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Temporal NPIs and NCIs as Adverb Phrases: The Case of Jordanian
Arabic¹

Ahmad Alqassas

aa1453@georgetown.edu

Abstract

I analyze the status of the temporal NPI *ʔumr* and NCI *baʔd* and explain their distribution and syntactic licensing. Despite their head-like properties (hosting clitics and assigning case), I argue that they are AdvPs in a Spec-XP position rather than heads projecting their own clausal projection. These items can be pre-verbal or post-verbal; differ in their ability to precede negative constituents; and require a complement (DP, CP) that can be co-referential with the subject, object (or pronominal complement inside a syntactic island in the NPI case). These properties follow from *ʔumr* being an adverb base-generated pre-verbally and post-verbally; while *baʔd* base-generated post-verbally and moved pre-verbally. I conclude that c-command and specifier-head configurations can license such items, excluding the head-complement configuration.

1 Introduction

Generally speaking Negative Polarity Items (NPIs) are words that display syntactic dependency with sentential negation. NPIs could be argumental such as *anyone*, *anything* in Standard English, or they could be adverbial such as *at all*, *yet* in Standard English. In this paper, the focus will be on the Arabic NPI *ʕumr* and the Negative Concord Item (NCI) *baʕd* whose English equivalents are the adverbs *ever* and *yet*, respectively. I use the term Negative Sensitive Items (NSIs) to refer to both the NPI and the NCI. The Negative Concord Item (NCI) *wala-ħada* ‘anyone, no one’, and the negative compound *maħadaaš* ‘no one’ will be discussed from the perspective of their interaction with the NPI *ʕumr* ‘ever’ and the NCI *baʕd* ‘yet’.²

The NPI *ʕumr* ‘ever’ and the NCI *baʕd* ‘yet’ are interesting because they exhibit head-like properties that put them on a par with verbs. They can host pronominal clitics, subject agreement inflections in the case of the Moroccan NCI *baqi* ‘yet’, and even negation. They also assign case to the pronominal clitics they host. Thus, they are referred to in the literature as head NPIs (Benmamoun, 2006; Aoun et al., 2010) and as pseudo verbs (Lucas 2009). Moreover, they are analyzed as heads that project a clausal projection selecting a NegP and that are licensed under the head-

complement relation with negation in Moroccan Arabic (Benmamoun, 2006). Nonetheless, I will show and argue that these items exhibit other properties that challenge analyzing them as clausal heads. These properties include (i) their ability to appear both pre-verbally and post-verbally, (ii) their requirement to have a (pro)nominal complement and (iii) the contrasts these two items have with respect to their grammaticality before the NCI *wala-ḥada* ‘anyone, no one’, and the negative compound *maḥadaaš* ‘no one’. I propose to analyze these items as adverbs in Spec-XP and argue that this analysis explains all of their properties. The analysis is developed by treating *ḥumr* as a TP adverb and *baḥd* as a VP adverb that can move to higher specifier positions.

Section 1.1 lays out the basic facts. Section 2 presents the two possibilities to analyze *ḥumr* and *baḥd* as heads in a clausal projection and as XPs in specifier position. A brief assessment of the benefits and drawbacks of each analysis is also presented. In section 3, I start with the claim that single negation (using the negative marker *maa*) is in a NegP above TP while bipartite negation is below TP. I, then, analyze these NPIs as XPs in specifier position. In section 4, I extend the analysis to explain the contrast in the behavior of *ḥumr* and *baḥd* with respect to licensing by

the NCI *wala-ḥada* ‘anyone, no one’, and the negative compound

maḥadaaš ‘no one’. Section 5 is the conclusion.

1.1 Empirical generalizations

Temporal words like *ʕumr* ‘ever’ and *baʕd* ‘yet’ in Jordanian Arabic (JA) require the presence of a negative element in sentences where they are interpreted as negative constituents ‘never’ and ‘yet’.³

- (1) a. *ʕumr-o *(maa) zaar el-batra*
 ever-him NEG visited.3ms DEF-Petra
 ‘He has never visited Petra’
- b. *baʕd-o *(maa) zaar el-batra*
 yet-him NEG visited.3ms DEF-Petra
 ‘He has not visited Petra yet’

Both of these items can be either initial or final, keeping in mind that the post-verbal *ʕumr* is a marked option, while both positions of *baʕd* are unmarked.

- (2) a. *(ʕumr-o) maa zaar el-batra (ʕumr-o)*
 ever-him NEG visited.3ms DEF-Petra
 ‘He has never visited Petra’
- b. *(baʕd-o) maa zaar el-batra (baʕd-o)*

yet-him NEG visited.3ms DEF-Petra

‘He has not visited Petra yet’

One interesting aspect of these words is that they can be followed or preceded by the subject. This observation is pointed out in Benmamoun (2006, p.145) for Moroccan Arabic. This is also the case in JA, as in (3) and (4). Benmamoun takes the fact that the subject can intervene between these words and negation as evidence that they do not form a compound with negation.⁴

(3) a. *Ahmad ʔUmr-o maa zaar el-batra*

Ahmad ever-him NEG visited.3ms DEF-Petra

‘Ahmad has never visited Petra’

b. *Ahmad baʔd-o maa zaar el-batra*

Ahmad yet-him NEG visited.3ms DEF-Petra

‘Ahmad has not visited Petra yet’

(4) a. *ʔUmr Ahmad maa zaar el-batra*

ever Ahmad NEG visited.3ms DEF-Petra

‘Ahmad has never visited Petra’

b. *baʔd Ahmad maa zaar el-batra*

yet Ahmad NEG visited.3ms DEF-Petra

‘Ahmad has not visited Petra yet’

These words must carry a pronominal clitic or be followed by the subject. If neither the clitic nor the Subject NP follows them, the sentence will be ungrammatical:⁵

(5) a. *ʔʊmr*(-o) maa zaar el-batra*

ever*(-him) NEG visited.3ms DEF-Petra

‘He has never visited Petra’

b. *ʔʊmr *(Ahmad) maa zaar el-batra*

ever *(Ahmad) NEG visited.3ms DEF-Petra

‘Ahmad has never visited Petra’

c. *baʔd*(-o) maa zaar el-batra*

yet*(-him) NEG visited.3ms DEF-Petra

‘He has not visited Petra yet’

d. *baʔd *(Ahmad) maa zaar el-batra*

yet *(Ahmad) NEG visited.3ms DEF-Petra

‘Ahmad has never visited Petra’

However, it is not only the subject that can fulfill their requirement to be followed by a (pro)nominal, but the object clitic can fulfill this requirement:⁶

(6) *ʔʊmr-o maa ʔabbat-o bint*

ever-him NEG love-him girl

‘A girl never loved him’

Another interesting property these words have involves a contrast with respect to their grammaticality when preceding a negative indefinite. The adverb *baʕd* can occur before the negative indefinite but the adverb *ʕumr* cannot do so:

- (7) a. **ʕumr-o maħadaaʕ zaar el-batra*
 ever-him no one visited.3ms DEF-Petra
 ‘No one has ever visited Petra.’
- b. *baʕd-o maħadaaʕ zaar el-batra*
 yet-him no one visited.3ms DEF-Petra
 ‘No one has visited Petra yet.’

It is important to point out that *ʕumr* and *baʕd* are Negative Sensitive Items (NSIs) that belong to two different classes. *ʕumr* is an a Negative Polarity Item (NPI) while *baʕd* is a Negative Concord Item (NCI). Below I highlight the important properties that distinguish *ʕumr* as an NPI from *baʕd* as an NCI.

The first property, pointed out in Soltan (2012) for lissa ‘yet’ and is also true of *baʕd*, is that it is formally negative, while *ʕumr* is not.

- (8) a. *ʕumr-o zaar el-batra* b. Answer: **ʕumr-o*

- ever-him visited.3ms DEF-Petra ever-him
‘Has he ever visited Petra’ ‘Never’
- (9) a. *Ahmad naam?* b. Answer: ***baʕd-o***
Ahmad slept.3ms yet-him
‘Has Ahmad slept?’ ‘Not yet’
- (10) ****baʕd-o*** *zaar el-batra?*
yet-him visited.3ms DEF-Petra
‘Has he visited Petra yet?’
- (11) *ðakkir-ni ʔiða ʕʊmr-o zaar el-batra?*
Remind-me if ever-him visited.3ms DEF-Petra
‘Remind me if he ever visited Petra’
- (12) ****ðakkir-ni ʔiða baʕd-o zaar el-batra?***
Remind-me if yet-him visited.3ms DEF-Petra
‘Remind me if he has visited Petra yet’

The fact that *baʕd*, but not *ʕʊmr*, can be used as a fragment answer with a negative interpretation suggests that *baʕd* is formally negative (carrying a [uNeg] feature). Moreover, the fact that *baʕd* cannot appear in non-negative polarity environments (the interrogative in (10) and the conditional in (12)), while *ʕʊmr* can (as in (8) and (11)), also shows that *baʕd* can only be licensed by negation while *ʕʊmr* can be licensed in non-

negative contexts. Again, this is another fact that suggests that *baʕd* carries a [uNeg] feature while *ʕUmr* does not.

Another difference between *baʕd* and *ʕUmr* is that *baʕd* can be either pre-verbal or post-verbal with both positions being unmarked but *ʕUmr* is mostly pre-verbal and the post-verbal position is marked.

(13) a. *baʕd-o maa saafar* (unmarked)

yet-him NEG travelled.3ms

‘He hasn’t travelled yet’

b. *maa saafar baʕd-o* (unmarked)

NEG travelled.3ms yet-him

‘He hasn’t travelled yet’

c. *ʕUmr-o maa saafar* (unmarked)

ever-him NEG travelled.3ms

‘He has never travelled’

d. *maa saafar ʕUmr-o* (marked)

NEG travelled.3ms ever-him

‘He has never travelled’

A third difference between *baʕd* and *ʕUmr* is that *baʕd* can be followed by bipartite negation but *ʕUmr* cannot. However, both can follow bipartite

negation. This is similar to Soltan's (2012) observations for Egyptian Arabic (EA) with *lissa* corresponding to *baʕd* in this case:

- (14) a. *baʕd-o ma-saaqfar-iʃ*
yet-him NEG-travelled.3ms-NEG
‘He hasn’t travelled yet’
- b. *ma-saaqfar-iʃ baʕd-o*
NEG-travelled.3ms-NEG yet-him
‘He hasn’t travelled yet’
- c.* *ʕʊmr-o ma-saaqfar-iʃ*
ever-him NEG-travelled.3ms-NEG
‘He has never travelled’
- d. *ma-saaqfar-iʃ ʕʊmr-o*
NEG-travelled.3ms-NEG ever-him
‘He has never travelled’

2 The status of *ʕʊmr* and *baʕd*

There is conflicting empirical evidence regarding the status of these items that make it difficult to classify them as syntactic heads X^0 or adverbs XPs. Below, I lay out these empirical arguments for and against each analyses. The importance of determining their status is that it has a bearing on two theoretical debates. The first debate is whether these items project

their own distinct clausal maximal projection (Benmamoun's 2006 argument for these temporal NPIs in Moroccan Arabic). The second debate has to do with the licensing configurations under which these NPIs are syntactically licensed by negation. Generally, Arabic NPIs and NCIs are licensed under c-command by negation or by being in the specifier position of a NegP (Benmamoun, 1997, 2006). If these items are clausal heads in a maximal projection XP above NegP, neither of the two licensing configurations can explain the syntactic dependency between negation and these items in the absence of covert NEG raising.

2.1 *ʕumr* and *baʕd* as heads selecting a NegP

The NPI *ʕammər* 'ever' and the NCI *baqi* 'yet' have been analyzed as heads of a clausal projection XP in Moroccan Arabic (MA) (Benmamoun, 2006), as in (17). There are three main empirical arguments for this. First, these items can host clitics (as in all the examples above) and can carry subject agreement inflections, a property that is associated with heads in Arabic, as in the MA examples below (Benmamoun, 2006: p.144):

- (15) a. *nadya baq-a ma-žat*
 Nadia yet-FS NEG-came.3FS
 'Nadia hasn't come yet.'
- b. *lə-wlad baq-yin ma-žaw*

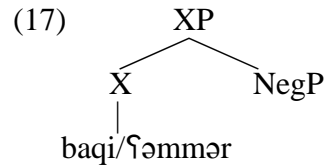
the-children yet-P NEG-came.3MP

‘The children haven’t come yet.’

(16) *nadya ʕəmmər-ha ma-ʒat*

Nadia never-her NEG-came.3FS

‘Nadia never came.’



Second, that the subject can precede these items, as in (15) and (16) from MA and (3) from JA suggests that, as heads, these items have an EPP-feature in their Spec-XP position allowing them to take the subject as a specifier.

Third, the NPI *ʕəmmər/ ʕumr* assigns accusative case to the subject NP or pronominal clitic following it in Spec-NegP and can encliticize onto it as evident from the MA examples in (18) (and the JA examples in (5)). Hosting clitics is an exclusive property of heads in Arabic and case assignment here is consistent with the configuration in (17). The MA examples in (18) are from Benmamoun (2006).

(18) a. *ʕəmmər nadya ma-mʃat l-təmma*

never Nadia NEG-went.3FS to-there

‘Nadia never went there.’

b. *ʕəmmər-ni ma-mʃit l-təmma*

never-me NEG-went.1S to-there

‘I never went there.’

Benmamoun proposes the head-complement configuration as a possible licensing configuration for these items in MA. Benmamoun convincingly argues against that covert movement of the negative marker to a position c-commanding the NPI and against reconstruction of the NPI to a position c-commanded by negation. Covert head movement of negation to a position c-commanding the NPI incorrectly predicts that the negative head can license the NPI *ʕʊmr* even when the auxiliary *kaan* ‘be’ separates the NPI from negation. Consider the following contrasts from JA in (19) and MA in (20):

(19) a. *ʕʊmr-o maa kaan yħib-ha*

ever-him NEG was love-her

‘He never loved her’

b. *(*ʕʊmr-o) kaan maa yħib-ha*

ever-him was NEG love-her

(20) a. *ʕəmmər-u ma-kan taybyi nadya*

never-him NEG-was love Nadia

‘He never loved Nadia.’

b. **ʕəmmər-u kan ma-taybyi nadya*

never-him was NEG-love Nadia

Moreover, in general covert NEG movement incorrectly introduces ambiguities not supported empirically. As Merchant (2000) points out, in English, the sentence *Bob doesn't often finish on time* only allows the reading *not* > *often*. If negation can move higher at LF, we expect the sentence *Bob often doesn't finish on time* to have both readings *often* > *not* and *not* > *often*, but it only allows the former.⁷

However, analyzing these NPIs as *clausal* heads cannot explain the contrasts in examples (7)a, b repeated below:

- (21) a. **ʕUmr-o maḥadaaš zaar el-batra*
ever-him no one visited.3ms DEF-Petra
‘No one has ever visited Petra.’
- b. *baʕd-o maḥadaaš zaar el-batra*
yet-him no one visited.3ms DEF-Petra
‘No one has visited Petra yet.’

If these items are heads that can be licensed by a negative complement, and if the negative compound *maḥadaaš* is in a NegP projection, we incorrectly predict (21)a to be grammatical. Reversely, if the negative compound is not in a NegP, we incorrectly predict (21)b to be ungrammatical. Moreover, analyzing these items as clausal heads becomes less plausible once we consider the fact that these items can be both pre-verbal and postverbal, as in examples (2)a, b above repeated in (22).⁸

- (22) a. (*ʕʊmr-o*) *maa* *zaar* *el-batra* (*ʕʊmr-o*)
ever-him NEG visited.3ms DEF-Petra
‘He has never visited Petra’
- b. (*baʕd-o*) *maa* *zaar* *el-batra* (*baʕd-o*)
yet-him NEG visited.3ms DEF-Petra
‘He has not visited Petra yet’

These are normally properties of XPs such as adverbs and subjects rather than clausal heads.

2.2 *ʕʊmr* and *baʕd* as adverbs in Spec-XP

Now let us briefly discuss how analyzing *ʕʊmr* and *baʕd* as adverbs can avoid the previous challenges faced in analyzing them as clausal heads.⁹ First, as adverbs, *ʕʊmr* and *baʕd* can occupy both the pre-verbal and post-verbal positions under either the XP adjunction analysis or the Spec-XP analysis.

The literature on adverb placement has at least two strategies. The first is to allow adverbs to occupy multiple positions via phrasal adjunction to more than one maximal projection (Pollock, 1989; Iatridou, 1990; Johnson, 1991; Bowers, 1993; Potsdam, 1999; among others). The second approach is to place adverbs in the specifier of the lowest maximal

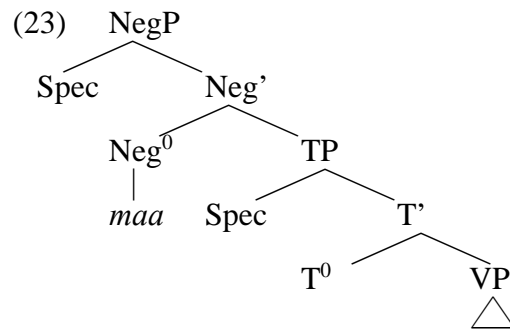
projection they modify and allow them to move up to other specifier positions (Jackendoff, 1981; Alexiadou, 1994; Kayne, 1994; Cinque, 1999; among others). Therefore, in principle, analyzing *ʕʊmr* and *baʕd* as adverbs has the advantage of accounting for the fact that they have various positions in the structure. As will be clear later (section 3), the NCI *baʕd* is better explained as an adverb that is merged in Spec-VP and moves to Spec-CP. This approach, as I show in section 3, will enable us to explain how *baʕd* is licensed when preceding the negative indefinite. By generating *baʕd* in the post-verbal position and allowing it to move up to the pre-verbal position, it can be licensed under c-command by negation. On the other hand, the pre-verbal position of the NPI *ʕʊmr*, contrary to the pre-verbal NCI *baʕd*, does not result from base generating it inside the VP and then moving it to the pre-verbal position. Instead, the pre-verbal NPI *ʕʊmr* is base generated in the specifier position of a functional projection above TP (Spec-FP) or in Spec-NegP above TP.

However, there other properties that we still have to explain. We have to explain how the subject can intervene between these items and negation; how the subject can precede these items and negation; and how the NPI can assign case to the subject intervening between the NPI and

negation. Below I tackle these issues arguing in support of analyzing these items as adverbs.

3 Analysis of *ʕʊmr* and *baʕd*

First I assume that negation here, single negation using the marker *maa*, is the head of a NegP above TP. Notice that JA and MA have bipartite negation in most contexts but only single negation is possible with the MA *ʕʊmr* and *baqi* and the JA *ʕʊmr*.



Single negation in JA (and a similar variety in Palestinian Arabic (PA) reported in Hoyt, 2007), is also attested in the context of oath words like *walla* ‘by God’. What is relevant here is not a characterization of the distribution of single and bipartite negation in these dialects, but rather the fact that an adverbial phrase can intervene between the negative marker *maa* and the verb with single negation in (24), something that is not possible with bipartite negation in (25):

(24) a. *wallah maa b-yo:m basaamħ-ak*

by-God NEG in-day forgive-you

‘I will not forgive you in any day.’=‘I will never forgive you’

b. *wallaah ma-[_{PP} fi-hal-lēle] b-anaam ʕind-ak PA*

by-God not in-this-night sleep.1s at-you

‘I won’t sleep with you this night.’ (SK30:§90.6)¹⁰

c. *ʕumr-i maa b-yo:m zurt el-batra*

Never-I NEG in-day visited.1s DEF-Petra

‘I never visited Petra in any day.’

(25) a. *ma-basaamiḥ-k-iš*

NEG-forgive-you-NEG

‘I will not forgive you.’

b. **maa b-yo:m basaamiḥ-kiš*

NEG in-day forgive-you

Since the negative marker and the adverbial phrase can even precede the past tense verb (see (24)c), and assuming that the past tense verb moves to T in Arabic (Benmamoun, 2000), it follows that the negative marker *maa* must be above TP in all of the above examples. That being said, I follow the analysis of bipartite negation in Arabic as a negative projection below TP (Benmamoun, 2000; Aoun et al., 2010; Alqassas, 2012, 2014; among others)¹¹, thus explaining the contrasts between the examples in (24) and (25).¹² Below is an illustration showing the two positions:

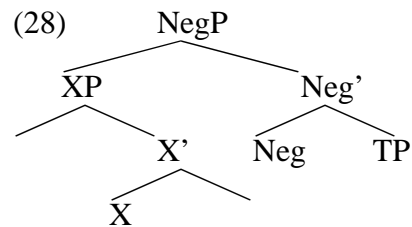
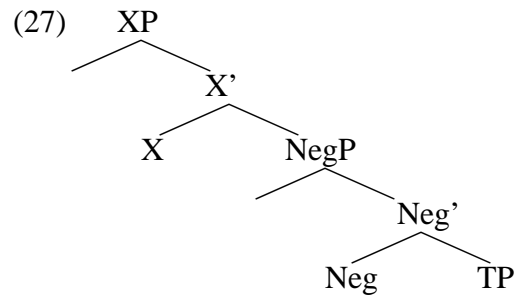
(26) a. [_{NegP} Neg *maa* [TP T [_{VP}...

b. [TP T [_{NegP} Neg *ma- iš* [_{VP}...

3.1 *ʕumr* and *baʕd* as XPs

Now going back to the issue of whether *ʕumr* and *baʕd* are clausal heads,

I should point out that I follow the insight from Benmamoun's analysis that these items are heads. But I depart from their being clausal heads, as in (27), and instead I argue that they are heads within their phrase, as in (28).



First, it should be pointed out that the ability to host clitics or display agreement may not be a determining factor in whether an element is a clausal head or a phrasal head. Arabic has adverbs that display *phi* agreement.

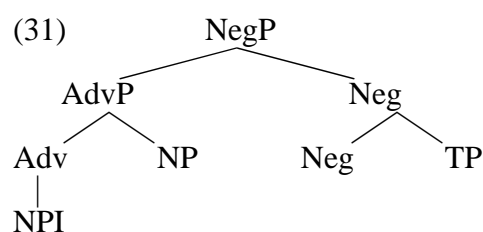
- (29) *ʕaadar-u* *musriʕ-iin*
 left-3mp fast-3mp
 ‘They left with a haste’

The manner adverb *musriʕ-iin* ‘fast-3mp’ displays complete phi agreement with the third person plural subject agreement on the verb *ʕaadar-u* ‘left-3mp’.

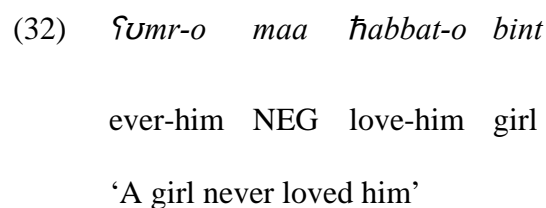
Second, *ʕUmr* and *baʕd* require a nominal complement whether it is a pronoun or a noun. Having this complement will necessarily mean that these items will not be in a head complement relation with negation if they project a causal XP above NegP. Consider these examples:

- (30) a. *ʕUmr*(-o) maa zaar el-batra*
 ever*(-him) NEG visited.3ms DEF-Petra
 ‘He has never visited Petra’
- b. *ʕUmr *(Ahmad) maa zaar el-batra*
 ever *(Ahmad) NEG visited.3ms DEF-Petra
 ‘Ahmad has never visited Petra’
- c. *baʕd*(-o) maa zaar el-batra*
 yet*(-him) NEG visited.3ms DEF-Petra
 ‘He has not visited Petra yet’
- d. *baʕd *(Ahmad) maa zaar el-batra*
 yet *(Ahmad) NEG visited.3ms DEF-Petra
 ‘Ahmad has never visited Petra’

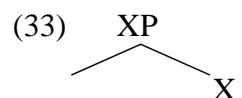
The fact that either the pronominal clitic or the NP is required suggests that this nominal complement is selected by these items as its complement rather than being a sentential subject in Spec-TP, especially that Arabic is a pro-drop language. Therefore, a revised representation of (28) above will look like (31) below, where the pronoun or the noun is under NP, and the NPI is the head of an XP, call it AdvP, in Spec-NegP.

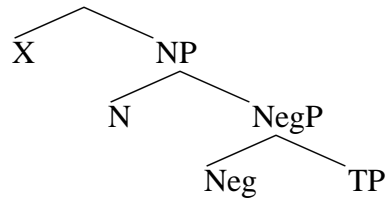


Another fact that motivates this analysis is that the NPI can host the object clitic, as in (32):



So the NPI not only requires a nominal argument but this argument can also be the sentential subject or object.¹³ What matters here is that if *ʔUmr* projects a clausal XP, its complement must be the (pro)nominal element. Consequently, we will lose the head-complement licensing configuration *ʔUmr* is assumed to have with NegP.





On the other hand, with the NPI in Spec-NegP as a head projecting a complement position, the (pro)nominal element is in this complement position.

Another situation where we lose the head-complement configuration takes place when a relative clause separates the NPI from negation:

(34) *ʕʊmr illi budrus maa bursub*

Never who study.3ms NEG fail.3ms

‘He who studies never fails’

The relative clause is the complement of the NPI, i.e., it is part of the NPI phrase. If the NPI is a clausal head, the relative clause would be a CP complement that intervenes between the NPI head and the NegP. So the NPI would not be in a head-complement relationship with NegP.

3.2 The NP subject preceding *ʕʊmr* and *baʕd*

Now I will show how analyzing the *ʕʊmr* and *baʕd* phrases as in (31) above can handle the challenge presented by the ability of the subject to precede these NSIs. These facts are repeated below:

(35) a. *Ahmad ʕʊmr-o maa zaar el-batra*

Ahmad ever-him NEG visited.3ms DEF-Petra

‘Ahmad has never visited Petra’

b. *Ahmad baʕd-o maa zaar el-batra*

Ahmad yet-him NEG visited.3ms DEF-Petra

‘Ahmad has not visited Petra yet’

First of all, there is a debate in Arabic over the status of the pre-verbal subject. Some analyses treat it as a noun in Spec-TP while others as a noun in Spec-CP (left dislocated). Here I think the noun preceding the NPI is left dislocated in the CP layer and not in the specifier position of the NPI. Consider the example below where the adverb *mumkin* ‘probably’ can separate the noun *Ahmad* from the NPI:

(36) *Ahmad mumkin ʕUmr-o maa zaar el-batra*

Ahmad probably ever-him NEG visited.3ms DEF-Petra

‘Probably, Ahmad has never visited Petra’

Notice that there is cross-linguistic evidence that this type of adverb is never/ cannot be under the scope of negation (Cinque, 1999:124). This includes JA:

(37) *Ahmad ʕUmr-o (*mumkin) maa (*mumkin) zaar el-batra*

Ahmad ever-him probably NEG probably visited.3ms DEF-Petra

Cinque (ibid) analyzes this adverb as occupying a projection

(ModP_{epistemic}) above NegP in order to explain how negative markers

preceding this adverb can never scope over it in Romance languages. If this adverb occupies a position above NegP and if the NPI is in Spec-NegP, it follows that the subject NP *Ahmad* preceding the NPI must be in a projection higher than that of the NPI (perhaps a TopP a la Rizzi, 1997). Another argument that supports analyzing the NP that precedes the NPI as a left dislocated element rather than a subject comes from example (38):

(38) *l-walad ʕumr-o maa ḥabbat-o bint*

DEF-boy ever-him NEG love-him girl

‘A girl never loved the boy’

Here we see that the noun co-indexed with the complement of the NPI is in fact the left dislocated object of the sentence. Therefore, it makes sense to treat the position of the noun before the NPI as a Spec-CP position rather than a Spec-NPI or a Spec-TP position.

4 *ʕumr* and *baʕd* as XPs: licensing by negative constituents

Now let us see how the analysis developed here can explain the dichotomy in the behavior of the NCI *baʕd* and the NPI *ʕumr* with regard to the ability of the negative compound *maḥadaaš* and the NCI *wala-ḥada* to license them. Remember that the NPI *ʕumr* cannot precede the negative compound *maḥadaaš* and the NCI *wala-ḥada*, while the NPI *baʕd* can:

- (39) a. (**ʕʊmr-o*) *maħadaaš* (*ʕʊmr-o*) *zaar* *el-batra*
 (*ever-him) no one (ever-him) visited.3ms DEF-Petra
 ‘No one has ever visited Petra.’
- b. (**ʕʊmr-o*) *wala-ħada* (*ʕʊmr-o*) *zaar* *el-batra*
 (*ever-him) NEG-one ever-him visited.3ms DEF-Petra
 ‘No one has ever visited Petra.’
- (40) a. (*baʕd-o*) *maħadaaš* (*baʕd-o*) *zaar* *el-batra*
 (yet-him) no one (yet-him) visited.3ms DEF-Petra
 ‘No one has visited Petra yet.’
- b. (*baʕd-o*) *wala-ħada* (*baʕd-o*) *zaar* *el-batra*
 (yet-him) NEG-one (yet-him) visited.3ms DEF-Petra
 ‘No one has visited Petra yet.’

The fact that the NPI *ʕʊmr* can follow the negative compound *maħadaaš* and the NCI *wala-ħada* suggests that the ungrammaticality when preceding the negative indefinite has to do with failure to be licensed by negation. Now two questions arise. First, how is *ʕʊmr* licensed when following these negative constituents? And second, why is it that *baʕd* but not *ʕʊmr* can be licensed when preceding the negative indefinite?

The answer to the first question lies in the adverbial properties of the NPI *ʃʊmr*. When pre-verbal, this NPI is always merged above TP. Earlier in the previous section, we saw that this position is the specifier position of the NegP that dominates TP. In examples (39)a-b, the negative constituents occupy a specifier position in the CP layer, as I show later in this section. So the NPI is merged in the specifier position of a functional projection, call it FP, above TP. The NPI, is then licensed under c-command by the negative constituents:

- (41) [CP *maħadaaš/ wala-ħada* [FP *ʃʊmr-o* [TP ... [VP ...

The answer to the second question lies in the properties of *ʃʊmr* and *baʃd* as adverbs. These NSIs are different in terms of their position in the structure and their ability to move. The NPI *ʃʊmr* is an adverb that is typically merged in Spec-FP or Spec-NegP above TP. Less commonly, this NPI can be merged in Spec-VP. On the other hand, the NCI *baʃd* is an adverb that is always merged in Spec-VP and can move to the CP layer.¹⁴

To show how the contrasts in (39) and (40) follow from the properties of the NPI *ʃʊmr* the NCI *baʃd* as adverbs that differ in their locus, movement, and licensing (whether licensed overtly or covertly), I will first explain where the negative compound *maħadaaš* and the NCI *wala-ħada* are located in the structure. First of all, the negative constituent *wala*-NP is

a non-strict NCI. When post-verbal, it must co-occur with negation and has an NC reading. But when pre-verbal it cannot co-occur with negation under the NC reading.

- (42) a. Ali *(ma-)ya:b-iš wala-s^faff
 Ali (NEG-)missed.3ms-NEG NEG-class
 ‘Ali did not miss any class’
- b. wala-s^faff Ali (*ma-)ya:b-(*iš)
 NEG-class Ali (NEG-)missed.3ms(-NEG)
 ‘Ali did not miss any class’

The NCI *wala-ħada* can be focus-fronted in JA. Consider the following examples where the NCI, which is the thematic object, precedes the pre-verbal subject and displays sensitivity to the Island Constraints:¹⁵

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- (43) * wala-s^faff Ali nidʒħ laʔinn-oh ya:b
 NEG class Ali passed.3ms because-him missed
 ‘Ali passed because he did not miss any class.’

But even when the NCI *wala-ħada* is a subject, it precedes the NPI *ʔumr*, suggesting that it is a topic in the CP layer rather than a subject in Spec-TP:¹⁷

- (44) *wala-ħada* ʔumr-o zaar el-batra
 NEG-someone ever-him visited.3ms DEF-Petra

‘No one has ever visited Petra.’

Therefore, the pre-verbal NCI *wala*-NP in (42)b and in (44)) is in the CP layer. Assuming a layered CP structure *a la* Rizzi (1997), the *wala*-NP in (42)b can be in a focus projection, FocP, as in (45)a, and the *wala*-NP in (44) can be a topic in a TopP projection, as in (45)b.¹⁸

- (45) a. [_{FocP} *wala*-NP [TP ... [VP ...
 b. [_{TopP} *wala*-NP [TP ... [VP ...¹⁹

Now we can answer the question of why the NPI *ʕumr* in (39)b cannot precede the NCI *wala*-NP while the NCI *baʕd* in (40)b can.²⁰ When preceding the NCI *wala*-NP, the NPI *ʕumr* is clearly neither c-commanded by negation (the NCI *wala*-NP here), nor is it in a specifier-head relation with negation. The NPI is in a position above the NCI *wala*-NP. But the NCI *baʕd* ~~starts in a VP internal position where the~~ NCI *wala*-NP can license it under c-command, and then it can move to a position preceding the NCI *wala*-NP in the CP layer.

- (46) a.* [...*ʕumr-o*...[_{TopP} *wala*-NP [TP ... [VP ...
 b. [_{TopP} *baʕd-o* [_{TopP} *wala*-NP [TP ... [VP ... *baʕd-o*

The fact that the NPI *ʕumr* in (39)a cannot precede the negative compound *maħadaaš* receives a similar explanation. The negative constituent *maħadaaš* ‘no one’ and the negative constituent *maʕumrhuš*

‘never’, are lexical compounds that do not branch in syntax.²¹ They are inherently negative and can license NPIs that follow them. The negative compound *maḥadaaš* can license the NPI *ḥumr*, and the negative compound *maḥumrhuš* can license the NPI *ḥada*.

- (47) a. *maḥadaaš ḥumr-o zaar el-batra*
 No one ever-him visited.3ms DEF-Petra
 ‘No one has ever visited Petra.’
- b. *maḥumrhuš ḥada zaar el-batra*
 never one visited.3ms DEF-Petra
 ‘No one has ever visited Petra.’

Now the fact that the negative compound *maḥadaaš* precedes the NPI *ḥumr* suggests that it is in the CP layer in a TopP projection similar to the NCI *wala-ḥada*.

The observation that the NPI *ḥumr* in (39)a cannot precede the negative compound *maḥadaaš* but the NCI *baḥd* in (40)a can is expected.

- (48) a.* [...*ḥumr-o*...]_{TopP} *maḥadaaš* [TP ... [VP ...
 b. [_{TopP} *baḥd-o* [_{TopP} *maḥadaaš* [TP ... [VP ... *baḥd-o*]

The NPI *ḥumr* in (48)a, the representation for (39)a is neither c-commanded by the negative compound nor is it in a specifier-head relation

with it. This means that the NPI is not licensed under any of the two licensing configurations, hence the ungrammaticality. But in (48)b, the representation for (40)a, the NCI *baʕd* originates in a VP internal position where it is licensed via c-command by the negative compound. It then undergoes topicalization to the CP layer.

So far I have taken the position that the NCI *baʕd* is licensed overtly in its VP internal position before it moves to the pre-verbal position. But it is possible to argue that it is licensed under reconstruction to its base position at LF. The adverbial NCI *baʕd* patterns with the other adverbial NCIs in JA in that it can be focus-fronted. Alsarayreh (2012) shows that adverbial NCIs such as *bilmarrah* in JA are focus-fronted.²² The examples in (49) show that the NCI *bilmarrah* occupies a post-verbal position. Negation is required for licensing it. In (49)a, the NCIs *bilmarrah* occupies a post-verbal position, and thus it is licensed under c-command by negation. But in (49)b the NCI is neither c-commanded by negation nor in a specifier-head relation with negation since the subject intervenes between negation and the NCI. Alsarayreh proposes that such NCIs are licensed at LF after they reconstruct to their base position inside the VP where they are c-commanded by negation.

(49) a. *Ahmad *(ma-)bihibb-*(iʕ) l-tʔayyarah bilmarrah* (JA)

Ahmad NEG-like-NEG the-plane at all

‘Ahmad doesn’t like planes at all’

[_{TP} Ahmad [T [_{NegP} [_{Neg-V-Neg} [[[_{vP}... <NCl>]]]]]

b. *bilmarrah Ahmad *(ma-)bihibb-*(iṣ) l-tʿayyarah*

at all Ahmad NEG-like-NEG the-plane

‘Ahmad doesn’t like planes at all’

[_{FP} *NCl* [_{TP} Ahmad [T [_{NegP} [_{Neg-V-Neg} [[[_{vP}... <NCl>]]]]]

It is worth pointing out that reconstruction implies movement, assuming the copy theory of movement (Lebeaux, 1990; Bianchi, 1995; Sauerland, 2004; Nunes, 2004; among others), where a moved constituent leaves a copy in the position from which it moves. The lower copy, then, gets interpreted at LF. Now the fact that the preverbal NPI *ʕumr* in (39) cannot be licensed can be taken as evidence that it has not moved from a position c-commanded by negation in the first place. Therefore, reconstruction is not possible and licensing fails, hence the ungrammaticality. In other words, when preverbal, this NPI is directly merged in Spec-FP or Spec-NegP above TP. And in the ungrammatical examples in (39), it is merged too high in a position where it cannot even be in a specifier-head relation with negation, as explained above.

(50) [_{NegP} *ʕumr* [_{Neg} [_{TP} *ʕumr* T [_{vP}... *ʕumr*]]]

There is more evidence supporting the claim that the pre-verbal *ʕUmr* phrase is not left-dislocated. The clitic inside the NPI phrase *ʕUmr-o* can bind the pronoun inside syntactic islands:

- (51) *ʕUmr-o maa habbat li-mʕalmeh ktaabt-oh*
 ever-him NEG like.3fs DEF-teacher.f writing-his
 ‘The teacher has never liked his writing’

The clitic inside *ʕUmr-o* binds the pronoun inside the complex DP *ktaabt-oh* ‘writing-his’, which is a syntactic island. This suggests that the clitic inside the NPI is not left-dislocated from the position of the pronoun inside the island. This, in turn, is consistent with the analysis of the NPI phrase *ʕUmr-o* as an adverb phrase not left-dislocated by extraction from a post-verbal position bound by the pronoun inside the island.

Finally, the locus of single negation above TP as opposed to bipartite negation below TP explains how bipartite negation cannot follow *ʕUmr* in (52).

- (52) a. *baʕd-o ma-saaqar-iʃ*
 yet-him NEG-travelled.3ms-NEG
 ‘He hasn’t travelled yet’
 b. *ma-saaqar-iʃ baʕd-o*
 NEG-travelled.3ms-NEG yet-him

‘He hasn’t travelled yet’

c.* *ʔUmr-o ma-saaʔar-iš*

ever-him NEG-travelled.3ms-NEG

‘He has never travelled’

d. *ma-saaʔar-iš ʔUmr-o*

NEG-travelled.3ms-NEG ever-him

‘He has never travelled’

The explanation is possible under the analysis that *ʔUmr* is a TP adverb and *baʔd* a VP adverb that moves to the CP layer. With these NSIs in post-verbal position (i.e., in Spec-VP), the licensing follows from their being c-commanded by negation whether above or below TP. But in their pre-verbal position, licensing will not take place if the NPI is merged above TP in Spec-FP and negation is below TP, hence the ungrammaticality of *ʔUmr* in (52)c.²³ However, an NCI like *baʔd* that is merged in Spec-VP gets licensed overtly in that position before it moves to a pre-verbal position or covertly after reconstruction to its base position at LF.

(53) * [_{FP} *ʔUmr* [_{TP} *T* [_{NegP} *Neg ma... š* [_{VP}...]]]]

(54) [_{FP} *baʔd* [_{TP} *T* [_{NegP} *Neg ma... š* [_{VP}... <*baʔd*>]]]]

Remember here that these analyses are possible because we are treating these NSIs as adverbs which occupy the specifier position rather than heads that project their own clausal projection.

5 Conclusion

In this paper, I analyzed the status of the NPI *ʕumr* ‘ever’ and the NCI *baʕd* ‘yet’. I argued that these items that exhibit head-like properties, such as hosting clitics and carrying agreement inflections (Benmamoun, 2006), are better explained as AdvPs that occupy the specifier position and that they are not heads that project their own clausal maximal projections. These items take a (pro)nominal complement that can be the subject or the object of the sentence. Their complement can also be as big as a relative clause. The analysis supports the position that the specifier-head relation and the c-command configurations are the licensing configurations for negative sensitive items in Arabic (Benmamoun, 1997) and excludes the head-complement configuration as a licensing strategy for these NPIs in the pre-negative position (not to mention the post-negative one).

The NCI *wala-ħada* ‘anyone, no one’, and the negative compound *maħadaaš* ‘no one’ were also discussed from the perspective of their interaction with the NPI *ʕumr* ‘ever’ and the NCI *baʕd* ‘yet’. The NPI *ʕumr* cannot precede the negative constituents *wala-ħada* and *maħadaaš*

while the NCI *baʕd* can. The analysis reduces this contrast to the location of these adverbs in the structure and their ability to move. The NCI *baʕd* is an adverb that is always merged VP internally and therefore gets licensed there where negation c-commands it. This adverb can move higher to the CP layer giving rise to its preverbal/ prenegative position and licensing can take place under reconstruction or before it moves from the VP. On the other hand, the preverbal NPI *ʕumr* is always merged above TP in Spec-FP (or in Spec-NegP above TP when *maa* is the licenser) where the negative constituents *wala-ħada* and *maħadaaš* can license it under c-command. These negative constituents occupy specifier positions in the CP layers. Therefore, when the NPI *ʕumr* precedes them, it is impossible to license it since the NPI is neither c-commanded by these negative constituents nor is it in a specifier-head relation with them.

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² My Jordanian Arabic examples are from the local dialect spoken in the north of Jordan. Specifically it is in Irbid city, its suburbs, and the bigger Hauran region.

³ The same is true of their Egyptian (EA) equivalents *ʕumr* and *lissa* and the Moroccan (MA) equivalents *ʕammər* and *baqi*.

⁴ This makes their licensing a puzzle. They are not c-commanded by negation, nor are they in a specifier-head relation with negation.

⁵ Hoyt (2007) presents examples from a Palestinian dialect where *ʕumr* appears without the pronominal clitic or the NP complement. Such cases are ungrammatical in JA.

⁶ Hoyt (2007) presents examples from a Palestinian dialect where the pronominal clitic on the NPI and the subject NP are not co-referential. This is what we also have in example (6) from JA.

⁷ For arguments against neg movement at LF, see Ladusaw (1977, 1988), and Höhle (1991).

⁸ The postverbal *ʕumr* is marked, but the postverbal *baʕd* is not.

⁹ Hoyt (2007) considers *ʕumr* ‘ever’ in Palestinian Arabic to be an adverb in the CP layer. Soltan’s (2012) analysis of *ʕumr* ‘ever’ and *lissa* ‘yet’ in Egyptian Arabic is based on the assumption that these are adverbs that are in Spec-NegP when preceding negation.

¹⁰ Cited in Hoyt (2007: p.113).

¹¹ In Alqassas (2012, 2014) I present arguments for analyzing bipartite negation below TP and single negation above TP.

¹² Later, I will also refer to this analysis as an explanation for why the preverbal *ʕumr* cannot be followed by bipartite negation.

¹³ Lucas (2009: pp. 207, 221) points out that *baʕd*-o and *ʕumr*-o are changing into impersonal verbs (pseudo-verbs) that take the logical subject of the sentence as its object pronoun. But here we see that the NPI can take the logical object of the sentence as its object pronoun.

¹⁴ The adverb *baʕd* is related to the Standard Arabic *baʕd* ‘yet’, which can only occur sentence finally, as in (i) below. Therefore, it makes sense to propose that *baʕd* is a VP adverb. The difference is that in JA it acquired the ability to host clitics and to occupy a preverbal position:

(i) (*baʕd) lam ʔunhi l-kitabata (baʕd)

(yet) NEG.past finish.1p DET-writing (yet)

‘I have not finished writing yet’

¹⁵ Focus-fronted constituents in JA display sensitivity to adjunct islands:

(i) ʕams ʔasʔileh Ali ʔall

five questions Ali answered

‘Ali answered five questions’

(ii) *ʕams ʔasʔileh Ali nidʒh laʔinn-oh ʔall

five questions Ali passed.3ms because-him answered

¹⁶ See Alsarayreh (2012) for similar facts in a different dialect in Jordan.

¹⁷ There are many arguments that preverbal subjects are in Spec-CP rather than in Spec-TP (Aoun et al., 2010). Since I argued that the NPI ʔumr is a Spec-TP adverb, it is reasonable to consider the NP preceding it to be in Spec-CP.

¹⁸ Below is a simple schematic representation for Rizzi’s (1997) layered CP:

(i) ... ForceP ... TopicP ... FocusP ... TopicP... Fin IP

¹⁹ In analyzing similar cases of *wala*-phrases in Levantine Arabic, Hoyt (2010) assumes that *wala*-phrases are topics in the sense that they introduce a topical presupposition. This topic presupposes a set of referents that do not have the property expressed by the proposition of the sentence. This explanation is consistent with the proposed structure in (45)b in this paper.

²⁰ Whether the preverbal NCI *wala*-NP is inherently negative (on a par with the Egyptian *wala*-NP as in Ouali and Soltan, 2014) or licensed by a covert negative operator (following Zeijlstra’s (2004) analysis of similar NCIs in Romance) is irrelevant here. But in another manuscript I argue that it is not inherently negative. One empirical evidence is attested in the fact that we have a concordant reading when the preverbal NCI *wala*-NP co-occurs with a negative compound like *maʕumrhuš* ‘never’:

(i) *maʕumrhuʃ wala-ħada zaar el-batra*

never NEG-one visited.3ms DEF-Petra

‘No one has ever visited Petra.’

²¹ It is not possible to derive these compounds in syntax. To derive them in syntax we have to move the NPIs (*ʕumr* and *ħada*) from a specifier position to the head position of the negative markers *ma* and *-ʃ* and then move the complex [Neg-NPI-Neg] to a Spec-XP position. As Aoun et al. (2010) point out, this pattern of movement is theoretically problematic because it violates the structure preservation (or rules of merge in recent minimalist terms). So I treat these as non-branching lexical compounds. This is the view in the literature (e.g. Hoyt, 2007).

²² Alsarayreh, however, follows Benmamoun’s analysis of the MA equivalent to *baʕd*, *baqi*, and analyzes *baʕd* as a head that projects a clausal projection above NegP and that is licensed via the head-complement relation with negation.

²³ Ouhalla (2002) presents a different explanation for the lack of *-ʃ* in sentences with NPIs in Moroccan Arabic, where all types of NPIs are always in complementary distribution with *-ʃ*. And Soltan (2012) presents a different analysis for the complementary distribution between the NPI *ʕumr* in preverbal position and *-ʃ* in Egyptian Arabic. Since the focus of this paper is not the complementary distribution between NPIs and the enclitic negative marker *-ʃ*, these will not be discussed here. I discuss these in a different paper (Alqassas, 2014).