Sentential Negation in Standard Arabic

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ABSTRACT

Negation is a challenging topic in all natural languages, one of which is Arabic. What is more challenging is sentential negation in Arabic. The crux of this paper stems from where the real location of the negative particle is and how it is fronted to have a wide scope in the sentence. The paper draws its line of argument from the Minimalist Program of Chomsky (1995). It provides support for the assumption of what is known in syntax as the little verb.

Keywords: Negation, Arabic, Minimalist Program, little verb.

INTRODUCTION


Negation is intriguing for various reasons. First, it is a distinct feature restricted to humans, rather than animals which have no access to negation and its various ways. However, natural languages vary in the way they express negation and the way it is integrated into syntax. Second, negation is not only important for its unique status among the “constant of classical logic as the one-place truth-functional connective, but also for its complex and systematic interaction with the other logical operators, especially the quantitative and modals” (Horn 1989: xiv) Third, negation is also significant as it provides vital data on the nature of constraints on word formation. Fourth, negation sheds light on the important relationship that lies between syntax and semantics. (See Christensen 2003) Fifth, psychologists and psycholinguists have arrived at important results in the field of language-acquisition “associated with the processing of overt and inherent negation.” (Horn 1989: xiv)

Although the study of negation has been the core of many linguistic studies, it is still poorly understood. There are serious gaps in our understanding of negative sentences and how the theory of semantics accounts for them. There are still many questions that pertain to negation in Arabic, particularly the relationship between negation and tense, negation and its scope, the distribution of negative particles, and whether negative markers show the behavior of syntactic heads or maximal projection. This paper endeavors to offer some reasonable answers to these questions.

The layout of this paper is as follows. First, I will offer an introduction to the present topic. Second, the distribution of Arabic negation particles will follow. The third section will be dedicated to the relationship between tense and negation. The fourth section will focus on the scope of negative operators. All of these topics will be handled within the Minimalist Approach developed by Chomsky (1995) in reference to Standard Arabic (hence SA).
Negative Markers in SA and their Distribution

There are nine negative markers in SA. (See Dahdah 1987: 142) These are:

a) In: This particle negates a nominal sentence as in (1) below

(1) In Zaydun ?illa Sa: diqun
Not Zayd-nom except right
"Zayd is not anything but right."

b) kalla: This negates an answer to a question as in (2):

(2) ?atafCalu su: ? an ?
do-you bad things
"Do you do mischieves?"
The answer is: kalla 'no'

c) lam: This negates the past. It is used with the imperative (see also Pacitti 1993b), as in (3)

(3) lam yakib
not (he)-lied
"He did not lie."

d) lamma: This particle negates the present and past tenses and the negated conditions continue till the moment of speaking, as in (4):

(4) lamm yaṣil
not (he)-arrive
"He did not arrive."

e) lan: This negative particle negates the future and used with the subjunctive mood, as in (5) below:

(5) lan yaCū: d
not (he)-return
"He will not return."

f) la: This negative particle is used to negate both verbal and nominal sentences. It negates the simple present at a current moment, as in (6) below:

(6) la ?alCab
not (I)-play
"I don't play."
The same particle negates the past in the future as in (7):

(7) la raddha -l- llahu Calyka
not bring-(it)-back the-Allah to-you
"May Allah not bring it back to you!"

g) laysa: This negates sentences at the present time as in (8) below:

(8) laysa yanjahu- l- kasla: n
not succeed-(he) -the- lazy
"The lazy don't succeed."

(9) Laysa-l-ilahu biDullamin lil-Cabhi:d
not- Allah with-unjustice to-servants
"Allah is not injustice to servants."

Laysa also negates the simple present at a present moment:

(10) laysa yanjahu-l-kaSlanu
not succeed-the-lazy
"The lazy does not succeed."

h) ma: This particle is similar to (laysa) in function, as in (11) below:

(11) ma ?ahadun ?ahsanu min ?ahadin
not one better from one
"No one is better than another."

i) lata: This negative particle is similar in function to laysa, but its predicate is commonly deleted, as in (12) below:

(12) nadima-l-buğatu wa-lata saCata mandami
repent –the-tyrants and-not hour of-repentance
"The tyrants repented but it was too late."

Benmamoun (2003) proposes that the above nine devices be reduced to ‘la’ and ‘ma’. To him, and based on this proposal, (lam), (lan) and (laysa) are variants of (la) as they carry either tense (i.e. lam and lan) or agreement (laysa).

There are other devices that express negation in Arabic. These are referred to as negative polarity items, such as the Arabic words (?abadan) ‘never’ and (?iTlaaqan) ‘absolutely’. These words will be disregarded in this paper for shortage of space.

Negative markers in Arabic co-occur in the following locations:

1. preverbal or at the beginning of the sentence, as in (13a, b, c) below.
2. before or after a verb as in (13d, e).
3. (13) a) la yanaamu '?'al-mujiddu

- 2886 -
not sleep  the-hard worker
“A hard worker does not sleep.”
b) laysa-l-llah biDallamin lil-Cabi:d
not Allah by-unfair to-sevants
“Allah is not unfair to (his) servants.”
c) laa ?ilaha ?illa-l-llah
not god except-Allah
“There is no god but Allah.”
d) yansa:ni laysa  sa:di: iq bal Cadowwi
forget-me not friend-my but enemy-my
“My friend does not forget me but my enemy.”
e) laysa yansaani  sa:di: iq bal Cadowwi
not forget-me friend-my but enemy-my
“My friend does not forget me but my enemy.”

(3) some negative markers in Arabic, such as (lam), (laysa) and (la), do not occur after a verb, as in the following: (See Table 1):
(14) *taktubu laysa-l- bintu
writes not -the-girl
“The girl does not write.”
(15) *yanamu lam ?al-ṭiflu
sleep not the-child-nom
“The child does not sleep.”
(16) *yatCabu la-1-mujiddu
feel tired not-the-hard worker
“The hard worker does not feel tired.”

All of the above sentences are ungrammatical on a sentential negative reading. However, they could be acceptable on a constituent sentential reading, if followed by (bal + NP), see (17) below:
(17) taktubu laysa-l-bintu bal-il- mar?atu
writes not -the-girl but-the woman
“The woman, but not the girl, writes.”

Syntactic Derivation of Arabic Sentences

In this paper I am going to adopt a framework of representation based on the x-bar theory. In his book, The Minimalist Program, Chomsky (1995) abandoned this theory and replaced it with a base-phrase-structure which satisfies the Inclusiveness Condition. “In other words, the interface levels consist of nothing more than re-arrangements of lexical features.” (Chomsky 1995:225)

However, the writer intends to employ the x-bar system due to its wide use and for being capable of representing structural relations and order of projections in a straightforward manner. The version of x-bar theory that will be adopted here is similar to that of Carnie (2002).

There are basically three types of negation. (However, see Zanuttini (2003) who says they are four). One well-know type is sentential negation where the whole proposition has been negated, or could simply mean "denying the truth of the non-negated form of the sentence” (Adger 2003:176), as in (18) below:

(18) lam yašṭari ahmad Cinaban
Not buy Ahmad grapes
"Ahmad did not buy grapes"

The other type of negation is constituent negation where one constituent (i.e. DP, object, AdvP, small clause) is negated, or could mean "the sentence is true of something which is not the negated constituent,” (Adger 2003:176), as in (19) and (20) below:

(19) ᵛaba Calyyun laysa bibaCi:d
went Ali not by-far
"Ali did not go far."
(20) ?ištara ahmad xubzan wa-laysa Cinaban
Bought Ahmad bread but grapes
"Ahmad bought bread but not grapes."

The third type of negation is meta-negation where the negative marker has a wide scope in a domain larger than a clause, as in (21) below:

(21) ᶢahaba al-rajulu laysa Cindama ħalla bal-Cindama
went the-man not when became-the dark but Cindama
"The man went not when it became dark but when the day broke."

As stated before, this paper will be dedicated to the first type only, namely sentential negation.
The derivation of an Arabic sentence within the Minimalist Program is built in a bottom-up manner. The derivation of a clause consists of a finite set of operations, such as select, merge, agree, move and transfer. To illustrate the above operations, let us take one Arabic sentence, as in (22) below:

(22) lam yaktub ?a-tṭa:lubu ?al-wajiba
Not write the student the-homework
The student did not write the homework.

The derivation of this sentence requires the selection of a lexical array (hence, LA) from the lexicon. The lexical items may be selected more than once, a numeration. In this sentence the selected items are (lam, yaktub, ?aT-Talibu, ?al-wajiba). The second operation, namely, merge (concatenation), of the lexical items, applies. Merge is a binary operation that combines two items at a time. Thus, (?al) and (wajiba) merge to form a DP constituent. (?al) has an uninterpretable selectional [N] feature that got deleted as soon as it merges with the NP complement. The merged elements project as DP (see the tree-diagram below):

Then the DP merges with V-bar and projects as another V-bar. To derive (?aṭṭalibu) the same process of merge applies to (?aṭ) and (talibu) to form a V-bar. The lower V-bar and the higher V-bar merge to form a VP. The DP, ?aṭ-falibu, is an agentive argument that every verb requires. However, this agentive argument occurs on the right of the verb as the adopted word order in Arabic is VSO. The next step is when the verb (yaktub) merges with the lower V-bar and projects as V-bar and this in turn merges with the higher V-bar and project as VP.
The latter VP merges with a ‘light’ abstract causal verb and results in little v-bar. The light verb has no phonological content but carries the meaning of ‘cause’. For this reason it is sometimes referred to as a zero morpheme. (Radford 1997) put. The light verb attracts the verb to adjoin to it. The resulted tree diagram appears in (25) below:

\[
\begin{align*}
\text{vP} & \quad | \\
\text{v-bar} & \quad | \\
\text{v} & \quad | \\
\text{yaktub}_i & \\
\end{align*}
\]

The tree-diagram above shows what is called head movement (from V-bar position to another). The structure of the sentence is anchored in time. Thus the v-bar (little v-bar) has to merge with T, which is specified for [+present], projecting in T-bar, as (26) shows below:

\[
\begin{align*}
\text{TP} & \quad | \\
\text{T-bar} & \quad | \\
\text{T} & \quad | \\
\text{ [+ present]} & \\
\text{v-bar} & \quad | \\
\text{vP} & \\
\text{v} & \\
\text{yaktub}_i & \\
\end{align*}
\]

In all the phases of merge one can notice that merge is asymmetric in that only one of the merging elements can project.

T includes unvalued features often referred to as Q-features which stand for Person, Number, and Gender features. Unlike other languages, Arabic has visible inflectional markers that are clearly marked on T-bar. The unvalued features on T-bar probe down to search for a
matching goal. This matching goal is the verb (*yaktub*). This is indeed the matching goal as it is required by the Minimal Link Condition which requires that operations yielding long distance dependencies to be local. The form of match between T-bar and the verb (*yaktub*) is the sort of agreement in person, number and gender. Another goal of matching is between T-bar and the subject (*?al-Talibu*). Finally, the Neg head merges with TP and project in a NegP constituent. This approach to the derivation of negated structures is different from that proposed by Almoumani (2011) who followed the footsteps of Benmamoun (2000) who proposed that the verb is attracted to move to [+D] to check agreement features. The verb is also attracted to check more features of agreement at the [+V] of T. Finally, the verb raises to Spec, thus merging with the negative particle to check the [+D] features.

**Analysis**

As stated before, this paper adopts the framework that Chomsky developed in (1995). The derivation by phrase version of the same program is also adopted. In this paper, the writer assumes, following Pollock (1989), Laka (1994) and Zanuttini (1997), that negation projects its own phrase according to the x-bar schemata. As argued above the NegP merges with TP. This leads to a state where the negative particle enjoys a higher position and thus a wider scope over the other constituents of the clause. (However, see pp.14-15 below). In Arabic the negative particle has to occupy a higher position than the position of the verb or even T because negation always precedes tense (See Ouhali 2003). This state of being follows from how sentential negation is derived in Arabic, as the next section shows below.

Following Ouhala (1994), I assume that the primary word order in Standard Arabic is VSO. SA seems to allow another word order SVO, as the sentences in (27) and (28) show:

(27) ra?a-a-1- ?awladdu Zaydan
    Saw the-boys Zayd
    "The boys saw Zayd"

(28) ?al-?awlaadu ra?a-a-aw Zaydan
    The-boys saw-they Zayd
    "The boys saw Zayd"

One main difference between (27) and (28) is the lack of agreement between the verb and the subject. This is attributed to the fact that "in this structure the subject is not in Spec-Head Agreement with I." (Ouhala 1994: 292). The structure in (28) still poses a problem regarding the strict interpretation under EPP whereby a subject is required in the Spec-TP position. Ouhala proposes that this position be filled with an expletive pro which in SA carries the default third person features.

In the rest of this paper the argument will focus on sentences where the word order is VSO.

Based on the argument above negative sentences in SA can be derived along the following lines. First, in a sentence like (29):

    Not write the-student-Masc the-assignment
    "The student did not write his assignment"

The sentence above can be represented by the following basic tree-diagram in (30) below:

The first movement is when the verb (*yaktub*) moves to the "little" verb or adjoins to it. Second, the NegP is assumed to be in a position to the left of the verb. The negative particle is assumed to head its own phrase as it shows agreement or concord with the verb in terms of tense or aspect (see also Weis 2003:307). Thrainsson (1996:270) believes that ‘----- these languages (like Arabic and Icelandic) must have separate functional projections where agreement and these features are checked-----.’ The structure of a verb phrase is indeed larger than the bare structure of the verb phrase. Besides, what verbs carry of concord agreement indicates that we can assume a projection of the negative head. (See Haelberli and Haegeman 1992: ch 2, and Dikken 1996:78). Third, DP, ?aṭ-ṭalib (the student) is assumed to be base-generated and thus does not move anywhere. As Ouhala proposed, this DP is base-generated is evident from the fact that the verb does not agree with it (cf. (31) and (32) below)

Not write the students the assignment

"The students did not write the assignment."

(32) 'lam yaktubu -ṭullta: bu ?al-wajiba

not write they the students the assignment

"The students did not write the assignment."

Sentence (31) is ungrammatical because the verb is not supposed to agree with the subject as it precedes it. Fourth, following Christensen (2005:103) I assume that "the negative particle is merged as an adjunct of vP. The negative particle carries uninterpretable features named [uNeg]. The latter then probes for a valuating match and finds (lamb), and the EPP on Neg-bar attracts it to spec-NegP." (See also Rognvaldsson (1987), who proposed a similar mode of analysis) In a similar framework to Nayudu (2004), I assumed that a new vP should be introduced above the lower vP that will temporarily host NegP. The negative particle has to raise to the spec of NegP to check its uninterpretable features against those on NegP, otherwise the derivation crashes. This means that the negative particle moves to ensure convergence. After the negative particle checks its feature, it finally lexicalizes.

This type of movement can be accounted for by reference to the **Weight Principle**, which says:

(33) **Weight Principle:**

F carries along just enough material for convergence.

This means that what should move should be as small or light as possible. (See Collins 2003: 56). The negative marker in Arabic is light and thus it moves to the front. The movement of the negative particle to the front is obligatory in order to license sentential negation.

The type of analysis proposed above opposes what Postal (1974) suggests. He proposes that negative elements be base-generated within the DP and these elements be capable of raising out into the clause. In Arabic one cannot assume that negative particles are inside DPs as we know that such particles are not related to the DP itself but rather to the whole clause. Second, I wonder how Postal can defend his position by stating that negative particles are base-generated and can move later on! If a certain element is base-generated within the DP, this entails that it does not move.

Within the theory of scope, where negative particles are perceived as scope drivers, I can say that after movement, the negative particle, occupying a higher position in a tree-diagram, has now a wide scope over all
the other items of the clause. Scope here is understood as the command domain in which the negative particle affects the interpretation of the whole expressions of the clause. Scope is thus similar to its counterpart in logical syntax. To illustrate the above words, let me represent my original sentence, repeated here in (34), as (35):

(34) lam yaktub ?aṭ-talibu ?al-wajiba

Not write the-student the-assignment

"The student did not write the assignment."

(35) ¬ write(x, y) where x is ?aṭ-talibu and y is ?al-wajiba (34) can be paraphrased as "there is some ?al-wajiba that x fails to write."

In other words and according to the words of Pacitti (1991d: 8) what is rejected or negated in (34) is not actually the existent or non-existent of a student or assignment, but rather judgment over the achievement of a duty or assignment.

The representation in (35) clearly shows a wide scope of the negative marker over the whole expressions. This is in line with what Reinhart (1978)'s definition of scope which states that:

**if a rule assigns node A some kind of prominence over node B, B must be within the domain of A.**

Compare this with (36), where the negative marker has a low or narrow scope:

(36) kataba-ṭ - ṭalibu ?al- risalata wa-lays- l-wajiba

wrote-the-student the-letter and-not-the assignment

"The student wrote the letter but not the assignment."

Within the framework adopted in this paper it is evident that all negative particles are sensitive to the type of sentence (i.e. nominal or verbal) in which they occur, except for (la), which may occur in both nominal and verbal sentences, (Dahdah 1987:142), as in (37) and (38) below:

(37) la rajula fi-l-bayti

no man in-the-house

"There is no man in the house."

(38) la tilCab bi-n-na: r

not play- you with-the fire

"Don't play with fire."

The other negative particles may occur in either nominative or verbal sentences, but not both. The negative particle (kalla) usually occurs as a 'strong' negative response to a question, as in (39) below

(39)  A) ?ataqtulu-l-abriyaa?

Kill-you-l-innocent

"Do you kill innocent people?"  

B) kalla

Never

Arabic negative particles are also sensitive to the type of tense expressed in the sentence. All Arabic negative particles are associated with one tense, rather than another. This is true, except for (lama), which can be associated with both present and past tenses, and (kalla) with present and future tenses. Consider the following sentences:

(40) a) ma laCiba -l-waladu

not play the-boy

"The boy did not play"

b) ma yilCab ?al-waladu

not played the-boy

"The boy did not play."

(41) a) lam ya?ti ?al-waladu

Not come the-boy

"The boy did not come."

b) lam ?ata ?al-waladu

not came the-boy

"The boy did not come."

(42) a) laysa yinjaḥu ?al-kasu:lu

Not succeed the-lazy

"The lazy does not succeed."

b) laysa najaha -l-kasu:lu

not succeed the-lazy

"The lazy did not succeed."

Sentence (40a) shows that the negative particle (ma) is associated with the past tense, rather than with the present tense. This explains why (a) is grammatical in Arabic while (b) is not. Conversely, (lam) is associated with the present, rather than with the past tense. This
accounts for the ungrammaticality of (41b) above. The same line of argument can be advanced for (laysa) in (42). (laysa) has to be followed by the simple present, rather than the past tense. Thus (42a) is acceptable in Arabic while (42b) is not. (See table (1) for a complete picture of the relationship between negative particles and tenses in Arabic:

<table>
<thead>
<tr>
<th>Negative Particle</th>
<th>Sentence type</th>
<th>Tenses</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Nominal</td>
<td>Verbal</td>
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<tr>
<td>?in</td>
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</tr>
<tr>
<td>Lata</td>
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<td>↓</td>
</tr>
</tbody>
</table>

Note: ↑ means that the particle in question can occur in a certain sentence or with a certain tense. However, ↓ means that the particle cannot occur in a certain sentence or with a certain tense.

In this paper the researcher assumes that Neg-particles function as heads rather than maximal projections. This assumption is based on a number of facts about negative particles in general and the structure of Arabic in particular. First, languages that show concord between the negative particle and the verb or noun phrase employ negative particles as head. (See Rowlett's book on Sentential Negation in French, ch.3). Arabic is such a language that shows agreement between the negative particle and the verb, see (43) below:

(43) laysati-l-fataatu mutazawwijatan bal Cazbaa?
Not the-girl married
"The girl is not married but single."

In this sentence the negative particle agrees in person, number and gender with the NP, the girl. If the subject is masculine, (laysat) will be rendered (laysa). This is also in line with the fact that negative particles are subject to the strict locality conditions. Second, Arabic negative particles do not block the movement of an NP across the NegP, as (44) shows below:

(44) a) laysat-l-fataatu mutazawwijatan bal Cazbaa?
Not -the-girl married
"The girl is not married but single."

b) ?al-fataatu laysat mutazawwijatan bal Cazbaa?
The-girl not married but single
"The girl is not married but single."

**Conclusion**

This paper is an endeavor to understand sentential negation in Standard Arabic which is the source of data reference here. The data have been dealt with within the framework of the Minimalist Program proposed by Chomsky (1995). In this paper Neg particles function as heads rather than maximal projections. The paper also enhances the existence of a little verb in the derivation of sentential negation in Arabic. It has been shown that negation projects its own phrase according to the x-bar schemata. The NegP merges with TP and thus the former enjoys a higher position which qualifies it to have a wider scope over other constituents of the clause. Besides, what
verbs carry of concord agreement indicates that we can assume a projection of the negative head. (See Haelberli


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نفي الجملة في اللغة العربية الفصحى

تتناول هذه الدراسة ظاهرة النفي في اللغات الإنسانية، وخصوصا اللغة العربية، إذ أن ظاهرة النفي من أصعب وأدق الظواهر اللغوية في نفي الجملة. وتتميز هذه الدراسة حول موقع أداة النفي وكيفية انتقالها من مكان لأخر في الجملة، وتأثير انتقالها على باقي عناصر الجملة. وقد استقت هذه الدراسة إطارها النظري من نظرية تشومسكي (1995) السمية البرنامج "المصغر أو الأدنى"، والتي عززت وجود عنصر يسمى "الفعل الصغير".

الكلمات الدالة: النفي، اللغة العربية، الجملة، البرنامج المصغر (الأدنى)، الفعل الصغير.

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