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# Syntax of Persian and English Negation

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**Abstract**

In this paper the syntactic properties of negation in English and Persian are compared and contrasted. It continues the debates concerning the availability of Universal Grammar (UG) to L1 and L2 acquirers. We argue that a UG-based analysis for the stages of NEG-placement is not only possible but in fact provides independent support for UG-based analyses. Evidence is provided that Persian negation is just checked in NegP and there is no need for finite and non-finite verbs to move to IP. To provide the evidence, the progressive construction 'dasht$^{æ}$n "to have" with and without negation marker is studied. In English however finite verbs need to move to IP to get negated.

**Key Words:** Syntax, Inflection, UG, IP, TP, Negation, progressive marker.

## 1.0 Introduction

The distributional properties of negation might follow Principles and Parameters Theory (PPT), developed by Chomsky's (1981, 1986, 1989) Universal Grammar. Obviously all languages have special syntactic mechanisms for expressing sentential negation. Therefore, we presumably can claim that negation is one of the categories available by Universal Grammar along with Noun, Verb, Adjective, Inflection, etc.

Using X-bar theory, a principle of Universal Grammar, Neg (ation) category can project to Negation bar and consequently to Negation Projection (NegP). Of course, there are clearly language-particular differences in the form or position of elements within NegP. Some languages like French, realize both the head and the specifier of NegP overtly as illustrated in (1):

(1) Jeanne ne parle pas grec
Jeanne Neg speaks not Greek
'Jeanne does not speak Greek'.

And languages like English have overt morphemes in the head position.

(2) John does not speak Greek

As it is clear, there is a parameter of variation. There is a strong hypothesis that the location of NegP in the phrase structure of the clause is universally fixed. It means that NegP, though an optional element of the clause, when present, is always selected as a complement by **Inflection projection (I)**. This is illustrated in Figure 1:

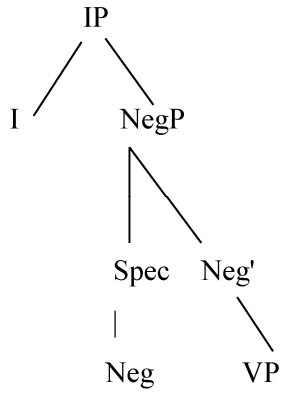


**Figure 1: English Negation Projection**

The specified differences in the location of negation in the clause in particular languages must be the effect of the other parameters of variation. A parameter of variation, for instance, concerns the strength of inflections under **I**. In some languages the inflections are strong supporting the raising of all verb classes, including thematic verbs. On the other hand, in some other languages the inflections are weak, consequently, supporting no thematic verb rising. As a matter of fact, this is a parametric difference within languages, in which inflections under **I** can be either strong or weak. And because the raised verbs move from **VP** through Neg to **I**, the parametric difference in the strength of inflections in **I** will have an effect on the superficial location(s) of negation. For example in French, thematic verbs will appear superficially to the right of negator *ne* (see sentence above).

## 2.0 The Syntax of Negation

According to Bloom's (1970) nonanaphoric negation, syntactic study should be mainly concerned with the internal structure of the negative element (Neg) and with its position in the sentences. The syntactic status of negative elements is really important in this regard.

Dahel (1979) found three types of languages, depending on whether NEG is instantiated as 1) an independent syntactic element, frequently an adverbial, 2) a verbal affix or 3) an auxiliary. Turning to languages to be studied (English and Persian), we come to the fact that there are a number of typologically uncommon features in their negative constructions.

Standard Persian, an SOV language with relatively high word order variation, normally requires the negators (ne/na) as bound morphemes preceding both finite and all non-finite verbs and merely adjacent to the verb.

(3) Un pesar keta:b na - kha n - d
That boy book not - read - past
'That boy did not read the book'.

Of course due to the fact that Negative Projection is not in VP, but between VP and IP, the verb must move to IP through NegP as an optional functional category. Therefore the verb, no matter thematic or not, must move from VP to NegP as shown in Figure 2. Thus the difference between English negation projection (Figure 1) and its Persian counterpart (Figure 2) is that the former just contains finite verbs while the latter covers both finite and non-finite verbs. In other words, negation in Persian functions the same for all types of verbs.

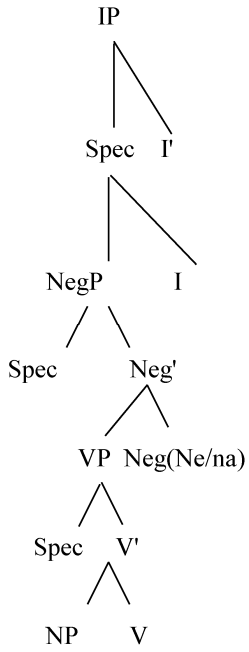


**Figure 2: Persian Negation Projection**

In the following sections, we focus our discussion on the acquisition of negation in first language.

**2.1 The Syntax of Negation in First Language Development**

Based on Universal Grammar, a number of universal principles are accessible to the child without inductive learning (White, 1989). This, of course, can be applied to the parameterized as well as non-parameterized principles. Non-parameterized principles are those which apply to all languages like "Structure Dependency" which means knowledge of language relies on knowing structural relationship in a sentence rather than looking at it as a sequence of words, John/went/to/school (Cook, 1996). Parameterized principles are those that vary from one language to another, of course, within certain limits, like the Head Parameter that concerns with the position of

Heads (principal elements) within each phrase. In English, the head is first in a phrase (with the car), but in Japanese the head is the last in the phrase (Nihon ni equal to the car with).

Considering parameterized principles, the child has to set the parameter to the value required by the target grammar. Although the principles themselves need not be learned inductively, parameter setting is actually triggered through information available in the input. Parameters only relate to the functional categories as well as word order. For instance, in English verb is head first while that of Persian is head final (see Figure 2). Consequently, we should expect functional categories to make the core problematic area in first language development. This refers to the selection of the appropriate set of categories, assuming that grammars of human languages vary in this regard, besides their internal structure and possibly their hierarchical order in sentence structures (Meisel, 1977). Based on the "Structure Building Hypothesis" proposed by Guilfoyle and Noonan (1992), and the "Small Clause Hypothesis" by

Radford (1986, 1990), and also Meisel (1977) children's initial sentence structures lack functional categories such as IP. That means structures generated by early grammars resemble VPs rather than sentences (IPs or CPs).

A question is raised as to how we can define the acquisitional task of the child acquiring the syntax of negative constructions. Meisel (1977) believes that the main problem is the option of analyzing NEG as the head of a NegP as opposed to NEG as a maximal projection. All other tasks are not, in fact, directly related to negation. They are primarily concerned with the implementation of several layers of functional categories above VP and their head-first/head-last directionality. When these categories are accessible, the finite verb raises, going through the head of NegP. And if NEG is a functional head, it forms a unit with the finite element and consequently both

are moved together (He didn't go home). On the other hand, if NEG is a maximal projection and the head of NegP is empty, the negator remains behind, therefore, it appears in postverbal position in surface order (He went not home).

The following section explains the reasons why negation constituent is instantiated below **I**.

## 3. Thematic/Non-thematic Negation in Persian

In this section I will check whether the prefix 'mi-' and the periphrastic progressive dashtæn 'to have' constructions exhibit agreement pattern with negation markers or not. In Persian the prefix mi- is added to past or present tense verbs to yield a continuous, habitual, or progressive reading for the verb[1]:

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1- the prefix stative verb *mi-* represents a Persian inherent aspectual marker, while the morpheme non-stative verb *mi-* represents either a grammatical aspectual marker or a tense marker such as the sentences in 1 and 2 below.

(1) a. (man) hala arabi mi dan-am
I now arabic impef know -1sg
'I know Arabic now'

b. (man) sale gozashteh arabi mi danst-am
I year last arabic impf knew-1sg
'I knew Arabic last year'

(2) a. (man) hala football bazi mi kon-am
I now football play impf make-1sg
'I am playing football'

b. (man) sale gozashteh football bazi kar -d -am
I year last football play made-perf-1sg
'I played football last year'

Sentences 1a-b with stative verbs use the prefix *mi-* with both present and past tense while sentences 2a-b with non-stative verbs use the morpheme *mi-* with present tense but without the prefix with past tense.

(4) (a) (mæn) sib-o mi-xoræ-.m.
(I) apple-OM DUR[1]-eat-1SG
'I am eating the apple.'

(b) (mæn) sib-o mi-xoræd-.m.
(I) apple-OM DUR-eat.PAST-1SG
'I was eating the apple.'

In colloquial Persian the progressive is more likely to contain the verb dashtæn 'to have' in addition to the prefix mi- on the main verb (Lazard 1992:141). This construction is referred to as the periphrastic progressive (Ghomeshi 2001)[2]:

Like modals, the auxiliary verb dashtæn usually follows the subject, although direct objects can precede the auxiliary with minimal discourse/pragmatic effects:

(5) (a) Reza (c.i) dar-e (c.i) mi-xor-e?
Reza (what) have-3SG (what) DUR-eat-3SG
'What is Reza eating?'

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1- OM stands for object marker and DUR stands for time duration.

2- While progressive aspect can be indicated with or without dashtæn, it cannot appear in other contexts in which mi- is used. For example, mi- can be used for a habitual/generic reading while dashtæn+ mi- cannot; mi- can occur on stative verbs while dashtæn+ mi- cannot cooccur with statives.

(3) Man Ali ro mi-shenasam
I Ali-OM Asp-know
'I Know Ali'.

(4) Parandegan parvaz mi-konand
Birds fly Asp-do
'Birds fly'.

(b) Reza (sib-o) dar-e (sib-o) mi -xor-e.
Reza (apple-OM) have-3SG (apple-OM) DUR-eat-3SG
'Reza is eating the apple.'

Unlike thematic verbs and modals, however, the auxiliary verb dashtæn cannot be negated:

(6) (a) Reza næ-bayæd sib-o be-xor-e.
Reza NEG-must apple-OM SBJ-eat-3SG
'Reza musn't eat the apple.'

(b) * Reza næ-dar-e sib-o mi-xor-e.
Reza NEG-have-3SG apple-OM DUR-eat-3SG
'Reza is not eating the apple.'

This fact is remarkable given that there is no obvious semantic reason why negation should be incompatible with the progressive aspect. Note also that both dashtæn as a main verb and verbs prefixed with mi- can be negated:

(7) (a) Reza sib-o næ-dar-e .
Reza sib-OM NEG-have-3SG
'Reza doesn't have the apple.'

(b) Reza sib-o næ-mi-xor-e.
Reza apple-OM NEG-DUR-eat-3SG
'Reza is not eating the apple.'

Based on the negation facts, Ghomeshi (2001) assumes that auxiliary

dashtæn is base-generated above NegP, in IP, while thematic and modals are adjoined below NegP, as shown in (3) below.

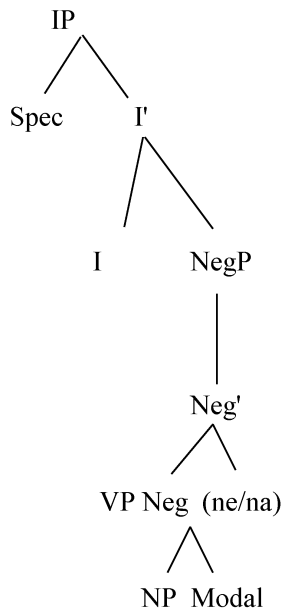


**Figure 3: English Negation Projection of Modals**

On the other hand, English is an SVO language, in which the negator "not" is an auxiliary element demonstrated in Figure 4.

(8) That man did not speak English.

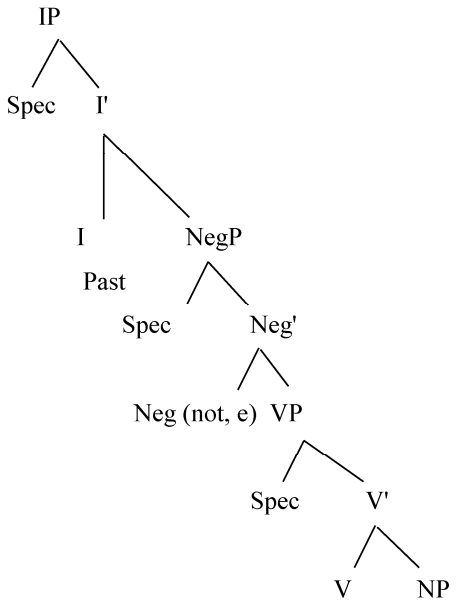


**Figure 4: English Projection of "Not"**

In this study, we adopt the theory of Universal Grammar and more specifically, the Principles and Parameters Theory (PPT) developed by Chomsky (1981,1986,1989) and others. We will follow Pollock (1989) and also Hawkins (2001), assuming that there is a functional category NEG projecting to NegP. The structural position of this phrase is actually somehow controversial. Based on the "standard analysis" it immediately dominates VP. Yet under the "split-INFL Hypothesis" in which INFL is decomposed into two independent categories, AgrP and TP. Negation projection may occupy a position between these two (Pollock, 1989).

Zanuttini (1989, 1991), on the other hand suggests that Neg projection should dominate both AgrP and TP. As Meisel (1986) suggests it is possible in some languages, the position NegP may come between AgrP and TP, and in some other it may dominate both; however these options are universally constrained. Before we account for the best model to substantiate the syntax

of Persian and English negation a brief study of acquisition of negation is presented.

## 4. Distributional Properties of NEG in English and Persian

Persian has a form of sentential negator "ne/na" which is a bound morpheme preceding the verbs regardless of any tense or agreement. In Persian when the verb is negated, it just moves from VP to NegP. There is no need to have a second movement to IP. That is, tense and agreement are not checked when the verb is negated. For instance, just by adding the negation marker "ne/na" to the verb, one can negate any verb of any kind. Never do you need to check tense or agreement this one-step. This movement is shown in Figure 2. As it was pointed out by Dahel, it seems that Persian negation is instantiated by a verbal affix. In English to negate a verb, unlike Persian, the verb must move to IP to check Tense and Agreement. This happens in a two-step movement, the first movement from VP level to Neg and then from Neg to IP. Then according to Dahl, negation in English functions like an auxiliary since auxiliaries need to move to IP to get marked.

Due to the fact that the Persian Neg is a functional category, which is above VP, the use of Neg in different negative constructions regardless of the kind of verb (copula, modal, or thematic), time or tense, proves that the verb in the head of VP has moved to NegP to get negation marker. This can be illustrated in 9a-c:

(9) a Ali nar:ahat ni-st (copula)
Ali sad neg-is
Ali is not sad

b Ali na-mitavan-ad be Tehran beravad (modal)
Ali neg – can he to Tehran to go
Ali can not go to Tehran

c Ali ghaza na- pokh -t
Ali food neg cook ed
Ali did not cook food

However, Persian periphrastic progressive "dashtæn", in terms of negation, is not negated like other verbs. The point is that this progressive marker is an auxiliary while "mi-" as a bound morpheme, is an aspectual imperfective marker[1]. Since in Persian the negator ne/na is attached to the verb and also aspectual marker is attached to the verb, both have the same quality, i.e. the verb moves to NegP to acquire the negator marker and the aspectual marker 'mi-' moves to aspectual projection to get aspect marker. However, the progressive auxiliary marker dashtæn is instantiated in IP. This is actually the reason that the Persian negative marker ne/na is not attached to the auxiliary dashtæn. See the examples given below:

(10) Ali darad be Tehran mi-rava-d
*Ali na-da:rad be Tehran m-irava-d
Ali is to Tehran going he
Ali is going to Tehran

To negate this present continuous construction, the main verb "miravam"

1- The prefix *mi-* with non-stative verbs is either a progressive marker or a lexical aspect marker, whereas the prefix *mi-* with statives is an inherent aspectual marker. All simple and compound verbs that end in '*budan*' 'be' (e.g. *xoshahl budan* 'to be happy' *bimar budan* 'be ill') and '*dashtan*' 'have', e.g. *eteghad dashtæn* 'to believe', *dust dashtæn* 'to like') are stative verbs (Jabbari 2003).

rises to Neg to get the negative marker “ne/na”.

(11) Ali be Tehran na__ mi__ rav__ ad
Ali to Tehran Neg-present-go-he
'Ali is not going to Tehran'.

Now, the same story happens to the past continuous tense.

(12) Ali dashæt be Tehran mi-raf-t
*Ali na-da:sht be Tehran miraft
Ali was to Tehran going-past-he
'Ali was going to Tehran'.

Its negated form is:

(13) Ali be Tehran na-mi-raf-t
Ali to Tehran Neg-present-going-he
Ali was not going to Tehran

Unlike Persian, the position of English sentential negator is determined in terms of the kind of the verb. “n’t /not” is preceded by copula “be”, auxiliary “be”, and “modal”. In terms of “thematic” verbs, the negator comes before the verb, and it has to be supported by the introduction of the meaningless “do” support:

(14)a. Ann was not sad. (Copula be)
b. Ann was not eating lunch. (Auxiliary)
c. Ann cannot go to London. (Modal)
d. Ann did not cook food. (Thematic)

As it is clear now, if we compare English and Persian languages in terms

of negation, they do not have the same structural pattern. Therefore, no help can be given to the Persian learners through the L1, as far as negation is concerned. Now let us see the second language acquisition of English negation.

## 5. The Syntax of Negation in Second Language Acquisition

There is a question as to whether second language learners succeed equally well in acquiring negative constructions or not. If this is not the case, we can raise the question of how their grammatical knowledge differs from that of children acquiring their first language. At the beginning of the 1980s, negation was presumably the most studied feature of second language interlanguage. The majority of these studies like Ravems (1968), Stauble (1978), Fitzgerald (1978) and Schumann (1979) focused on English as a target language. Of course, these studies disagreed with each other in details. But there was consensus in assuming that acquiring the grammar of negation, learners follow an invariant acquisitional sequence. Most of these studies also agreed that the age of learners is not a factor causing significant changes in this sequence.

The early phases of this sequence are believed to be instantiated by the placement of negator in preverbal or even in clause-initial position. Meisel (1977) believes that the same structural properties have been found in Pidgins and in Creole languages[1].

Stauble (1978, 1984) also comes to the same idea and develops a model representing the acquisitional phases of negation as a continuum of learner varieties ranging from *basilang* to *acrolang* via *mesolang*. That is, from a variety most distant from the target norm to the one closest to the target.

1- Pidgin is a language which is developed as a contact language when groups of people who speak different languages try to communicate with each other. While Creole is a pidgin language which has become the native language of a group of speakers, being used for all or many of their communicative needs.

Meisel (1997) represents a simplified version of this model, based on the speech of English L2 learners with L1 Spanish.

**Table 2: Developmental pattern of negation in L2**

| | |
|---|---|
| **I** | Basilect: preverbal negation<br>No + V, don't + V, no + phrase<br>(I no buy toys), (He doesn't play piano), (No catch it) |
| **II** | Mesolect: preverbal and post verbal negation<br>Don't/doesn't + V, cop/aux + NEG, no/not + phrase<br>(You don't go last night), (We are not laughing),<br>(Not the man). |
| **III** | Acrolect: target pattern (NEG following the finite element)<br>Present/past distinction, restructuring of unanalyzed forms,<br>'Do' auxiliary, position of NEG after cop/aux<br>(He didn't go there yesterday) |

**Adopted from Concino et al. (1978, P. 221)**

As it is clear from this pattern, the main feature of the first phase is the position of the negator, mainly 'no', immediately preceding the element to be negated. At this stage "don't + V" is just a rote form, i.e. it is not analyzed by the lea

As we go upward the continuum toward the second phases "doesn't + V" appears, but learners do not yet use tense or agreement productively. Again these forms are still regarded as unanalyzed ones.

We would however predict that Persian speaking learners of English use a negator before a main verb. It is not a rote form because they are transferring from their L1 negation structure into English. Then they would produce grammatical structures rather than rote form. Moreover they would produce ill-forms with copular "be" and auxiliaries since they still put negation "no" or "not" before them. The learners put the negator marker after these verbs when they learn tense in English. We can not verify these predictions unless one collects data from Persian learners of English.

What distinguishes the first two phases is that NEG now increasingly follows auxiliaries and the copulas. And as we go forward to the *acrolect* phase, the use of preverbal NEG fades out, “do + NEG” is analyzed, and the past/non-past distinction instantiated with negative forms.

Now we come to this question that “how can this sequence be explained?” Regarding the first phase, i.e. *basilect* L2 English, we might suspect that the target system itself triggers preposing of the negator, for if “do + NEG” is treated as a single element, we might claim that it frequently precedes the main verb. Placing NEG before the verb might also be the result of transfer from L1 in languages like Spanish and Persian. Of course, transfer becomes less acceptable in view of the results that Staubl (1984) obtained with Japanese learners of English. In this language NEG follows the verb, but the Japanese subjects showed, with some minor variations, the same acquisitional pattern. They used “no/not + V” more persistently than the Spanish learners. The same results hold for Norwegian child learning English (Ravem, 1968). Since in Norwegian, also, NEG follows the verb. Ravem (1968) postulated basically the same acquisition sequence, having analyzed the speech of learners of Swedish with 35 different first languages. Given that, much like Norwegian or German, NEG in Spanish is placed after the finite verb in main clauses. This actually suggests that preverbal NEG cannot be explained satisfactorily either in terms of properties of the target

L2, or as transfers from the learners' L1.

We might come to this conclusion that all these experts seem to agree on the idea that NEG is initially placed preverbally and that target-like constructions are first used with auxiliaries. Several experts point to the similarities between first and second language acquisition. For example Ravem (1968) suggests that some sort of universal mechanism might still be active while, simultaneously, L1 transfer might be a source of difference.

Regarding the second and the third phases, Meisel (1977) has the idea that these phases can define the underlying principles and mechanisms more precisely. He believes that these two phases primarily concern the basic phrase structure (layers of functional projections, headedness of these projections, etc), the status of negative element (head of NegP or adjoined maximal projections) and finiteness (triggering verb-raising and possibly the agreement of NEG, too). But this idea does not, in any significant way, enable us to explain the observed L2 pattern of acquisition. At first we have to determine the properties of early L2 phrase structures. We may assume, for instance, that base structures are transferred from the L1. A similar claim is also made by proponents of the Full transfer/Full access hypothesis (Schwartz and Sprouse 1994,1996). This hypothesis predicts a considerable amount of variation between learners with different L1 backgrounds where we observe surprising uniformity.

As a matter of fact, in L1 speech one finds both final and initial placement of NEG, but apparently not even Japanese learners of English use "V + no/not". This fact can raise two questions here: one is why apparently L2 learners use only preverbal NEG and the other is that whether the head/non-head distinction for different NEGs is a problem in L2 acquisition. Alternatively, we can assume that verbs in L2 structures are initially not raised out of VP, as Tomaselli and Schwartz (1990) suggest. Even if we accept this idea, still this leaves preverbal NEG unexplained. It is supported

by the fact that tense and agreement appear to be absent. So it can somehow account for the post-auxiliary position of NEG in *mesolectal* varieties, assuming that these elements are base-generated in INFL and NEG remains in its position adjoined to VP.

Another problem raises here, why structural properties of the first phase, basilect, continue to be used in *Mesolect* one, and even the third phase, acrolect. For example, learners who have acquired tensed forms still use no + V. Meisels (1977) subjects continued 57% of these stage I forms at stage III.

Clearly, the strong connection between finiteness and verb movement, documented for first language development, does not hold for second language acquisition. And this has obvious consequences for the syntax of negation.

Eubank (1993, 1994, and 1996) believes that in spite of remarkable similarities in the acquisitional sequences of surface patterns, the grammatical explanations suggested for L1 sequence cannot be applied to L2 without major modifications.

## 6. Conclusion

Hawkins (2001) proposes that there is a single category in each language called Neg, which appears in the same place in phrase structure. Using X' theory, as it was mentioned before, we can conclude that in English, negation marker is instantiated below IP shown in Figure 1.

The other point is that negation in English is an inflectional marker and a functional category as well. On the other hand, Persian negator na/ne is a bound morpheme, because it is attached to the verb stem, e.g., roo (go) na-roo (no go) or it is attached to the infinitive verb like raftan (to go) na-raftan (not to go). In Persian all verbs raise to NegP to get negation marker "ne/na" (see Figures 2 & 3), but in English thematic verbs have to raise to IP (or TP)

to get their "do" support (see Figure 4). English modals, auxiliaries, are base-generated in IP.

Due to the head directionality Persian, unlike English, is a head-last language, a different tree diagram must be designed that is compatible with the headedness (see Figure 2).

In English, the negator marker "not" is attached to supplement "do", auxiliaries, and modals. Since supplemented "do", auxiliaries, and modals are instantiated under I, the negation marker is a functional category. English Negation can be shown through the tree diagram illustrated in Figure 4 . In this Figure "e" stands for empty. As it is clear, the head of NegP in English is empty while its specifier is filled. Clearly the verb should move from VP to IP in order to pick up the agreement and tense inflections under **I** proposed by Emonds (1978), Pollock (1989), Chomsky (1995), and Hawkins (2001). This is based on "head movement constraint". This proposes that when a head moves, it is obligatory to move to the nearest head (Travis 1984, Chomsky 1995).

As it is clear through the above tree diagrams we see that the NegP is located between IP and VP in the phrase structure. This analysis actually generates the grammatical results for sentential negation with verbs like copula "be" and "have", auxiliaries, modals and all the thematic verbs in English. In Persian, the tree diagram in Figure 2 shows the one-step movement to negate sentences.

## References

Bloom, L.M. 1970. ***Language development: form and function in emerging grammars***. Cambridge, MA: MIT Press.

Chomsky, N. 1981. ***Lectures on government and binding: the Pisa lectures***. Dordrecht: Foris.

—— 1986. ***Barriers***. Cambridge, MA: MIT Press.

—— 1989. Some notes on economy of derivation and representation.

MIT ***Working Papers in Linguistics*** 10,43-74.

—— 1995. The Minimalist Program. Cambridge, MA: MIT Press.

Cancino, H., Rosansky, E.J. and Schumann, J.H. 1978. The acquisition of English: negatives and interrogatives by native Spanish speakers. In Hatch, E., editor, ***Second Language acquisition***. Rowley, MA: Newbury House, 207-30.

Cook, V. and Newson,M.1996. ***Chomsky's UniversalGrammar***.Oxford : Blackwells.

Dahel, O. 1979. Typology of sentence negation. ***Linguistics*** 17, 79-106.

Emonds, J. 1978. The verbal complex V'-V in French. ***Linguistic Inquiry 9,*** 49-77.

Eubank, L. 1993/94: On the transfer of parametric values in 2development. ***Language Acquisition*** 3, 183-208.

——— 1996. Negation in early German-English interlanguage: more valueless features in the L2 initial state. ***Second Language Research*** 12, 73-106.

Fitzgerald, W.A. 1978. Nativization and second language acquisition: a study of negation.MA thesis, Southern Illinois University.

Ghomeshi, J. 2001. Control and thematic agreement. ***Canadian Journal of Linguistics*** 46, 9-40.

Guilfoyle, E. and Noonan, M. 1992: Functional categories and language acquisition. ***Canadian Journal of Linguistics*** 37, 241-72.

Hawkins, R. 2001. Second language syntax. Oxford. Blackwell.

Jabbari, A. 2003. Temporal properties of Persian and English. ***Language Forum***. 29, 53-80.

Lazard, G. 1992. A grammar of contemporary Persian. Costa Mesa: Mazda Publishers.

Meisel, J.M. 1977. Linguistic simplification: a study of immigrant workers' speech and foreigner talk. In Corder, S.P. and Roulet, E., editors, ***The notion of simplification, interlanguages and pidgins and their relation to second language pedagogy***. Geneva: Droz, 88-113.

———— 1986. adquision de la negacion en euskera y castellano. In Meisel, J.M., editor,

***La adquisicon del vasco y del castellano en ninos bilingues***. Madrid/Frankfurt : Vervurt, 151-80.

Ouhalla, J. 1991. ***Functional categories and parametric variation***. London: Routledge.

Pollock, J.Y, 1989. verb movement, universal grammar, and the structure of IP. ***Linguistic Inquiry*** 20, 365-424.

Radford, A. 1986. Small children's small clauses. ***Bangor Research Papers in Linguistics*** 1,1-38.

———— 1990. ***Syntactic theory and the acquisition of syntax***. Oxford Blackwell.

Ravem, R. 1968. Language acquisition in a second language environment. ***International Review of Applied Linguistics*** 6, 165-85.

Schumann, J. 1979. The acquisition of English negation by speakers of Spanish: a review of the literature. In Andersen, R., editors, ***The acquisition and use of Spanish and English as first and second languages***. Washington. DC: TESOL, 3-32.

Stauble, A.M. 1978. The process of decreolization: a model for second language development. ***Language Learning*** 28, 29-54.

———— 1984. A comparison of a Spanish-English and a Japanese-English second language continuum: negation and verb morphology. In Andersen, R.W., editor, ***Second languages: a cross-linguistic perspective***. Rowley, MA: Newbury House, 323-53.

Schwartz, B. and Sprouse, R. 1994. Word order and nominative Case in nominative language acquisition: a longitudinal study of (L1 Turkish) German interlanguage. In T. Hoekstra and B. Schwartz (eds).

Schwartz, B. and Sprouse, R. 1996. L2 cognitive states and the "full transfer/full access"model. Second Language Research 12, 40-72.

Schwartz, B. and Tomaselli, A. 1990. Some implications from an analysis of

German word order. In W. Abraham, W. Kosmeijer and E. Reuland (eds), Issues in Germanic Syntax, Berlin: de Gruyter.

Travis, A. 1984. Adult Spanish speakers and the acquisition of French negation forms: individual variation and linguistic awareness. In Anderson, R.W. editor, ***Second language: a cross-linguistic perspective***. MA: Newbury House. 165-89.

White, L. 1989. Universal Grammar and Second Language Acquisition. John Benjamins Publishing Company:Amesterdam/ Philadelphia

Wode, H. 1981. Learning a second language, ***Volume 1, An integrated view of language acquisition***. Tubingen: Narr.

Zanuttini, R. 1989. The structure of negative clauses in Romance. Unpublished manuscript, University of Pennsylvania.

———— 1991. Syntactic properties of sentential negation: a comparative study of Romance languages. Ph.D. thesis, University of Pennsylvania.