

فراگیری ساختارهای پرشی ساده زبان انگلیسی توسط گویشوران فارسی زبان و دوزبانانهای عرب و فارسی

دکتر منیژه یوحنايي * - زهره گونی بند شوشتری **

چکیده

این تحقیق بر آن است تا در افزایش سطح آگاهی علمی در حیطه نوپای فراگیری زبان سوم سهمی ایفا نماید. در این راستا مقاله حاضر، فراگیری دو خصیصه نحوی ساختارهای پرشی زبان انگلیسی را در چهارچوب نظریه دستوری جهانی بررسی نموده است. شرکت کنندگان در این تحقیق شامل ۱۴۴ نفر زبان آموز فارسی و عربی-فارسی هستند که بعد از تعیین سطح بندی زبان انگلیسی، به شش گروه تقسیم شدند و در دو آزمون ترجمه شفاهی و توضیح کتبی تصاویر شرکت جستند.

براساس نتایج به دست آمده از تحلیل داده ها تفاوت معناداری بین عملکرد زبانی زبان آموزان یک زبانه و دوزبانان انگلیسی مشاهده نگردید، اما عملکرد زبانی گروهها در سطوح بالای بسندگی تفاوت معناداری را با عملکرد زبانی گروهها در سطوح پایین بسندگی نشان می دهد. تفسیر نتایج از دیدگاه دو نظریه رایج نحوی در فراگیری زبان غیرمادری، حاکی از آن است که پارامترهای زبان دوم نیز می تواند همچون زبان اول در شکل گیری دانش نحوی زبان سوم مؤثر باشد.

واژه های کلیدی

فراگیری زبان، فرضیه نقصان مشخصه های مقوله های کارکردی، فرضیه انتقال کامل / دسترسی کامل، حرکت هسته، حرکت پرش واره.

1. Introduction

To date, the field of second language acquisition of syntax has been dominated by generative models, which despite their distinct views, share the assumption that grammar building in second language acquisition will be UG-constrained. For the majority of these models, L1 settings are claimed to be influential in the L2 learners' interlanguage

* - استادیار گروه زبان انگلیسی دانشگاه اصفهان.

** - دانشجوی دکتری آموزش زبان انگلیسی دانشگاه اصفهان.

grammar though there is considerable variation as to the extent of this effective role (White 1985, Smith & Tsimpli 1995, Schwartz & Sprouse 1996, Hawkins and Chan 1997). Alongside this trend in SLA, during the last decade, however, there has been an increased interest in a relatively under-explored field, namely, third language acquisition. Cenoz & Ulrike (2001) hold that learners who come into contact with a foreign language are not always monolinguals. Especially, for learners who are members of linguistic minorities in their countries, the acquisition of a language like English may take place in a multilingual situation which is linguistically more complex than the L1-L2 situation that has usually been considered in the SLA literature. Cook (1992) asserts that the language knowledge of multilinguals is not the same as that of monolinguals.

Iran sets a real example of those countries in which a good number of English learners especially in secondary and tertiary academic settings- are members of linguistic minorities like Arabic, Turkish, and Kurdish. These learners are bilinguals who acquire English as a third language. As such, these learners are assumed to develop unique interlanguage patterns as they possess a distinct type of language background. This reality along with the growing awareness that approaching language learning through the study of L2 alone seems to yield an incomplete picture of language learning (Vinnitskaya et.al. 2003) triggered the initiation of this study.

This paper then sets out to empirically substantiate the claim whether English L3 learners' distinct language background causes them to develop interlanguage patterns which are different or similar to those of monolingual learners of English. That is, the major question addressed in this study is the impact of the previously learned languages on the L3 interlanguage patterns and the extent to which the L3 learners' performance with regards to the syntactic features involved in the formation of English questions would be similar to or different from that of L2 learners, In this respect the role of the language background possessed by Arabic-Persian bilingual learners of English is investigated through a comparative study in light of the most recent syntactically- based generative models of L2A, namely, Full Access Full Transfer (FAFT) and the Failed Functional Feature Hypothesis (FFFH). Within this framework, the performance of the Arabic-Persian bilinguals on the English questions which involve the syntactic features of head and wh-movement is compared with that of Persian monolingual learners at three levels of proficiency. This comparative study may help to demonstrate whether L3A is different from L2A or it is simply another case of L2A.

2. Theoretical Framework

The Failed Functional Feature Hypothesis (Hawkins, 2001; Hawkins & Chan, 1997) is a particular version of the No Parameter Resetting. This proposal predicts that interlanguage grammars will be confined to L1 feature values, even if there is ample positive evidence to motivate resetting. That is to say, the parameterized properties that are not instantiated in L1 are not available in L2 interlanguage. The logical extension of this prediction to L3A should be that parameterized properties not instantiated in L1 will never be acquired in L3 initial state. The general prediction of FFFH on L3/Ln acquisition implies that persistent L1 transfer effects from the initial state all through to the final state of L3/Ln cause the failure of eventual attainment of target language parameters.

The proponents of Full Access Full Transfer Hypothesis (Schwartz & Sprouse, 1996) propose that the entire L1 grammar (in the sense of all abstract properties) constitutes the initial state in L2A. Furthermore, it is hypothesized that changes to the initial grammar can take place; that is to say, the L2 learners are not confined to representations based on L1 steady state. In fact, the L2 learner has recourse to UG options not instantiated in the L1, including new parameter settings for functional categories and their feature values. Full access, then, is their claim about subsequent grammar restructuring during the course of development. Applying the model to L3/Ln acquisition, full transfer is predicted in the L3/Ln initial state but the source is not restricted to L1. In other words, it can be claimed that transfer in L3 does not necessarily come from L1 alone and the parameterized properties are ultimately acquirable in L2/L3/Ln final states.

3. Linguistic Assumptions

3.1. The structure of English questions

Following Chomsky (1995 and Radford, 1996) we assume that English interrogative clauses are complementizer phrases (CPs) headed by a strong COMP (C) which contains the strong question affix [Q]. The strong Q affix needs an overt head to attach to. The shortest movement principle requires that this head must be the auxiliary in I. That is, auxiliary moves from the head I position in IP into the Head C position in CP. Since Q also carries a [wh] specifier-feature, the wh-operators move to spec-CP in order to check the interrogative specifier –feature carried by Q. Thus, the two properties of [Q] in English demand two types of movements: head movement to (C position) and operator movement to (spec-CP position).

- 1 What did John buy?
 [_{CP} what_i [_C did_j +Q [_{IP} John t_j [_{VP} t_j buy t_i]]]]

Such movement or extraction of wh-phrases can also take place from embedded clauses:

- 2 Who did Freda discover bought a big guitar?
 [_{CP} who_i [_C did_j [_{IP} Freda t_j discover [_{IP} t_i bought a big guitar]]]]

In main yes/no questions, the [+Q] feature is checked by a null operator in the specifier position. And the [+affixal] property of [Q] imposes Aux-movement.

- 3 Will you marry me?
 [_{CP} Q [_C will_i [_{IP} you t_i marry me]]

3.2. The structure of Persian questions

In the formation of yes/no questions in Persian, the yes-no particle *aayaa* is used in formal register, yet it could be covert in informal language. The most common position of this particle is clause-initial. That is, the question particle *aayaa* is inserted in the front position (spec-CP) (Kahnemuyipour, 2001).

- 4 [CP aayaa [IP raisjomhur naamera be naxostvazir daa-d]]
 Q president letter-Acc to prime minister give-past
 (Did the president give the letter to the Prime minister?)

Persian is a wh-in-situ language; that is, wh-expressions do not get preposed, but rather occur in their base position (Karimi 1989; Lazard 1992; Raghidoost 1994; Bateni 1995 Mahootian 1997, Youhanaee 1997).

- 5 ali ye kitab xari-d
 Ali a book buy- past

(Ali bought a book.)

- 6 ali chi xari-d
 Ali what buy-past

(What did Ali buy?)

- 7 ali hasan-o za-d
 Ali Hassan-Acc hit-past
 (Ali hit Hassan.)

- 8 ali ki-yo zad
 Ali who-Acc hit-past

(Who did Ali hit?)

3.3. Question formation in Arabic

Similar to Persian in the formation of Arabic yes/no questions C bears [Q] and a question particle (hal) is inserted in the front position (Spec-CP)

- 9 yaqru ahmed al-gasedata
 reads Ahmed the- poem

(Amhad reads the poem.)

- 10 hal yaqru ahmed al-gasedata?
 Q reads Ahmed the-poem

(Does Ahmed read he poem?)

The formation of wh-questions in Arabic is similar to English in that in both languages the syntactic movement of wh-phrase to (Spec-CP) is realized. In Arabic C bears Q and [wh]. The strong [wh] in C triggers the wh-phrase to move to Spec-CP (Benmamoun, 2000; Al-Eid, 2006, P.C.)

- 11 yaqru ahmed al-gasedata
reads Ahmed the-poem

(Ahmad reads the poem.)

- 12 maatha yaqru ahmed?
what reads Ahmed?

(What does Ahmed read?)

The above account of question formation in English, Persian and Arabic highlights marked parametric differences and similarities among the three languages concerning the formation of interrogative constructions. As for English and Persian, the latter is a wh-in-situ language but English involves the syntactic wh-movement to Spec-CP and head movement from I to C. On the other hand, Arabic turns to be similar to English in that the formation of wh-questions in Arabic involves the movement of wh-phrase to Spec-CP, but C remains empty. Concerning the formation of yes/no questions in these languages, English is different from Persian and Arabic in that English yes/no questions involve a head to head movement from I to C but in the other two languages the inserting of the Q particle does not require any syntactic changes. That is to say, in Arabic and Persian the question particle is base generated in spec-CP but C remains empty.

4. Generative studies on third language acquisition

Trilingualism has been prominently tapped on within the general context of cross-linguistic influence. However, few studies have ever investigated the syntactic architecture of the initial and subsequent grammars of L3A and the extent to which it is similar to or different from L2A. Vinnitskaya, et al. studied 33 adult Kazakh L3 speakers of English who had all acquired Russian as an L2 before acquiring English as an L3. Unlike Kazakh, Russian is a head-initial branching language similar to English. In general the results suggested no privileged role for the L1. Leung (2003) investigated the acquisition of the formal features associated with the functional category T (Tense), namely, finiteness, agreement and [+/-past] in French as L3 Vs. L2 by Cantonese-English bilinguals and Vietnamese monolinguals. Extending the predictions of the two current L2A competing models namely, the Failed Functional Feature Hypothesis (FFFH) and the Full Transfer Full Access (FTFA) to L3A, it was hypothesized that a) according to FFFH, the L3 French initial state is to be L1 Chinese final state. That is, [T] and the associated features of [+/-finiteness], agreement and [+/-past] should be absent in L3 French interlanguage b) according to FTFA, no such specific prediction could be extended and L1 or L2 final states can both compete in the initial stages of L3 acquisition.

In general, the results on the L3 experimental group supported the presence of the L2 English steady state in the L3 French initial state. The data were inconsistent with FFFH which predicted the L3 French initial state to be L1 Chinese.

As stated by Leung (2003), there are few comparative studies that have investigated different combinations of source/target languages with respect to some grammatical property to find out about the route of L3 development within a generative framework.

Accordingly, it seems worthwhile to pursue generative L3A further by looking at other syntactic properties across different L3 populations.

5. The focus of the present study

Based on the theoretical framework presented in section 2 and the parametric similarities and differences among the three languages of Persian, Arabic and English, the present study addresses the following questions in order to accumulate the relevant evidence. Given sufficient exposure to target English:

- I. Do Arabic- Persian bilinguals outperform Persian monolinguals in the formation of yes/no and simple wh-questions due to the similar grammatical features in Arabic and English?
- II. Does knowledge of the second language(Persian) affect the acquisition of and the developmental processes of the third language (English) by Arabic L1 speakers?

These questions have been formulated in the following hypotheses:

- 1) Arabic-Persian bilinguals would acquire English head and operator movements faster and better than Persian monolinguals.
- 2) The knowledge of a second language would not affect the acquisition of a third language.

5.1. The participants

The study was undertaken among second and third language learners of English in Khuzestan. The primary population included Arabic-Persian bilingual and Persian monolingual learners of English who were university students majoring in English language and literature. A brief oral interview was conducted to check on the language background of the Arabic-Persian bilinguals. This interview helped the selection of those bilingual learners who were raised in a linguistic community where both parents were Arabs and they used Arabic among the family and local Arabic linguistic community members. The Arabic-Persian learners use Persian extensively in their every day life. So they were advanced or near native speakers of Persian too. The final selection of the monolingual and bilingual learners of English was based on their performance on Michigan English language proficiency test (Briggs et.al. 1997). This was a multiple – choice test consisting of three sections: grammar section with 40 items, vocabulary section with 40 items and a reading part with 20 items. Hence the maximum total possible score was 100.

The results of performing an ANOVA on the scores of proficiency test revealed that the six groups performed significantly different from each other ($F= 382.301$, $P= .000$). Also, the results of a post hoc Scheffe test indicated that the elementary L1 & L2 groups performed significantly different from both intermediate and advanced groups; Moreover, the intermediate L1 & L2 learners performed significantly lower than advanced L1 & L2 groups.

Following the administration of the general proficiency test, the monolingual and bilingual speakers were assigned to three proficiency bands which resulted in six groups of participants: two elementary monolingual and bilingual groups, each consisting of thirty members; two intermediate monolingual and bilingual groups, each consisting of thirty members and two advanced groups, each including twelve members.

5.2. The material

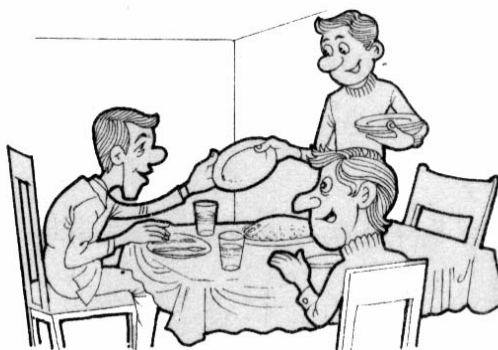
Two tasks were used in this study. The first one was an oral translation task and the other was a picture description task. The rationale behind using these two tasks was to check the participants' performance in two different modalities and see if focus on form in the written task would cause any significant change in the L2 & L3 learners' performance on the syntactic properties under investigation. The oral translation task consisted of two versions the first of which included 10 yes/no questions and 36 wh-questions in Persian to be translated into English by L2 learners. The second, included the same number and types of questions in Arabic to be translated into English by the L3 learners. In addition to target sentences, the task included 30 distracter sentences with a variety of structures. The picture description test consisted of 13 pictures each invoking a simple wh-question. Sample test items of each task are given below:

Translation task

۱. محمد به چه کسی نامه خواهد نوشت (زبان اول فارسی)

۱. من یکاتبه محمد؟ (زبان اول عربی)

Picture description task



5.3. The procedure

One week after the participants completed the general proficiency test, the picture description test was given to them. Before they started, clear instruction was given concerning the time limit and the way to perform the task. Also they were not allowed to return to previous items and to change their answers while doing the test. The test took twenty five minutes.

One week later, the oral translation task was conducted. To ensure optimal performance, attempts were made to provide a relaxing testing environment. The administrator read each of the written questions aloud to the individual testee at normal rate of speech; then the learner's oral translation of the heard question into English was

tape recorded. Each question sentence was read only once and the participants were asked to translate it as quickly as possible without paying any attention to the form. Each correct translation /response for the tasks received 1 mark. And each wrong response or no response was given a score of zero. Lexical errors were ignored as they were not of any importance to this study.

5.4. Results

To arrive at plausible answers to research questions the results of the oral translation and picture description tests are presented in turn. To begin with, Table (1) exhibits the mean percentages the learners obtained on the oral translation task:

Table 1. Mean accuracy scores on the oral translation task

Groups		(%)
Elementary	Bilingual	60
	Monolingual	58
Intermediate	Bilingual	86
	Monolingual	84
Advanced	Bilingual	97
	monolingual	98

As shown in Table (1), at the elementary and intermediate levels the monolinguals and bilinguals performed similarly, though the bilinguals were slightly more accurate than their monolingual counterparts. The advanced L2 & L3 learners obtained the same and the highest mean percentages on the oral translation task. The results of an ANOVA performed on the scores of oral translation task indicated significant differences between the groups ($F = 72.44$, $p = .000$). Multiple comparisons of post hoc Scheffe test showed that the elementary L2 & L3 learners performed significantly different from both intermediate and advanced L2 and L3 learners. Moreover, the intermediate monolinguals and bilinguals performed differently from advanced L2 & L3 learners.

Having presented the overall results of the oral translation task, the next table is a display of the L2 & L3 learners' performance on the oral translation of yes/no questions which mainly involve auxiliary raising in English interrogative constructions.

Table 2. Mean accuracy scores of yes/no questions on the oral translation task

Groups		(%)
Elementary	Bilingual	85
	Monolingual	87
Intermediate	Bilingual	98
	Monolingual	98
Advanced	Bilingual	100
	monolingual	100

As shown in table (2), the six groups' overall performance on yes/no questions seems quite good as the range of mean percentages across the elementary, intermediate

and advanced L2 & L3 groups is not very great (85- 100). However, the upper levels L2 & L3 learners turned to be significantly more accurate than the elementary groups. In particular, the advanced groups performed native-like on the acquisition of the main property of English yes/no questions. The results of performing an ANOVA showed that the six groups performed significantly different on oral yes/no questions ($F= 13.47$, $P= 0.00$). According to the results of post hoc Scheffe, significant differences were found between the performances of L2 & L3 elementary groups and those of intermediate and advanced L2 & L3 learners on responding to oral yes/no questions.

We now consider the participants' performance on the oral translation of wh-questions.

Table 3. Mean accuracy scores of wh- questions on the oral translation task

Groups		(%)
Elementary	Bilingual	52
	Monolingual	48
Intermediate	Bilingual	80
	Monolingual	81
Advanced	Bilingual	97
	monolingual	98

These scores indicate that at each level of proficiency the L2 & L3 learners obtained nearly the same mean percentages; however, at the elementary level the bilingual learners performed slightly better than their monolingual counterparts. The advanced L2 and L3 learners obtained the same and the highest mean percentages among the six groups. The results of ANOVA revealed that there were significant differences across the L2 & L3 groups on the oral translation of wh- questions ($F: 57.69$, $P: 0.00$). Multiple comparisons of scheffe test indicated that the elementary bilinguals and monolinguals performed significantly different from the intermediate and advanced L2 & L3 English learners. Besides, the intermediate L2 & L3 learners performed significantly different from the advanced monolinguals and bilinguals.

To inspect the effect of the change of modality on the L2 and L3 learners' performance, the next table presents the mean percentages the L2 & L3 learners obtained on the wh-questions in the picture description task.

Table 4. Mean accuracy scores of wh- question in the picture description task

Groups		(%)
Elementary	Bilingual	62
	Monolingual	57
Intermediate	Bilingual	88
	Monolingual	89
Advanced	Bilingual	97
	monolingual	99

As it is shown in table (4), the intermediate and advanced L2 & L3 learners obtained almost the same mean percentages. And at the elementary level the

monolinguals' and bilinguals' mean scores on wh-questions were close to each other while elementary bilinguals got a slightly higher mean percentage than the elementary monolinguals. According to the results of an ANOVA, significant differences were found across the performances of the six L2 & L3 learners on the wh-questions in the picture description task ($F= 87.61$, $P= 0.00$). The results of post hoc Scheffe located the significant differences between the performances of the elementary L2 & L3 learners and the performances of intermediate and advanced monolinguals and bilinguals.

6. Discussion

In this study we have sought to test whether the predictions of particular syntactically-based L2A theories, namely, The Failed Functional Feature and Full Access Full Transfer Hypotheses about the impact of previously learned language(s) on the target language provide insights into the acquisition of wh-movement and auxiliary raising operative in English questions by Arabic-Persian bilinguals and Persian monolingual learners at three levels of proficiency.

The results obtained using the oral translation and picture description tests with monolingual and bilingual learners of English at different levels of proficiency are compatible with FAFT theory but failed to support the FFFH stand point. The main justification for this claim is the overall finding that Arabic-Persian bilinguals, despite their potential superiority, did not significantly outperform their monolingual counterparts.

To be more concrete, in the first place, the overall results of the oral translation task revealed that at each level of proficiency, the bilingual and monolingual learners did not perform significantly different from each other with respect to the resetting of the two parameters of head & operator movements. That is to say, at the elementary level the L3 & L2 learners performed similarly to each other. This finding seems to contradict the prediction of FFFH model which claims that L2 learners have access only to those functional features instantiated in their L1. The extension of this claim to L3/Ln situation implies that the L1 steady state partially affects the L3/Ln interlanguage patterns in case the L1 and subsequent languages do not share the same parameter settings. It follows that if L1 had an exclusive role in the acquisition of language(s) other than the first, the Arabic-Persian bilinguals would have outperformed their monolingual counterparts as the former enjoys a first language background which is partly similar to English in the formation of wh-questions. As it was explained in section 3, Arabic language –similar to English but unlike Persian- is endowed with syntactic wh-movement since an interrogative C has a strong [wh] feature which triggers the wh-phrase to move to spec-CP. Accordingly, the Arab-bilingual learners should experience less difficulty, at least at the outset, in deriving wh-questions by means of operator movement compared with Persian monolinguals whose first language lacks a strong C. However, it was observed that the former did not outperform the latter in the formation of wh-questions at the elementary level. So, this finding seems to be in accordance with the predictions of (FTFA) hypothesis if L2 transfer is hypothesized. L3 learners did not perform significantly higher than L2 learners as their interlanguage grammar seemed to reflect more of the parameter values of their L2, Persian, which is a wh-in situ language. This constitutes evidence in support of full transfer of FAFT Hypothesis which assumes the

possibility of L2 Transfer in addition to L1 transfer, which explains why the elementary groups performed similarly in spite of different L1 settings.

The overall results of both tasks also showed that at the intermediate and advanced levels the bilingual and monolingual learners performed similarly. And the average group means obtained by the intermediate and advanced L3 & L2 learners were quite high (intermediate L2 & L3 %85; advanced L3 & L2 %97). These findings highlight two important facts. First, the interlanguage patterns of the L3 learners beyond the initial state are not significantly different from the L2 learners' grammar with respect to the [+wh]. This implies that the L3 learners' grammar at upper levels did not show considerable improvement against L2 learners' grammar suggesting that L3 learners did not benefit much from their distinct language background beyond the elementary level. Second, the high degree of accuracy on both tasks at upper levels indicates the possibility of the restructuring of the interlanguage grammars and their approximation toward the target language grammar. These interpretations appear to attest to the extension of the predictions of Full Transfer Full Access Hypothesis to L3/n learning situation which hold that restructuring of the interlanguage grammars is possible beyond the initial stage of L2/Ln learning. Therefore, the L2/Ln learners can eventually reset the target Language values in response to L2/Ln input and due to the accessibility of U.G constraints.

Moreover, the overall results of the oral translation and picture description tasks demonstrated significant differences across the levels of proficiency. That is to say, the elementary L2 & L3 learners performed significantly lower than both the intermediate and advanced groups. Also, the advanced groups performed significantly higher than the intermediate groups. This evidence may suggest that L2&L3 learners were progressively more accurate as exposure to English increased. In other words, their accuracy on the mentioned properties increased with proficiency and aided the restructuring of L2/L3 grammars. This finding turns to be counter evidence to the claim of FFFH which purports that while the L2 /Ln grammar is not impaired, no development is possible in the sense of grammar restructuring (Hawkins and Chan 1997).

One marginal point derived from the results of wh-questions in the mentioned tasks is that in picture description task, the L2&L3 learners especially at the elementary level were more accurate than in the oral translation. Also in the same task the intermediate groups performed similarly to the advanced groups while in oral translation the former was significantly less accurate than the latter. This might suggest that in the picture description task the participants had the chance to "focus on form" and this in turn aided them to respond more accurately.

7. Conclusion

With regard to the role of language background in L3A, the overall results of the study led to the conclusion that the bilingual learners did not take full advantage of their distinct language background as their performance did not outweigh that of the monolingual learners. The L3 learners were presupposed to benefit from their unique language experience at least at the initial stages due to the parametric similarity between the target language, English, and their first language Arabic.

It has been argued that having a language background which is typologically distant or close to the target language would greatly affect the L2/L3 learners' interlanguage patterns (Cenoz & Ulrike, 2001; Ecker, 2001). Here in the case of Arab-Persian

bilinguals, the typological distance in terms of the lack of congruent structures between their first and second languages and English as their third language concerning some of the properties under investigation, seemed to override the positive effect of their unique language experience and caused them not to perform significantly higher than their monolingual counterparts.

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