topic in NA (and in fact in most other languages) is recursive, in the sense that it allows for multiple realizations. This is why lower topics are technically marked by ‘\*’ which stands for recursion (see, Rizzi 1997, 2001, 2004, and Benincà 2001)) (i.e. Force > Focus > \*Topic > Fin). In relation to this point, Rizzi states:

There can be an indefinite number of topics [...] [we] assume an adjunction analysis for topic, under the usual assumption on the reiterability of adjunction [...] No interpretative problem arises in the case of a recursion of Top: nothing excludes that a comment [...] may be articulated in turn as a topic-comment structure, so that topic phrases can undergo free recursion. (Rizzi, 1997: 295, 297)

On the other hand, a clause has at most one contrastive focus, hence the observation that a multiple realization of focus is disallowed (see, Krifka 1996a,b, 2006; Drubig 1994, 2003 for further discussion in this regard).

This discussion would make the most sense if there is evidence that the left periphery of peripheral adverbial clauses does not have a different underlying structure than that of what Rizzi (1997) argues for. In other words, what precludes the possibility that the left periphery of peripheral clauses in NA is not reduced, but rather the position of the upper topic and the

focus phrase are swapped, resulting in the situation that the Focus Phrase is the topmost projection in the left periphery (if the Force Phrase is factored out). In the following subsection, I provide evidence to the effect that this is not the case, i.e. the left periphery of NA peripheral adverbial clauses has a relatively reduced structure in that the upper Topic Phrase is not projected but still maintains the structure developed in Rizzi (1997) with respect to the remaining projections. I draw on evidence from the so-called discourse particles which have a fixed position in the left periphery.

#### 6.2.4 More evidence that there is no upper Topic Phrase

In this section, the same test I used for peripheral temporal clauses to argue that there is no upper Topic Phrase will be applied to peripheral conditional clauses to find out whether the left periphery in these clauses also lacks the upper topic phrase. Consider the examples below:

- (15) a. \*law      binisbah      li-l-ʔidztimāf      an-natīdʒeh  
           if      Prt                    for-DEF-meeting      DEF-result  
           al-mudīr      yʔakkid-ah                    kān      al-muwaDDaf  
           DEF-manager      confirm.3SM.PRES-it      Prt      DEF-employee  
           arsel                                            al-ʔimail  
           send.3SM.PAST                                    DEF-email

‘If a result, at the meeting, the manager confirmed the result, the employee will send the email.’

- b. binisbah      li-Fahd      **kūrəh**      ʔštra  
           Prt                    for-Fahd      ball                    buy.3SM.PAST

‘As for Fahd, **a ball**, he bought.’

The use of the higher topic marker *binisbah* in peripheral conditional clause renders the sentence ungrammatical. On the other hand, NA root clauses are compatible with the particle *binisabli* as in (15b). Such fact lends credence to Bianchi and Frascarelli’s proposal that the upper topic does not project in non-root contexts. This also alludes to the fact that peripheral adverbial clauses, both temporal and conditional, share the same internal structure of the left periphery. My generalization is that these types of clauses have a reduced left periphery. The upper topic is not projected as it is limited to non-root contexts. Other projections are

available, hence the possibility of having topicalized/focalized elements dislocated to a preverbal position, where the CP.

### 6.2.5 Conclusion

This section has investigated the internal syntax of the peripheral conditional clauses which are introduced by the subordinator *law* ‘if’ (i.e. peripheral *law*). It has argued that the layer topic, located below the focus phrase, is recursive, given that more than one topic can move there. Also, this section has argued that the structure of the left periphery in the NA peripheral conditional clauses which are introduced by the subordinator *law* ‘if’ is poorer than that of root clauses in that there is no upper topic phrase (the layer c-commanding the focus phrase) in the former clauses, hence support to Bianchi & Frascarelli’s (2010) proposal that this Topic layer is only prerogative of root clauses. This section has shown that while the higher topic marker *binsbah* is available in NA main clauses, such a particle cannot be used in peripheral temporal adverbial clauses.

## 6.3 The Internal Syntax of Central Conditional Adverbial Clauses in Najdi Arabic

This section investigates the internal syntax of the central conditional adverbial clauses which are introduced by *ʔiða*, *ʔin*, *ya/lya*, and central *law* ‘if’. First, it introduces the word order used in these clauses. It shows that these central conditional clauses behave in a way similar to central temporal clauses in which they all have a strict word order (i.e. VSO). Second, this section argues that this word order available in such clauses (i.e. the VSO word order) is derived through the movement of the verb (i.e. the complex V+v+T) to the head of Finiteness Phrase which, the argument goes, does not have an EDGE feature, hence the ban against the possibility of other word orders in such clauses.

### 6.3.1 Word order in central conditional clauses

It is quite clear from the NA data that the only word order allowed in the conditional adverbial clauses introduced by *ʔiða*, *ʔin*, *ya/lya*, and central *law* ‘if’ is the VSO word order. All other word orders, i.e., SVO, OVS, etc. are not possible options. Let us begin our analysis of these clauses with the conditional *ʔin*. Consider the following examples:

(16) a. ?in xallaş Fahd al-wādzib  
 if finish.3SM.PAST Fahd DEF-assignment  
 ba-laḥad rāḥ yslm-uh ba-laḥnayn  
 on-Sunday will submit.3SM.PRES-it on-Monday  
 ‘If Fahd finishes the assignment on Sunday, he will submit it on Monday.’

b. \*?in Fahd xallaş al-wādzib  
 if Fahd finish.3SM.PAST DEF-assignment  
 ba-laḥad rāḥ yslm-uh ba-laḥnayn  
 on-Sunday will submit.3SM.PRES-it on-Monday  
 ‘If Fahd finishes the assignment on Sunday, he will submit it on Monday.’

c. \*?in al-wāzib xallaş-uh Fahd  
 if DEF-assignment finish.3SM.PAST-it Fahd  
 ba-laḥad rāḥ yslm-uh ba-laḥnayn  
 on-Sunday will submit.3SM.PRES-it on-Monday  
 Intended: ‘If, the assignment, Fahd finishes on Sunday, he will submit it on Monday’

Note also that adjunct fronting is also prohibited. All accompanying adjuncts should appear to the right of the verb; otherwise the resulting sentence would become ungrammatical. Consider the following examples which include fronting adjuncts:

(17) a. \*?in ba-laḥad xallaş Fahd al-wādzib  
 if on-Sunday finish.3SM.PAST Fahd DEF-assignment  
 rāḥ yslm-uh ba-laḥnayn  
 will submit.3SM.PRES-it on-Monday

Intended: ‘If, on Sunday, Fahd finishes the assignment, he will submit it on Monday.’

b. \*ʔin ba-laḥad Fahd xallaṣ al-wādʒib rāḥ  
 if on-Sunday Fahd finish.3SM.PAST DEF-assignment will  
 yslm-uh ba-laḥnayn  
 submit.3SM.PRES-it on-Monday

Intended: ‘If, on Sunday, Fahd finishes the assignment, he will submit it on Monday.’

c. \*ʔin ba-laḥad al-wādʒib xallaṣ-uh Fahd  
 if on-Sunday DEF-assignment finish.3SM.PAST-it Fahd  
 rāḥ yslm-uh ba-laḥnayn  
 will submit.3SM.PRES-it on-Monday

Intended: ‘If, on Sunday, Fahd finishes the assignment, he will submit it on Monday’

d. \*ʔin al-wādʒib ba-laḥad xallaṣ-uh Fahd  
 if DEF-assignment on-Sunday finish.3SM.PAST-it Fahd  
 rāḥ yslm-uh ba-laḥnayn  
 will submit.3SM.PRES-it on-Monday

Intended: ‘If, on Sunday, the assignment Fahd finishes it, he will submit it on Monday’

On the basis on these pieces of data, an obvious starting point which can be drawn at this point is that the conditional adverbial clauses introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’ have one invariant word order, i.e. VSO. All other word orders, i.e., SVO, OVS, etc. are not possible options. So let us first account for the VSO word order fact of the NA central conditional adverbial clauses introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’.

### 6.3.2 The VSO word order in NA central clauses

In this section, I investigate the syntactic derivation of the VSO word order used in NA central conditional adverbial clauses. I first dismiss the proposal that subject remains in situ, while the verb adjoins to T. Then, I discuss the operator movement approach (Haegeman 2012, 2014) and show how this approach cannot accommodate NA central clauses facts. Next, I introduce my approach, depending on the truncation approach of the left periphery.

### 6.3.2.1 The Subject is not in Spec-vP

To account for the invariant VSO in the NA central clauses introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* ‘if’, one might claim that verb adjoins to T, whereas the subject remains in situ, i.e. in the Spec position of vP/VP. Following this proposal, the subject does not raise to the Spec position of TP, yielding as a result, the invariant VSO word order in central conditional adverbial clauses in NA. However, this proposal does not account for several NA central clauses facts. What casts doubt first on this approach is the fact that the verb appears to the left of TP-related adverbs, such as *ṭabʕan* ‘surely’ which adjoins to TP (Cinque 1999). According to Rahhali and Souâli (1997), Benmamoun (2000), and Fassi Fehri (2012), adverbs in Arabic are reliable signs to determine the movement of the verb to T as well as the movement of the subject to the Spec position of TP. The idea is that if the verb appears to the left of adverbs, the verb adjoins to a head above T. Consider the following examples (the adverb appears in boldface):

- (18) a. \*ʔin xallaʕ Fahd **ṭabʕan**  
           if finish.3SM.PAST Fahd surely  
           al-wādzib ba-laḥad rāḥ yslm-uh ba-laḥnayn  
           DEF-assignment on- Sunday will submit.3SM.PRES-it on-Monday  
           ‘If Fahd surely finishes the assignment on Sunday, he will submit it on  
           Monday.’
- b. ʔin xallaʕ **ṭabʕan** Fahd al-wādzib  
           if finish.PAST.3SM surely Fahd DEF-assignment  
           ba-laḥad rāḥ yslm-uh ba-laḥnayn  
           on- Sunday will submit.3SM.PRES-it on-Monday  
           ‘If Fahd surely finishes the assignment on Sunday, he will submit it on  
           Monday.’

As is clear from the example in (18b), the verb *xallas* ‘finish’ appears to left of the adverb *ṭabʕan* ‘surely’, implying that the verb is located in a position higher above T. In other words, the position of the verb in relation to the adverb indicates that the verb leaves T to some position in the left periphery, i.e. CP.

Let us now examine whether the recent approach advanced by Haegeman (2007, 2010, 2012, 2014) and Haegeman & Ürögdi (2010) is any good to account for the invariant VSO word order in central conditional adverbial clauses of NA alongside the fact there is no adjunct nor argument fronting.

### 6.3.2.2 *The Operator movement approach*

Under this approach, a subordinate clause which disallows root transformations (such as central clauses) involves a movement of an operator to its CP domain. This operator blocks any argument fronting because the relevant transformation is ruled out as a minimality violation (Haegeman 2007, 2010 and Haegeman & Ürögdi 2010). Following this approach, a central adverbial clause is derived through the movement of some operator to a clause-initial position. Therefore, the operator blocks any argument to land in any position higher than the operator, given the minimality violation invoked by the operator (Haegeman 2010). Consider the following sentence and its representation. (Haegeman 2010: 635).

- (19) a. \*John left when the office Sheila left.  
 b. \*John left [CP when<sub>i</sub> the office<sub>j</sub> [IP Sheila left t<sub>j</sub> t<sub>i</sub>]]

The operator movement to the left periphery blocks the movement of the topicalized DP *the office* to the left periphery. Haegeman (2010) argues that the impossibility of having a fronted argument is thus a reflex of the movement of some operator to the left periphery. On the other hand, peripheral adverbial clauses are not derived through the movement of some operator to the left periphery; hence no restrictions are placed on argument fronting.

Following this approach and given the fact that there is only one invariant word order (namely the VSO word order) licensed in the conditional adverbial clauses introduced by *ἴδινα*, *ἴν*, *ἢ/ἢνα* and central *law* ‘if’, it can be suggested that the verb moves to Fin (i.e. the head of Fin Phrase) in the sense of Rizzi (1997), accompanied by an operator movement to the Spec position of Fin Phrase. Consider the following example:

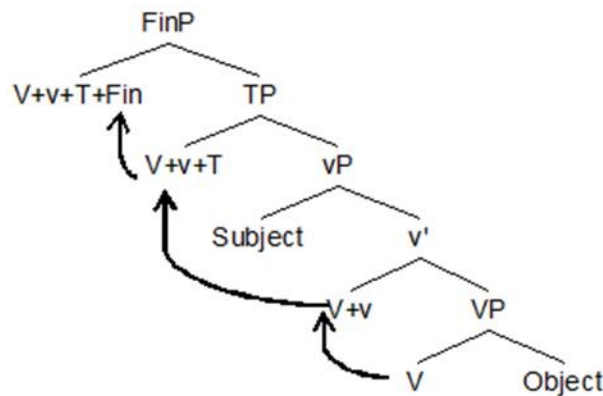


(20)	ʔin xallas	Fahd al-wādʒib	ba-laḥad
	if finish.3SM.PAST	Fahd DEF-assignment	on-Saturday
	rāḥ yslm-uh		ba-laḥnayn
	will submit.3SM.PRES-it		on-Monday

‘If Fahd finishes the assignment on Sunday, he will submit it on Monday.’

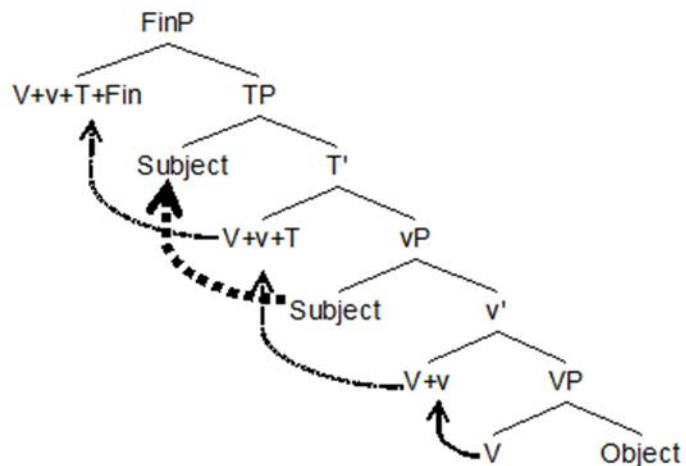
The verb *xallas* is base-generated as a head of the thematic VP shell. Then it moves to adjoin to the functional head *v*, the head of *vP*, given the affixal nature of the latter (see, Chomsky 1995). Then, the amalgamated head *V+v* moves to adjoin to *T* in order to satisfy *[V]* feature on *T* (see, Benmamoun 2000). Afterwards, the amalgamated head *V+v+T* moves to adjoin to *Fin*, as schematically indicated in the following structure.

(21)



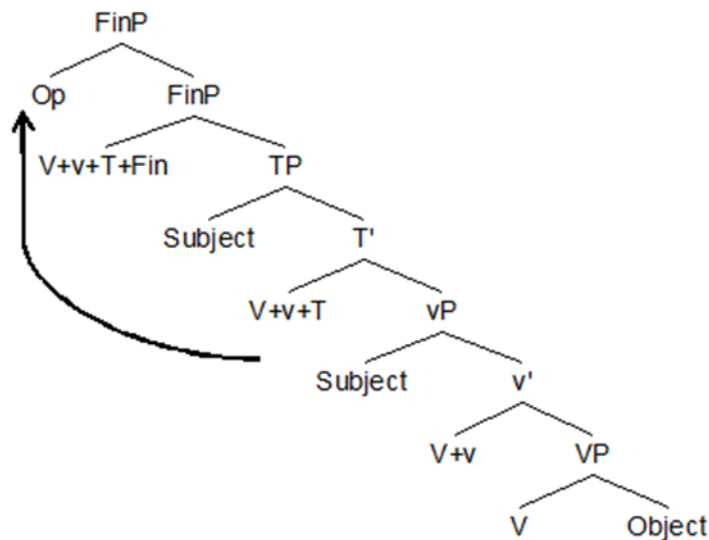
The subject moves to the Spec position of TP because it has a *[D]* feature within its featural grid, as shown below:

(22)



The requirement of T to have its Spec filled (by the subject) is hence satisfied. The requirements imposed by EPP and the [D] feature on T do not cause problems to this account. What is important here to highlight is that the movement of the verb to Fin Phrase is accompanied by an operator movement which lands in the Spec position of Fin, causing an intervention blocking effect to any argument movement (subject or object) to higher positions in the left periphery. Consider the following structure:

(23)



On the other hand, what casts doubt on this approach is the fact that this approach has been originally proposed to account for the fact that, in English, adjuncts but not arguments can be fronted to the left periphery. Consider the following sentences, adapted from Haegeman (2010: 632)

(24) If on Monday we haven't found him, we'll call RSPCA.

In (24), the adjunct *on Monday* is fronted to the left periphery, given its position directly following the conditional *if*. Under the operator approach, the movement of the adjunct *on Monday* is expected, given that the operator does not block adjunct fronting. With this being the case, the apparent question to ask here is how this approach accounts for the invariant VSO word order used in the conditional adverbial clauses introduced by *ʔin* and *ya/lya*, given that both arguments and adjuncts cannot appear preverbally, a fact that is unexpected under this approach. Consider the following sentences.

(25) a. \*ʔin ba-laḥad xallaṣ Fahd al-wādʒib  
 if on-Sunday finish.3SM.PAST Fahd DEF-assignment  
 rāḥ yslm-uh ba-laḥnayn  
 will submit.3SM.PRES-it on-Monday

Intended: ‘If Fahd finishes the assignment on Sunday, he will submit it on Monday.’

b. \*ʔin ba-laḥad Fahd xallaṣ al-wādʒib  
 if on-Sunday Fahd finish.3SM.PAST DEF-assignment  
 rāḥ yslm-uh ba-laḥnayn  
 will submit.3SM.PRES-it on-Monday

Intended: ‘If, on Sunday, Fahd finishes the assignment, he will submit it on Monday.’

c. \*ʔin ba-laḥad al-wādʒib xallaṣ-uh  
 if on-Sunday DEF-assignment finish.3SM.PAST-it  
 Fahd rāḥ yslm-uh ba-laḥnayn  
 Fahd will submit.3SM.pres-it on-Monday

Intended: ‘If on Sunday Fahd finishes the assignment, he will submit it on Monday’

d. \*ʔin al-wādʒib ba-laḥad xallaṣ-uh  
 if DEF-assignment on-Sunday finish.3SM.PAST-it  
 Fahd rāḥ yslm-uh ba-laḥnayn  
 Fahd will submit.3SM.PRES-it on-Monday

Intended: ‘If, on Sunday, the assignment Fahd finishes it, he will submit it on Monday’

If we apply the operator approach to the sentence derivation of NA central clauses, it is hard to account for the fact that adjunct fronting is also illicit in this dialect. The operator located in the left periphery is claimed to block argument fronting rather than adjunct fronting, which is not the case in NA grammar, as shown in the examples above in (25).

In the following subsection, I propose my account of the invariant VSO word order in NA central conditional adverbial clauses. First, I introduce the truncation approach on which I will

build my proposal of the invariant VSO word order in NA central conditional adverbial clauses.

### *6.3.2.3 Truncation approach*

As I have above, under this proposal, the reason of why argument/adjunct fronting is not permitted is that fronting, e.g., topicalization, is related to the assertive illocutionary force which is encoded by the functional head Force in the left periphery (Haegeman 2002). In central adverbial clauses, it is argued that there is no any assertive illocutionary force. Such clauses are thus structurally deficient in the sense that their left periphery is reduced. They lack the functional projection 'Force' which encodes assertive illocutionary force. Due to this deficiency, the higher Topic Phrase and Focus Phrase, being dependent on the Force Phrase, are not projected either in central adverbial clauses, and thus argument fronting is ungrammatical (Haegeman 2003: 188). In other words, a constituent affected by a root transformation such as topicalization and focalization does not move to a particular domain within the peripheral part of a clause which lacks such projections as the latter cannot offer a landing site for a preposed constituent, and hence the effect that blocks the relevant transformation (Haegeman 2003, 2006, Munaro 2005, Bocci 2007, Julien 2007, and Nasu 2014).

This approach crucially suggests that there is a distinction between the head which encodes illocutionary force (i.e., Force Phrase) and the head which serves simply to subordinate a clause (i.e., to make it available for the categorial selection independently of its force). (Haegeman 2003: 335). Force Phrase (in the sense of Rizzi 1997) is split into two different projections: Sub (a place where the subordinator is positioned) and Force (which encodes the illocutionary force of the clause). In central adverbial clauses, only Sub is available, while Force and other projections depending on Force (i.e., Topic Phrase and Focus Phrase) are truncated. On the other hand, in peripheral adverbial clauses, almost all projections in the left periphery (i.e., Sub, Force Phrase, Topic Phrase, and Focus Phrase) are available for any fronting, resulting in no restrictions against argument and/or adjunct fronting. In such clauses, truncation is prohibited because peripheral adverbial clauses act as root clauses that have their own assertive illocutionary force. Consider Table 6 which summarizes this situation.

Table 6: The left periphery of clauses (modified)

Clause Type	Projections available
Central adverbial	Sub>Fin
Peripheral adverbial	Sub>Force> Focus>Top>Fin
Root clauses	Force>Top>Focus>Top>Fin

As summarized in Table 6, central adverbial clauses, peripheral adverbial clauses, and root clauses differ with respect to the projections of their left periphery.

Following the truncation approach of the left periphery of central adverbial clauses (Haegeman 2002, 2003), it is predicated that no arguments nor adjuncts are allowed to appear in a preverbal position. I claim that the obligatory VSO word order in the conditional adverbial clauses introduced by *ʔida*, *ʔin*, *ya/lya* and central *law* ‘if’ is derived through the movement of the verb to Fin Phrase. Said this, there are three important components of my approach of NA central conditional adverbial clauses. The first component is that the left periphery of NA central clauses is truncated in the sense that no Topic Phrase nor Focus Phrase is projected above Fin Phrase. The main evidence in favour of this claim comes from the fact that verb cannot be focalized, as demonstrated in the following ill-formed sentence:

- (26) \*ʔin XALLAŞ                      Fahd    al-wādʒib                      ba-laḥad  
       if finish.3SM.PAST              Fahd    DEF-assignment              on-Sunday  
       rāḥ    yslm-uh                                      ba-laḥnayn  
       will    submit.3SM.PRES-it              on-Monday

Intended: ‘If Fahd does finish (not start) the assignment on Sunday, he will submit it on Monday.’

Under the truncation approach, the verb is expected not to move to Focus Phrase, given that this phrase is not projected, which is the case. If we follow rather the operator movement approach, the operator situated in the left periphery (in the Spec position of Fin Phrase) does not block head movement. The sentence in (26) would be grammatical as the verb moves to the left periphery due to the contrastive stress the verb bears. The operator approach cannot account for the ungrammaticality of the example in (26), whereas the truncation approach does. Additionally, the example in (26) is clear evidence for the unavailability of Focus

Phrase above Fin Phrase in the conditional adverbial clauses introduced by *ʔiḏa*, *ʔin*, *ya/lya* and central *law* ‘if’.

The second component of my approach is that Fin Phrase does not have an [EDGE] feature within its featural bundle; so there is no movement of whatsoever (i.e. of adjuncts and arguments) to the Spec position of Fin Phrase. According to Chomsky (2005, 2006), phrases have specifiers because they have an [EDGE] feature within their featural grid. The fact that adjuncts and arguments cannot move to the left of verb (which is in a position higher than TP) indicates that the phrase housing the verb does not have an [EDGE] feature, a matter which is, I argue, the main reason of incompatibility of any movement to its Spec.

One might wonder about the motivation for the verb to leave its position in TP and raise to the head of Fin Phrase. The answer to this question lies in the proposal that the head of the Fin Phrase has a [+V] feature which attracts the verb to Fin Phrase. According to Benmamoun (2000), the main difference between PAST tense and PRESENT tense in Arabic is that the former has a [+V] feature within its featural bundle, which attracts the verb to T, whereas the latter does not have such a feature, hence the verb remains adjoined to the little *v*. Benmamoun takes this proposal to account for several facts related to the positions of the verb in MSA. For instance, if the verb is in the present tense, the subject appears to the left of verb, while the subject appears to the right of verb as long as the verb occurs in the past tense. I exploit this approach and extend it to Fin Phrase in NA, claiming that the head of Fin Phrase in NA central clauses has a [+V] feature, which attracts the verb from its position adjoining to T.

Combined in this way, the invariant VSO in NA central conditional adverbial clauses is accounted for. First, the verb moves to Fin Phrase attracted by a [+V] feature the head Fin has. Secondly, Fin Phrase does not have an [EDGE] feature, so the movement by any element to its Spec is not allowed. Thirdly, the higher phrases, which are Focus Phrase and Topic Phrase, are truncated.

### 6.3.3 Summary

This section has investigated the internal syntax of the central conditional clauses which are introduced by *ʔiḏa*, *ʔin*, *ya/lya*, and central *law* ‘if’. It has focused on the observation that the VSO word order is the only available word order used in such clauses. It has introduced the

two competing proposals in the literature, namely the operator movement approach and the truncation approach. This section has shown that the operator proposal fails to account for the word order facts of central conditional clauses, given that it cannot account for adjunct fronting. It has proposed that in central conditional clauses, the verb moves to Finiteness Phrase, attracted by a [+V] feature on  $\text{Fin}^\circ$ , in the same way that is argued for in central temporal clauses. This section has also proposed that  $\text{Fin}^\circ$  does not have an [EDGE] feature; so there is no movement whatsoever to its Spec (i.e. Topic Phase and Focus Phrase are not projected in the left periphery of NA central conditional clauses).

#### 6.4 Conclusion

This chapter has investigated the internal syntax of conditional clauses in Najdi Arabic. It has been divided into two sections. The first section has focused on the internal syntax of the peripheral conditional clauses which are introduced by the subordinator *law* ‘if (i.e. peripheral *law*). It has argued that there is a layer dedicated to topics, and this layer is located below the Focus Phrase which is also available in such clauses. The Topic layer is argued to be recursive, given that more than one topic can move there. Additionally, this section has provided evidence that the structure of the left periphery in peripheral conditional clauses is poorer than that of root clauses in that there is no upper topic phrase (the layer c-commanding the focus phrase) in the former clauses, hence support to Bianchi & Frascarelli’s (2010) proposal that this Topic layer is only restricted to root clauses.

The second section in this chapter has investigated the internal syntax of the central conditional clauses which are introduced by *ʔiða*, *ʔin*, *ya/lya*, and central *law* ‘if’. It has focused on the observation that the VSO word order is the only available word order in this type of clauses. It has introduced the competing proposals advanced in the literature, most notably the operator proposal to account for this fact. It has shown that this proposal is invalid in accounting for the word order facts of central conditional clauses in NA, given that it cannot account for adjunct fronting. As an alternative account of NA central conditional clauses, I have proposed here that in central conditional clauses, the verb moves to Finiteness Phrase, attracted by a [+V] feature on  $\text{Fin}^\circ$ , in the same way that is argued for in central temporal clauses. This section has also argued that  $\text{Fin}^\circ$  does not have an [EDGE] feature; so there is no movement whatsoever to its Spec (i.e. Topic Phase and Focus Phrase are not projected in the left periphery of NA central conditional clauses).





## Chapter SEVEN: Conclusion

The aim of this thesis was to investigate the syntax of temporal and conditional clauses in Najdi Arabic (NA). This conclusion will summarize the key issues that have been discussed in this thesis in addition to the main findings obtained. This chapter will also raise some questions left open for further research.

### 7.1 Summary

This thesis has investigated the syntax of temporal adverbial clauses and conditional adverbial clauses in NA. It has been divided into seven chapters. The first chapter was an introduction and the last chapter includes the conclusion. The second chapter has been presented as a background of the study of adverbial clauses. It has provided an overview of central/peripheral dichotomy of adverbial clauses. It contains two parts: the first part has outlined the main diagnostics used to argue for an asymmetry between adverbial clauses and, hence, the distinction between central and peripheral adverbial clauses. This chapter has shown that all these diagnostic tests advocate for the view that central adverbial clauses are adjoined to TP/vP, while peripheral adverbial clauses are merged with CP. The second part of this chapter has discussed the two approaches that have been advanced in the literature to account for the difference between central adverbial clauses and peripheral adverbial clauses with respect to the possibility of allowing/disallowing arguments fronting.

The third and fourth chapters of this thesis have investigated the syntax of temporal adverbial clauses in NA. The third chapter has focused on the external syntax of temporal adverbial clauses. It has argued that temporal adverbial clauses in NA exhibit a dichotomy of central vs. peripheral clauses. It has argued that the subordinators *gabлма* ‘before’ and *baʕdma* ‘after’ are exclusively used as subordinators of central temporal clauses. That is because temporal clauses introduced by them modify the time of the event expressed in the main clause. On the other hand, the subordinator *yūm* ‘when’ can be used as a subordinator of both central temporal clauses and peripheral temporal clauses, depending crucially on its meaning. This chapter has provided several pieces of evidence in favour of such an argument. Among the diagnostic tests that have been used as an evidence for a dichotomy of central vs. peripheral temporal clauses include event vs. discourse readings, the scope of negation, epistemic modality, and coordination. This chapter has also shown that all these tests confirm the view that central temporal adverbial clauses adjoin to TP, whereas peripheral temporal adverbial clauses adjoin to CP.

The fourth chapter has investigated the internal syntax of temporal clauses. This chapter has focused on the left periphery in these clauses. It has been divided into two main parts. The first part was devoted to the internal syntax of peripheral temporal clauses which are introduced by *yūm* ‘when’. It has argued that the left periphery of such clauses allows all projections except for the higher topic Phrase. It has shown that no element whatsoever is allowed to appear to the left of focalized arguments/adjuncts. The second part of this chapter has investigated the internal syntax of the central temporal clauses which are introduced by *gablmā* ‘before’ and *baʕdma* ‘after’. The main focus here is placed on the observation that the VSO word order is the only available word order in such clauses. Firstly, it has introduced the two syntactic approaches that have been advanced in the literature to account for this fact, i.e. the operator movement approach and the truncation approach. It has shown that the operator movement approach is incapable of accounting for the facts in central temporal clauses. This is because this approach is unable to account for adjunct fronting. Following Haegeman (2012), this chapter has argued that in the central temporal adverbial clauses which are introduced by *gablmā* ‘before’ and *baʕdma* ‘after’, the verb moves to Finiteness Phrase which is attracted by a [+V] feature on Fin<sup>o</sup>. The fact that there is no adjunct nor argument fronting is accounted for, suggesting that Fin<sup>o</sup> does not have an [EDGE] feature; so, there is no movement whatsoever to its Spec. This chapter has argued that Topic Phrase and Focus Phrase are not projected in the left periphery of NA central temporal adverbial clauses.

The fifth and sixth chapters have investigated the syntax of conditional adverbial clauses in NA. The fifth chapter was devoted to the external syntax of these clauses. It has argued that conditional clauses in NA are also categorized into two types; central and peripheral. Also, it has argued that the subordinators *ʔiḍa*, *ʔin*, *ya/lya* ‘if’ are exclusively used as subordinators in central conditional clauses. That is because the conditional clauses introduced by such subordinators modify the time of the event expressed in the main clause. On the other hand, the subordinator *law* ‘if’ can be used as a subordinator of both central conditional adverbial clauses and peripheral conditional adverbial clauses, depending on the semantic use of it. It has provided evidence in favour of such an argument, drawing on several tests, including event vs. discourse readings, the scope of tense, the intended meaning of the conditional subordinator, epistemic modality, and coordination of likes. It has shown that all these tests confirm the view that peripheral conditional clauses adjoin to CP, whereas central conditional clauses adjoin to TP/VP.

The sixth chapter has focused on the internal syntax of conditional clauses in NA. This chapter has been divided into two main sections. The first section has investigated the internal syntax of the peripheral conditional clauses which are introduced by *law* (i.e. peripheral *law*). It has focused on the left periphery of these clauses. Following Bianchi & Frascarelli's (2010) assumption that the higher Topic layer is only projected in root clauses, this chapter has argued that the left periphery of peripheral conditional clauses allows all projections except for the higher Topic Phrase. It has shown the particle *binisbah*, which has been argued to be a marker for higher topic phrase (Alshamari 2016), does not occur in the left periphery of peripheral conditional clauses. This is evidence for the lack of higher Topic Phrase in peripheral conditional clauses. The second section of this chapter has explored the internal syntax of the central conditional clauses which are introduced by *ʔiḍa*, *ʔin*, *ya/lya*, and central *law* 'if. It has shown that the only word order available in this type of clauses is the VSO word order. This section has introduced the competing proposals advanced in the literature, most notably the operator proposal. It has shown that this proposal is invalid in accounting for the word order facts of NA central conditional clauses, given that it cannot account for adjunct fronting. It has argued that the verb in central conditional clauses moves to Finiteness Phrase which is attracted by a [+V] feature on Fin<sup>o</sup>, in the same way that is argued for central temporal clauses. Fin<sup>o</sup> has also been proposed not to have an [EDGE] feature; so there is no movement whatsoever to its Spec (i.e. Topic Phrase and Focus Phrase are not projected in the left periphery of NA central conditional clauses).

## 7.2 Further research

Due to the time and space, this thesis does not cover several issues which are important. These issues include the following questions:

- A. Where exactly should the central adverbial clause adjoin the matrix clause?
- B. How can we account for the verb tense of adverbial clauses, on the one hand, and the centrality/peripherality of adverbial clauses, on the other hand?
- C. Does the central vs. peripheral dichotomy exist in other types of adverbial clauses in NA?
- D. Does the central vs. peripheral dichotomy exist in temporal and conditional clauses in MSA?
- E. Does the central vs. peripheral dichotomy exist in temporal and conditional clauses in other varieties of Arabic?

A further study is also required to investigate the semantic and sociolinguistic differences between the particles that introduce temporal and conditional clauses in NA.

## References:

- Al-Balushi, R.A. (2011). *Case in standard Arabic: The untraveled paths*. Ph.D. thesis, University of Toronto.
- Algryani, A. (2012). *The Syntax of Ellipsis in Libyan Arabic: a generative analysis of sluicing, VP ellipsis, stripping and negative contrast*. Ph.D. thesis, Newcastle University, UK.
- Alshamari, M.R. (2016). In favour of contrastive topic phrase in North Hail Arabic left periphery: Evidence from the discourse particle tara. *Newcastle and Northumbria Working Papers in Linguistics* 22, 23-40.
- Alshamari, M.R., & Jarrah, M. (2016). A Minimalist-Based Approach to Phrasal Verb Movement in North Hail Arabic. *International Journal of English Linguistics* 6(1), 24-37.
- Al-Sweel, A. (1981). *The verbal system of Najdi Arabic: A morphological and phonological study*. MA Dissertation. University of Washington.
- Antomo, M. (2009). Interpreting embedded verb second. Causal modifiers in German. In C. Constantinescu, B. Le Bruyn, and K. Linke (eds.), *Proceedings of the 17<sup>th</sup> Conference of the Student Organization of Linguistics in Europe*. Leiden: SOLE. 27-51.
- Aoun, J., Benmamoun, E. & Sportiche, D. (1994). Agreement and conjunction in some varieties of Arabic. *Linguistic Inquiry* 25: 195-220.
- Aoun, J. & Benmamoun, E. (1998). Minimality, reconstruction, and PF movement. *Linguistic Inquiry* 29, 569-597.
- Aoun, J. & Choueiri, L. (1996). *Resumption and last resort*. MS., University of Southern California.
- Aoun, J. & Choueiri, L. (1999). Modes of interrogation. In E. Benmamoun (ed.), *Perspectives on Arabic linguistics XII*. Amsterdam: John Benjamins, 7-26.
- Aoun, J. and Choueiri, L., (2000). Epithets. *Natural Language & Linguistic Theory* 18, 1-39.
- Aoun, J., Choueiri, L. & Hornstein, N. (2001). Resumption, movement, and derivational economy. *Linguistic Inquiry* 32, 371-403.
- Aoun, J. & Li, Y. (2003). *Essays on the representational and derivational nature of grammar: The diversity of wh-constructions*. Cambridge, MA: MIT Press.
- Aoun, J., Benmamoun, E. & Choueiri, L. (2010). *The Syntax of Arabic*. Cambridge: Cambridge University Press.
- Authier, J. & Haegeman, L. (2015). French adverbial clauses, rescue by ellipsis and the truncation versus intervention debate. *Probus* 27, 33-71.
- Badawi, A.S.M. & A. Gully (2004). *Modern Written Arabic: A Comprehensive Grammar*. Psychology Press.

- Bahloul, M. & Harbert, W. (1993). Agreement asymmetries in Arabic. In J. Mead (ed.), *Proceedings of the Eleventh West Coast Conference on Formal Linguistics*. Stanford: Centre for the Study of Language and Information, 15-31.
- Bakir, M. (1980). *Aspects of Clause Structure in Arabic*. Ph.D. Dissertation, Indiana University, Bloomington.
- Benincà, P. (2001). The position of Topic and Focus in the left periphery. In G. Cinque & G. Salvi (eds.), *Current Studies in Italian Syntax. Essays Offered to Lorenzo Renzi*. Amsterdam: Elsevier-North Holland, 39-64.
- Benincà, P. & Poletto, C. (2004). Topic, focus and V2: defining the CP sublayers. In: Rizzi, L. (ed.), *the Structure of CP and IP: The Cartography of Syntactic Structures*. Oxford: Oxford University Press, 52-75.
- Benmamoun, E. (1999). Arabic morphology: The Central Role of the Imperfective. *Lingua*, 108: 75-201.
- Benmamoun, E. (2000). *The feature structure of functional categories: A comparative study of Arabic dialects*. Oxford: Oxford University Press.
- Benmamoun, E. (2003). The role of the imperfective template in Arabic morphology. In: J. Shimron, (ed.) *Language Processing and Acquisition in Languages of Semitic, Root-Based, Morphology*. Amsterdam: John Benjamins, 99-114.
- Benmamoun, E. (2008). Clause Structure and the Syntax of Verbless Sentences. In Otero, F.C.P and M.L, Zubizarreta. M L (eds.) *Foundational Issues in Linguistic Theory*. Cambridge: MIT Press. 105-131.
- Bianchi, V. (2013). ‘‘On Focus Movement in Italian’’. In M. Victoria Camacho-Taboada, A. Jiménez-Fernández, J. Martín-González and M. Reyes-Tejedor (eds.), *Information Structure and Agreement*. Amsterdam: John Benjamins, 193-216.
- Bianchi, V. & Frascarelli, M. (2010). Is topic a root phenomenon? *Iberia: An International Journal of Theoretical Linguistics* 2, 43-88.
- Biberauer, T., Holmberg, A., Roberts, I., & Sheehan, M. (2010). *Parametric variation: Null subjects in minimalist theory*. Cambridge: Cambridge University Press.
- Blok, P. (1991). Focus and presupposition. *Journal of Semantics* 8, 149-165.
- Bocci, G. (2007). Criterial positions and left periphery in Italian. *Papers from the Consortium Workshops on Linguistic Theory. Special Issue, Nanzan Linguistics* 3 (1), 35-70.
- Brustad, K. (2000). *The Syntax of Spoken Arabic: A Comparative Study of Moroccan, Egyptian, Syrian, and Kuwaiti dialects*. Georgetown University Press.
- Cantarino, V. (1974). *Syntax of Modern Arabic Prose: The Expanded Sentence*. Indiana University Press for the International Affairs Centre.

- Chomsky, N. (1993). A Minimalist Program for Linguistic Theory. *The view from Building 20. Essays in linguistics in honor of Sylvain Bromberger*, ed. by Kenneth Hale and Samuel Jay Keyser, 1-52. Cambridge, MA: MIT Press.
- Chomsky, N. (1995). *The Minimalist Program*. Cambridge, MA: MIT Press.
- Chomsky, N. (2001). *Beyond explanatory adequacy*. MIT Occasional Papers in Linguistics, no.20. Cambridge, MA.
- Chomsky, N. (2005). Three Factors in Language Design. *Linguistic Inquiry* 36: 1-22.
- Chomsky, N. (2007). Approaching UG from below. In *Interfaces+ Recursion= Language? Chomsky Minimalism and the View from Syntax-Semantics*, ed. by H.M. Gärtner & U. Sauerland, 1-30. Berlin: Mouton de Gruyter.
- Chomsky, N. (2013). Problems of projection. *Lingua* 130, 33-49.
- Cinque, G. (1990). *Types of  $\bar{A}$ -dependencies*. Cambridge, Mass: MIT Press.
- Cinque, G. (1999). *Adverbs and functional heads: A cross-linguistic perspective*. Oxford: Oxford University Press.
- Cinque, G. (2001). Restructuring and functional structure. *University of Venice working papers in linguistics* 11, 45-128.
- Coniglio, M. (2008). Modal particles in Italian. *Working Papers in Linguistics* 18, 91-129.
- Cruschina, S. (2010). Syntactic Extraposition and Clitic Resumption in Italian. *Lingua* 120, 50-73.
- Cruschina, S. (2012). *Discourse-related Features and Functional Projections*. Oxford: Oxford University Press.
- Dahlgren, S-O (1998). *Word order in Arabic*. Gothenburg: Acta Universitatis.
- Declerck, R. & Reed, S. (2001). *Conditionals: a comprehensive empirical analysis*. Walter de Gruyter.
- Demirdache, H. (1991). *Resumptive Chains in Restrictive Relatives, Appositives and Dislocation Structures*. Ph.D. thesis, MIT, Cambridge.
- Drubig, H.B. (1994). *Island constraints and the syntactic nature of focus and association with focus*. Arbeitspapiere des Sonderforschungsbereichs 340: Sprachtheoretische Grundlagen der Computerlinguistik 51.
- Drubig, H.B. (2003). Toward a typology of focus and focus constructions. *Linguistics* 41, 1-50.
- ElSadek, S. (2016). *Verbal Complementation in Egyptian Colloquial Arabic: An LFG account*. Ph.D. thesis, University of Essex.
- El-Yasin, M.K. (1985). Basic word order in classical Arabic and Jordanian Arabic. *Lingua* 65(1), 107-122.

- Emonds, J.E. (1970). *Root and Structure-Preserving Transformations*. Ph.D. thesis, MIT.
- Emonds, J.E. (2000). *Lexicon and Grammar: The English Syntacticon*. Mouton, Berlin.
- Endo, Y. & Haegeman, L. (2014). Adverbial concord: merging adverbial clauses. *MIT Working Papers on Linguistics* 73. Cambridge: Cambridge University Press, 22-44.
- Erteschik-Shir, N. (2007). *Information Structure: The syntax-discourse interface*. Oxford: Oxford University Press.
- Fassi-Fehri, A. (1982). *Linguistique arabe, forme et interprétation, Rabat, Maroc: Publications de la faculté des lettres et sciences humaines*.
- Fassi Fehri, A. (1993). *Issues in the Structure of Arabic Clauses and Words*. Dordrecht: Kluwer.
- Fassi-Fehri, A. (2012). *Key features and parameters in Arabic Grammar*. John Benjamins Publishing.
- Ferguson, C.A. (1959). Diglossia. *Word* 15, 325-340.
- Féry, C. (2013). Focus as prosodic alignment. *Natural Language & Linguistic Theory* 31, 683-734.
- Frascarelli, M. & Hinterhölzl, R. (2007). Types of topics in German and Italian. In S. Winkler and K. Schwabe (eds.). *On Information Structure, Meaning and Form*. Amsterdam: John Benjamins. 87-116.
- Frascarelli, M. (2010). Narrow Focus, clefting and predicate inversion. *Lingua* 120, 2121-2147.
- Frey, W. (2012). On two types of adverbial clauses allowing root-phenomena. In L. Aelbrecht, L. Haegeman & R. Nye (eds.). *Main clause phenomena: New horizons*. Amsterdam: John Benjamins. 405-429.
- Haegeman, L. (2002). Anchoring to speaker, adverbial clauses and the structure of CP. *Georgetown University Working Papers in Theoretical Linguistics* 2, 117-180.
- Haegeman, L. (2003). Conditional Clauses: External and internal syntax. *Mind and Language* 18, 317-339.
- Haegeman, L. (2004a). The Syntax of Adverbial Clauses and its Consequences for Topicalization. In M. Coene et al. (eds.), *Antwerp Papers in Linguistics*, 61-90.
- Haegeman, L. (2004b). Topicalization, CLLD and the left periphery. In B. Shaer et al. (eds.), *Proceedings of the dislocated elements workshop*. Berlin: ZAS, 157-192.
- Haegeman, L. (2006c). Conditionals, factives and the left periphery. *Lingua* 116, 1651-1669.
- Haegeman, L. (2007). Operator movement and topicalization in adverbial clauses. *Folia linguistica* 18, 485-502.



- Haegeman, L. (2009). The movement analysis of temporal adverbial clauses. *English Language and Linguistics* 13 (3), 385-408.
- Haegeman, L. (2010). Internal syntax of adverbial clauses. In *exploring the left periphery*, ed. by Kleanthes Grohmann and Ianthi Tsimpli, thematic issue, *Lingua* 120, 628-648.
- Haegeman, L. (2011). The movement derivation of conditional clauses. *Linguistic Inquiry* 41, 595-621.
- Haegeman, L. (2012). *Adverbial clauses, main clause phenomena, and composition of the left periphery: The cartography of syntactic structures*. Oxford: Oxford University Press.
- Haegeman, L. (2014). West Flemish verb- based discourse markers and the articulation of the speech act layer. *Studia Linguistica* 86(1), 116-139.
- Haegeman, L. & Ürögdi, B. (2010). Referential CPs and DPs: An operator movement account. *Theoretical linguistics* 36(2-3), 111-152.
- Halliday, M.A.K. (1967b). Notes on transitivity and theme in English. *Journal of linguistics* 3: 199-244.
- Harbert, W. & Bahloul, M. (2002). Postverbal subjects in Arabic and the theory of agreement. In J. Ouhalla and U. Shlonsky (eds.), *Themes in Arabic and Hebrew Syntax*. Dordrecht: Kluwer. 45-70.
- Heinamaki, O. (1978). *Semantics of English temporal connectives*. Bloomington: Indiana University Linguistics Club.
- Heycock, C. & Kroch, A. (2002). Topic, focus, and syntactic representations. In L. Mikkelsen and C. Potts (eds.), *Proceedings of WCCFL*. Somerville, MA: Cascadilla Press. 101-125.
- Heycock, C. (2006). Embedded root phenomena. In Van Riemsdijk H., Everaert, M. (eds.), *The Blackwell Companion to Syntax*, Blackwell: Oxford. 174-209.
- Holes, C. (1995). Community, dialect and urbanization in the Arabic-speaking Middle East. *Bulletin of the School of Oriental and African Studies* 58, 270-287.
- Holes, C. (1996). The Arabic Dialects of South Eastern Arabia in a socio-historical perspective. *Zeitschrift für Arabische Linguistik* (31), 34-54.
- Holes, C. (2004). *Modern Arabic: structures, functions, and varieties*. Georgetown University Press.
- Holmberg, A. (2000). Scandinavian Stylistic Fronting: How any category can become an expletive. *Linguistic inquiry*, 31(3), 445-483.
- Hooper, J.B. & Thompson, S.A. (1973). On the applicability of root transformations. *Linguistic Inquiry* (4), 465-497.
- Huddleston, R. & Pullum, G.K. (2006). Coordination and Subordination. In: B. Aarts & A. McMahon (eds.), *The handbook of English linguistics*. Blackwell Publishing, 198-219.

- Ingham, B. (1991). Subordinate clauses of time and condition in Bedouin dialects. *Bulletin of the School of Oriental and African studies* 54 (part 1).
- Ingham, B. (1994b). *Najdi Arabic: Central Arabian*, Volume 1. John Benjamins Publishing Co.
- Jarrah, M. (2017). A Criterial Freezing Approach to Subject Extraction in Jordanian Arabic. *Canadian Journal of Linguistics/Revue canadienne de linguistique* 62(3), 411-448.
- Julien, M. (2007). Embedded V2 in Norwegian and Swedish. *Working Papers in Scandinavian Syntax* 80, 103-161.
- Kayne, R.S. (1994). *The Antisymmetry of Syntax*. Cambridge, Mass: MIT Press.
- Kiss, K.É. (1995). *Discourse configurational languages*. Oxford: Oxford University Press.
- Kiss, K.É. (1998). Identificational focus versus information focus. *Language* 74, 245-273.
- Koppen, M. van & J. Rooryck (2008). 'Resolving resolution: underspecification and the Law of Coordination of Likes', Ms., University of Leiden and University of Utrecht.
- Krapova, I. (2002). On the Left Periphery of the Bulgarian sentence. *University of Venice Working Papers in Linguistics*, 107-128.
- Krifka, M. (1996a). Parametrized Sum individuals for Plural Anaphora. *Linguistics and Philosophy* 19, 555-598.
- Krifka, M. (1996b). Pragmatic strengthening in plural predications and donkey sentences. In T. Galloway & J. Spence. *Proceedings of SALT*. CLC Publications, 136-153.
- Lambrecht, K. (1994). *Information Structure and Sentence Form: Topic, Focus, and the Mental Representations of Discourse Referents*. Cambridge: Cambridge University Press.
- Lewis, R. (2013). *Complementizer Agreement in Najdi Arabic*. M.A. Dissertation, University of Kansas.
- Lohnstein, H. (2005). Sentence connection as quantificational structure. In C. Maienborn & A. Wöllstein (eds.), *Event arguments: Foundations and applications*. Tübingen: Niemeyer, 113-138.
- Mahfoudhi, A. (2002). Agreement lost, agreement regained: A minimalist account of word order and agreement variation in Arabic. *California Linguistic Notes* 27, 1-28.
- Maki, H., Kaiser, L. and Ochi, M. (1999). Embedded topicalization in English and Japanese. *Lingua* 109(1), 1-14.
- Mohammad, M.A. (2000). *Word order, agreement, and pronominalization in Standard and Palestinian Arabic*, Volume 181. John Benjamins Publishing Company.
- Molnár, V & Susanne, W. (2010). Edges and gaps: Contrast at the interfaces. *Lingua* 120: 1392-1415.

- Moutaouakil, A. (1989). *Pragmatic Functions in a Functional Grammar of Arabic*. Dordrecht: Foris Publication.
- Munaro, N. (2005). Computational puzzles of conditional clause preposing. In A.M. Di Sciullo (ed.), *UG and External Systems: Language, Brain and Computation*. Amsterdam/Philadelphia: John Benjamins.73-94.
- Musabhién, M. (2009). *Case, agreement and movement in Arabic: a minimalist approach*. Ph.D. thesis, University of Newcastle, UK.
- Norio, N. (2014). Topicalization in adverbial clauses: toward parameterization of embedded root effects. *Journal of foreign studies*, 61-84.
- Ouhalla, J. (1992). Focus in Standard Arabic. *Linguistics in Potsdam 1*, 65-92.
- Ouhalla, J. (1994). Verb movement and word order in Arabic. In Lightfoot, D. and N. Hornstein (eds.) *Verb movement*. Cambridge: Cambridge University Press. 41-72.
- Ouhalla, J. (1997). Remarks on Focus in Standard Arabic. In Bid, M. & Ratcliffe, R. (eds.), *Perspectives on Arabic Linguistics X*, 9-46. Amsterdam: John Benjamins.
- Ouhalla, J. (1999). Focus and Arabic clefts. In Rebuschi, G. & Tuller, L. (eds.), *The Grammar of Focus*, 335-359. Amsterdam: John Benjamins.
- Ouhalla, J. (2013). Agreement Unified. In L. Cheng & N. Corver. (eds.). *Diagnosing Syntax*, 314-333. Oxford: Oxford University Press.
- Plunkett, B. (1993). The position of subjects in Modern Standard Arabic. In E. Mushira & C. Holes (eds.), *Perspectives on Arabic linguistics V: papers from the fifth Annual Symposium on Arabic Linguistics*. Amsterdam: John Benjamins.231-60.
- Plunkett, B. (1996). Binding in Arabic and the Lexical Clause. In Mushira, E. & C. Holes (eds.) *Perspectives on Arabic Linguistics V*. Amsterdam and Philadelphia: John Benjamins. 86-97.
- Quirk, R., S. Greenbaum, G. Leech & J. Svartvik (1985b). *A Comprehensive Grammar of the English language*. New York: Longman.
- Rahhali, M. & Souâli, E.H. (1997). A Minimalist Approach to Verb Movement in Standard Arabic. *Studia linguistica 51*, 317-338.
- Repp, S. (2010). Defining ‘contrast’ as an information-structural notion in grammar. *Lingua 120*: 1333-1345.
- Rizzi, L. (1986). Null objects in Italian and the theory of pro. *Linguistic Inquiry 17*, 501-557.
- Rizzi, L. (1997). The fine structure of the left periphery. In Haegeman, L. (ed.), *Elements of Grammar*. Dordrecht: Kluwer, 281-337.

- Rizzi, L. (2001). On the position ‘?’int (errogative)’ in the Left periphery of the clause. In Cinque, G., Salvi, G. (eds.), *Current studies in Italian syntax: Essays offered to Lorenzo Renzi*. North-Holland, Amsterdam, 286-296.
- Rizzi, L. (2004). Locality and left periphery. In Belletti, A., (ed.), *Structures and Beyond. The Cartography of Syntactic Structures*. Oxford: Oxford University Press, 223-251S.
- Roussou, A. (2000). On the left periphery: Modal particles and complementizers. *Journal of Greek linguistics 1*, 65-94.
- Ryding, K. (2005). *A Reference Grammar of Modern Standard Arabic*. Cambridge University Press.
- Selkirk, E. (2008). Contrastive focus, givenness and the unmarked status of “discourse-new”. In *The Notions of Information Structure*, C. Féry, G. Fanselow, M. Krifka (eds.), *Acta Linguistica Hungarica*, 125-145.
- Sells, P. (1984). *Syntax and Semantics of Resumptive Pronouns*. Ph.D. thesis, University of Massachusetts, Amherst.
- Shlonsky, U. (1997). *Clause Structure and Word Order in Hebrew and Arabic: An Essay in Comparative Semitic Syntax*. Oxford: Oxford University Press.
- Shlonsky, U. (2002). Constituent questions in Palestinian Arabic. In: Ouhalla, J. & Shlonsky, U. (eds.). *Themes in Arabic and Hebrew Syntax*, 137-155. Dordrecht: Kluwer Academic Publishers.
- Soltan, U. (2007). *On Formal Feature Licensing in Minimalism: Aspects of Standard Arabic Morphosyntax*. Ph.D. thesis, The University of Maryland. College Park.
- Szendrői, K. (2004). Focus and the interaction between syntax and pragmatics. *Lingua 114*(3), 229-254.
- Umbach, C. (2005). Contrast and information structure: A focus-based analysis of but. *Linguistics 43*(1), 207-232.
- Vermeulen, R. (2011). The syntax of topic, contrast and contrastive topic. *MIT Working Papers in Linguistics 58*.
- Versteegh, K. (2001). Linguistic Contacts between Arabic and Other Languages. *Arabica 48*(4), 470-508.
- Wahba, W.A. (1984). *Wh-constructions in Egyptian Arabic*. Ph.D. dissertation, University of Illinois at Urbana-Champaign.
- Wickens, G. (1980). *Arabic grammar: a first workbook*. Cambridge: Cambridge University Press.
- Williams, E. (1978). Across-the-Board Rule Application. *Linguistic Inquiry 9*, 31-43.

- Zerbian, S. (2006). Inversion structures in Northern Sotho. *Southern African Linguistics and Applied Language Studies* 24, 361-376.
- Zerbian, S. (2007). Investigating prosodic focus marking in Northern Sotho. In E. Aboh, K. Hartmann, and M. Zimmermann (eds.), *Focus Strategies in African Languages*. New York: Mouton de Gruyter, 55-79.
- Zimmermann, M. (2004). Discourse particles in the left periphery. In B. Shaer, W. Frey, and C. Maienborn (eds.), *ZAS Papers in Linguistics* 35, 543-566.
- Zughoul, M.R. (1980). Diglossia in Arabic: Investigating solutions. *Anthropological Linguistics* 22, 201-217.

## Transcription (Algryani, 2012)

### Consonants

Arabic Letter	Symbol	Phonological Transcription
ء	ʔ	glottal stop
ب	b	voiced bilabial stop
ت	t	voiceless alveolar stop
ث	θ	voiceless dental fricative
ج	dʒ	voiced palatal affricate
ح	ħ	voiceless pharyngeal fricative
خ	x	voiceless uvular fricative
د	d	voiced alveolar stop
ذ	ð	voiced dental fricative
ر	r	voiced alveolar flap
ز	z	voiced alveolar fricative
س	s	voiceless alveolar fricative
ش	ʃ	voiceless palato-alveolar fricative
ص	ʂ	emphatic s
ض	ɖ	voiced velarized alveolar stop
ط	ɹ	emphatic t
ظ	D	voiced velarized dental fricative
ع	ʕ	voiced pharyngeal fricative
غ	ɣ	voiced uvular fricative
ف	f	voiceless labiodental fricative
ق	q	voiceless unaspirated uvular stop
ك	k	voiceless velar stop
ل	l	voiced alveolar lateral
ن	n	voiced alveolar nasal
ه	h	voiceless glottal fricative
و	w	voiced bilabial semi vowel
ي	y	voiced palatal semi vowel

## Vowels

Vowel	Short	Long
Central Open	a	ā
Front Closed	i	ī
Back Closed Rounded	u	ū