



Head-Position and Wh-movement Parameters in Persian
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Abstract

To explain why the learners of a language demonstrate ‘uniformity’ in learning their first languages and how they come to master a plethora of complex linguistic structures in a relatively short period of time-rapidity- Chomsky posits a biologically endowed innate language faculty(or Language Acquisition Device) which exists within brain and is transmitted genetically in human beings from parents to their children and is assumed to be responsible for language learning. This faculty is supposed to consist of a series of information referred to as ‘principles and parameters’; principles are values that govern all languages of the world (like structure-dependency) and parameters refer to principles that vary in certain restricted ways from one language to another. Radford (1997) claims that these parameters are ‘binary’ *in* nature in all natural languages of the world.

However, in Farsi, the parameters of ‘Head’ and ‘Wh-movement’ seem not to conform to the values Radford claims to be of a binary nature. In this paper I will discuss the Head-position as well as Wh-movement parameters in Farsi and I will bring some counter-evidence to demonstrate that Radford’s description of the parameters as ‘binary’ and two-mode switches is doubtful.

Key Words: uniformity, rapidity, Language Acquisition Device, principles, parameters, head-position parameter, Wh-movement parameter, binarity.

I. Introduction

One of the fundamental questions which has occupied the minds of linguists, psycholinguists and philosophers is that “How does the human mind come effortlessly to acquire knowledge of such complexity in a relatively short period of time?” Chomsky (1972) maintains that the most plausible answer for this question is that human beings are endowed with a genetically transmitted mental faculty metaphorically termed as Language Acquisition Device (LAD) which is responsible for language learning. The hypothesis that much of the knowledge of language is built-in to the human mind rather than acquired is also known as the ‘innateness hypothesis’(Richards and Platt, J. and Platt, H., 1992) .



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If human beings are equipped with what Chomsky describes as LAD, the obvious question to ask will be, “What are the features and properties that characterize the nature of the language faculty?”

According to Radford (1997), the language faculty consists of a set of ‘principles of universal grammar (UG)’. Chomsky defines UG as “the system of principles, conditions and rules that are elements or properties of all human languages” (1976, P.29).

Subsequently, Chomsky(1981a) characterizes these universals as consisting of principles and parameters . Ellis(1994) defines principles as.... “ highly abstract properties of grammar which apply to language in general and which, therefore, underlie the grammatical rules of all specific languages” (p.430).An example for such a principle is ‘structure-dependency’ which claims that “grammatical operations are sensitive to grammatical structure, so that whether or not a particular grammatical operation can apply to a particular expression depends on the syntactic structure of the expression” (Radford, 1997, p.72). To elucidate the above definition let’s look at an example cited in (Johnson and Johnson, 1998, p.169):

*(1a) Is Sam is the cat that black?

(1b) Is Sam the cat that is black?

According to English grammar (1a) is impossible and (1b) is possible. Yet, they seem to have been constructed in very similar ways-i.e. by moving a copula *is* to the beginning of the sentence. Therefore, the rule for making questions in English does not merely state that an *is* must move to the beginning of the sentence; rather, it has to specify that only the copula *is* which is in the main clause can move to the front of the sentence; the rule depends on the structure of the expression-i.e. it is ‘structure-dependent’.

According to Radford, parameter is defined as “A dimension of grammatical variation between different languages or different varieties of the same language” (1997, p.267) .

That is, they take the form of a finite set of options which individual languages draw on and which define the variation possible between languages. Chomsky likens parameters to the array of switches found in a switch box (cited in Ellis, 1994). The language learner’s task is to see to which specific position the switch must be set. An example of a parameter is ‘pro-



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(3b) close the window (verb phrase)
 head complement

(3c) interested in drawing (adjective phrase)
 head complement

Since English consistently positions head before complements, it is a head-first language (Radford, 1997, p.19). He continues: “It the case of head parameter (i.e. the parameter which determines: the relative positioning of head with respect to the complement.), UG allows only a *binary* set of possibilities-namely, that a language may either be *consistently* head-first or *consistently* head-last” (ibid.) [emphasis is mine].

However, it seems that this is not true in case of Farsi regarding the position of heads in phrases. Farsi language does not position the heads consistently before or consistently after their complements. While in noun, prepositional, and adjective phrases heads *precede* their complements, in verb phrases head(verbs) *follow* their complements. Consider the following example:

(4a). daneshjoo₁ ye₂ zabaanshenaasi₃ [student₁ of₂ linguistics₃] (noun phrase)
 head complement

(4b). az₁ madreseh₂ [from₁ school₂] (prepositional phrase)
 head complement

(4c). alaaqemand₁ beh₂ varzesh₃ [interested₁ in₂ school₃] (adjectival phrase)
 head complement

(4d). qazaayat₁ boxor₂ [eat₁ your food₂] (verb phrase)
 complement head

(4e). naamehatra₁ xandam₂ [I read₂ your letter₁] (verb phrase)



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In the Farsi noun phrase (daneshjooye zabaanshenaasi) in (4a), the head noun (daneshjooye) precedes its complement (zabaanshenaasi) ; if we suppose that (daneshjooye zabaanshenaasi) is a noun phrase, then the head of the phrase (the noun = daneshjooye) precedes its complement (zabaanshenaasi) . Likewise, in the prepositional phrase (az madreseh) in (4b), the head preposition (az) precedes its complement (madreseh). In the same way, in the adjective phrase (alaaqemand beh varzesh) in (4c), the head adjective (alaaqemand) precedes its complement (beh varzesh) which is in turn a prepositional phrase in which the head preposition (beh) precedes its complement (varzesh). By contrast, we find exactly the opposite ordering in the verb phrases. In the verb phrase (qazaayatraa boxor) in (4d), unlike all of the other phrases, the head verb (boxor) *follows* its complement (qazaayatraa). Likewise, in the verb phrase (naamehatraa xaandam) in (4e), the head verb (xaandam) follows its complement (namehatraa).

Farsi, as is evident from the examples above, does not position heads consistently before or consistently after complements, i.e. regarding prepositional, adjective, and noun phrases it falls within head-first classification of languages whereas in case of verb phrases, it seems to be in the head-last classification.

This piece of evidence disproves Radford's claim that "This [*switch metaphor*] would preclude the possibility of languages having both head-first and head-last structures" (1997, p.21) [italics are mine].

In conclusion, we saw that the relative position of heads and complements is not consistent in Farsi and both structures (i.e. head-first and head-last) co-exist hand in hand . Thus, describing languages as either head-first or head-last seems to be an unrealistic generalization.

1.2. Wh-movement Parameter

Radford (1997) defines wh-parameter as "The parameter which determines whether wh-expressions can be fronted(i.e. moved o the front of the overall interrogative structure containing them) or not" (P.18). In English wh-movement is allowed and it is obligatory for



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(8a). raiisjomhoor₁ darmoredeh₂ {eslaahaate₃ siaasi₄}^asoxanraani₅ kardand₆. [President₁ on₂ {political₄ reforms₃}^bmade₆ speech₅.] (President made a speech on the political reforms.)

(8b). raiisjomhoor₁ darmoredeh₂ {chechizi₃}^asoxanraani₄ kardand₅? [President₁ on₂{what₃}^b made₅ speech₄? (what did the President make a speech on?)

(9a). ali₁ {beelate₂}^a bimaari₃ dar₄ xaaneh₅ maand₆. [Ali₁ {because of₂}^bsickness₃ at₄ home₅ stayed₆.] (Ali stayed at home because of sickness.)

(9b). ali₁ {cheraa₂}^a dar₃ xaaneh₄ maand₅? [Ali₁ {why₂}^b stayed₅ at₃ home₄?] (Why did Ali stay at home?)

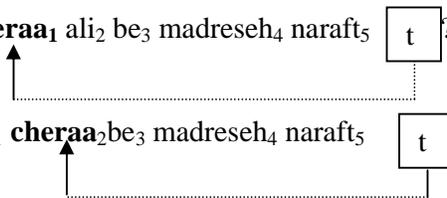
At the first glance one might wrongly conclude that Farsi consistently does not allow the wh-expressions (i.e., cheraa, kojaa, chehchizi, kei, etc.) to move and they systematically remain in situ. However, this is not the case with the use of (cheraa) in certain interrogative structures; for example:

(10a). ali₁ be₁madreseh₃ naraft₄ {chon₅ bimaar₆ bood₇}^a. [Ali₁ to₂ school₂ did not go₄ {because₅ he was₇ ill₆}^b.] (Ali did not go to school because he was ill.)

*(10b). ali₁ be₂ madreseh₃ naraft₄ {cheraa₅}^a? [Ali₁ to₂ school₃ did not go₄ {why₅}^b?] (Why did not Ali go to school?)

(10c). **cheraa₁** ali₂ be₃ madreseh₄ naraft₅ t? [**Why₁** Ali₂ to₃ school₄ did not go₅?]

(10d). ali **cheraa₂** be₃ madreseh₄ naraft₅ t? [Ali₁ **why₂** did not go₅ to₃ school₄?]





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If we delete the clause (*chon bimaar bood*) and replace it with the corresponding wh-expression (*cheraa*), following the no-wh-movement rule which was pointed to earlier, the ill-formed structure (10b) results. In this specific case, the wh-expression (*cheraa*) is not allowed to remain in situ by Farsi grammar and has to move either to the front or to immediately after the subject. Therefore, we can conclude that if the position of the wh-expression in the interim structure –i.e. after the related constituents are deleted and replaced with the appropriate wh-expression-is grammatically acceptable, the wh-expression will remain in situ, otherwise, it has to move.

Thus, in Farsi, for most of the wh-expressions in interrogative structures, apparently there is no wh-movement ,or, if there exists any, it is very limited. Nevertheless, in case of the wh-expression(*cheraa*), we saw that its movement to front of the structure or immediately after the subject was obligatory in certain structures. The case of wh-expression (*cheraa*) in Farsi, contrary to Radford’s claim that for wh-parameters there are only two possibilities: viz. a language does or does not allow wh-expressions to be systematically fronted, indicates that there may be some languages, including Farsi, in which both wh-movement and no-wh-movement principles are simultaneously operating.

II. Conclusion

The values of the head-position and wh-movement parameters do not seem to boil down to an either-or binary mode in Farsi and maybe some other natural languages; rather both of the values might be present in a language with one of them having the dominant role. There might be a sort of general tendency in languages toward one pole of the parametric values of a particular linguistic feature and these two values are not necessarily mutually exclusive.

2.1. Pedagogical Implications

“There is now clear evidence that the L1 acts as a major factor in L2 acquisition”(Ellis, 1994, p.343). The role of L1 in the process of L2 acquisition can be viewed from two major perspectives : cognitive and mentalist views which are discussed briefly below .



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Schachter (1983) seeing the issue from a cognitive standpoint contends that L1 as a part of the learners' existing knowledge, influences the specific hypothesis to be tested; it can contribute to both correct and incorrect hypotheses. In the mean time, it sounds quite reasonable to think that drawing learners' attention to the syntactic similarities and differences between L1 and L2 can possibly foster the learners' metalingual awareness of grammar and this, in turn, might lead them to formulate less deviant interlanguage rules. Moreover, consciousness raising resulting from the contrastive analogy of the L1 and L2 syntactic systems in specific areas can also prevent the L2 learners from constructing wild grammars, thereby, limiting the number of hypotheses to be formulated and tested.

Schmidt (1990) treats the issue in a different way. He claims that, "Interestingly, explicit knowledge is being viewed as a facilitator of implicit knowledge, by enabling learners to notice features in the input and compare them with their own interlanguage representations" (cited in Ellis, 1994, p.340).

The mentalist view which is almost exclusively associated with Chomskyan theories of language acquisition claims that much of the knowledge of language is built-in to the human mind rather than acquired (Chomsky,1992;Ellis,1997;Cook and Newson,1996).Although there is substantial controversy among scholars of SLA concerning the availability of UG principles contained in LAD in the process of L2 learning, some empirical researches show that adult L2 learners have continued access to UG (Bley-Vorman and Felix, and Loup, 1988). White (1990, p.131) claims that L2 learners *have* partial access to UG via their L1s (i.e. L2 learners do not have direct access to UG principles, rather, these principles are mediated through the learner's L1s).

The above discussion implies that L1 is no longer viewed as an interfering factor in the way of L2 acquisition, on the contrary, it is believed to play a fundamental role in the process of L2 acquisition by providing the learners with a basis upon which to build L2 knowledge structures.

In conclusion, language teachers can probably facilitate the process of L2 acquisition through focusing the learners' attention on the similarities and differences in the related grammatical features of the L1 and L2.



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