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# The Acquisition of English Interrogative Structures in the Light of L2 Generative Models: The Case of Monolingual Persian and Bilingual Kurdish-Persian Speakers

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## **Abstract**

This study investigates the interaction of L1, L2, and L3 in the acquisition of English interrogative structures by Persian monolinguals and Kurdish-Persian Bilinguals across different levels of language proficiency in light of generative UG models (Full Transfer Full Access (FA/FT), Representational Deficit Hypothesis (RDH), Shallow Structure Hypothesis, Direct Access (DA), Missing Surface Inflection Hypothesis (MSIH), and Modulated Structure Building Hypothesis (MBSH). The participants were 108 learners, including Persian monolinguals and Kurdish-Persian bilinguals, assigned to lower intermediate, upper-intermediate, and advanced proficiency levels. The participants were then given two experimental tests (GJTandTT), to analyze the data; the inferential Statistics of ANOVA and Post hoc Scheffe tests were employed. The results indicated no significant difference between the performances of monolinguals and bilinguals at each level of language proficiency, yet the difference was statistically significant across proficiency levels; also, no single generative hypothesis can offer a comprehensive explanation of the whole process of L2 and L3 interrogative language acquisition. The results support the predictions made by FT/FA, DA, and MBSH and contradict with the predictions made by RDH, MSIH, and SSH.

Keywords: FA/FT • Persian monolinguals • Kurdish-Persian bilinguals • Generative hypothesis

# Introduction

In the recent decade, several studies have been written on second (or further) language acquisition [1-6]. The field of cross-linguistic influence on non-first language acquisition asserts a form of transfer from L1 and L2 to the language produced by L3 learners. Universal Grammar-based hypotheses of SLA, such as Representational Deficit Hypothesis (RDH), Missing Surface Inflectional Hypothesis (MSIH), Full Transfer/Full Access hypothesis (FT/FA), Modulated Structure Building Hypothesis (MSBH), have various predictions about the mechanism of interaction between L1 and L2. Various and even contradictory findings in previous studies, along with the complex nature of language acquisition in general and nonprimary language learning, led the researchers to the idea that no single theory can offer a comprehensive explanation about the whole process of language acquisition/learning. Any distinctive theory can offer a different understanding of the complex process of language acquisition. The current study cross-linguistically investigated the learning of interrogative structures of yes/no questions (simple present and simple past) in light of (the UG framework) the most recent non-first language learning theories mentioned above: RDH, MSIH, FT/FA, DA, SSH, and MSBH. The primary purpose of the present paper was that understanding the process of second and third language acquisition and the variation observed in these processes will provide a parameter perspective on the mental processes encompassed in language acquisition. As a result, this study may contribute to a better understanding of language learning in general and multilingualism in particular.

## **Literature Review**

Research has shown that a tremendous challenge to SLA various variables cause cross-linguistic influence and individual variables play a substantial mediation role in general, and L3A in particular [6-15]. According to the studies the discussion of L3 acquisition, the consensus is that the

significance of L3 transfers is due to low L3 proficiency (citation required) [8,11,16,17]. An alternative complex factor in first and second language distinction concerning transfer is that for many multilingual, the first language is not necessarily the dominant language. Therefore, there is no clear relationship between the level of proficiency and order of acquisition [15].

## The present study and research questions

The current research is significant in a number of ways. First, it helps expand the scope of UG-based accounts for a better understanding of the language learning process in general and multilingualism in particular. Second, the results propose that having multiple mental grammars would facilitate multilingualism and having knowledge of the system of several languages may help the learning of subsequent languages. Third, the results help develop an inter language theory as the pieces of the evidence obtained the (dis)confirmation of the most recent theoretical approaches (namely FT/FA, RDH, MSIH, DA, MSBH, and SSH).

The present study aims to address the following questions:

- 1. If the L1, L2 and L3 differ in the syntactic features of the interrogative sentences, are the Persian monolingual and the Kurdish-Persian bilingual learners of English able to use and reset the parametric values of the L1 in their L2 and L3?
- 2. According to the research results, which assumptions of the generative theories of the second language are approved or rejected?
- 3. Is there any similarity/difference between Persian monolingual and Kurdish-Persian bilingual learners in the acquisition of English language interrogative structures?
- 4. Does the proficiency level of the target language in learning interrogative sentences by Persian monolingual and Kurdish-Persian bilingual learners of English affects the performance of syntactic features of interrogative structures?

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#### The theoretical framework

The current research attempts to test the most recent generative models and theories of SLA (FT/FA, RDH, DA, MSIH, MSBH, and SSH), L2A and L3A, on the issue of language transfer, the UG-based hypothesis, and non-first language learning.

The FT/FA proposed by Schwartz and White assumes that learners' L1 grammar, including the L1 parameter settings constitutes the initial state of L2A (full transfer) and UG is fully accessed during L2A when inter language is needed to restructure grammar. Hence, this makes it possible to reset the parameters during the L2A (full access) [5,16-20].

The DA hypothesis argues that advanced L2 learners acquire both the surface and underlying structure in English interrogative structures (yes/no question) and parameters of TL, whether these L2 structures differ from their L1 structures and parameters [21]. With the more input, the more native-like performance can be attained, the current paper's goal and transfer can be overcome.

The RDH claims that there is a critical period for the acquisition of functional features that L2 structures and parameters differ from their L1 structures and parameters [22]. An adult L2/L3 learner cannot learn a new functional feature. If considered functional feature does not seem to be instantiated in his/her L1, and second language learners are limited accesses to the list of syntactic features of their L1. I.e., RDH predicts that IL grammars will be confined to L1 feature values, even if there was ample evidence to motivate resetting. In the case of adult SLA, parameterized formal features, which are present in the L2 but not selected in the learner's L1, are hypothesized to be acquirable due to the critical period effects.

The MSIH is introduced in significant studies such as Lardiere, Prevost, Ionin and White maintains that a certain subcomponent of UG could be the locus of the observed differences in adults L1, L2, and L3 grammars [5,23-28]. The MSIH has explained this subcomponent of UG to be the morphological module. It is a gap in the mapping between syntax and morphology, which causes various forms to be produced by L2 and L3 speakers. It has been claimed by Proponents of the MSIH that the varied use of the grammatical morphemes could be due mainly to the incapability of accessing the correct morph-phonological form in speech production post syntax, then the presence of developmental principles characterizing the varied use of morphology by L2/L3 learners as a mapping problem between functional features in the syntax and the proportionate forms in the lexicon [23,25-31]. Accordingly, L2/L3 learners not only have unconscious knowledge of functional projections and features but also have problems with the realization of the correct surface morphology. Learner's problems at the initial state will not disappear in final states due to these mapping problems.

Another hypothesis pertaining to SLA presented by Clahsen is the SSH explaining that as long as native speakers use the syntactic and lexical information to process features, second and third language learners utilize a lexically driven strategy also underuse syntactic structure in their processing of these features regardless of their structure in the L1 [32]. The SSH remarks that L2/L3 learners will be incapable of acquiring these features (whether their L1 properties are similar or different from the L2) in English regardless of their L1 structures.

Based on MSBH consists of principles of lexical projection like VP, NP, AP, PP, and these projections have the structural properties of their L1 grammars. That is, in the initial state, non-primary language learners categorize words into lexical categories N, V, A, P, and their phrasal projections into VP, NP, AP, and PP. In other words, in the 'initial stats,' learners rely mostly on words and the syntax of phrases [22,33]. In the 'transitional state,' then they acquire words in L2, which are realizations of functional categories, e.g., I,C,D, and their phrasal projections IP, CP, DP, and the bound morphology, which accompanies this functional development. The noticeable opinion that L2/L3 learners have begun L2 and by extension L3 mental grammars with lexical projections and subsequently add up functional categories on the basis of the positive evidence from L2 and L3 is

the structure building part of hypothesis and the idea that structure building is influenced by properties of L1 at the relevant point in the construction of grammar and not before is the 'Modulated' part of the theory. So, based on this model, learning starts with lexical projections in principle and then followed by structural projections by the L1.

#### **Linguistics assumptions**

Persian question word order (yes/no question formation): In English, for making a question, we must reverse the subject and verb. Alternatively, we add "Do-support." In Persian, question word order differs from that of English. The Persian question word (question particle (aayaa)) is posed at the beginning of the sentence (in the front position (spec-CP)) [34]. Notice that there is no change in word order, and by changing the tense of the sentence and verb, the question word does not change the yes-no particle aayaa is applied informal register, yet it could be covert in informal language [35,36]. In Persian yes/no questions, the word order is often the same as in statements. Merely a question intonation is applied to differentiate. The voice intonation rises, rather than falls.

Kurdish question word order (yes/no question formation): Dissimilar to formal Persian in the formation of Kurdish interrogative structure (yes/no, questions), C bears null (Q), and no question particle is set in the front position (Spec-CP). Thus, to change a statement into a question in informal speech, the sentence remains without any change in the sentence structure, while rising the tone at the end is enough to change the statement into an interrogative sentential.

Do-support (Do insertion): In Present-day English, Do-support (a parameter of the principles and parameters approach in the Minimalist Program (MP)) is required in yes/no questions, non-subject Wh questions, and in negative forms (simple present and simple past); but prohibited for 'be' and auxiliary verbs. DO-Support is due to the presence of a particular null question, complementizer Ø (+Q). In English interrogative structure transformation, a verbal element must move to C<sub>0</sub>. Auxiliary verbs in yes/ no questions undertake category movement to T<sub>0</sub>, and then they further move to C<sub>0</sub>. On the other hand, in interrogative sentences, lexical verbs are stuck in situ, and the loss of M-T movement leads to do-support, and  $D_0$  moves through  $M_0$  and  $T_0$  to  $C_0$  to check the appropriate features. In other words, when there is not another option for supporting inflectional affixes, Do-support occurs. Hence, the dummy verb Do is inserted into T. This rule applies only in the case that there is nothing else you can do (Ø simple past and Ø simple present). You only apply them when you have to and when no movement transformation can apply. In several languages (such as Persian and Kurdish), yes/no questions are not indicated with subject-aux inversion in sentences with no auxiliary. Conversely, we insert a dummy (meaningless) auxiliary in yes/no questions in English interrogative sentences. This is contradictoriness in Persian and Kurdish, T has to rise to C, but there is nothing in it because, unlike sentences with auxiliaries, nothing has raised to this position [37-54].

Inversion: Many studies have been done on inversion parameter which is known as TC movement, or subject-aux inversion. In yes/no questions in English, auxiliary verbs are inverted with their subject [37-44]. However, in many other languages, interrogative structure (yes/no questions) is constructed with a complementizer particle that precedes the verb [49-51]. This inversion process involves the leftward movement of the verb over the subject rather than the rightward movement of the subject over the verb. Adopting the extension of X-bar theory to non-lexical categories proposed in Chomsky [39] and the theory of the head-to-head movement of Blake [37] this process can be seen as raising of the inflected verb from I° to C° [55] as for the overall typology of (obligatory) subject-verb inversion, it will be noted that obligatory inversion is obtained initially, by the movement of the verb to C when C (+Q) is a bound affix, subsequently, by C-verb group adjacency when C (+Q) is a particle. Of course, a third option is also realized. Accordingly, C (+Q) is an autonomous head, i.e., an interrogative complementizer. In the latest theories of generative grammar, the term Head movement is used instead of inversion.

**Pro-drop:** Languages such as Persian and Kurdish have a property (omit subject pronouns), which is attributed to such a parameter known as pro-drop [55,56]. English is not a pro-drop language (-PD) and does not show this clustering of properties [43,44,46,49,50,52,53,55-62]. Although unlike English, Persian and Kurdish are pro-drop languages (+PD), the pro-drop parameter has some properties in the following sentence:

#### (1) Did you go to university? (English)

In English, an interesting effect emerges when we try to question a sentence with no auxiliary. To form interrogative structures (yes/no questions) in English sentences with no auxiliary, we insert a dummy auxiliary at the beginning of the sentences. In other words, when there is no other option for supporting inflectional affixes, insert the dummy verb Do into T. Also, we have no pro-drop option in the English interrogative structure. In formal English, the presence of the subject is obligatory. As illustrated in Figure 1.

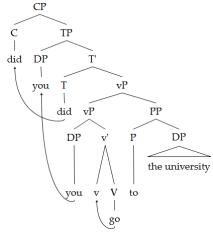


Figure 1. Do insertion, no pro-drop subject, movement and inversion.

- (1) Āyā dānešğahrafti? (Formal Persian)
- (2) Question word. Null subject (pro-drop). University. (simple past go) went?

Interrogative structures in formal Persian are also different from that of English. In the formation of interrogative structure (yes/no questions) in Persian, the question word (aayaa) is inserted at the beginning of the sentence. Notice that there is no change in word order. This means DP has no movement. Besides, by changing the tense of the sentence and verb, the question word does not change, but in English, we add 'do-support,' and we often reverse the subject and verb to make a question. As shown in Figure 2.

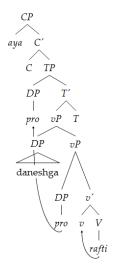


Figure 2. Pro-drop subject, no movement and no inversion.

- (1) Dānešğah rafti? (informal Persian)
- (2) Null question word. Null subject (weaker). University. (Simple Past go) went?

Interrogative structure in informal Persian is also different from that of formal Persian. In the formation of an interrogative structure (yes/no questions) in Persian, the question word (aayaa) is inserted at the beginning of the sentence with no change in word order and no change in the tense. In other words, there is no inversion and do insertion in informal interrogative sentences, but in informal Persian (which is pro-drop), we often omit the subject (NP) to make an informal question. As shown in Figure 3.

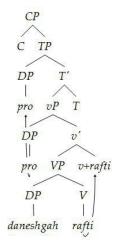


Figure 3. No do insertion (null question word), weaker subject, no movement and no inversion.

- (1) Dānešğah Çid? (Kurdish)
- (2) Null question word. Null subject (pro-drop). University. (Simple Past go) went?

To make a statement into both "formal" and informal interrogative sentences (yes/no, questions) in Kurdish, C bears null (Q), and no question particle is inserted in the front position (Spec-CP). Also, there is no inversion, but the pro-drop parameter value resets in Kurdish. The subject (NP) pronoun is omitted, but the sentence remains without any change to its structure, while raising the tone at the end is enough to make the statement a question. As shown in Figure 4.

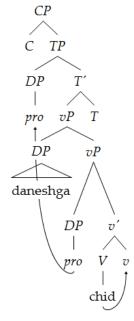


Figure 4. No do insertion (null question word), pro-drop subject, no movement and no inversion

#### (1) Do the women come? (English)

In this English sentence, to form an interrogative structure (yes/no questions), we insert a dummy (meaningless) auxiliary (do) at the beginning of the sentence. Besides, there is no pro-drop; in formal English, the presence of the subject is obligatory. Merely inversion and do support occur in this English interrogative sentence. In other words, in this example of English yes/no questions, the main verb (come) does not rise to T. The transformation of T to C movement forces the same T to rise. This is a contradiction: T has to rise to C, but there is nothing in it because, unlike sentences with auxiliaries, nothing (null auxiliary) has risen to this position. The phenomenon of do-support parameter value appears to be an escape hatch for T. If we insert a dummy (contentless) auxiliary to fill T, then this dummy can undergo the T-C movement. As illustrated in Figure 5.

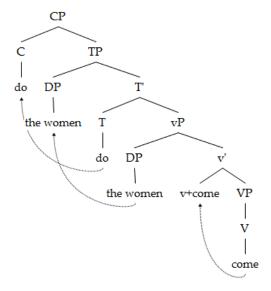


Figure 5 Do insertion, movement and inversion.

- (1) Āyā Zan hā Āmadand? (formal Persian)
- (2) Question word. Women (subj). Come (V)?

In the above interrogative structure (yes/no questions) that occurs in formal Persian, the question word (aayaa) is inserted at the beginning of the sentence. Thus, there is no change in word order, and by changing the tense of the sentence and the verb, the question word does not change. As shown in Figure 6.

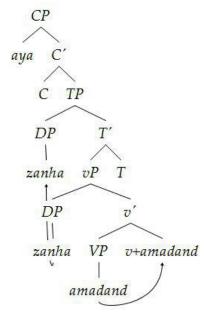


Figure 6. Question word, no movement and no inversion.

- (1) Zan hā Āmadand? (informal Persian)
- (2) Null question word. Women. Come?

Interrogative structure in informal Persian is also different from that of formal Persian. In formation interrogative structure (yes/no questions) in Persian, there is no question word (aya) at the beginning of the sentence. Moreover, this interrogative sentence has no change in word order, and no change in the tense. In other words, there is no inversion and do-insertion in informal interrogative sentences. As shown in Figure 7.

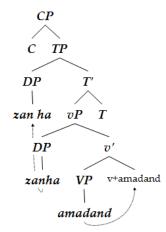


Figure 7. No do insertion (null question word), no movement and no inversion in Persian.

- (1) Ženiela hātên? (Kurdish)
- (2) Null question word. Women. The. Come?

In both formal and informal interrogative sentences (yes/no, questions) in Kurdish, C bears null (Q) and no question particle in the front position (Spec-CP). Also, there is no inversion parameter value in this Kurdish interrogative sentence. Also, the Subject (NP) has no movement. This means that, in this Kurdish interrogative sentence, there is no inversion parameter value. Moreover, this Kurdish yes/no question remains without any change to the sentence structure, while rising the tone at the end is enough to make the statement a question. As shown in Figure 8.

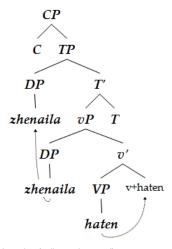


Figure 8. No do insertion (null question word), no movement, and no inversion Kurdish.

## **Materials and Methods**

Participants of this study were 108 male and female students (they were selected randomly) who were 36 Persian monolinguals and 72 Kurdish-Persian bilinguals (36 Kalhori and 36 Sorani learners) as L2 and L3 learners of English (Figure 9).

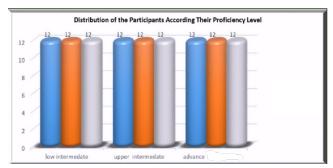


Figure 9. Distribution of the participants according to their proficiency level. **Note:** (\_) Monolingual; (\_) Bilingual Kalhori; (\_) Bilingual Sorani

The OPT, GJT and TT were administered in this study. The OPT (Oxford Placement Test (2001)) as a proficiency task (assigned to both monolinguals and bilinguals into three levels of English proficiency (lower intermediate, upper-intermediate, and advanced)), the TT (a Translation Test), and the GJT (a Grammaticality Judgment Test) both of them as an experimental task tested the syntactic properties (yes/no question properties, inversion, and pro-drop parameters). Linguistics professors controlled all of the test sentences for simplicity and length of vocabulary. In this study, a 44-item (13 correct, 31 incorrect) GJT was administered in order to tap L2 and L3 learners. They were asked to read and consequently judge individual interrogative sentences as grammatical/ungrammatical. A 24-item TT was also applied (the participants were asked to translate the items from Kurdish (Sorani and Kalhori) into English. The results obtained, then, were analyzed using the SPSS software (one-way ANOVA computations (within and between-groups comparisons))

## **Results**

As shown above Figure 10, while the mean percentage obtained by Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals is quite distant and significant across the levels of language proficiency, this difference is statistically significant between the groups at each level. In other words, the Persian monolingual learners of English performed better, though to a small degree, than the (Kalhori and Sorani) Kurdish-Persian bilinguals both at the lower intermediate and upper-intermediate levels, whereas the Persian monolinguals at advanced level of language proficiency had a better performance than their (Kalhori and Sorani) Kurdish-Persian bilinguals peers, meaning that the Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals lower intermediate learners did perform much weaker compared to those at upper-intermediate and advance levels.

The learners' improvement in the acquisition of interrogative structures (Yes/No questions) is remarkable with increasing language proficiency levels. Although the realization of interrogative structure is achieved in the native language of both (Kalhori and Sorani) Kurdish-Persian bilinguals and Persian monolinguals differently from that in the target language, we can observe that advanced learners' interlanguage in the Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals are highly similar to the target language forms. However, the differences, as supported by the results of conducting ANOVA, are significant.

The results, highlighting the UG accessibility, clearly show that the higher the level of language proficiency, the closer to the native-like proficiency. In other words, a various realization of the syntactic properties in the L1 seems not to affect the end-state grammar of EFL learners even though at the initial state, this is not the case. The results of ANOVA performed on the overall performance of the learners on the GJT are presented in Table 1.

Table 1 indicates that learners' overall performance on various parts of the GJT amongst the nine groups across the levels of proficiency is significantly different at the level of proficiency (F=53.594, P=0.000). Furthermore, multiple comparisons of post hoc Scheffe test confirming the results obtained from ANOVA show that the lower intermediate Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals performed differently from both upper intermediate and advanced Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian, bilingual learners at a significant level. Moreover, the upper intermediate monolinguals and bilinguals performed significantly different from advance learners.

As displayed in Figure 11, the lower intermediate Persian monolinguals (L2) had a better performance compared to (Kalhori and Sorani) Kurdish-Persian bilinguals (L3) at the same level of language proficiency. These differences between Persian monolingual (L2) and Kurdish-Persian bilingual (L3) learners' performances in interrogative structure items seem to be the most problematic part of the test for both Persian monolinguals (L2) and (Kalhori and Sorani) Kurdish-Persian bilinguals (L3), especially at lower and upper-intermediate levels. Besides, fluctuations can be observed in the performance of learners on TT at lower intermediate and upperintermediate levels, whereas the advanced learners showed relatively stable performance. Therefore, it can be inferred that the higher the level of language proficiency, the closer the learners' performance to native-like proficiency. Hence, they employ target language properties and parameters more accurately. However, the results of ANOVA (Table 2) show that the differences in learners' performance across levels of language proficiency were found statistically meaningful.

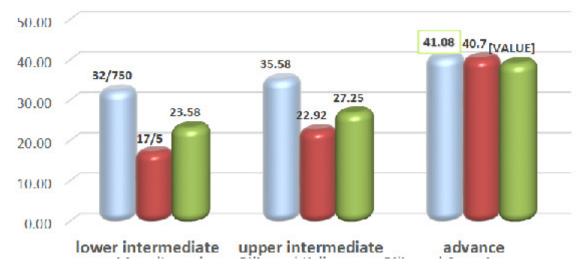


Figure 10. Mean percentage of the learners' performances on the GJT overall.

**Table 1.** Mean percentage of the learners' performance on the GJT overall.

ANOVA	Sum of squares	df	Mean square	F	Sig
Between groups	4885.907	2	2442.954	53.594	0
Within groups	4786.194	105	45.583		
Total	9672 102	107			

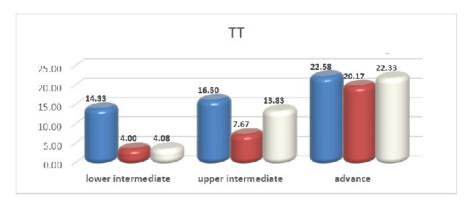


Figure 11. Mean percentage of the average of the learners' performance on TT parts. Note: ( → ) Monolingual; ( → ) Bilingual Kalhori; ( → ) Bilingual Sorani

Table 2. Results of ANOVA comparing learners' performance on TT overall.

	Sum of squares	df	Mean square	F	Sig	
ANOVA	Sum of squares	df	Mean square	F	Sig	
Between groups	946.722	2	473.361	8.512	0	
Within groups	5838.944	105	55.609			
Total	6785.667	107				

The data presented in Table 2 indicate that the differences in the learners' performance across proficiency levels are significant (F=8.512, P=0.000). In other words, learners' performances show the improvement in their language proficiency, which means that there is a strong positive relationship between learners' proficiency and their performance on the test. The results of Scheffe's post hoc multiple comparisons on the differences among the average performances of all the nine groups indicate that L2/L3 learners performed differently on the other levels of proficiency to a significant degree. The results depicted by ANOVA show the lower intermediate Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals performed differently from upper-intermediate and advanced Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals' learners at a significant level. Moreover, the upper intermediate monolinguals and bilinguals performed significantly different from advanced learners, whereas there was no significant difference between Kalhori Kurdish-Persian bilingual learners' and Sorani Kurdish-Persian bilingual learners' performance.

In this section of data analysis, the learners' performances on individual items of the GJT and TT are compared. To begin with, Figure 12 presented the mean percentages the learners obtained on interrogative structure items tested in the selection and production tests.

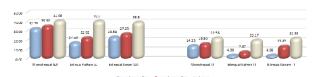


Figure 12. Mean percentage of the learners' overall performances on the GJT and TT. Note: ( ) Monolingual; ( ) Bilingual Kalhori; ( ) Bilingual Sorani

As can be observed in Figure 12, the mean percentages of Persian monolinguals (L2) and (Kalhori and Sorani) Kurdish-Persian bilinguals (L3) at lower intermediate and upper-intermediate levels clearly show that they had a poor performance on the TT than GJT. This implies that the learners had more problems with production tests rather than selection ones. However, the abrupt contrast observed in the performance of L2 and L3 lower intermediate and upper-intermediate learners is not recognized at the advanced level, meaning that learners' improvement is quite noticeable

with the increase in the level of language proficiency. Accordingly, language transfer is diminished or at least minimized. Even though the interrogative structure in the learners' native language is realized differently from that of the target language, as the language proficiency of learners increases, their performance will get closer to native-like proficiency. Persian monolinguals (L2) at all the levels of language proficiency have obtained higher scores on GJT and TT compared to their Kalhori and Sorani Kurdish-Persian bilinguals (L3) counterparts, Persian monolinguals had better performances on GJT and TT on the same items. The learners at both lower intermediate and upper-intermediate levels of language proficiency have performed quite better on the GJT than on the TT, while advanced learners performed almost the same on both tests, indicating that ample exposure to TL and increase in language proficiency minimize language transfer and hence improve language learners' performances.

The overall performances of (Kalhori and Sorani) Kurdish-Persian bilinguals and Persian monolinguals on GJT and TT are compared in terms of their mean percentages. These differences are statistically meaningful.

## **Discussion**

The current study was carried out to investigate the acquisition of English interrogative structure and the related syntactic properties in English as a foreign language by Persian monolinguals and (Kalhori and Sorani) Kurdish-Persian bilinguals as their L2 and L3. While the key syntactic features in relation to yes/no question and the movement of Auxiliary (+auxiliary movement) in English interrogative structure, (+inversion), (+ do-support), (-pro drop), these features in Persian and Kurdish languages were (-auxiliary movement), (-inversion), (-do support), (+pro drop). In other words, these language terms prefer to remain in situ regarding simple yes/no question. The acquisition of the features was explored on Persian monolinguals and Kurdish-Persian bilinguals across different levels of language proficiency (lower intermediate, upper-intermediate, advanced), within the generative framework and against several dominant theories (namely, FT/FA, DA, RDH, MSIH, MSBH, and SSH) concerned especially with such issues as L1 transfer and UG accessibility in non-primary language development and morphological variability as well.

Based on The FT/FA hypothesis Kurdish and Persian lower and upperintermediate English learners have not acquired the ability to reset the parameters of English; as a result, they are unable to insert the dummy verb and move it to the spec CP, on the other hand, they tend to drop the subject since their native language is a pro-drop one typologically. For the advanced level, the findings of the research demonstrate that the learners have reached that level of proficiency to set the initial state parameters based on L2 syntactic features.

The RDH claims that Persian monolinguals and Kurdish-Persian bilinguals are not able to acquire interrogative structure, do-support, inversion parameter features within English yes/no question due to they lack this feature in their first language.

The DA Theory argues that L2 and L3 learners will acquire both surface and underlying English interrogative structures (yes/no question); in other words, regardless of languages such as Persian and Kurdish which mainly with no changing in sentence verb, the question word and with no inserting do support, learners acquire interrogative structures and related parameters. The proponents of these models argue that with more input, the transfer can be overcome, and native-like performance can be achieved. The findings of this research confirm the analysis which is proposed by DA theory because, at advanced levels, Kurdish and Persian learners proficiently are able to insert dummy verbs in the proper position (head of TP) and move it to the head of CP. The interesting point is that although Persian and Kurdish languages are pro-drop, advanced level learners correctly make the subject of the sentence to be realized and put it in the front of sentences (spec CP).

The MSIH strongly proposes for the L2A, and due to the observation that in Persian and Kurdish tense feature is realized on the main verb of the sentence, the learners at lower and upper-intermediate levels fail to insert a dummy verb into the head of TP to bear the tense feature and consequently to move it to the head of CP. Concerning the pro-drop-parameter, some lower and upper-intermediate learners do not give phonological content to the subject of the sentence, and some of them give phonological content to the subject; however, they do not raise the subject to the CP (spec of CP).

The SSH predicts that L2 and L3 learners will not be able to acquire features of English interrogative structure, inversion, and do support regardless of their L1 structure, yet findings of this study run contrary to SSH. It was found that advanced level students efficiently used English interrogative sentences. In linguistic terms, they were able to insert dummy do into the head of TP and to raise the dummy verb to the head of CP, deriving the subject-verb inversion effect, although none of these properties is attested to in their native languages, so it seems that there is more than just learning lexical feature in SLA at least at advanced levels.

The MBSH claims that Persian monolinguals and Kurdish bilinguals are weak at initial states, but by language development, their progress and improvement become tangible. The hypotheses of this theory could be put into practice with English learners at different levels of efficiency. Lower-intermediate learners have not yet acquired principles of making yes-no questions according to the structure of English. There is no do insertion and no inversion at this level. Intermediate learners notably show an amount of improvement. Some of them insert the auxiliary verb in T but fail to raise it to the head of CP.

On the other hand, some of them do the inversion in that they put the verb in from of the sentence; however, they fail to insert the dummy verb. These learners raise the main verb of the sentence and posit it in the C head, not the auxiliary verb. The advanced level students have adopted the principles of L1 ultimately. They are efficiently capable of inserting an auxiliary verb and making inversion without any problem.

The overall results of GJT suggest that although transfer can happen in development stages, native-like performance can be achieved at the advanced proficiency level, which is predicted by FT/FA and MSBH. DA, like FT/FA, holds that with a high level of proficiency, L2 learners acquire both the surface and underlying structure in English interrogative structure. Besides, as MBSH predicts, the results displayed that learning of these

syntactic features incrementally takes place, and deficits almost disappear in the final stages. On the contrary, the findings contradict the predictions made by RDH, MSIH, and SSH. RDH firmly claims that the target language parameterized properties that are not instantiated in L1 are inaccessible in L2, even for advanced learners. RDH argues that L2 and, by extension, L3 learners will not be able to acquire features that are not instantiated in the L1. According to MSIH, learners' problems at the initial state will not disappear due to the mapping problems. SSH also argues that while native speakers use syntactic and lexical information to process parametric values, L2 and L3 learners only use a lexically derived strategy, and they underuse syntactic structure in their processing of English interrogative structure in the L1. All of these theories predict that even L2 and L3 advanced learners will not acquire interrogative structures in English while our data proved the learners' poor performance at elementary level improves as proficiency increases.

Subsequently, the overall results of the TT obtained by analyzing the monolingual and bilingual learners' overall performances across different levels of language proficiency on the given task gave almost the same results as those of the individual items and GJT; however, some other points can be inferred as follow:

- First, the comparison of the group means across levels of language proficiency indicated that responding to the same items in the test turned out to be more complicated than the others. All the Persian monolinguals (L2) and (Sorani and Kalhori) Kurdish-Persian bilinguals (L3) at the three levels of proficiency had relatively poor performance on translating interrogative structure. In other words, though with an increase in the level of language proficiency learners showed remarkable improvement over the preceding level of proficiency, the contrast is quite sensible with each item in the task.
- Second, the overall results of TT indicated that the shift in the mode of data collection and elicitation did not profoundly affect the learners' performances on the acquisition of English interrogative structure properties and parameters, though the learners performed better on the selection test (GJT) rather than the production on (TT), all the (Sorani and Kalhori) Kurdish-Persian bilinguals (L3) across different level of proficiency displayed similar patterns of language acquisition and development.
- Third, all the findings of the UG-based theories obtained from the analysis of individual items included in the TT could be generalized to the overall results of the given test as well.
- Fourth, the concept of parametric variation is of particular interest where L2 and L3 acquisition is concerned since L2 and L3 learners will often be in the situation where their L1 has fixed some parameter one way, whilst the TL has some other setting, or the situation may arise where L1 has some parameter activated, which is not operative in L2, and L3 or vice versa. The Persian monolinguals and (Sorani and Kalhori) Kurdish-Persian bilinguals carry the parameter such as pro-drop over from L3, causing transfer errors. This proposal was tested on the Persian monolinguals as a L2 and (Sorani and Kalhori) Kurdish-Persian bilinguals as a L3. The TL, such as English, carries some parameters such as Do-support, and inversion parameters in interrogative structure, while the Persian monolinguals and (Sorani and Kalhori) Kurdish-Persian bilinguals carry no Do-support and inversion parameters.

All the L2 and L3 learners across different levels of proficiency exhibited the same patterns of language acquisition and development. According to the obtained results of the current research, we concluded that:

To be exposed to the L2/L3 and language use is a vastly determining variable. Increased being exposed to L2, L3, and language use lead to less language transfer, and consequently, the approximation to native-like performance. Proficiency is another significant factor in cross-linguistic influence. It was found that much of L2 and L3 transfer is the result of low language proficiency. Language transfer (cross-linguistic influence) most certainly takes place in the initial state of LA. Hence, the proficiency level in the TL plays a significant role as to the degree and manner in which a background language will influence L2 and L3. As is generally assumed

that lower proficiency levels in TL, the more background languages will exert influences in order to solve communicative problems. In other words, as proficiency in the TL increases, less transfer will occur, and closer, the learner's performances will be to native-like proficiency.

Change in the mode of data elicitation (GJT vs. TT) did not profoundly affect learners' performances, meaning that LA takes place in a development step-by-step manner: all L2 and L3 participants demonstrated the same patterns of language development.

All findings of the UG-based theories obtained through the analysis of individual items and overall results of the GJT can be generalized to those of the TT as well.

The analysis of both individual items and overall results of two tasks, GJT and TT, revealed that advanced L2 and L3 learners performed significantly higher than upper-intermediate and lower intermediate learners, suggesting that as learners advanced in language proficiency, they obtained quite higher scores on the tasks. i.e., the restructuring of TL grammar is possible with the increase of language ability.

The analysis of errors divulged that the majority of errors committed by L2 and L3 learners, particularly at the lower intermediate level, reflected learners' problems in reassembling of the given syntactic feature in TL.

The analysis of both individual items and overall results of two tasks, GJT and TT, revealed that there is a positive relationship between learners' language proficiency and their performances on the syntactic features in interrogative structures. As the L2 and L3 learners advanced in their language proficiency, their performances got much closer to that of native speakers.

# Conclusion

Analyzing the results of GJT and TT exhibited that there was no significant difference between Persian monolinguals and (Sorani and Kalhori) Kurdish-Persian bilinguals in the acquisition of interrogative structures.

With regard to differences that exist in parametric values between the learners' native language and the TL they study, both Persian monolinguals and (Sorani and Kalhori) Kurdish-Persian bilinguals were able to reset the interrogative structure parametric values of L1 in English as L2) and L3, suggesting that resetting is possible especially beyond early stage of IL grammar.

Regarding to prediction made by the dominant theoretical UG based models of SLA (RDH, FTFA, DA, MSIH, and SSH) tested in the current study, the results of GJT and TT exhibited that no single non-primary language learning model can best characterize learning of the given syntactic properties and offer a comprehensive description of the whole process of language learning. Each model proposes a somewhat different perspective of the complicated process of L2A/L3A.

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