Sentential Negation in Moroccan Arabic

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Abstract

Sentential Negation in Moroccan Arabic

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In this thesis I analyze the distribution of negative markers in sentential negation in Moroccan Arabic . Moroccan Arabic uses two negative markers to denote sentential negation: one in a pre-verbal position-*ma*, and another one following the verb-*sh*.

I propose a structure based on the assumption that Moroccan Arabic has two NegPs. The lower NegP hosts *ma* in its Spec and the higher NegP is the position where *sh* moves. Moreover, I propose that *ma* is a clitic that left adjoins to the verb once the verb is in a c-commanding position (following Bošković's 2002 view on clitics).

This analysis is successful at accounting for the distribution of negative markers in verbal and verbless sentences, and also at solving the problems exhibited by the previous analyses of *bipartite negation* (Pollock 1989, Rowlett 1998, Benmamoun 1997, Bell 2004).

Furthermore, the same structure also accounts for the syntax of negative sentences containing N-words, under the assumption that *sh* and N-words cannot co-occur because they compete for the same position, namely the spec of the higher NegP.

Finally, to account for the syntax of negative sentences that carry metalinguistic negation, I propose that the negators are in the CP field, rather than within the TP (following Martins's 2014 view on metalinguistic negation in European Portuguese). This analysis is successful at accounting for the distribution of metalinguistic negators in both verbal and verbless sentences.

Contents

Chapter 1

Introduction

This thesis focuses on the analysis of negative sentences and the distribution of negative markers in Moroccan Arabic. Negation in Moroccan Arabic exhibits a rather peculiar distribution that seems similar to negation in French. Moroccan Arabic uses two negative markers; one in a pre-verbal position–*ma*, and another one following the verb–*sh*.

(1.1) ***ma*** V ***sh***

Such type of sentential negation (which I will call *bipartite negation*) brings up two issues. The first one is a syntactic issue and it is related to the position of the two markers, and the second one is a semantic issue that raises questions such as why the two negative markers do not cancel each other semantically.

Moroccan Arabic also shows a distinctive pattern of negation in sentences that do not contain an overt verb. These sentences always contain a silent copula verb followed by a predicative XP. In these instances, the two negative markers cluster together and precede the predicative XP, which can be a DP/Pronoun, an AP, a PP, etc.

(1.2) ***ma-sh*** $\text{XP}_{predicative}$

The two negative markers can cluster together not only in sentences with covert copular verbs, but also in some sentences with overt lexical (non-copular) verbs. Such type of sentences always

carry a *meta linguistic negation*, which is used to negate a proposition during a pragmatic discourse (Horn 1998).

(1.3) ***ma-shi*** V (*meta linguistic negation*)

Furthermore, negation in Moroccan Arabic reveals that adjectives in a predicative position are different from other predicative XPs: in addition to the normal pattern of negation that all verbless sentences show–as in (1.2), adjectives are also able to occur in between the two negative markers, just like verbs.

(1.4) ***ma*** A ***sh***

Finally, another peculiar aspect of sentential negation in Moroccan Arabic is the distribution of its Negative words (N-words). N-words in Moroccan Arabic are licensed only by the pre-verbal negative marker *ma*. The co-occurrence of N-words with the post-verbal negative marker *sh* is ungrammatical, even in the presence of the pre-verbal one as shown in (1.5.c).

(1.5) (a) ***Ma*** *mcha* ***hattawahed***.
neg go anybody
'Nobody went.'

(b) **Mcha* ***sh*** ***hattawahed***.
go neg anybody
'Nobody went.'

(c) *****Ma*** *mcha* ***sh*** ***hattawahed***.
neg go neg anybody
'Nobody went.'

The theoretical challenges posed by the distribution of negative markers in Moroccan Arabic are thus the following:

- What is the position of the two negative markers in verbal sentences (i.e. sentences with overtly expressed lexical or auxiliary verbs)?

  (1.6) (a) ***ma*** V ***sh***

(b) ***ma*** Aux ***sh***

- What is the position of the metalinguistic negative markers in verbal sentences of type (1.3), repeated below.

  (1.7) ***ma-sh*** V

- What is the position of the negative markers in verbless sentences (i.e. copular sentences with covert copulas)?

  (1.8) ***ma-sh*** $XP_{Predicative}$

- Why do adjectives sometimes behave like verbal items, in the sense that *ma* and *sh* can attach to the front and to the end of the adjective respectively.

  (1.9) ***ma*** A ***sh***

The aim of this thesis is to provide a model that represents the syntactic distribution exhibited by the negative markers in verbal and verbless sentences as well as the distribution of N-words in Moroccan Arabic. The issue I will focus on mostly with respect to N-words is to provide a solution that explain why *sh* and N-words cannot co-occur in Moroccan Arabic.

In Chapter 2 I will provide evidence that shows that the type of sentences I'm analysing are of the sentential negation type. Chapter 3 will contain the relevant data that I use to depict the distribution of the negative markers in verbal and verbless sentences. Chapter 4 will entail a discussion of previous proposals that deal with the distribution of negative markers in French, Northern Hausa and Moroccan Arabic. In Chapter 5 I will provide and discuss a primary proposal that deals with the representation of the negative markers in verbal and verbless sentences in Moroccan Arabic, then in Chapter 6 I will discuss the distribution of N-words in Moroccan Arabic and provide a final proposal that deals with the representation of the negative markers in verbal and verbless sentences in Moroccan Arabic. Chapter 7 is dedicated to the discussion of *meta linguistic negation* in Moroccan Arabic and finally in Chapter 8 I will outline directions for future research.

Chapter 2

Sentential negation vs. constituent negation

In this chapter, I will discuss and analyze sentential negation in Moroccan Arabic. In the first section I will discuss the differences between sentential negation (S-negation) and constituent negation (C-negation) in English, then in the second section I will discuss how the properties identified by Klima (1964) for sentential negation in English apply to Moroccan Arabic.

2.1 Sentential negation vs. constituent negation

There are many aspects in which sentential negation and constituent negation differ. Klima (1964) discusses several differences that apply to English, which I will illustrate below. The examples are from Haegeman (1995).

2.1.1 *Neither* tags

One difference between sentential negation and constituent negation is that sentential negation admits *neither* tags, while constituent negation does not, as shown in (2.1):

(2.1) (a) Not often does Julie stay up late and *neither does Andy*. (S-Negation)

(b) *Not long ago Teresa finished dancing and *neither did Sophie*. (C-negation)

2.1.2 Tag formation

Negative sentences take positive tags, while sentences containing constituent negation take negative tags, as shown in (2.2):

(2.2) (a) Not often does Julie stay up late, *does she*?/ **doesn't she*? (S-Negation)

(b) Not long ago Teresa finished dancing, *didn't she*?/**did she*? (C-Negation)

2.1.3 Licensing of Negative Polarity Items (NPIs)

Instances of sentential negation co-occur with *any*, *ever* and other indefinite NPIs, while instances of constituent negation do not, as shown in (2.3):

(2.3) (a) Not often does Sophie attend *any conferences*. (S-Negation)

(b) *Not long ago Anastasia attended *any parties*. (C-Negation)

2.1.4 *Either* conjoining

Instances of sentential negation allow for *either* coordination, while instances of constituent negation do not, as shown in (2.4) (example (2.4.a) is from Klima 1964, ex. 261):

(2.4) (a) Publishers will not reject suggestions, *and writers will not accept them, either*. (S-Negation)

(b) *Publishers used to reject suggestions, *and not long ago writers accepted them, either*. (C-Negation)

2.1.5 *Not even* continuation

Instances of sentential negation allow for a *not even* continuation while instances of constituent negation do not, as shown in (2.5) (example (2.5.a) is from Klima 1964, ex. 263):

(2.5) (a) Writers will not accept anything, *not even suggestions*. (S-Negation)

(b) *Not long ago Teresa would eat anything, *not even strawberries*. (C-Negation)

The validity of these tests for sentential negation has been subjected to criticism (Jackendoff 1965).

However, as pointed out by de Hann (1997), Jackendoff's (1965) tests are different in nature from Klima's (1965). The former are *semantic* tests, while the latter are *syntactic* in nature since they test for negative elements that are in certain position in the sentence.

While these tests were designed specifically for English, it is not clear if all of them have applicability to other languages, because some of them require the existence of certain language specific constructions, such as tag questions. However, many of the above tests should apply because the elements they require are already present in most languages.

In what follows, I will test whether the four properties described above for sentential negation apply to Moroccan Arabic.

2.2 Sentential negation in Moroccan Arabic

Moroccan Arabic uses two sentential negative markers: *ma* and *sh*. In the remainder of this thesis I will refer to this type of negation as *bipartite negation*.

Moroccan Arabic distinguishes between two types of sentences depending on whether the verb is overt (verbal sentences) or covert (verbless sentences). In verbal sentences, the two negative markers are placed on each side of the verb, as in (2.6).

(2.6) ***ma*** V ***sh***

In addition, if the verb is a lexical verb, the two negative markers can cluster together and precede it, as in (2.7).

(2.7) ***ma-sh*** V

Verbless sentences contain a silent copula verb followed by a predicative XP. In these instances, the two negative markers cluster together and precede the predicative XP, which can be a DP/Pronoun, an AP, a PP, or an AdvP.

(2.8) ***ma-sh*** $XP_{predicative}$

In what follows I will show that the bipartite negators *ma* and *sh* are instances of S-negation (as opposed to C-negation) by testing whether the properties identified by Klima (1964) apply to *ma* and *sh*. The discussion is split into two parts: the first one applies Klima's (1964) tests to verbal sentences, and the second part considers verbless sentences.

2.2.1 Verbal sentences

Apart from tag formation, which cannot be applied to Moroccan Arabic because Moroccan Arabic lacks tag questions, verbal sentences containing the bipartite negators *ma* and *sh* show all the properties identified by Klima (1964) for sentential negation:

Neither tags

(2.9) *Samira* ***ma*** *katbka* ***sh*** *fayka ou* ***hatta Hamid***.
Samira neg stayed neg awake and even Hamid
'Samira didn't stay awake and neither did Hamid.'

NPI/N-words licensing

NPIs/N-words in Moroccan Arabic are licensed only by the pre-verbal negative marker *ma*. The co-occurrence of NPIs/N-words with the post-verbal negative marker *sh* is ungrammatical, even in the presence of the pre-verbal one as shown in (2.10b,c).

(2.10) (a) ***Ma*** *mcha* ***hattawahed***.
neg went anybody
'Nobody went.'

(b) **Mcha* ***sh*** ***hattawahed***.
went neg anybody
'Nobody went.'

(c) *****Ma*** *mcha* ***sh*** ***hattawahed***.
neg went neg anybody
'Nobody went.'

I will come back to this aspect of NPI/N-words licensing in chapter 6. What is important for now is that NPIs/N-words can be licensed by the negative marker *ma*, which shows that the latter is a sentential negator, as opposed to a constituent negator.

Either **conjoining**

(2.11) *Samira* ***ma*** *katbka* ***sh*** *fayka* ***ou*** ***hatta*** ***Hamid*** ***ma*** ***kaybka*** ***sh*** ***fayk***.
Samira neg stayed neg awake and even Hamid neg stayed neg awake.
'Samira didn't stay awake and Hamid didn't stay awake, either.'

Not even **continuation**

(2.12) *Samira* ***ma*** *galt* ***sh*** *hattahaja,* ***wala*** ***kalma***.
Samira neg said neg anything, not.even word
'Samira didn't say anything, not even one word.'

2.2.2 Verbless sentences

For verbless sentences the properties identified by Klima (1964) for sentential negators are illustrated below:

***Neither* tags**

(2.13) *Samira* ***ma-shi*** *farhana ou* ***hatta Hamid***.
Samira neg-neg happy and even Hamid
'Samira isn't happy and neither is Hamid.'

NPI licensing

(2.14) *Samira* ***ma-shi*** *farhana* ***ga3***.
Samira neg-neg happy at.all
'Samira isn't happy at all.'

***Either* conjoining**

(2.15) *Samira* ***ma-shi*** *farhana* ***ou hatta Hamid ma-shi farhan***.
Samira neg-neg happy and even Hamid neg-neg happy
'Samira isn't happy and Hamid isn't happy, either.'

***Not even* continuation**

(2.16) *Samira* ***ma-shi*** *f-l-birou had simana* ***ou hatta ltnin jay***.
Samira neg-neg in-the-office this week and even Monday next
'Samira is not in the office this week, not even next Monday.'

Based on the results of the tests above, I will thus conclude that the bipartite negators *ma* and *sh* are instances of sentential negation.

In the next Chapter I will present and discuss the relevant data that depicts the distribution of negative markers in verbal and verbless sentences in Moroccan Arabic.

Chapter 3

Data

In this chapter I will present in detail the relevant data that depicts the distribution of the sentential negative markers *ma* and *sh* in Moroccan Arabic. I will divide the discussion in two parts. First I will present data with verbal sentences, which show specific patterns of negation and then I will discuss sentences without an overt verb, which show different patterns of negation.

3.1 Verbal Sentences

Verbal sentences are sentences that contain an overt verbal element and they are divided into two categories, depending on whether the verbal element is an auxiliary or a lexical verb. In sentences with an auxiliary verb the negative markers attach on each side of the auxiliary, as shown in (3.1), while in sentences without an auxiliary verb the negative markers may either attach on each side of the lexical verb, or cluster together and precede the lexical verb, as shown in (3.2) and (3.3), respectively.

3.1.1 Sentences With Auxiliaries:

(3.1) (a) *Ryan* ***ma*** *kan* ***sh*** *kayl3ab koura.*
Ryan neg was neg played football
'Ryan was not playing football.'

(b) **Ryan kan **ma sh** kayl3ab koura.*
Ryan was neg neg played football
'Ryan was not playing football.'

(c) **Ryan **ma sh** kan kayl3ab koura.*
Ryan neg neg was played football
'Ryan was not playing football.'

3.1.2 Sentences Without Auxiliaries:

(3.2) (a) *Rim **ma** mchat **sh** l mdrassa.*
Rim neg went neg to school
'Rim did not go to school.'

(b) **Rim **ma sh** mchat l mdrassa.*
Rim neg neg went to school
'Rim did not go to school.'

(c) **Rim mchat **ma sh** l mdrassa.*
Rim went neg neg to school
'Rim did not go to school.'

(3.3) (a) ***Ma-shi** tmcha, jarra.*
neg-neg walked ran
'He did not just walk, he ran.'

(b) **Tmcha **ma shi**, jarra.*
walked neg neg ran
'He did not just walk, he ran.'

(c) ***Ma-shi** tmcha.*
neg-neg walked
'He did not just walk, he ran.'

Even though sentences with lexical verbs show two possible patterns of negation (i.e. *ma-V-sh* and *ma-sh V*), it is important to notice that the interpretations of the two patterns differ. Sentences of the type (3.2) are negating a proposition (i.e. the proposition that Rim went to school), while sentences of the type (3.3) carry a meta linguistic negation which Horn (1989) defined as in (3.4).

(3.4) Meta linguistic negation (Horn 1989)

> "A device for objecting to a previous utterance on any grounds whatever, which focuses, not on the truth or falsity of a proposition, but on the assertability of an utterance".

In Moroccan Arabic, sentences of the type (3.3) can only be expressed during a discourse, in response to an assertion that was previously made, and the presence of an overt expression of a contrast is necessary, as shown in (3.5).

(3.5) A: *Samir kayhab Mary.*
Samir love Mary
'Samir loves Mary.'

B: ***Ma-shi*** *kayhab-ha,* ***kay3chek-ha***.
neg-neg love-her, adore-her
'He does not just love her, he adores her.'

Last but not least, *ma* cannot be separated from the verb, regardless of whether the verb is a lexical verb or an auxiliary verb .

(3.6) (a) *Houa* ***ma*** *kla* ***sh*** *lyouma.*
he neg ate neg today
'He did not eat today.'

(b) **Houa* ***ma*** *lyouma* ***kla*** ***sh***.
he neg today ate neg
'He did not eat today.'

(c) *Houa* ***ma*** *kan* ***sh*** *kaykra lyouma.*
he neg aux neg studying today
'He was not studying today.'

(d) **Houa* ***ma*** *lyouma* ***kan*** ***sh*** *kaykra.*
he neg today aux neg studying
'He was not studying today.'

3.2 Verbless Sentences

Apart from sentences in which the verb is overtly expressed, Moroccan Arabic also uses sentences in which the verb is not overt. Only copular verbs can be covert in Moroccan Arabic, and only if

they are in the present tense. If the tense is past, the copula must be overt. This is illustrated in (3.7):

(3.7) (a) *Houwa farhan.*
he happy
'He is happy./*He was happy.'

(b) *Houwa kan farhan.*
he was happy
'He was happy.'

In negative verbless sentences in Moroccan Arabic, the two negative markers cluster together and precede the Predicative, regardless of whether the Predicative is an NP (or pronoun), an AdvP, a PP, or an AP.

NPs as Predicatives

(3.8) (a) ***Ma-shi*** *houwa/hiya/Adil.*
neg-neg him/her/Adil
'It's not him/her/Adil.'

(b) *****Ma*** *houwa/hiya/Adil* ***sh***.
neg him/her/Adil neg
'It's not him/her/Adil.'

(c) **Houwa/Hiya/Adil* ***ma sh***.
him/her/Adil neg neg
'It's not him/her/Adil.'

AdvPs as Predicatives

(3.9) (a) ***Ma-shi*** *hna.*
neg-neg here
'It is not here.'

(b) *****Ma*** *hna* ***sh***.
neg here neg
'It is not here.'

(c) **Hna* ***ma*** ***sh***.
here neg neg
'It is not here.'

PPs as Predicatives

(3.10) (a) ***Ma-shi*** *f l bateau.*
neg-neg on the boat
'It is not on the boat.'

(b) *****Ma*** *f l bateau* ***sh***.
neg on the boat neg
'It is not on the boat.'

(c) **F l bateau* ***ma*** ***sh***.
on the boat neg neg
'It is not on the boat.'

APs as Predicatives

(3.11) (a) ***Ma-shi*** *farhan.*
neg-neg happy
'I'm not happy.'

(b) ***Ma*** *farhan* ***sh***.
neg happy neg
'I'm not happy.'

(c) **Farhan* ***ma*** ***sh***.
happy neg neg
'I'm not happy.'

Note that the examples above are different than the ones in (3.3) where *ma* and *sh* cluster together and precede the verb. (3.3) carry a *meta linguistic negation* and only in such type of verbal sentences the bipartite negators cluster together and precede the verb.

Also, notice that with adjectival predicatives the negative markers can also attach to each side of the adjective (as shown in (3.11.b), a pattern that is not grammatical with any other predicatives illustrated above.

Furthermore, *ma* and *sh* can not be separated from the adjective, they either have to cluster together and precede it directly or attach to it from the front and the end respectively as shown in (3.12.a) and (3.12.b):

(3.12) (a) *Ana* ***ma-shi*** *farhan bzaf.*
I neg-neg happy very
'I'm not very happy.'

(b) *Ana* ***ma*** *farhan* ***sh*** *bzaf.*
I neg Happy neg Very
'I'm not very happy.'

(c) **Ana* ***ma*** *farhan bzaf* ***sh****.*
I neg happy very neg
'I'm not very happy.'

(d) **Ana* ***ma*** *bzaf farhan* ***sh****.*
I neg very happy neg
'I'm not very happy.'

3.3 Summary of the data

Verbal Sentences

- ***ma*** AUX ***sh*** VP
- ***ma*** V ***sh*** NP
- ***ma-sh*** VP

Verbless Sentences

- ***ma-sh*** $XP_{Predicative}$
- ***ma*** A ***sh***

Chapter 4

Previous analyses of bipartite negation

The literature on *bipartite negation* is focused mainly on French, which superficially shows a distribution of the negators which is similar to Moroccan Arabic. In this chapter I will analyze in detail Pollock's (1989), Rowlett's (1998), Bell's (2004) and Benammamoun's (1997) analyses. I will also discuss the merits and problems of each one of them.

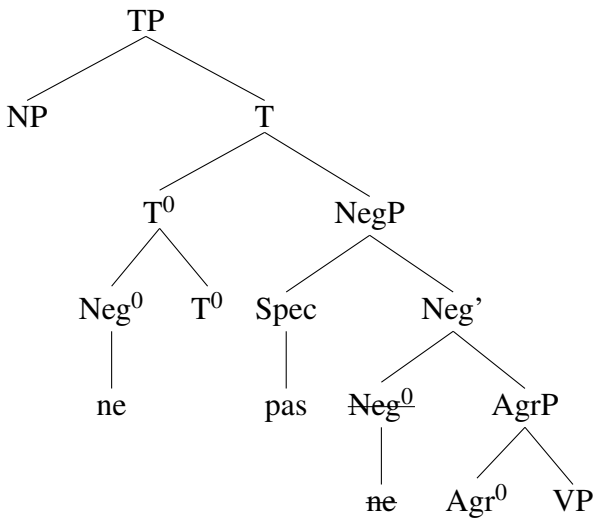
4.1 Pollock (1989)

Pollock's (1989) analysis focused on French. In French, sentential negation is expressed by the use of the negative markers *ne* and *pas* where *ne* precedes the verb and *pas* follows it directly as shown in (4.1):

(4.1) *Jeremy* ***ne*** *veut* ***pas*** *dormir.*
Jeremy neg want neg sleep
'Jeremy does not want to sleep.'

Under Pollock's (1989) analysis, the two negators are both hosted by the NegP. NegP provides two positions, the Specifier of NegP–a phrasal position which hosts *pas*, and Neg^0– a head position, where *ne* is generated. Moreover, given that *ne* is a clitic and since all clitics must move to Tense according to Pollock (1989), *ne* will move to T^0.

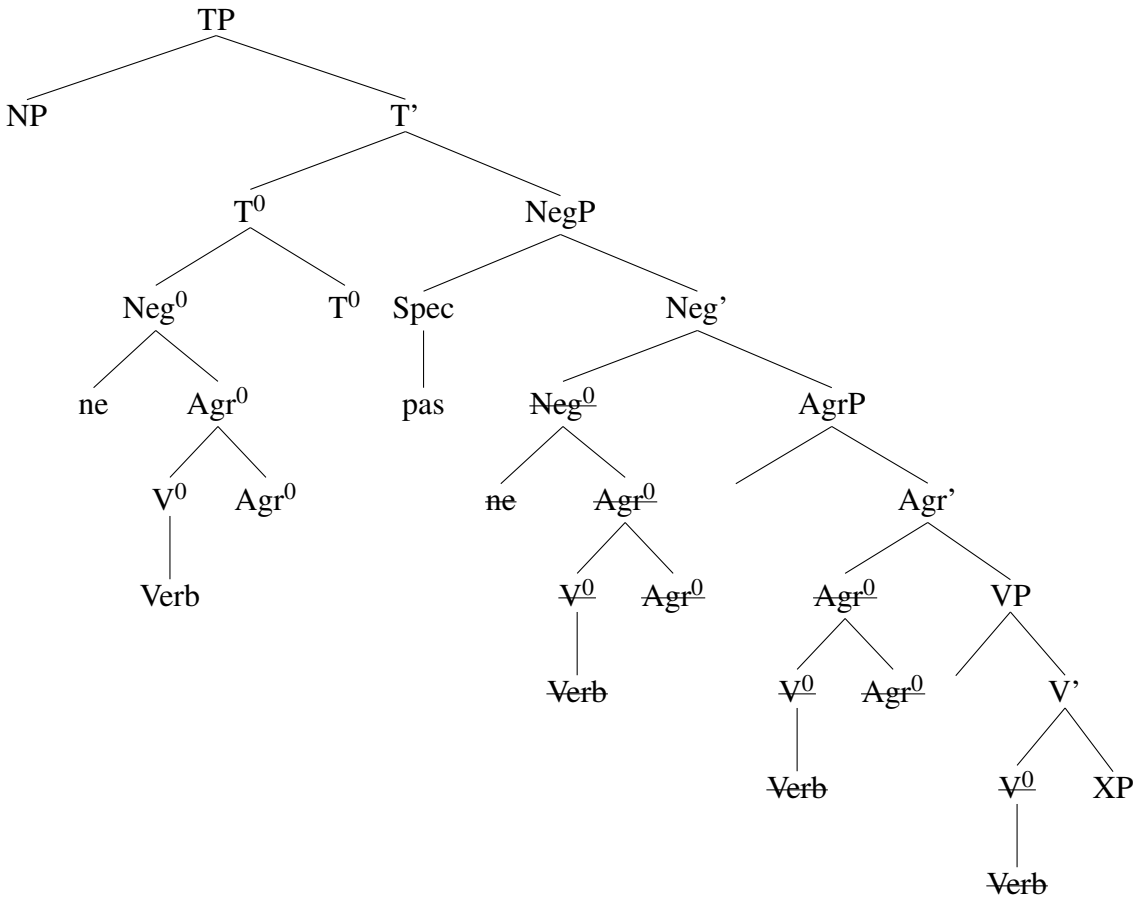
The relevant configuration he proposed is illustrated in (4.2):



(4.2)

In addition, Pollock (1989) shows that the verb moves to T^0 in French. Given the *Head movement constraint* (HMC) (Roberts 2001) the verb must move first to Agr^0, then to Neg^0, and only then to T^0. The resulting configuration is as in (4.3):

(4.3) Pollock (1989)

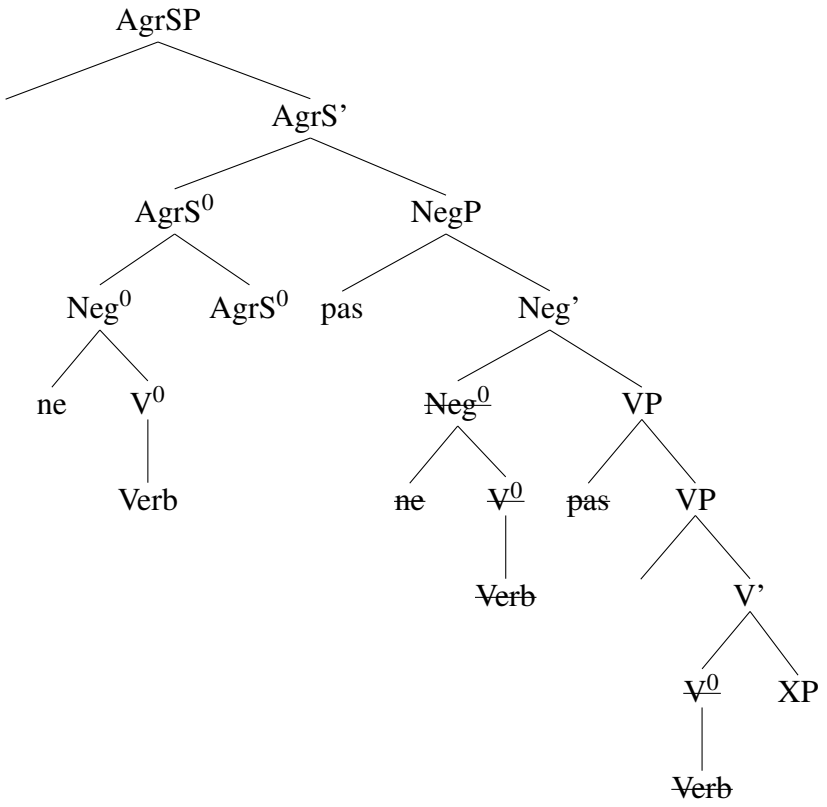


In the above structure, the verb first adjoins to Agr^0, forming a complex head which further raises to adjoin to Neg^0. Finally, the resulting complex head moves to T^0. Given that the agreeing verb adjoins to the right of *ne*, and that *pas* is generated in Spec of NegP and never moves, the resulting word order is *ne*+V+*pas*.

4.2 Rowlett (1998)

Rowlett (1998) agrees with Pollock (1989) that *ne* is in the head of NegP, but he argues that the base position of *pas* is lower than NegP, more specifically, in an adjunct position to VP. From this base position, *pas* raises to SpecNegP. Moreover, the verb raises to Neg^0, then the complex head formed by V^0 and ne raises to $AgrS^0$. Crucially, it is *pas* that has inherent negative features in French according to Rowlett (1998), while the head of the NegP, i.e. *ne*, is inherently non-negative, and it acquires a negative feature only by virtue of an agreement relation with *pas*. The relevant configuration he described is illustrated in (4.4):

(4.4) Rowlett (1998)



In the above structure, the verb adjoins to the right of Neg^0 forming a complex head with it (*ne* + V^0), then this complex head moves to a position above NegP, more specifically, to $AgrS^0$. On the other hand, *pas* moves from a position adjoined to VP to SpecNegP.

4.3 Benmamoun (1992, 1997)

Even though Pollock (1989) and Rowlett (1998) do not discuss other languages, their analysis could be extended to the Moroccan Arabic facts.

(4.5) ***Ma*** *mcha* ***sh***.
neg went neg
'He did not go.'

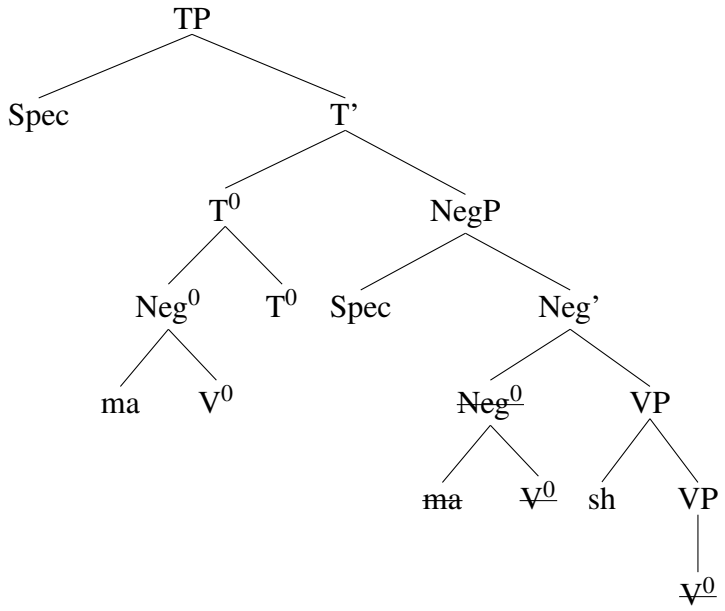
If we assume that *ma* and *sh* are respectively equivalent to *pas* and *ne* we obtain an output such as in (4.6.a), which is ungrammatical. However, if we consider that *ma* and *sh* are respectively equivalent to *ne* and *pas*, the output is as in (4.6.b) which is grammatical.

(4.6) (a) ***Sh** *mcha* **ma**.*
neg went neg
'He did not go.'

(b) ***Ma** *mcha* **sh**.*
neg went neg
'He did not go.'

This kind of analysis has in fact been proposed for Moroccan Arabic. Benmamoun (1992, 1997) proposes that *ma* is in the head of a negative projection located between the Tense Phrase and the VP, as illustrated in (4.7):

(4.7) Benamamoun (1992,1997)



In the above structure, Benmamoun (1992, 1997) posits that *ma* is in Neg^0 to explain the cliticization of *ma* on the verb as the result of verb movement through the negative projection. On the other hand, he proposes that *sh* could be analysed as a specifier or adjunct of a lower projection, similar

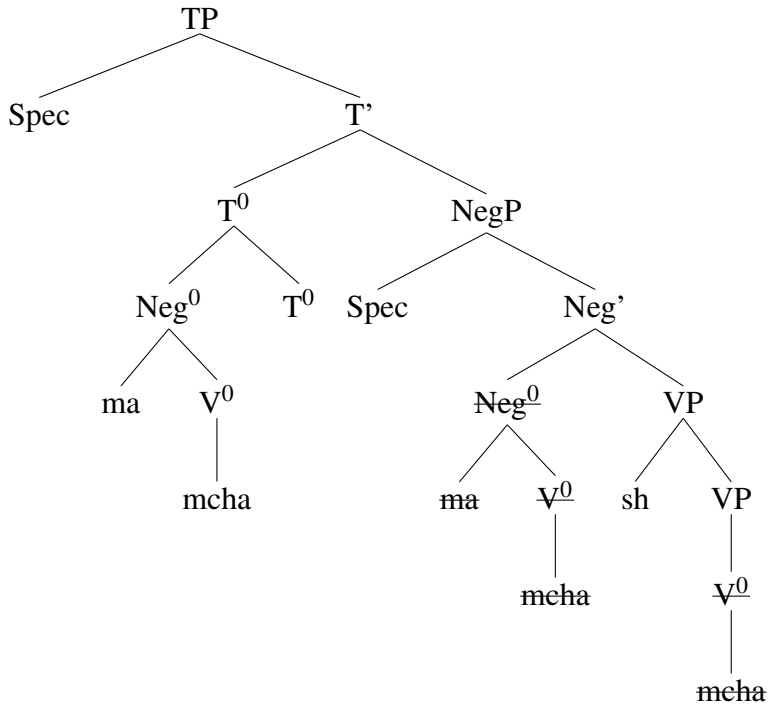
to what Rowlett (1998) proposed for French *pas*. Unlike in Rowlett (1998) however, *sh* does not raise to SpecNegP in Benmamoun's (1992, 1997) analysis.

Given this, in the above structure the verb adjoins to the right of Neg^0 thus forming a complex head with *ma* (*ma*+V), which further moves to T^0. *Sh* on the other hand is generated in a position adjoined to VP, therefore generating the order *ma*+V+*sh*.

This analysis seems to straightforwardly account for negative verbal sentences, as well as for the negative verbless sentences in Moroccan Arabic.

In the verbal sentence (4.8) the verb adjoins to the right of the Neg^0 thus forming a complex head with *ma* (*ma*+*mcha*), which further moves to T^0. *Sh* on the other hand is generated in a position adjoined to VP, therefore generating the grammatical output in (4.8).

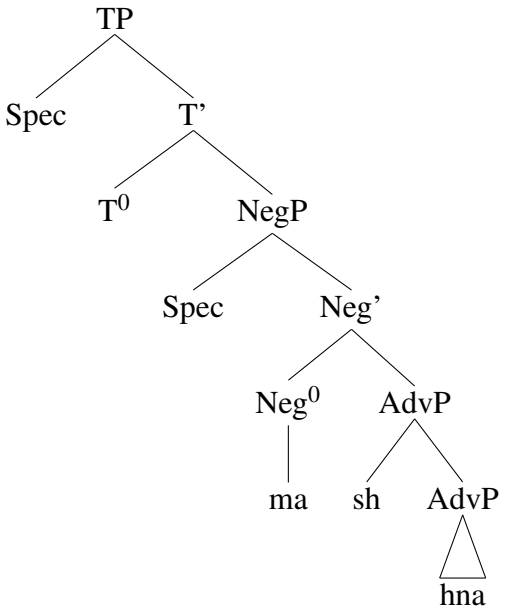
(4.8) ***Ma*** *mcha* ***sh***.
neg went neg
'He did not go.'



In contrast, in verbless sentences, *ma* is generated in Neg^0 and does not move according to Benmamoun (1992, 1997), while *sh* is generated in a lower position adjoined to the Predicative (the

AdvP in (4.9)), therefore generating the grammatical output in (4.9)[1].

(4.9) ***Ma-shi*** *hna.*
neg-neg here
'It is not here.'



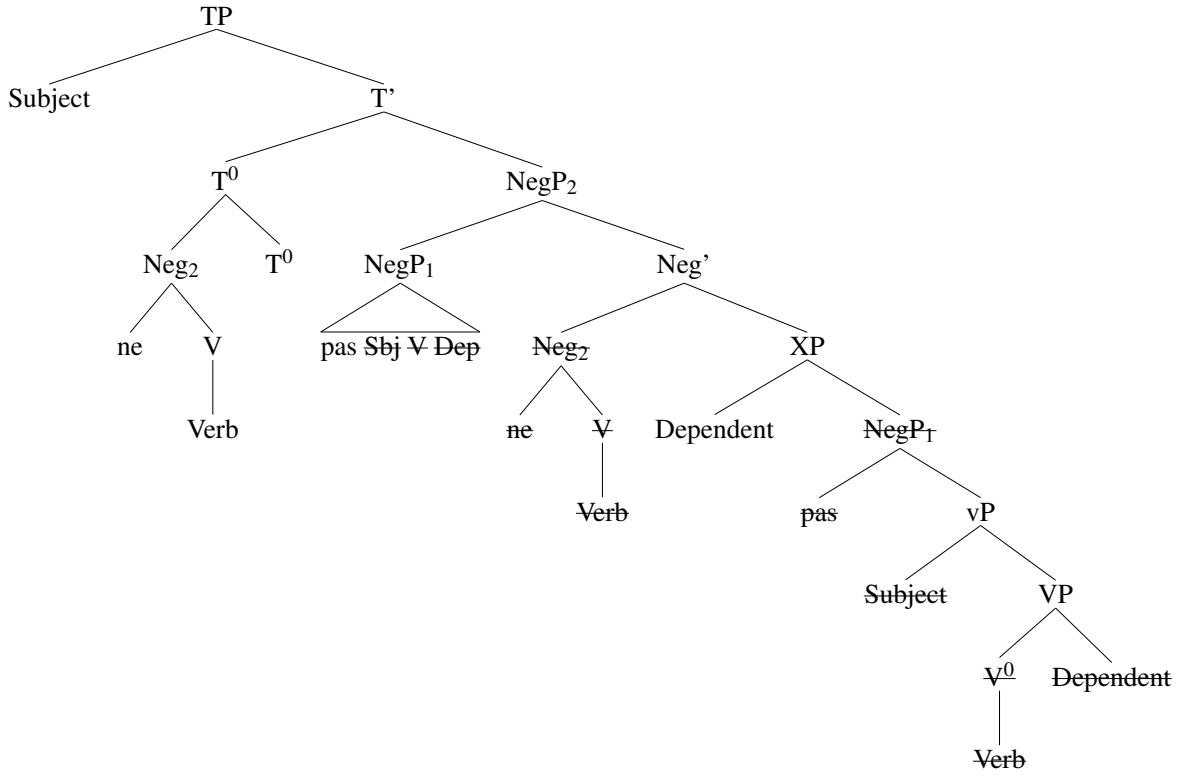
4.4 Bell (2004)

Bell (2004) proposed a structure that contains two NegPs for languages with bipartite negators. He based his analysis on data from Northern Hausa and French. Like Pollock (1989), he also assumes that the verb moves to Tense carrying *ne* along with it.

The structure he proposed for French is illustrated in (4.10):

[1]Benmamoun et al. (2009) assume that verbless sentences do not contain a verb at all in the syntax. The structure in (4.9) reflects this assumption. In my analysis of verbless sentences in Moroccan Arabic I will not adopt this assumption.

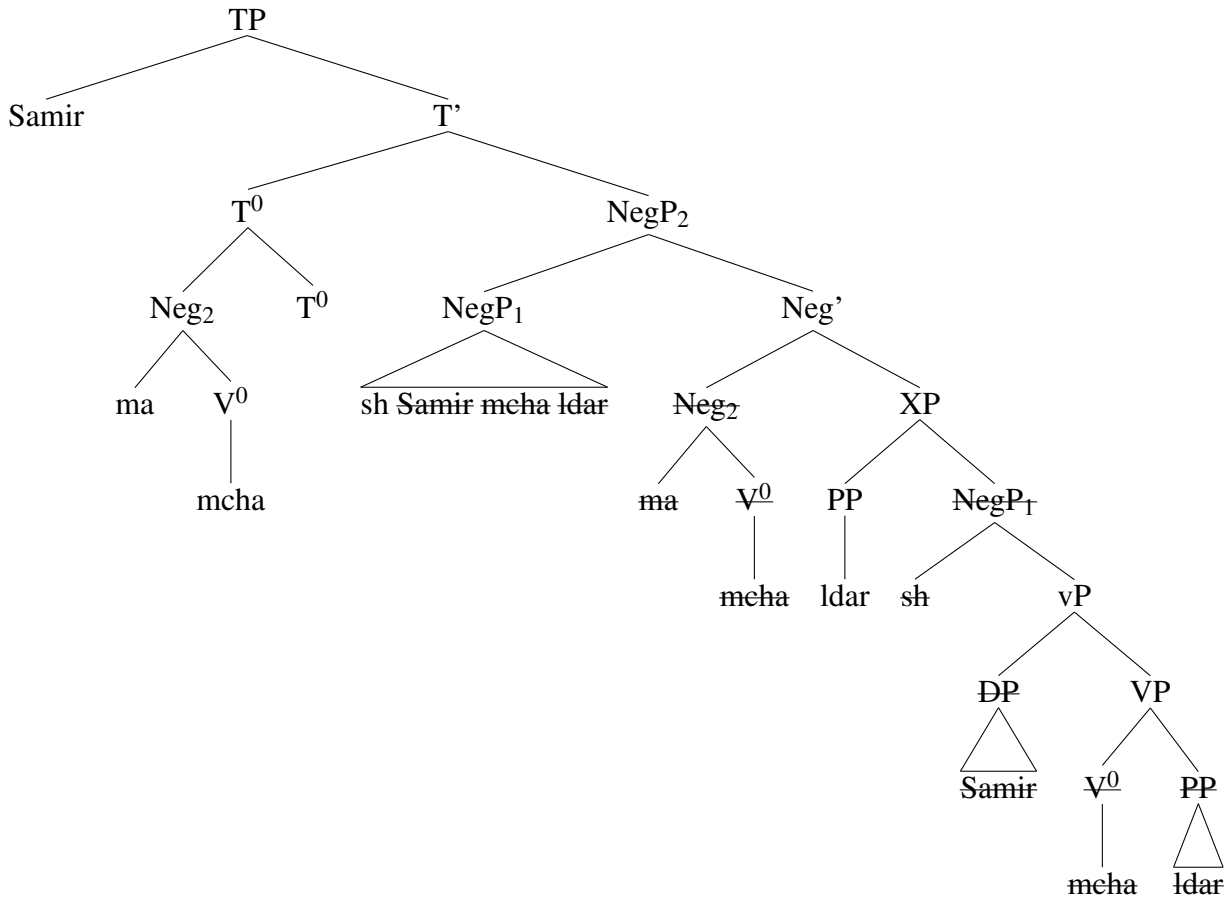
(4.10) French order: S ***ne*** V ***pas*** *Dependent*



There are four instances of movement in this tree according to Bell (2004). First, the *Subject* moves to SpecTP. Second, the *Dependent* moves out of vP, to SpecXP. Third, the verb raises to Neg_2, forms a complex head with it (*ne*+Verb) and then further raises to T^0. And finally, $NegP_1$, which contains only *pas* at this point, undergoes remnant movement to the Spec of $NegP_2$.

Bell's (2004) analysis seems to transfer very well to verbal and verbless sentences in Moroccan Arabic. Example (4.11) shows the application of this analysis to verbal sentences in Moroccan Arabic:

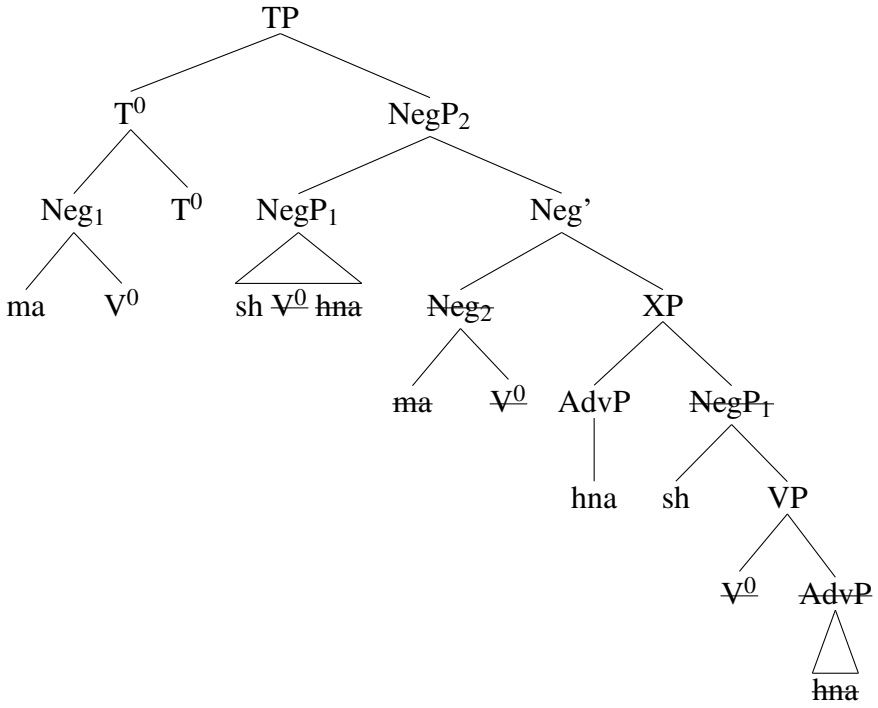
(4.11) *Samir* ***ma*** *mcha* ***sh*** *l-dar.*
Samir neg went neg to-house
'Samir did not go home.'



In (4.11) there are four instances of movement. First, the *Subject*(which is null in this case) moves to SpecTP. Second, the *Dependent*(*ldar*) moves out of vP, to SpecXP. Third, the verb raises to Neg_2, forms a complex head with it (*ma*+Verb) and then further raises to T^0. And finally, $NegP_1$, which contains only *sh* at this point, undergoes remnant movement to the Spec of $NegP_2$, therefore generating *Samir ma mcha sh ldar*.

Example (4.12) shows the application of this analysis to verbless sentences in Moroccan Arabic:

(4.12) ***Ma-shi*** *hna.*
neg-neg here
'He is not here.'



In (4.12) there are four instances of movement. First, the *Subject*(Pro) moves to SpecTP. Second, the *Dependent*(*hna*) moves out of vP, to SpecXP. Third, the verb raises to Neg_2, forms a complex head with it (*ma*+Verb) and then further raises to T^0. And finally, $NegP_1$, which contains only *sh* at this point, undergoes remnant movement to the Spec of $NegP_2$, therefore generating the output *Ma-shi hna*.

4.5 Problematic aspects of previous analyses

In this section I will discuss the problematic aspects of Pollock's (1989), Rowlett's (1998), Bell's (2004) and Benmammoun's (1992, 1997) analyses together because they share a similar problem and then I will dedicate a separate subsection to outline a different problem exhibited by Bell's (2004) analysis.

4.5.1 The Linear Correspondance Axiom

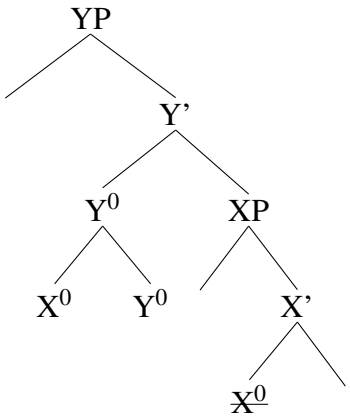
Even though we get the right word order under the assumption that *ma* is like *ne* and *sh* is like *pas*, there are theoretical problems with Pollock's (1989), Rowlett's (1998) and Benmamoun's (1992, 1997) analyses. All of these analyses share a problem exhibited by the adjunction of *ne*/*ma* after the movement of the verb. According to Kayne's (1994) Linear Correspondance Axiom (LCA), when a complex head is formed as a result of head movement, the raised head adjoins to the left of the host head. However, under Pollock's (1989), Rowlett's (1998) and Benmamoun's (1992, 1997) analyses, one has to assume that the raised verbal head adjoins to the right of the host (i.e. the negative head *ne*/*ma*), thus violating LCA.

Furthermore, the same problem applies to Bell (2004), even though his proposed structure is slightly different (i.e. two NegPs).

More specifically, the problem with these analyses seems to be with the relative positioning of the clitic *ne/ma* after the verb undergoes head movement to the head hosting *ne/ma*. All four analyses assume that this clitic adjoins to the left of the verb after the verb moves to Neg^0, which violates Kayne's (1994)*(Linear Correspondence Axiom)LCA*.

According to Kayne (1994) a head X^0 of XP adjoins to **the left** of a head Y^0 of YP, where YP is the first projection dominating XP.

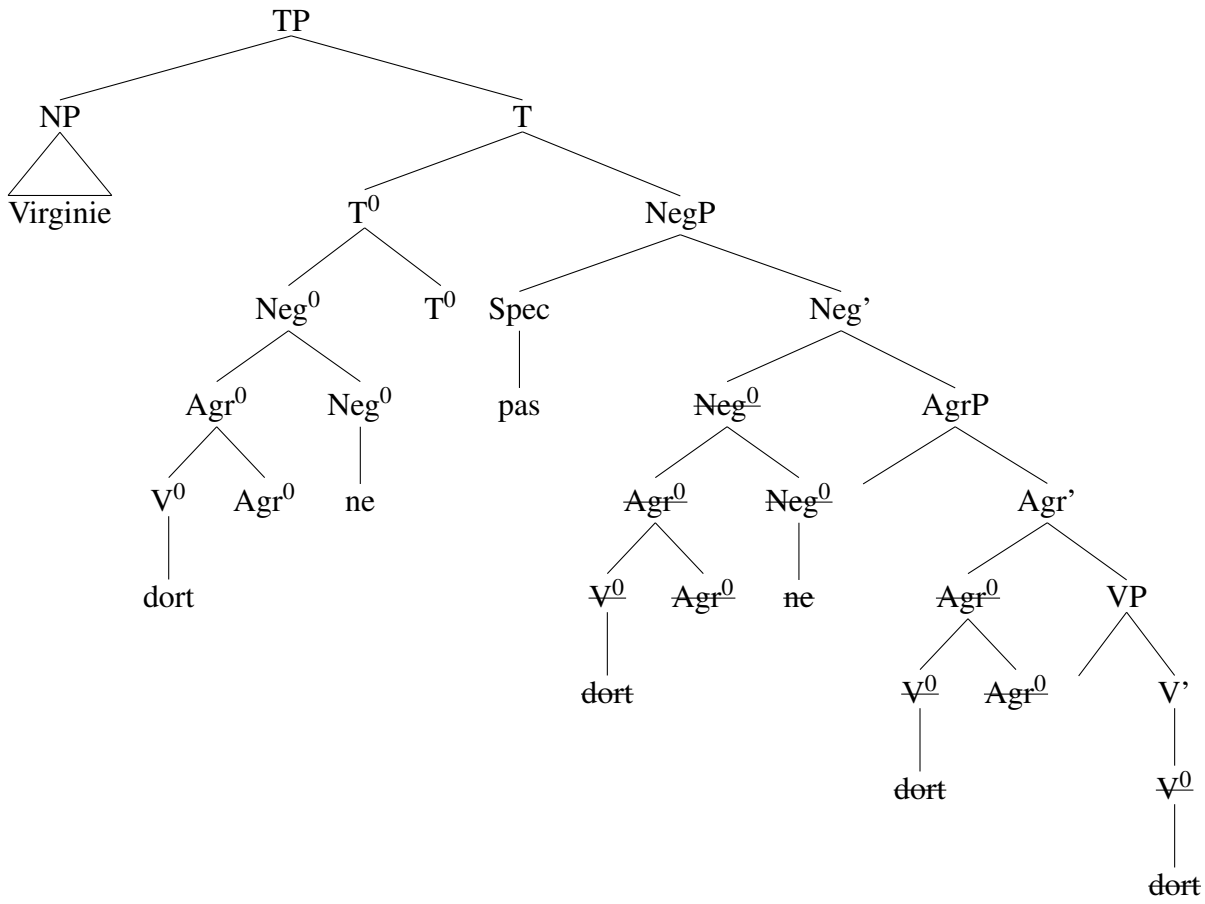
(4.13)



If we apply this theory as it is to the example (4.14.a), we obtain an ungrammatical string (4.14.b):

(4.14) (a) *Virginie dort.*
Virginie sleep
'Virginie is sleeping.'

(b) **Virginie dort* ***ne pas***.
Virginie sleep neg neg
'Virginie is not sleeping.'



This is because the verb would assume a leftward adjunction position when moving to Neg^0 forming a complex head with it (*dort+ne*).

This problem applies equally to Pollock's (1989), Rowlett's (1998) and Bell's (2004) analyses, given that all of these analyses assume that V adjoins to the right of *ne*. Furthermore, this problem also applies to Benmmamoun's (1992,1997) analysis given that in this analysis it is assumed that V adjoins to the right of *ma*.

4.5.2 An additional problem

Last but not least, there is another problem exhibited by Bell's (2004) analysis. Bell (2004) does not explain what motivates the movement of the *Dependent* out of the lower NegP. Moreover, he does not clarify the nature of the XP targeted by the movement of the *Dependent*.

In the next Chapter I will present a preliminary proposal that will solve the issues exhibited by the analyses I discussed in this Chapter.

Chapter 5

Towards a solution: preliminary proposal

In this chapter I will show how the problems pointed out in Chapter 4 for the existing analyses of bipartite negation can be solved, at least for some languages. The main point has to do with the status of one of the negators as a clitic. I will adopt Bošković's (2002) analysis of Serbo-Croatian, Bulgarian and Macedonian clitics and show how his approach can be extended to the relevant data in Moroccan Arabic.

5.1 Bošković (2002) on Clitics

Most of the existing analyses of clitics use right-ward adjunction to obtain the right order of clitics in languages like Serbo Croatian(SC), Bulgarian(Br) and Macedonian(Mc). Example (5.1) provided by Bošković (2002) illustrates the application of such an approach:

(5.1) (a) *Ti ne si mu gi dal. (Macedonian)*
you neg are him.dat them.acc given
'You have not given them to him.'

(b) [$_{NegP}$ ne[$_{AuxP}$ si[$_{AgrioP}$ mu [$_{AgrdoP}$ gi+dal$_i$[$_{vp}$ t$_i$]]]]]

(c) [$_{NegP}$ ne[$_{AuxP}$ si[$_{AgrioP}$ mu+[gi+dal$_i$]$_j$[$_{AgrdoP}$ t$_j$ [$_{vp}$ t$_i$]]]]]]

(d) [$_{NegP}$ ne[$_{AuxP}$ si+[mu+[gi+dal$_i$]$_j$]$_k$ [$_{AgrioP}$ t$_k$ [$_{AgrdoP}$ t$_j$ [$_{vp}$ t$_i$]]]]]]]

(e) [$_{NegP}$ ne+[si+[mu+[gi+dal$_i$]$_j$]$_k$]$_l$ [$_{AuxP}$ t$_l$[$_{AgrioP}$ t$_k$ [$_{AgrdoP}$ t$_j$ [$_{vp}$ t$_i$]]]]]]]]

In (5.1) the proper order of clitics is achieved through successive cyclic right-ward head adjunction, starting by the verb *dal* adjoining to the clitic *gi* as shown in (5.1b), then these two adjoin to the clitic *mu*, as shown in (5.1c), and so on till we obtain (5.1e).

While this approach seems to generate the correct order of the clitics in these languages, it imposes a problem on head movement theory because it violates Kayne's (1994) *Linear Correspondence Axiom* (LCA) which disallows right-ward adjunction.

(5.2) *The Linear Correspondence Axiom* (Kayne (1994):

A head X^0 of XP adjoins to **the left** of a head Y^0 of YP, where YP is the first projection dominating XP.

In order to account for this problem, Bošković (2002) proposes the clitics-as-non-branching-elements-hypothesis, which states that clitics are syntactically defined as non-branching-elements, defining ambiguous projections (X^0/XPs). This means that such clitics are initially generated as XPs in the Specifier of some functional projection and when they undergo movement, they undergo movement as heads.

Example (5.3) illustrates how such a hypothesis gives the correct order of the clitics:

(5.3) (a) *Ti ne si mu gi dal. (Macedonian)*
you neg are him.dat them.acc given
'You have not given them to him.'

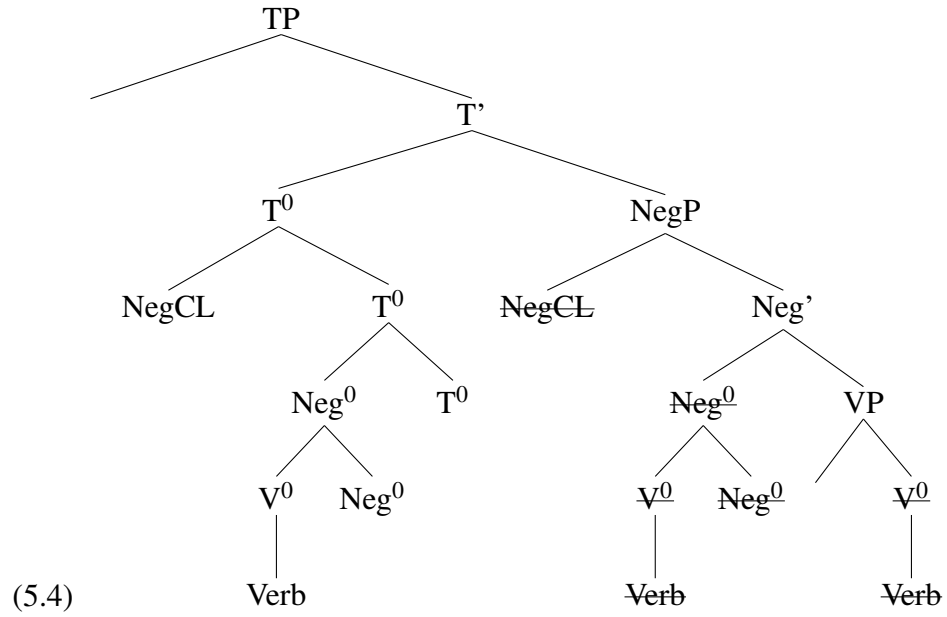
(b) $[\text{neg}_p+[\text{si}_n+[\text{mu}_l+[\text{gi}_i+\text{dal}_i]_k]_m]_o]$ $[_{NegP}\ t_p\ [_{Neg'}\ t_n\ ['_v\ t_m[_{AgrioP}\ t_l[_{Agrio'}t_k[_{AgrdoP}\ t_j\ [_{Agrdo'}\ t_i\ [_{VP}\ t_i]]]]]]]]$

In the above example, the verb moves to a position higher than NegP, passing through all the intermediary heads. As soon as the verb is in a position where it immediately c-commands a clitic, the clitic will move and left adjoin to the verb. Thus, the accusative clitic adjoins to the left of the verbal host first, the dative clitic second, then the auxiliary clitic third and negation last, therefore yielding the right word order under a left-ward adjunction analysis.

In light of Bošković 's (2002) proposal, the next section will entail a discussion about a new hypothetical model of bipartite negation in French and Moroccan Arabic (and in fact all languages that use *bipartite negators* and in which one of the negators is a clitic).

5.2 Analysis

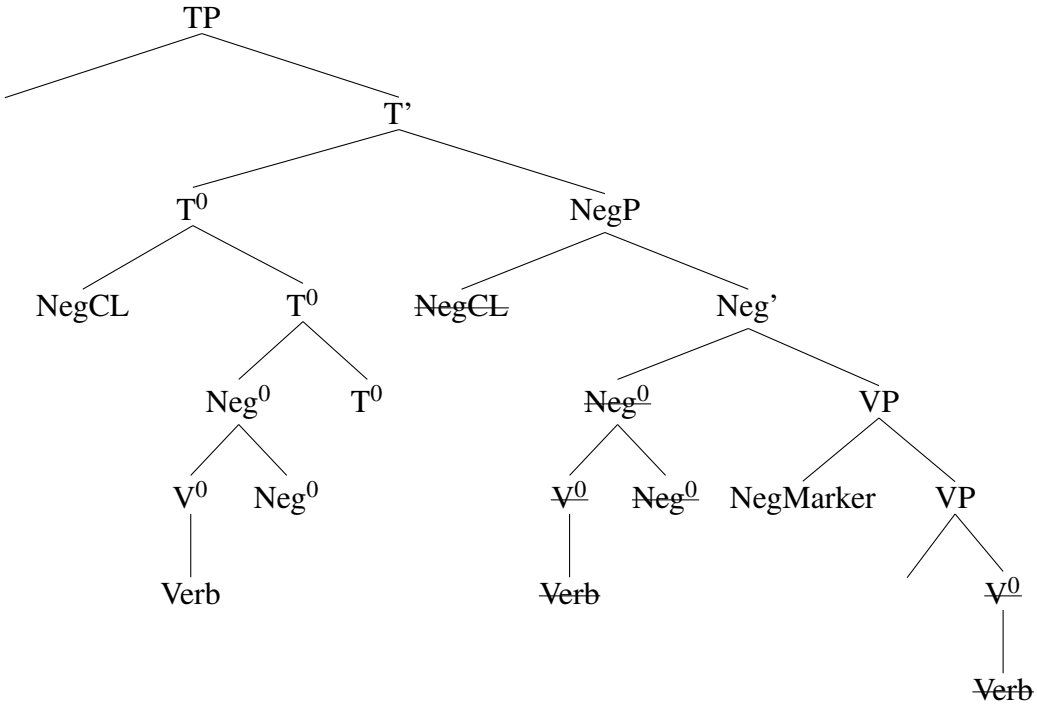
I propose that in languages that use *bipartite negators* and in which one of the negators is a clitic, the clitic negator is merged as an XP in the Spec of NegP and then moves as a head to adjoin to the left of the V that has raised higher than NegP, as illustrated in (5.4):



(5.4)

Notice that this is in compliance with Kayne's (1994) LCA, since head adjunction is always adjunction to the left. More specifically, the negative clitic adjoins to the left of the complex verbal head that lands in T^0, in accordance with the LCA.

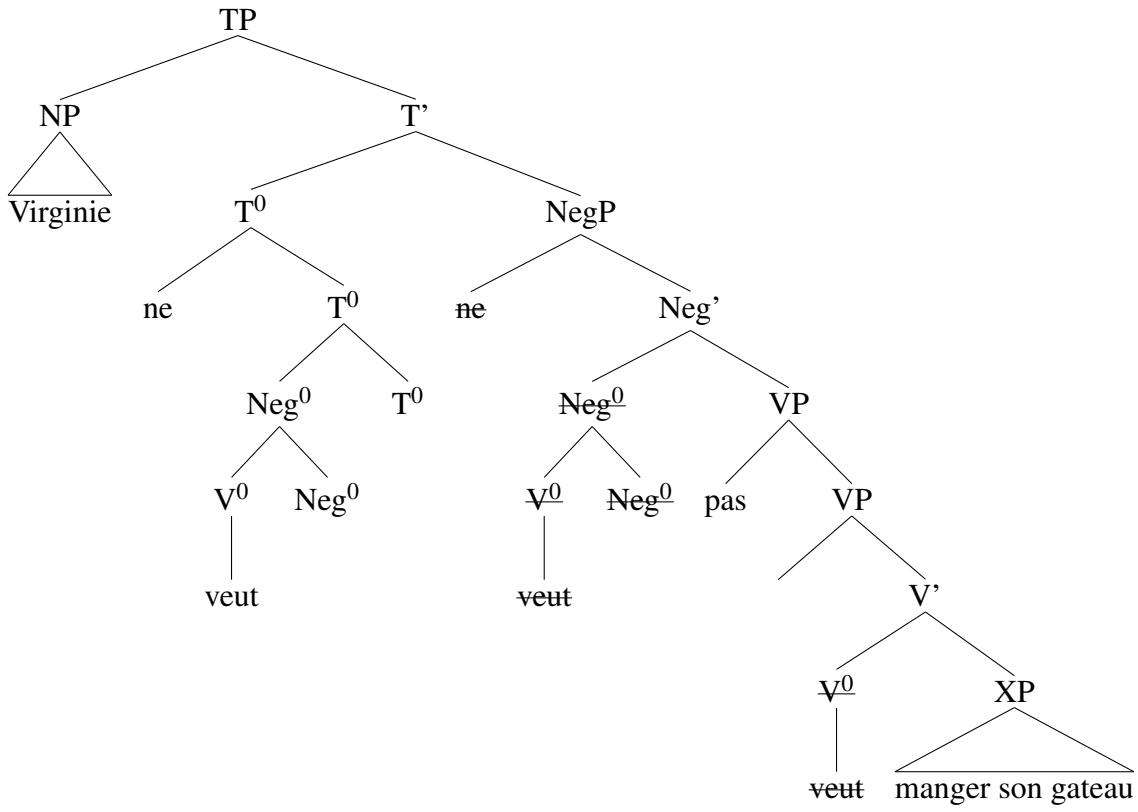
Given that the negative clitic must be in SpecNegP, the other negator cannot also be in SpecNegP, so we will have to assume that the second negator is merged in a lower position, as adjoined to a verbal projection. This is what Rowlett (1998) proposed for French *pas*.



(5.5)

If we apply this proposal to French, a sentence like (5.6) will have the representation in (5.7):

(5.6) *Virginie* ***ne*** *veut* ***pas*** *manger son gateau.*
Virginie neg want neg eat her cake
'Virginie does not want to eat her cake.'



(5.7)

In (5.7) V^0 moves to Neg^0 forming a complex head with it (V^0+Neg^0). Afterwards this complex head continues to a position higher than the NegP, more specifically it raises to T^0. At this point, *ne*, which is generated in the Spec of NegP, will raise to T^0 and cliticize to the left of this complex head (V^0+Neg^0+T^0).

The same analysis can also be applied successfully to Moroccan Arabic. The clitic status of the negator *ma* is supported by the fact that *ma* cannot be separated from the verb, regardless of whether the verb is a lexical verb or an auxiliary verb .

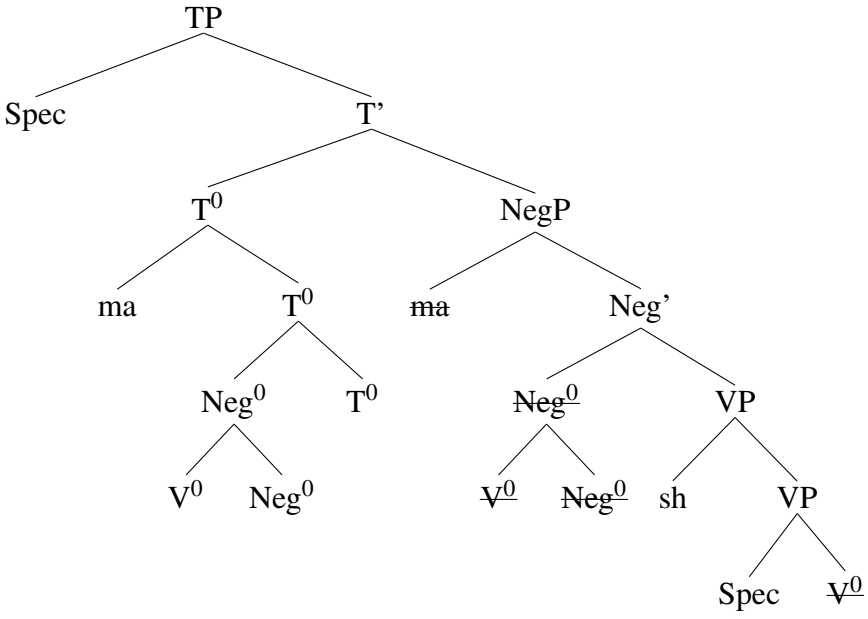
(5.8) (a) *Houa* ***ma*** *kla* ***sh*** *lyouma.*
he neg ate neg today
'He did not eat today.'

(b) **Houa* ***ma*** *lyouma* ***kla*** ***sh***.
he neg today ate neg
'He did not eat today.'

(c) *Houa* ***ma*** *kan* ***sh*** *kaykra* *lyouma.*
he neg was neg studying today
'He was not studying today.'

(d) **Houa* ***ma*** *lyouma* ***kan*** ***sh*** *kaykra.*
he neg today was neg studying
'He was not studying today.'

Given (5.4), the negative clitic *ma* will be in the Spec of NegP and *sh* would be adjoined to VP, as illustrated in (5.9):



(5.9)

In (5.9) V^0 moves to Neg^0 forming a complex head with it (V^0+Neg^0). Afterwards this complex head continues to a position higher than the NegP, more specifically it raises to T^0. At this point, *ma*, which is generated in the Spec of NegP, will raise to T^0 and cliticize to the left of this complex head (V^0+Neg^0+T^0). The final resulting word order is *ma*-V-*sh*, as desired.

5.2.1 Verbal sentences

The structure in (5.9) generates the right word order for *verbal sentences* in Moroccan Arabic. Recall that the distribution of the negative markers in verbal sentences in Moroccan Arabic is as in (5.10).

(5.10) ***ma*** V ***sh***

Under the assumption that the verb moves to T^0 in Moroccan Arabic, the clitic *ma* will raise and left adjoin to the verb once the V is in T^0, producing the desired word order. This is straightforwardly illustrated in (5.9).

5.2.2 Verbless sentences

The same structure could also account for verbless sentences, in which both negative markers precede the predicative XP.

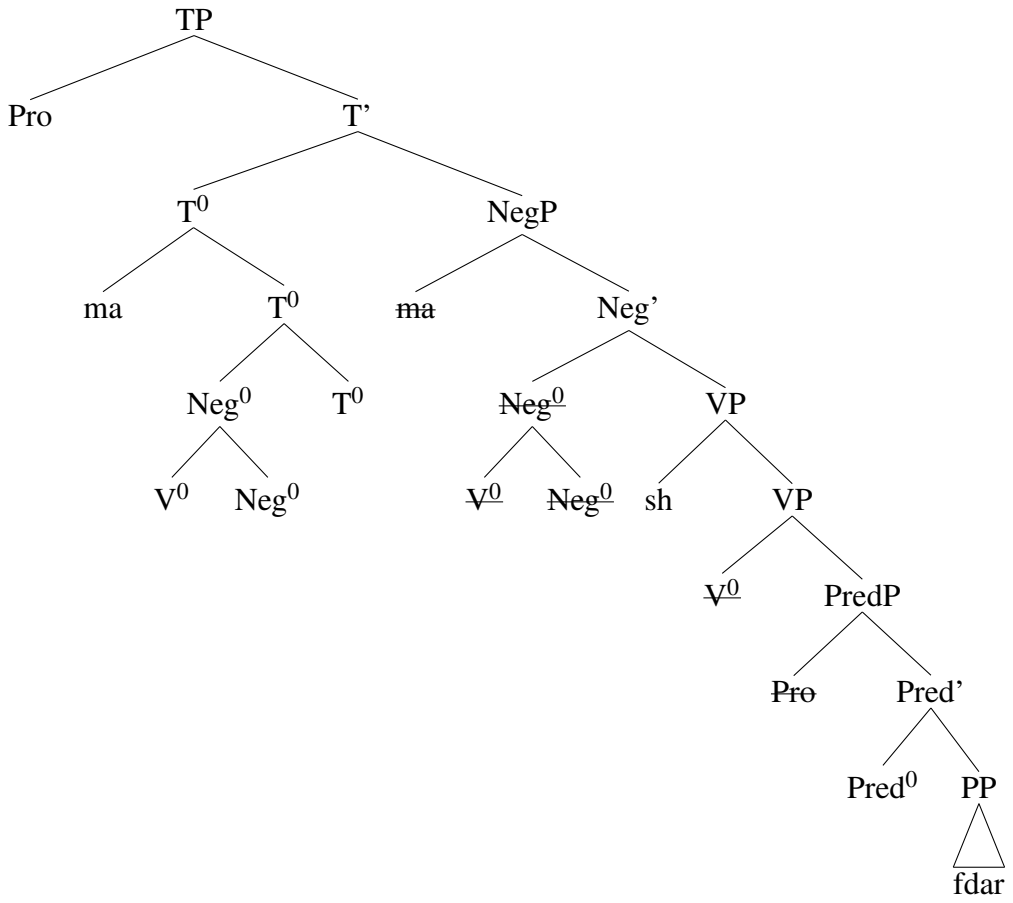
(5.11) ***ma sh*** $XP_{Predicative}$

Unlike Benmamoun et al. (2009) who propose that verbless sentences in Moroccan Arabic do not contain a verb at all in the syntax, I will assume that in verbless sentences, in the present tense, the copula verb is syntactically present but phonologically null. Therefore, under such assumption, the null verb will raise to T^0 and *ma* would cliticize to its left, similar to the analysis of verbal sentences. The only difference between verbal and verbless sentences under this account would be whether the verb is overt or covert.

Therefore the structure I propose for verbless sentences is illustrated in (5.12)[1]:

(5.12) ***Ma shi*** *f-dar.*
neg neg the-house
'He is not in the house.'

[1] I will assume that the structure of the copular sentences includes a copular V whose complement is a small clause, as it was proposed by Moro (1997). Moreover, I will assume that the small clause is a regular phrase, a PredP



In the above structure V^0 moves to the Neg^0 forming a complex head with it (V^0+Neg^0). Afterwards this complex head continues to a position higher than NegP, more specifically adjoining to the left of T^0. Moreover, since *ma* is generated in NegP, it will cliticize to the left of this complex head thus forming a new complex head with it (*ma*+V^0+Neg^0). At this point, since *sh* is generated in the higher VP and following my assumption that the copular verb is phonologically null in the present tense, we obtain the grammatical output *ma-shi fdar*.

Verbless sentences with adjectives

Finally, the same analysis can also account for verbless sentences with adjectives in which the adjective occurs in between the two negative markers.

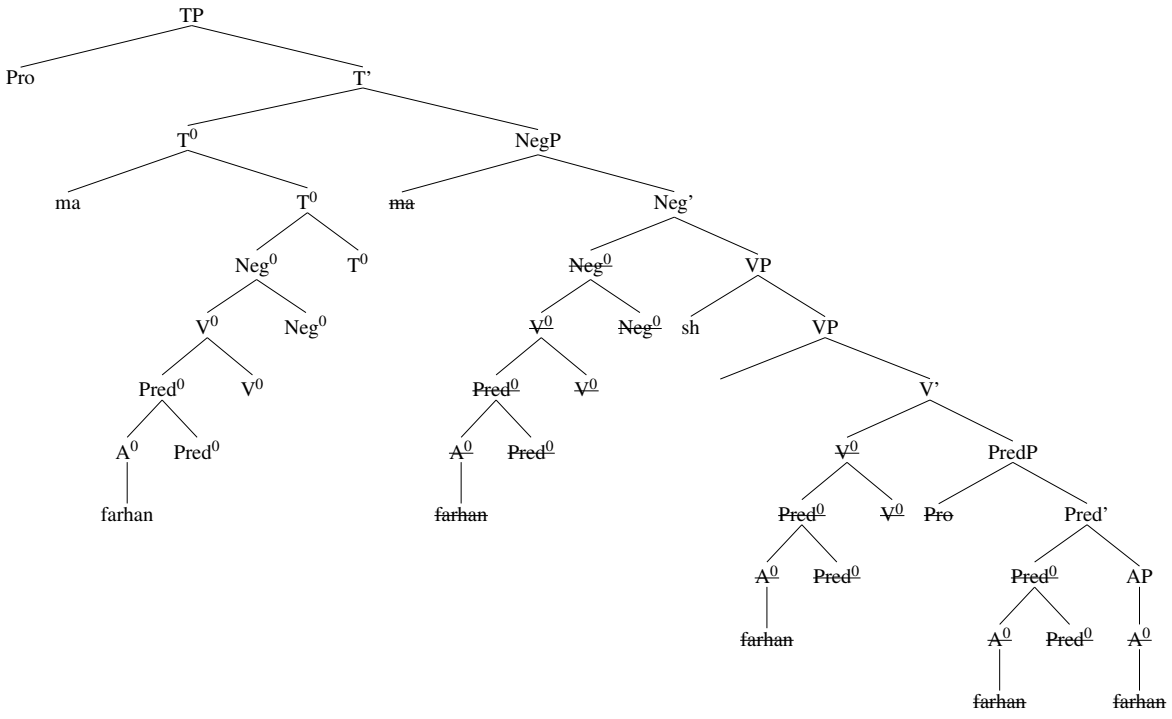
Recall that the distribution of the negative markers in verbless sentences with adjectives in Moroccan Arabic is as in (5.13.a) or (5.13.b):

(5.13) (a) ***ma*** A ***sh***

(b) ***ma-shi*** A

There are two ways in which one could account for the order in (5.13.a). One is to assume that verbs can be dynamically derived from adjectives via an incorporation analysis. Under this view, adjectives would raise to the V head and incorporate into the latter. Adjectives are the only ones that can show up in between the two negative markers because unlike other types of predicatives, like nominal, prepositional or adverbial ones, adjectives carry the feature [V], as it was discussed in Chomsky (1970). If the structure of a copular sentence is as in (5.14), the A head would first raise to $Pred^0$, and then incorporate into V^0.

(5.14) ***Ma*** *farhan* ***sh***.
neg happy neg
'He is not happy.'



In the above structure A^0 moves to the left of $Pred^0$ thus forming a complex head with it (A^0+$Pred^0$) and then this complex head moves to the left of V^0 and forms a new complex head with it (A^0+$Pred^0$+V^0). Afterwards, this newly formed complex head will adjoin Neg^0 to the left and

form another new complex head with it (A^0+$Pred^0$+V^0+Neg^0). Moreover, this complex head will continue moving to a position above NegP, more specifically adjoining to the left of T^0. At this point since *ma* is generated at the lower NegP, it will cliticize to the left of this complex head and since *sh* is generated in the higher VP, we obtain the grammatical output *ma farhan sh*.

An alternative way to account for the order in (5.13.a) is to assume that adjectives are systematically lexically ambiguous in Moroccan Arabic between their status as adjectives and their status as verbs. Similar examples of lexically ambiguous items in English would include *mellow*, *slow*, *shy*, *ready*, *quiet*, etc. The difference between English and Moroccan Arabic would be that while in English only some adjectives can occur as verbs, in Moroccan Arabic this is a generalized property that applies to all adjectives.

I will leave the choice between these possible analysis for further research.

Chapter 6

Final proposal

In the previous chapter I made a preliminary proposal for the structure of negative sentences in Moroccan Arabic, based on the following assumptions:

(i) the negator *ma* is a clitic;

(ii) clitics are non branching elements, that define ambiguous projections (X^0/XP)

(iii) clitics adjoin to their host by undergoing head movement and by adjoining to the left of their target head, in accordance to the LCA (Kayne 1994)

(iii) the negator *sh* is merged as adjoined to VP

Even though this proposal can account for regular verbal and verbless negative sentences in Moroccan Arabic, it faces problems in explaining negative sentences that include N-words. In particular my proposal in Chapter 5 cannot account for a distributional restriction on N-words in Moroccan Arabic: N-words can co-occur with the negator *ma* but not with the negator *sh*. This applies equally to verbal and verbless sentences. In this chapter I will first present the relevant data for the co-occurrence restrictions between the negative markers and N-words in Moroccan Arabic and then modify the existing proposal so that this new data is accounted for.

6.1 Negative markers and *hatta*-items: co-occurrence restrictions

Hatta-items (*hattawahed, hattahaja, hattanhar, hattablasa*) in Moroccan Arabic can occur in negative sentences but they are subject to the following co-occurrence restriction:

(6.1) *Hatta*-items in Moroccan Arabic cannot co-occur with the negator *sh*.

The examples below show that while *hatta*-items like *hattawahed* are grammatical when they occur in a negative sentence negated by *ma*, sentences including both *hattawahed* and the negator *sh* are ungrammatical.

6.1.1 Verbal negative sentences and *hatta*-items

(6.2) (a) ***Ma*** *ja* ***hattawahed***.
neg come anybody
'Nobody came.'

(b) *****Ma*** *ja* ***sh*** ***hattawahed***.
neg come neg anybody
'Nobody came.'

(c) **Ja* ***sh*** ***hattawahed***.
camse neg anybody
'Nobody came.'

6.1.2 Verbless sentences and *hatta*-items

(6.3) (a) ***Ma*** *farhan* ***hattwahed***.
neg happy anyone
'Nobody is happy.'

(b) *****Ma*** *farhan* ***sh*** ***hattwahed***.
neg happy neg anyone
'Nobody is happy.'

(c) **Farhan* ***sh*** ***hattwahed***.
happy neg anyone
'Nobody is happy.'

(6.4) (a) ***Ma*** *fouk l-bateau* ***hattawahed****.*
neg on the-boat anyone
'There is nobody on the boat.'

(b) *****Ma*** *fouk* ***sh*** *l-bateau* ***hattawahed****.*
neg on neg the-boat anyone
'There is nobody on the boat.'

(c) **Fouk* ***sh*** *l-bateau* ***hattawahed****.*
on neg the-boat anyone
'There is nobody on the boat.'

6.1.3 NPIs vs N-words

Zanuttini (1991), Deprez (1999), among others noted that there are three properties that distinguish N-words from NPIs.

(6.5) (i) NPIs can occur in other downward entailing contexts apart from negative ones, while N-words cannot.

(ii) N-words are grammatical when they are uttered as answers to questions and carry a negative meaning, whereas NPIs are ungrammatical in these contexts.

(iii) N-words can be modified by 'almost' (just like universal quantifiers) but NPIs cannot.

The examples in (6.6) show the application of the above properties, in the order I listed them in (6.5), to the lexical item *hattawahed*:

(6.6) (i) **Chefti* ***hattawahed****?*
saw anybody
'Did you saw anybody?'

(ii) A: *Chkoun li chafek?*
who that saw.you
'Who saw you?'

B: ***Hattawahed.***
anybody
'Nobody.'

(iii) ***Takriban hattawhed*** *ma sawat ala James.*
almost anybody neg voted for James
'Almost nobody voted for James.'

Based on the results of the application of the properties listed in (6.5), I conclude that 'hatta' items (*hattawahed, hattahaja, hattanhar, hattablasa*) are N-words. Therefore the co-occurrence restrictions I mentioned above are between the negative marker *sh* and the N-words.

6.2 Previous proposals on the co-occurrence restrictions of N-words and the negative marker

Rowlett (1998), DeGraff (1993) and Mortiz and Valois (1993,1994) suggested that the reason behind the incompatibility of *pas* and French N-Words (i.e: *personne, jamais, guere*), as shown in (6.7), is due to the fact that *pas* and French N-Words compete for the same position, more specifically, SpecNegP. Since SpecNegP can accommodate only one constituent, *pas* and N-words cannot co-occur.

(6.7) (a) *Je* ***ne*** *vois* ***personne***.
I neg see anybody
'I do not see anybody.'

(b) *Je* ***ne*** *vois* ***pas***.
I neg see neg
'I don't see.'

(c) **Je* ***ne*** *vois* ***pas*** ***personne***.
I neg see neg anybody
'I do not see anybody.'

Along the same lines, in the next section I will propose a solution based on the above suggestion to solve the co-occurrence restriction between *sh* and N-words in Moroccan Arabic.

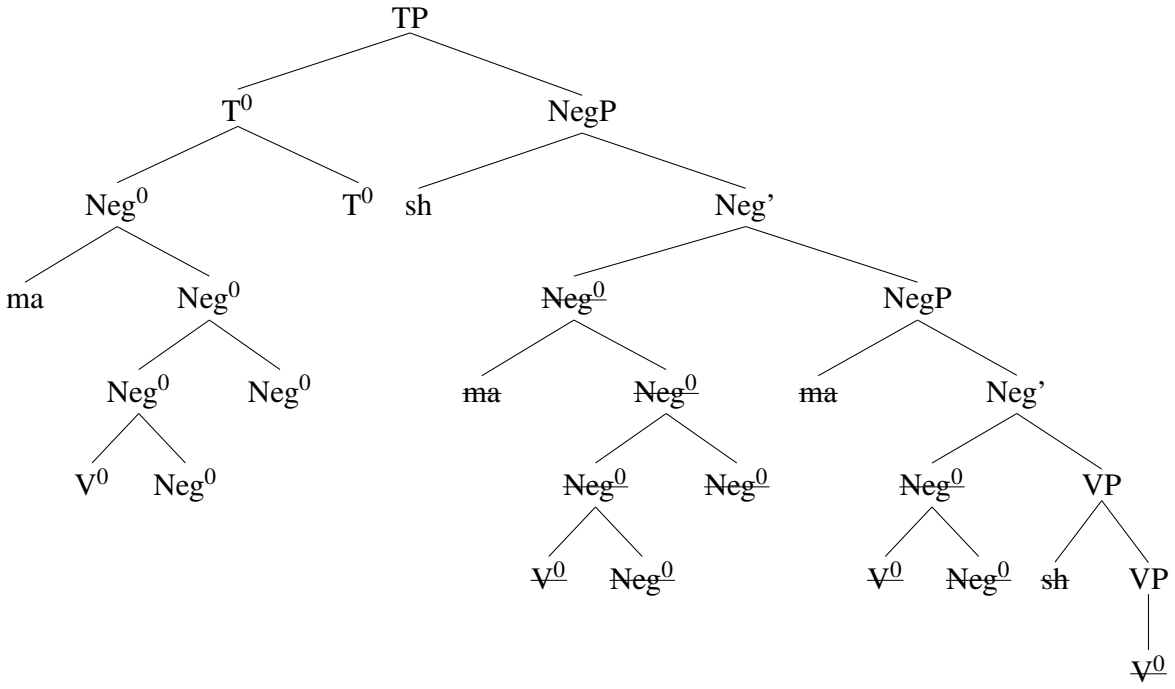
6.3 New Proposal

In order to solve the co-occurrence restriction of N-words and the negator *sh* in Moroccan Arabic, I will adopt the same solution as Rowlett (1998), DeGraff (1993) and Mortiz and Valois (1993,1994), namely that the negator *sh* and N-words compete for the same position—the Specifier of NegP. More specifically, I will assume that *sh* is generated in a position adjoined to VP and raises to SpecNegP. I will also assume that N-words must raise to the same position as *sh*, namely SpecNegP. Since SpecNegP can accommodate only one of them, the two cannot co-occur.

Notice that under this new analysis the initial position of the negator *sh* is the same as in the preliminary proposal discussed in chapter 5. The only modification with respect to the syntax of *sh* in this new proposal is that *sh* raises out of its initial position to move to SpecNegP. This has consequences however for the syntax of the other negator, *ma*. If *sh* raises to SpecNegP, then *ma* cannot also be in SpecNegP. Similarly to what Bell (2004) proposed for Northern Hausa and French, I propose that Moroccan Arabic has two NegPs. *Ma* will be in the Spec of the lower NegP and *sh* is initially merged as adjoined to VP and then it raises to the Spec of the higher NegP.

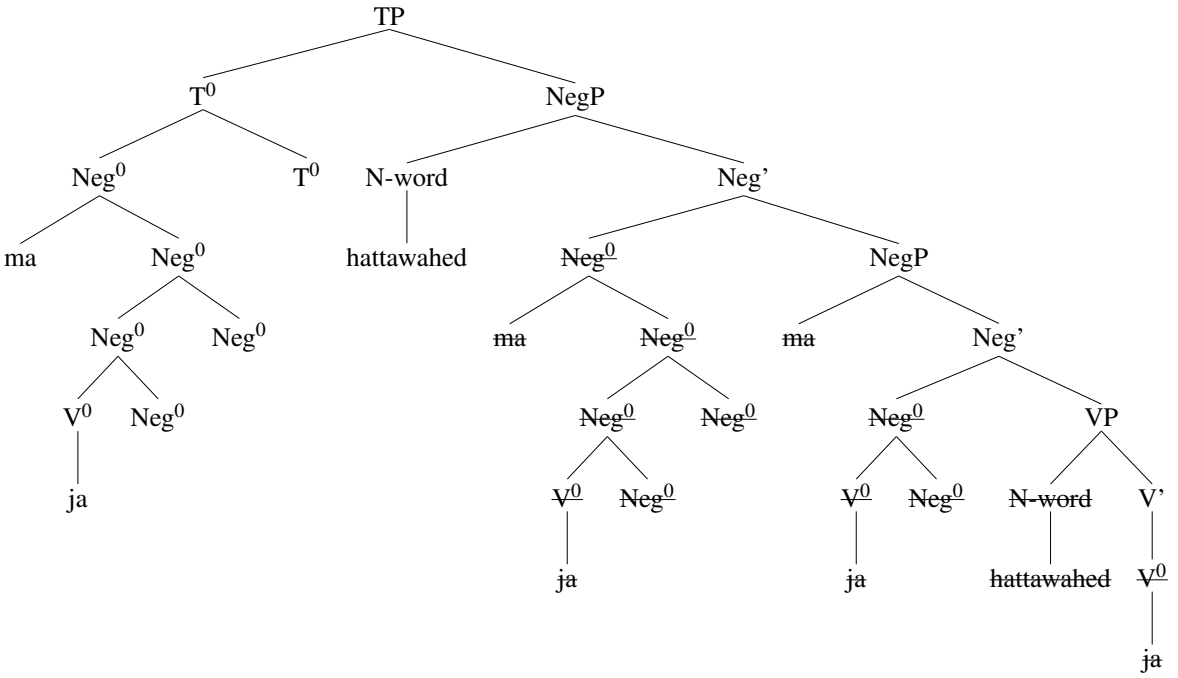
The tree in (6.8) illustrates this newly proposed structure:

(6.8)



In the structure above V^0 raises first to the lower Neg^0, and then to a position above the lower NegP, which hosts *ma* in its Spec (i.e. to the higher Neg^0); then *ma* cliticizes to the verb, by raising to the higher Neg^0 and left adjoining to it. At this point, if *sh* is generated, it will raise to Spec of the higher NegP. Otherwise, if an N-word is generated, the N-word will also need to raise to the Spec of the higher NegP. Since there is only one Spec, only one of the two can be generated: either *sh* or the N-word. Afterwards, the resulting complex head continues to raise to a position above the higher NegP, more specifically to T^0. The tree including the N-word is given below in (6.9).

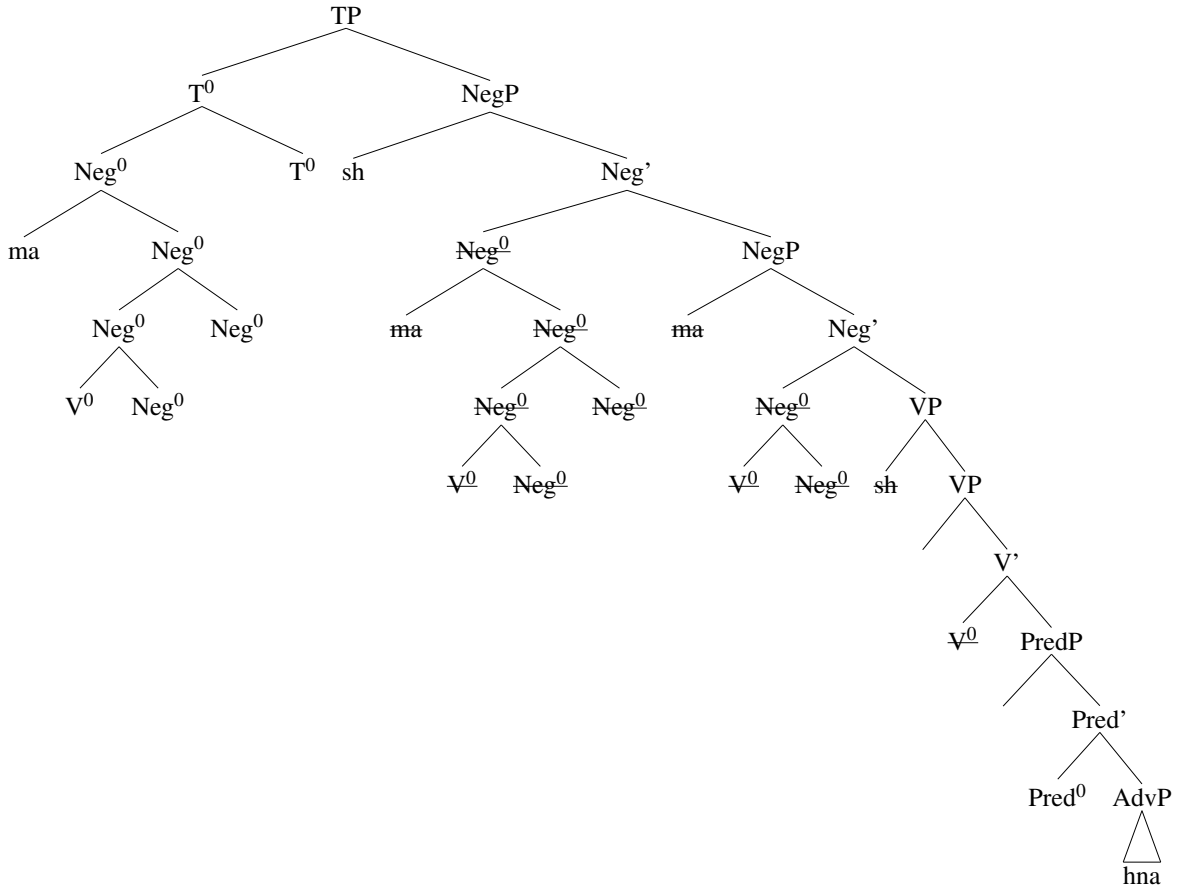
(6.9) ***Ma*** *ja* ***hattawahed****.*
neg came anyone
'Nobody came.'



In (6.9) V^0 raises first to the lower Neg^0, and then to a position above the lower NegP, which hosts *ma* in its Spec (i.e. to the higher Neg^0); then *ma* cliticizes to the verb, by raising to the higher Neg^0 and left adjoining to it. At this point the N-word *hattawahed* moves to the spec of the higher NegP. Afterwards, the resulting complex head continues to raise to a position above the higher NegP, more specifically to T^0, therefore generating the grammatical output *ma ja hattawahed*.

The same proposal can successfully account for negative verbless sentences, as shown in (6.10)

(6.10) ***Ma-shi*** *hna.*
neg-neg here
'He is not here.'



In (6.10) V^0 raises first to the lower Neg^0, and then to a position above the lower NegP, which hosts *ma* in its Spec (i.e. to the higher Neg^0); then *ma* cliticizes to the verb, by raising to the higher Neg^0 and left adjoining to it. At this point *sh* raises to the spec of the higher NegP. Afterwards, the resulting complex head continues to raise to a position above the higher NegP, more specifically to T^0, therefore generating the grammatical output *ma shi hna*.

Chapter 7

Metalinguistic negation in Moroccan Arabic

The proposal outlined in the previous chapter can account for all negative sentences in Moroccan Arabic, except those involving metalinguistic negation.

7.1 Horn 1989 and Martins 2014 on Metalinguistic Negation (MN)

Metalinguistic negation is defined as a device used to reject a proposition in favour of a new proposition, because the former is considered invalid (Horn 1989). This is illustrated in (7.1).

(7.1) (a) A: Some men are chauvinists.
B: Some men aren't chauvinists – all men are chauvinists.

(b) A: He is meeting a woman this evening.
B: No, he's not (meeting a woman this evening) – he's meeting his wife!

(c) A: Were you a little worried?
B: I wasn't a little worried, my friend; I was worried sick.

In contrast to regular negation, metalinguistic negation exhibits the following properties (Horn 1989, Martins 2014):

(7.2) (i) MN does not license negative polarity items/ N-words;
(ii) MN is compatible with positive polarity items (PPIs);
(iii) MN requires licensing by discourse/pragmatic context;
(iv) MN is excluded from subordinate clauses.

Furthermore, Martins (2014) distinguished two types of metalinguistic negation: *internal* MN and *peripheral* MN. *Peripheral* MN negative markers merge into SpecCP, while the *internal* MN negative markers reach SpecCP by movement from a lower position inside the TP domain. The difference between the two types is characterized by the behaviour they exhibit when subjected to the following tests:

(7.3) (i) Availability in isolation and nominal fragments;
(ii) Scope over negation;
(iii) Scope over Emphatic/Contrastive high constituents and whole coordinate structures;
(iv) Compatibility with idiomatic sentences;
(v) Compatibility with VP Ellipsis.

Peripheral MN responds positively to these tests while *internal* MN responds negatively to them.

In the next sections I will first provide evidence that shows that contexts like in (7.4) in Moroccan Arabic have the properties of MN listed in (7.2).

(7.4) ***ma sh*** VP

Then I will show that the tests in (7.3) apply to the negators *ma* and *sh* in contexts like (7.4) in Moroccan Arabic, which indicates that both of these negators are instances of *peripheral* MN.

Finally, I will propose a syntactic analysis that accounts for these properties.

7.2 Metalinguistic Negation in Moroccan Arabic

In this section I will apply the properties in (7.2), to demonstrate that contexts like in (7.4) carry metalinguistic negation. I will discuss these properties in the order given in (7.2).

7.2.1 MN does not license Negative Polarity Items/ N-words

In contrast to ordinary negation (7.5), the negative markers that occur in (7.4) do not license the N-word *hattawahed* as shown in (7.6), hence validating property (7.2)(i) and showing that the negative markers that occur in (7.4) are MN markers.

(7.5) ***Ma*** *tmacha* ***hattawahed****. (regular negation)*
neg walked anybody
'Nobody walked.'

(7.6) A: *Chiwahed tmacha hda dar.*
somebody walked near house
'Somebody walked near the house.'

B: ***Ma-shi*** *tmacha, jarra. (metalinguistic negation)*
neg-neg walked, ran
'He did not just walk, he ran.'

C: *****Ma-shi*** *tmacha* ***hattawahed****, jarra.*
neg-neg walked anybody, ran
'He did not just walk, he ran.'

7.2.2 MN is compatible with Positive Polarity items (PPIs)

The negative markers that occur in (7.4) license PPIs as shown in (7.7), while ordinary negation does not, as shown in (7.8).

(7.7) A: ***Baqi*** *khadam.*
still working
'He is still working.'

B: ***Ma-shi baqi*** *khadam, rah bat tamma. (metalingusitic negation)*
neg-neg still works, EXPL stay there
'He is not just still working, he is stuck there.'

(7.8) **Houwa* ***baqi ma*** *khadam* ***sh****. (ordinary negation)*
he still neg works neg
'He is still did not get a job.'

7.2.3 MN requires licensing by discourse/pragmatic context

Negative sentences showing the pattern in (7.4) can only be uttered during a discourse in response to a suggestion or a previous sentence.

(7.9) (a) A: *Sophia katmacha bzarba.*
Sophia walks quickly
'Sophia walks quickly.'

B: ***Ma-shi*** *tatmacha bzarba, katjarri. (metalinguistic negation)*
neg-neg walks quickly, runs
'She doesn't just walk quickly, she runs.'

When uttered out of the blue, in the absence of a preceding discourse, sentences showing the pattern in (7.4) are unfelicitous.

(7.10) *??**Ma-shi*** *tatmacha, katjarri. (metalinguistic negation)*
neg-neg walks quickly, runs
'She does not just walk quickly, she runs.'

In contrast, sentences that carry regular negation do not require a pragmatic context and can be uttered out of the blue.

(7.11) ***Ma*** *tatmacha* ***sh****. (regular negation)*
neg walks neg
'You don't walk.'

7.2.4 MN is excluded from subordinate clauses

In contrast to regular negation (7.12), the negative markers that show the pattern in (7.4) cannot occur in subordinate clauses, like the 'that' clause embedded under the verb *den* 'think' in (7.13).

(7.12) *Sahbi rah den bianahou* ***ma*** *tmacha* ***sh***.
my.friend EXPL thought that.he neg walked neg
'My friend thought that he didn't walk.'

(7.13) A: *Sahbi den biana Samir jarra.*
my.friend thought that Samir ran
'My friend thought that Samir ran.'

B: **Sahbi rah den bianahou* ***ma-shi*** *tmacha, jarra.*
my.friend EXPL thought that.he neg-neg walked, ran
'My friend thought that he didn't just walk, he ran.'

Based on the evidence provided in this section, we can conclude that contexts like in (7.4) in Moroccan Arabic have all the properties in (7.2) and hence that they carry metalinguistic negation.

7.3 Peripheral vs internal MN

In this section I will provide evidence using the tests in (7.3) to show that both *ma* and *sh* are instances of *peripheral-MN*. I will discuss these tests in the order given in (7.3).

7.3.1 Availability in isolation and nominal fragments

In contrast to *internal* MN, *peripheral* MN can occur in isolation or with nominal phrases, according to Martins (2014). Moroccan Arabic negators *ma* and *sh* do not show this property. The contrast in (7.14) shows how verbless fragments in Moroccan Arabic block the occurrence of the *MN* markers *ma* and *sh*.

(7.14) A: *Wach ja l-dar?*
did came the-house
'Did he come home?'

B: ****Ma-sh./*** ****Ma-sh*** *l-dar.*
neg-neg/ neg-neg the-house
'He didn't.'

When the answer to the question in (7.14A) is negative, the negative markers *ma* and and *sh* cannot appear alone as an answer. These negative markers require the presence of a verb.

7.3.2 Scope over negation

Peripheral MN markers can form sentences that express the denial of a negative proposition as shown in (7.15a.b).

(7.15) (a) A: ***Ma*** *kanbghi* ***sh*** *Peter.*
neg like.1s neg Peter
'I don't like Peter.'

B: ***Ma-shi*** ***ma*** *katbghi* ***sh*** *Peter, kathakdou.*
neg-neg neg like.1s neg Peter, hate
'You don't just not like Peter, you actually hate him.'

(b) A: *Sophia* ***ma-shi*** *f-Fes.*
Sophia neg-neg in-Fes
'Sophia is not in Fes city.'

B: ***Ma-shi*** *hia* ***ma-shi*** *Fes, hia ma-shi f-lmaghrib gaa.*
neg-neg her neg-neg Fes, her neg-neg in-Morocco at.all
'It is not just that she is not in Fes city, she is not in Morocco at all.'

(7.15a.B) and (7.15b.B) show that MN markers *ma-sh* negate an entire proposition where such proposition can be either affirmative or negative. This applies both to verbal sentences—(7.15.a), and to verbless sentences—(7.15.b).

7.3.3 Scope over emphatic/contrastive high constituents and whole coordinate structures

The MN negators *ma* and *sh* can take scope over coordinate structure (7.16.B) and contrastively focused constituents (7.17.B):

(7.16) A: *Houma tjawjou ou waldou.*
they married and birth
'They got married and had a baby.'

B: *Houma* ***ma-shi*** *tjawjou ou waldou, houma tjawjou hit waldou.*
they neg-neg married and birth, they married because birth
'They didn't got married and had a baby, they got married because they had a baby.'

(7.17) A: *Rah Samir li kaybghi Sophia.*
EXPL Samir that likes Sophia
'It is Samir that likes Sophia.'

B: ***Ma-shi*** *Samir li kaybghi Sophia, rah Peter.*
neg-neg Samir that likes Sophia, EXPL Peter
'It is not Samir that likes Sophia, it's Peter.'

These scopal properties indicate that *ma* and *sh* are *peripheral* metalinguistic negators.

7.3.4 Compatibility with idiomatic sentences

Generally, idioms do not allow for grammatical and syntactic alteration. It seems that *peripheral* MN markers can negate such structures, while *internal* MN markers do not. The examples below show that *ma-sh* in Moroccan Arabic can negate idiomatic sentences, which points to their *peripheral* nature.

(7.18) A: *Hada banliya fih l-khwad.*
this looked have the-mix
'This person looks fake to me.'

B: *Hada* ***ma-shi*** *banliya fih l-khwad, fih la3b bzaf.*
this neg-neg looked have the-mix, have play lot
'This person does not just look fake to me, he plays a lot of shady games.'

In the above example, the MN markers *ma-sh* in (7.18B) do not interfere with the grammaticality of (7.18A), which suggests that the MN negators have a high position in the syntactic tree.

7.3.5 Compatibility with VP ellipsis

Peripheral MN markers allow VP ellipsis, which is the case for Moroccan Arabic *ma* and *sh*, as shown in (7.19):

(7.19) A: *Samir ghadi ymchi l-dar.*
Samir will go to-home
'Samir will go home.'

B: *Houwa* ***ma-shi*** *ghadi ymchi l-dar, ghadi ymchi l-mdrassa.*
he neg-neg will go to-house, will go to-school
'He will not go home, he will go to school.'

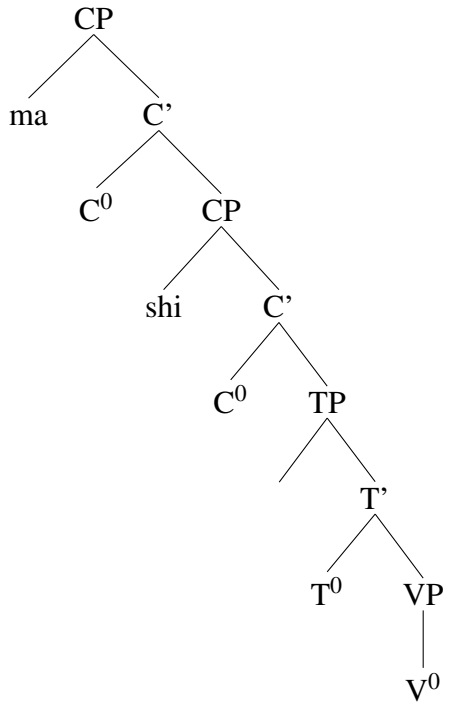
C: *Houwa* ***ma-shi*** *ghadi.*
he neg-neg will
'He won't (go home).'

In (7.19B) while the VP *ymchi ldar*(go home) is elided, the resulting sentence that carries the MN markers remains grammatical.

To conclude, Moroccan Arabic metalinguistic negators *ma* and *sh* shows all the properties of *peripheral* metalinguistic negators, except for the one involving the ability to occur in isolation or in nominal fragments. In what follows, I will propose an analysis for MN markers in Moroccan Arabic and will explain how the *peripheral* properties of these MN markers follow from the analysis.

7.4 Proposal for Meta Linguistic Negation in Moroccan Arabic

Martins (2014) proposes that peripheral metalinguistic negative markers are directly merged in SpecCP in European Portuguese. In order to apply Martin's (2014) proposal to Moroccan Arabic, we need two CP projections, since Moroccan Arabic has bipartite negation. The resulting structure would look like (7.20):



(7.20)

Below, I will show how this structure can account for the tests in (7.3).

7.4.1 Availability in isolation and nominal fragments:

According to Martins (2014), the appearance of the peripheral metalinguistic markers in isolation should be possible in European Portuguese. Moreover, according to the structure in (7.20), we predict that *ma-shi* in isolation should indeed yield a grammatical output, given that we could apply TP/IP ellipsis and the leftover overt material would be *ma-shi* only. However, in Moroccan Arabic the use of the MN markers *ma-shi* in isolation is ungrammatical, as shown in (7.14). I hypothesize that the reason why *ma-shi* in isolation is ungrammatical in Moroccan Arabic is that the MN *ma-shi* is a phonological clitic and as such it needs an overt verbal support. The fact that nothing can intervene between *ma-shi* and the verb, as shown in (7.21), supports my hypothesis.

(7.21) A: *John kaybghi Mary.*
John likes Mary
'John likes Mary.'

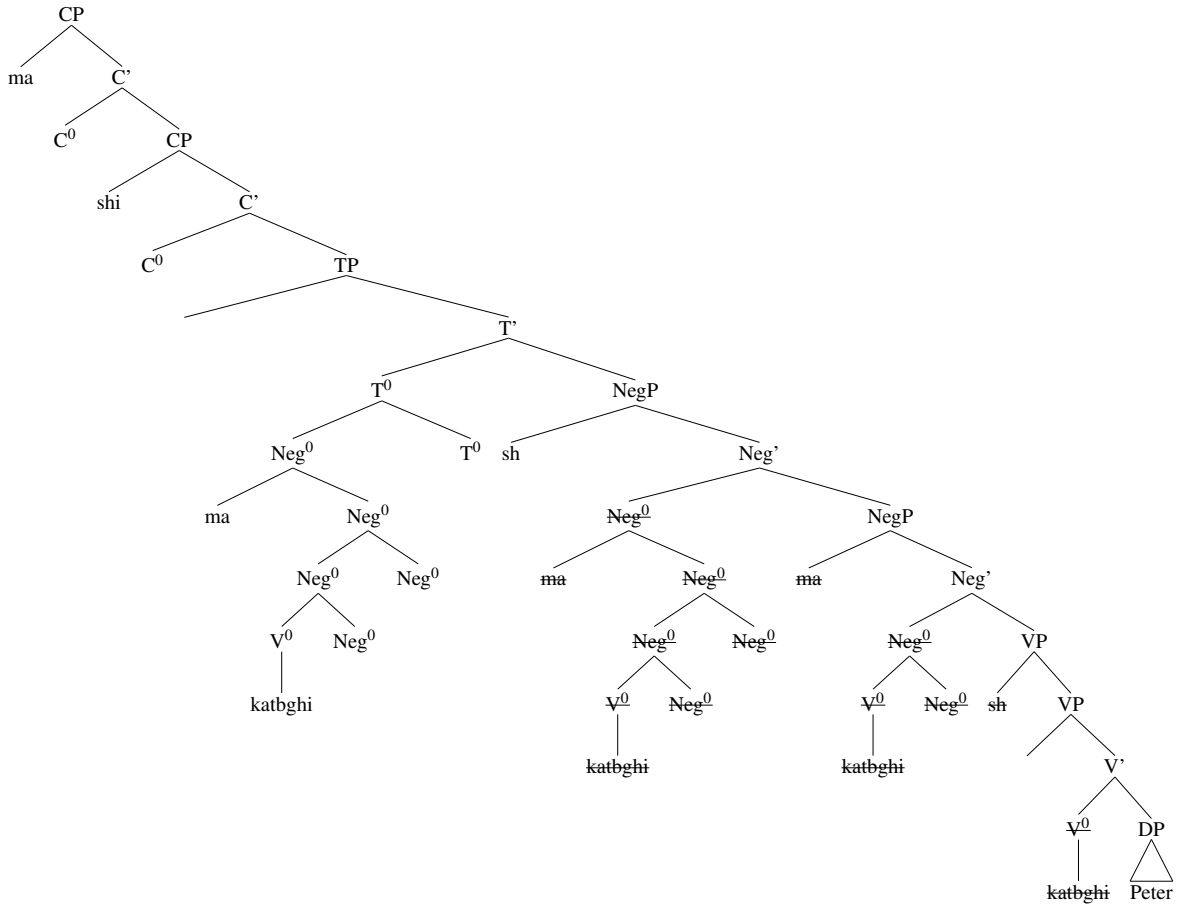
B: ***Ma-shi** John **kaybghi** Mary, kayhabha.*
neg-neg John likes Mary, love.her
'John doesn't like Mary, he adores her.'

C: *John* ***ma-shi*** ***kaybghi*** *Mary, kayhabha.*
John neg-neg likes Mary, love.her
'John doesn't like Mary, he adores her.'

7.4.2 Scope over negation

My final proposed structure in (6.8) supports two NegPs inside the TP and since the structure in (7.20) allows for the TP to carry negative structures, it predicts that such TPs would be able to carry regular negation as shown in (7.22):

(7.22) ***Ma-shi*** ***ma*** *katbghi* ***sh*** *Peter, kathakdou.*
neg-neg neg like neg Peter, hate
'You don't just like Peter, you actually hate him.'



7.4.3 Scope over emphatic/contrastive high constituents and whole coordinate structures

Since the metalinguistic marker *ma-shi* is in the CP layer of the clause, it can be higher than focused constituents and it allows for the coordination of two TPs.

(7.23) (a) [$_{CP}$ *ma-sh* [$_{FocusP}$ FOCUS [TP]]]

(b) [$_{CP}$ *ma-sh* [TP and TP]]

7.4.4 Compatibility with idiomatic sentences

The structure in (7.20) allows for the TP to be an idiomatic expression and it predicts that such TPs would be able to carry *metalinguistic negation*, just like other TPs.

(7.24) [$_{CP}$ *ma-sh* [$_{TP}$ Idiom]]]

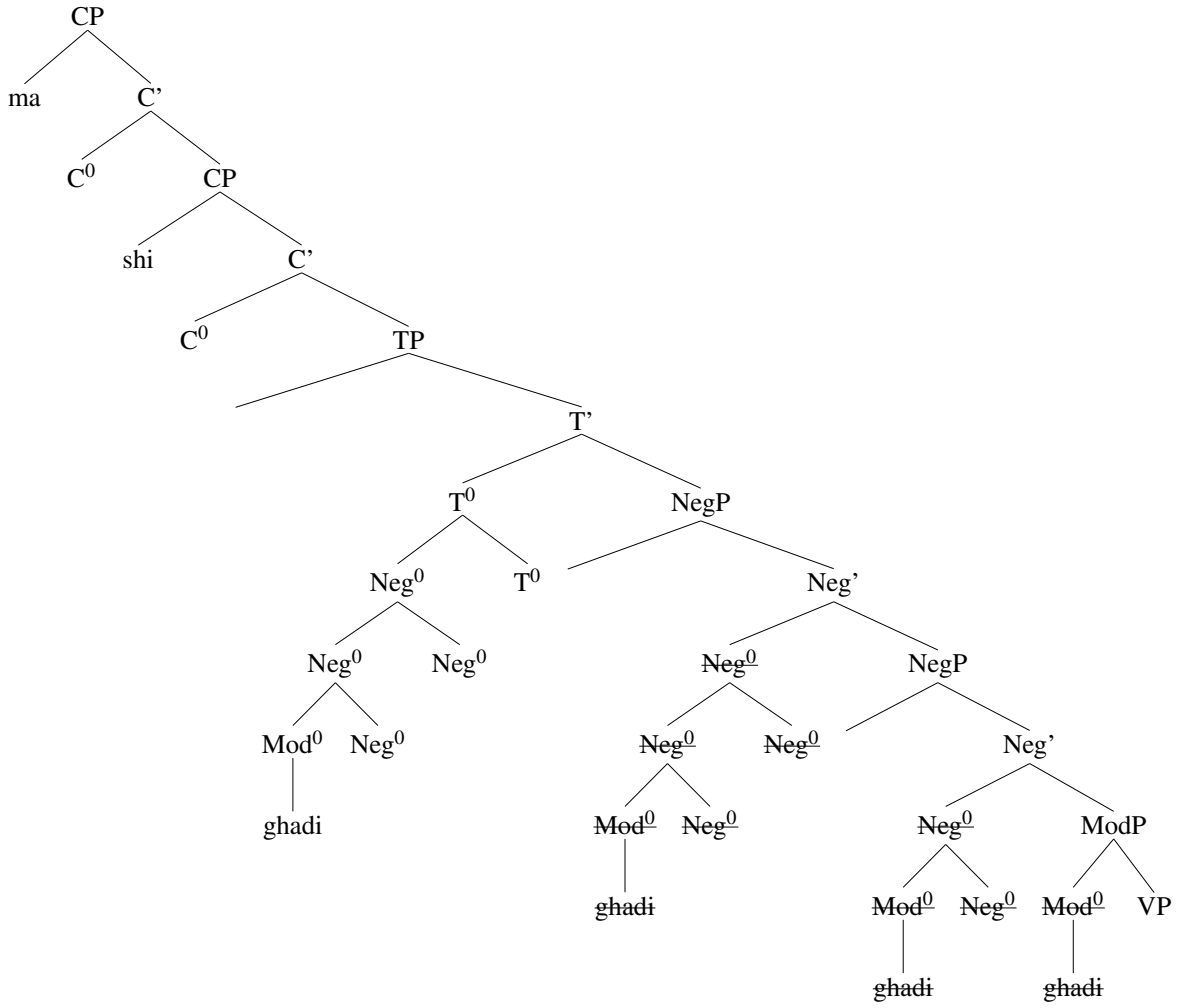
7.4.5 Compatibility with VP ellipsis

The structure in (7.20) predicts that VP ellipsis will affect all the material within the VP. On the other hand, the material that is in T at the moment when VP ellipsis applies is expected to 'survive' VP ellipsis. In the example in (7.19), repeated below for convenience, the auxiliary 'will' is not affected by VP ellipsis because it is in T.

(7.25) A: *Samir ghadi ymchi l-dar.*
Samir will go to-house
'Samir will go home.'

B: ***Ma-shi*** *ghadi ymchi l-dar, ghadi ymchi l-mdrassa.*
neg-neg will go to-house, will go to-school
'He will not go home, he will go to school.'

C: ***Ma-shi*** *ghadi.*
neg-neg will
'He will not go.'

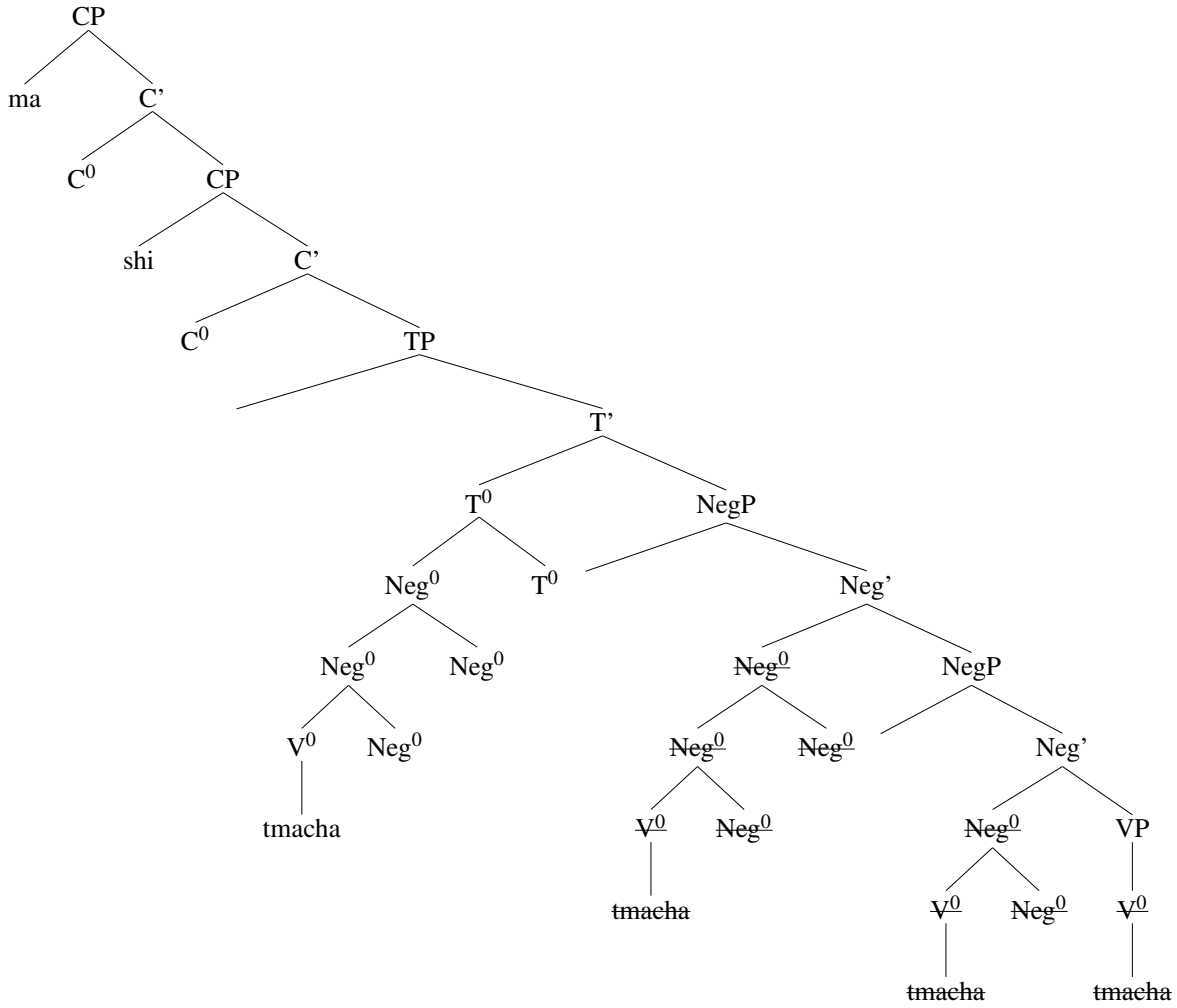


The structure in (7.20) predicts that if VP ellipsis applies to a string with no auxiliary, the verb will also 'survive' ellipsis, because V moves to T in Moroccan Arabic, and so at the time when VP ellipsis applies, the V is in T, as shown in (7.26):

(7.26) A: *Samir tmcha l-dar.*
Samir walked to-home
'Samir walked home.'

B: ***Ma-shi*** *tmacha l-dar, jarra.*
neg-neg walked to-house, ran
'He did not walk home, he ran.'

C: ***Ma-shi*** *tmacha.*
neg-neg walked
'He did not walk.'



In this chapter I provided evidence using Horns's (1989) tests (7.2) that showed that sentences of the type (7.4) carry a metalinguistic negation. I also provided evidence using Martins (2014) tests (7.3) that showed that the metalinguistic negator *ma-shi* in sentences of the type (7.4) is a peripheral metalinguistic negator. Considering this, I proposed the structure in (7.20) that implemented Martins's (2014) proposal for peripheral metalinguistic negation which suggested that peripheral metalinguistic negators are merged externally. The resulting structure in (7.20) adequately represented sentences of the type (7.4) and predicted the behaviour of such type of sentences when subjected to the tests in (7.3).

Chapter 8

Conclusions

In this thesis I analysed and discussed the distribution of the bipartite negators in verbal and verbless sentences in Moroccan Arabic. Moreover, I analyzed previous proposals that dealt with the distribution of bipartite negators and I demonstrated how these proposals share a similar problem characterized by the rightward adjunction of the verb to the negative marker, which violated Kayne's (1994) *LCA*. Furthermore I showed how these proposals failed at accommodating the distribution of negative markers in verbal and verbless sentences in Moroccan Arabic.

In order to solve the adjunction problem that these analyses share, I proposed a solution that was based on the assumption that the negator *ma* in Moroccan Arabic is a clitic and which incorporated Bošković's (2002) view on clitics. In this view, clitics are syntactically defined as non-branching-elements, defining ambiguous projections (X^0/XPs). This means that clitics are initially generated as XPs in the Specifier of some functional projection and when they undergo movement, they undergo movement as heads. More specifically, I proposed that *ma* is generated in SpecNegP and then cliticizes (i.e. left adjoins) to the verb when the verb raises to T. Such a solution proved to be successful in solving the main problem imposed by previous analyses and accommodating the various distributions of negative markers in verbal and verbless sentences.

Furthermore, unlike Benmamoun et al. (2009) who proposed that verbless sentences in Moroccan Arabic do not contain a verb at all in the syntax, I proposed that in verbless sentences, in the present tense, the copula verb is syntactically present but phonologically null. Therefore, under such an assumption, the null verb will raise to T^0 and *ma* would cliticize to its left, similar to the analysis of verbal sentences. The only difference between verbal and verbless sentences under this

account would be whether the verb is overt or covert.

The same analysis was shown to also accommodate negative sentences containing N-words which show a particular distributional restriction in Moroccan Arabic: N-words can co-occur with the negator *ma* but not with the negator *sh*. In order to account for this co-occurrence restriction, I proposed that N-words and the negator *sh* compete for the same position, namely the Specifier of NegP. Since SpecNegP can accommodate only one of them, the two cannot co-occur. One consequence of this analysis is that Moroccan Arabic must have two NegPs. *Ma* was analyzed as being in the Spec of the lower NegP and *sh* as initially merged in a position adjoined to VP and then as raising to the Spec of the higher NegP.

(8.1) [$_{NegP}$ sh [$_{Neg'}$ [$_{Neg^0}$ *ma*+Verb][$_{NegP}$ ~~*ma*~~ [$_{Neg'}$ [$_{Neg^0}$ ~~Verb~~][$_{VP}$ ~~*sh*~~ [$_{VP}$ [$_{V'}$ [$_{V^0}$ ~~Verb~~] [XP]]]]]]]]

Finally, in order to account for distributions where the negative markers *ma* and *sh* cluster together in sentences with covert copular verbs and sentences with overt lexical verbs, I showed that these sentences carry a different variety of negation, i.e. metalinguistic negation. In order to show that, I applied the tests proposed by Horn (1989) to Moroccan Arabic (MN does not license negative polarity items/ N-words; MN is compatible with positive polarity items (PPIs); MN requires licensing by discourse/pragmatic context; MN is excluded from subordinate clauses).

Furthermore, I showed that these type of sentences carry a special type of metalinguistic negation, namely peripheral metalinguistic negation, by applying the tests proposed by Martins (2014) to Moroccan Arabic (Availability in isolation and nominal fragments; Scope over negation; Scope over Emphatic/Contrastive high constituents and whole coordinate structures; Compatibility with idiomatic sentences; Compatibility with VP Ellipsis).

For the syntax of sentences carrying metalinguistic negators in Moroccan Arabic I proposed a structure in which *ma* and *sh* are directly generated in the CP layer, following Martins' (2014) analysis of metalinguistic negators in European Portuguese. The resulting structure proved to account for both verbal and verbless sentences that carry a metalinguistic negation and for verbal and verbless sentences that carry regular negation.

8.1 Directions for further research

Nonetheless there are few issues that were not addressed in this thesis.

One issue is the behaviour of adjectives in Moroccan Arabic. As discussed in Chapter 3, adjectives in Moroccan Arabic occur in two patterns in negative sentences:

(8.2) (a) ***ma*** A ***sh***

(b) ***ma-sh*** A

While my final proposal accounted straightforwardly for (8.2.a), I didn't make a firm proposal to account for (8.2.b). There are two ways in which one could account for the order in (8.2.a). One way is to assume that verbs can be dynamically derived from adjectives via an incorporation analysis. Under this view, adjectives would raise to the V head and incorporate into the latter. Adjectives are the only ones that can show up in between the two negative markers because unlike other types of predicatives, like nominal, prepositional or adverbial ones, adjectives carry the feature [V], as it was discussed in Chomsky (1970). An alternative way to account for the order in (8.2.a) is to assume that adjectives are systematically lexically ambiguous in Moroccan Arabic between their status as adjectives and their status as verbs. Similar examples of lexically ambiguous items in English would include *mellow*, *slow*, *shy*, *ready*, *quiet*, etc. The difference between English and Moroccan Arabic would be that while in English only some adjectives can occur as verbs, in Moroccan Arabic this is a generalized property that applies to all adjectives.

I will leave the choice between these possible analysis for further research.

Another issue that I didn't address was the general distribution of N-words in Moroccan Arabic. As it has been already proposed by (Benmammoun 2006), N-words can occur either before the negator *ma* or after it, as shown in (8.3.a) and (8.3.b):

(8.3) (a) ***Hattawahed*** ***ma*** *ja.*
anybody neg came
'Nobody came.'

(b) ***Ma*** *ja* ***hattawahed.***
neg neg anybody
'Nobody came.'

More research needs to be done to clarify the licensing conditions of these items.

Thirdly, *ammar*(*ever*) N-words in Moroccan Arabic exhibit a peculiar distribution as shown in (8.4):

(8.4) (a) ***Ammar*** *Nadya* ***ma*** *zat* *l-madrassa.*
ever Nadia neg came to-school
'Nadia never came to school.'

(b) ***Ammar****-ha* ***ma*** *zat* *l-madrassa.*
ever-her.3SAgr neg came to-school
'She never came to school.'

(c) ****Ammar*** ***ma*** *zat* *l-madrassa.*
ever neg came to-school
'Nadia never came to school.'

(d) ****Ammar****-ha* ***ma*** *l-madrassa.*
ever.3SAgr neg to-school
'She never came to school.'

(e) ****Ma*** *zat* ***Ammar****-ha* *l-madrassa.*
neg came ever-her.3SAgr to-school
'She never came to school.'

(d) ****Ammar***
ever
'never.'

While both the *ammar* N-word and *hatta* N-word require the presence of *ma*, the *ammar* N-word is different than the *hatta* N-words in such that:

(8.5) (i) It requires the presence of a subject or it has to carry a subject-agreement-clitic as shown in (8.4.a),(8.4.b) and (8.4.c);

(ii) It cannot occur after the verb as shown in (8.4.b) and (8.4.e).

(iii) It cannot appear in isolation as shown in (8.4.d).

More research needs to be done to clarify the licensing and the distribution of *ammar* N-words.

Bibliography

Joseph E Aoun, Elabbas Benmamoun, and Lina Choueiri. *The syntax of Arabic*. Cambridge University Press, 2009.

C Lee Baker. 'Double negatives'. *Linguistic inquiry, JSTOR*, pages 169–186, 1970.

Arthur James Bell. *Bipartite negation and the fine structure of the negative phrase*. Cornell University, 2004.

Elabbas Benmamoun. *Functional and inflectional morphology problems of projection, representation and derivation*. PhD thesis, University of Southern California, 1992.

Elabbas Benmamoun. 'Licensing of negative polarity items in moroccan arabic'. *Natural Language & Linguistic Theory*, pages 263–287, 1997.

Elabbas Benmamoun. 'Licensing configurations: The puzzle of head negative polarity items'. *Linguistic Inquiry*, pages 141–149, 2006.

Jonathan David Bobaljik and Höskuldur Thráinsson. 'Two heads aren't always better than one'. *Syntax*, pages 37–71, 1998.

Željko Bošković. 'Clitics as nonbranching elements and the linear correspondence axiom'. *Linguistic inquiry*, pages 329–340, 2002.

Noam Chomsky. *Some empirical issues in the theory of transformational grammar*. Indiana University Linguistics Club, 1970.

Mark W Cowell. *Reference grammar of Syrian Arabic: Based on the dialect of Damascus*, Washington, DC: Georgetown University Press 1964.

Ferdinand De Haan. *The interaction of modality and negation: A typological study*. Taylor & Francis, 1997.

Michel DeGraff. 'A riddle on negation in haitian'. *Probus*, 5(1-2):63–93, 1993.

Viviane Déprez. 'The roots of negative concord in french and french based creoles'. *Language creation and language change: Creole, diachrony and development.* MIT Press Cambridge, MA, pages 375–428, 1999.

Liliane Haegeman. *The syntax of negation*, volume 75 in The Cambridge Studies in Linguistics. Cambridge University Press, 1995.

Laurence Horn. *A natural history of negation*. CSLI Publications, 1989.

Richard S Kayne. *The antisymmetry of syntax*. MIT Press, 1994.

Edward Klima. Negation in english. the structure of language, ed. by ja fodor and jj katz, Englewood Cliffs, NJ: Prentice-Hall, pages 246-323, 1964.

Ana Maria Martins. 'How much syntax is there in metalinguistic negation?'. *Natural Language & Linguistic Theory*, pages 635–672, 2014.

Luc Moritz and Daniel Valois. 'Pied-piping and specifier-head agreement'. *Linguistic inquiry*, pages 667–707, 1994.

Andrea Moro. *The raising of predicates: Predicative noun phrases and the theory of clause structure*, volume 80 in The Cambridge Studies in Linguistics. Cambridge University Press, 1997.

Michael Akamin Nkemnji. *Heavy pied-piping in Nweh*. PhD thesis, UCLA, 1995.

Jean-Yves Pollock. 'Verb movement, universal grammar, and the structure of ip'. *Linguistic inquiry*, pages 365–424, 1989.

Ian Roberts. *Head movement*. Blackwell Publishers Ltd, pages 112-147, 2001.

Paul Rowlett. *Sentential negation in French*. Oxford University Press on Demand, 1998.

Raffaella Zanuttini. *Syntactic properties of sentential negation. A comparative study of Romance languages*. 1991.

Raffaella Zanuttini. 'Re-examining negative clauses'. *Paths towards universal grammar: Studies in honor of Richard S. Kayne*, pages 427–451, 1994.

Raffaella Zanuttini. *Negation and clausal structure: A comparative study of Romance languages*. Oxford University Press, 1997.