

A Generative Analysis of the Acquisition of Negation by Iranian EFL Learners: A Typological Study

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Abstract

The present study was an attempt to investigate the acquisition of negation properties by Persian monolingual and Kurdish-Persian bilingual learners of English across different levels of language proficiency and within a generative framework. Generative models are generally concerned with issues such as universal grammar (UG), language transfer, and morphological variability in nonprimary language development. Hence, an attempt was made to test the claims and predictions made by a number of generative theories specifically FTFA, RDH, DA, MSIH, SSH, and MSBH. To do so, 180 Persian monolingual and Kurdish-Persian bilingual learners of English participated in the study. Based on the Oxford Placement Test, they were assigned to 3 levels of language proficiency. They, then, received a grammaticality judgment test and a translation task. The results revealed that there was, first, no significant difference between the performance of the monolingual and bilingual learners at each level of language proficiency, whereas the difference was statistically significant across the levels of proficiency, and second, no single generative theory can offer a comprehensive explanation about the whole process of L2-L3 negation acquisition. Indeed, language development occurs in an incremental manner as predicted by MSBH, and the resetting of TL properties is possible with increasing level of proficiency. The findings also confirmed that knowledge of an L2 does not play a significant role in the development of the interlanguage grammars of Kurdish-Persian bilinguals, and increased L2/L3 exposure and use lead to less language transfer and consequently approximation to native-like performance. Each of these findings has been discussed in the framework of the related theories tested in the study.

Keywords: Negation; FTFA; RDH; DA; MSIH; SSH; MSBH; Initial-State; Final/End-State; Universal Grammar (UG)

1. Introduction

Research studies conducted in the area of cross-linguistic influence on nonprimary language learning suggest that a form of L1 or L2 transfer is most evident in the language produced by L3 learners (e.g., Cenoz & Ulrike, 2001; Khany, Youhanaee, & Barati 2008; Leung, 2003; White, 2003). As far as third language acquisition (L3A) or nonnative language acquisition (L_nA) is concerned, our principal hypothesis is a kind of transfer, but we argue that the source of transfer is not necessarily from L1. However, various generative models and theories of SLA like full transfer/full access (FTFA), direct access (DA), representational deficit hypothesis (RDH), shallow structure hypothesis (SSH), missing surface inflection hypothesis (MSIH), and modulated structure building hypothesis (MSBH) have different claims and predictions about language transfer and access to universal grammar (UG).

Literature also shows that many variables cause cross-linguistic influences. Some variables play a role in lexical cross-linguistic influence, and some variables are operative in cross-linguistic influence in general, but during L3A their presence seems particularly to promote the use of L1 and L2 items in an L3 utterance (Anderson, 1983; Dewaele, 2001; Gass, 1984; Ghafar Samar & Jalili 2008; Hammarbeg, 2001; Kellerman, 1995; Odlin, 1989; Ringbom, 2001; Shanon, 1991; Selinker & Lakshmanan, 1993). These variables range from the similarities between languages, the degree of markedness, the last language effect, cognitive mode, language typology, exposure to the TL, the speaker's level of language proficiency, and frequency of language use.

Some variables seem to play more important parts than others do. Language proficiency, for example, is believed to have a central role. In discussion of L3 acquisition, the general consensus is that much of L3 transfer is the result of low L3 proficiency (Fuller, 1999; Dewaele, 2001; Hammarberg, 2001; Williams & Hammarberg, 1998). Therefore, the effects of proficiency of multilinguals must be taken into consideration when L3 acquisition is dealt with. Exposure to an L3 and language use are other determining variables. Increased L3 exposure and use lead to less language transfer although this decline is more pronounced for L2 speakers than for L3 speakers (Dewaele, 2001). Odlin (1989) assumes that typology appears to be the most important variables in determining the likelihood of language transfer. Early studies of language contact highlight the significance of typological closeness and congruent structures between L1 and L2, whereas later studies identify a facilitative role for both typological closeness and typological distance (Anderson, 1983; Gass, 1984; Jarvis & Odlin, 2000; Kellerman, 1995). The results of empirical studies show that language typology overrides other determining factors such as language proficiency (de Bot, 1992; Poulisse, 1990) and amount of L2 exposure (Jarvis, 2000).

The purpose of the study, therefore, is to investigate the proposals offered by the most recent theories of SLA and hopefully to help expand the scope of the given theories to contexts other than L2, namely L3. Each individual theory offers a different insight in the complex process of language acquisition. Therefore, it seems quite reasonable and legitimate to carry out a study that takes a rather inclusive framework in the treatment of L2 and L3 learning. Inspired by the given issue and in the light of current generative theories of language development as well as two of the main factors causing morphological variation in L2 and L3 acquisition/learning namely, proficiency and language typology, the present study was an attempt to investigate the interaction among L1, L2, and L3 in the acquisition/learning of negation constructions by Persian monolinguals and Kurdish-Persian bilinguals as L2 and L3 learners of English within a UG model to see what effects the given interaction yields with regard to the proposed UG accessibility and transfer models. More specifically, it was attempted to empirically substantiate the claim whether English L2 and L3 learners' distinct language background causes them to develop interlanguage patterns similarly or differently, that is, another major question addressed in this study was the impact of the previously learned languages on the L2 and L3 interlanguage patterns. In this respect, the role of the language background possessed by Persian monolinguals and Kurdish-Persian bilinguals on the interlanguage grammar was investigated through a comparative study. Other issues such as language use and exposure, and different elicitation modes (selection vs. production) were also of the focus of the paper.

1.1 Theoretical Framework of the Study

The present study tries to test the most recent generative models and theories of second language acquisition (L2A) and L3A on the issue of language transfer, the UG hypothesis, and nonprimary language learning namely, FTFA, RDH, DA, MSIH, SSH, MSBH. In generative linguistics, many researchers agree that something like UG must play some role in L2A because the logical problem of first language acquisition (L1A) seems to hold for L2A, as well. In L2A, as in L1A, the complex, abstract system of knowledge that the learner ends up acquiring exceeds to a great extent the primary linguistic data that the learner receives as input (White, 1989). However, these researchers are still debating the following two questions as to the exact role of UG in SLA: (1) what constitutes the initial state of L2 acquisition? And, (2) is parameter resetting possible in situations in which the value of a certain parameter differs for the learner's L1 and the target L2? A number of such hypotheses and theories as the RDH, MSIH, FTFA, DA, SSH and MSBH have been proposed in response to either one or both of these questions (see Clahsen & Felser, 2006; Clahsen & Muysken, 1986, 1989; Epstein, Flynn, & Martohardjono, 1996; Eubank, 1993; Vainikka & Young-Scholten, 1994, 1996).

One such hypothesis is the FTFA (Schwartz & Sprouse 1994, 1996; White 1989, 2003) which proposes the following answers to the above questions: first, the learner's L1 grammar (including L1 parameter settings) constitutes the initial state of L2A (= full transfer), and second, the L2 learner has access to UG in its entirety and, hence, parameter resetting is possible in L2A (= full access).

The RDH proposed by Hawkins and Chan (1997) and Hawkins (2003) argues that there is a critical period for the acquisition of functional features (like *wh*-feature, subject-verb agreement or negative inflection) that differ between the L1 and L2. That is, adult L2 learners cannot acquire a feature if this feature is not instantiated in their L1, and L2 learners are limited to the inventory of syntactic features of their L1. In other words, this hypothesis predicts that interlanguage grammars will be confined to L1 feature values, even if there is 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 unacquirable due to critical period effects. This is also referred to as failed functional features hypothesis (FFFH) or failed features hypothesis (FFH; Hawkins, 1998, 2000; Hawkins & Chan 1997; Smith & Tsimpli, 1995) which is a modern version of no parameter resetting. The FFH assumes full transfer of L1 in the L2 initial state. It predicts the nonavailability in L2A of parameterized properties not instantiated in L1. In other words, the FFH rejects the possibility of UG restructuring in L2 development. Specifically, according to Hawkins (1998, 2000), a subset of uninterpretable features will *fail*, that is, be nonacquirable and thus absent, permanently in L2A.

DA theory (Epstein, Flynn, & Martohardjono, 1996) argues that advanced L2 learners can acquire L2 structures, even if these L2 structures are different from their L1 counterparts. That is, like FTFA, DA holds that with a high level of proficiency, L2 learners will acquire both the surface and underlying structures of the TL. With more input, transfer can be overcome and native-like performance can be achieved. In other words, there is no Critical Period for the acquisition of advanced adult L2 learners with respect to syntax, and they can perform like native speakers.

The MSIH, proposed by Lardiere (1998a, 1998b, 2000), Prévost and White (2000a, 2000b) and later supported by Ionin and Wexler (2002) and White (2002), holds that a certain subcomponent of UG could be the locus of the observed differences in mature native and nonnative grammars. This view posits this subcomponent to be the morphological module. It is a breakdown in the mapping between syntax and morphology, which causes divergent forms to be produced by nonnative speakers. Proponents of the MSIH argue that variable use of grammatical morphemes is caused by the inability to access the correct morphophonological form

in speech production postsyntax, rather than by the presence of underlying deficiencies in functional features, syntactic structure, or the presence of developmental principles (Haznedar, 2001, 2006; Haznedar & Schwartz, 1997; Lardiere, 1998, 2000; Prévost & White, 2000a, 2000b). Lardiere (1998, 2000) characterizes variable use of morphology by L2 learners as a mapping problem between functional features in the syntax and the appropriate forms in the lexicon. Based on this hypothesis, L2 learners have unconscious knowledge of functional projections and features but have problems with realization of the correct surface morphology. Learners' problems at the initial state will not disappear in final state due to these mapping problems.

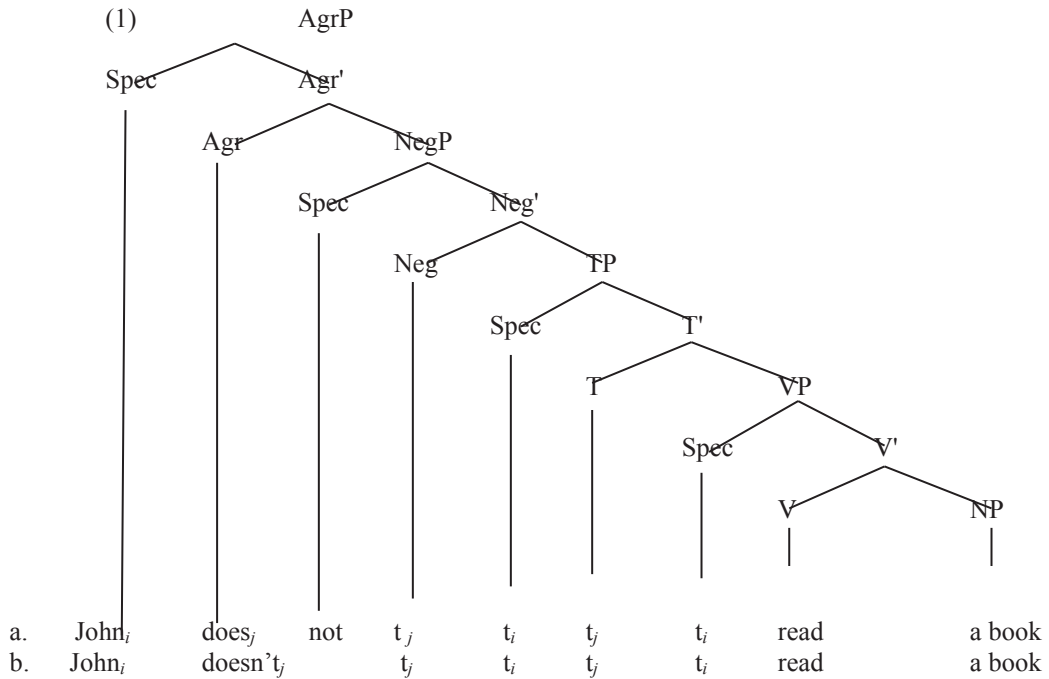
Another recent theory that deals specifically with L2 processing is the SSH proposed by Clahsen and Felser (2006). Clahsen and Felser proposed the SSH positing that whereas native speakers use syntactic and lexical information to process features (like *wh*-movement), L2 learners only use a lexically driven strategy, and they underuse syntactic structure in their processing of these features regardless of their status in the L1. The SSH predicts that language learners will not be able to acquire L2 features regardless of their L1 structure, that is, whether their L1 properties are similar to or different from the L2, they will not be able to acquire L2 structure.

Finally, based on the MSBH proposed by Hawkins (2001, 2003) learners' initial L2 grammars consist, in principle, of lexical projections like VP, NP, AP, PP, and these projections have the structural properties of their L1 grammars. That is, in the *initial state*, nonprimary language learners categorize words into lexical categories N, V, A, P, and their phrasal projections VP, NP, AP, and PP. In other words, in the *initial state*, learners rely largely on words and the syntax of phrases. In the *transitional state*, then, they acquire words in L2 which are realizations of functional categories, for example, I, C, D, and their phrasal projections IP, CP, DP, and the bound morphology which accompanies this functional development. The idea that learners start L2 and by extension L3 mental grammars with lexical projections and then add functional categories on the basis of positive evidence from L2 and L3 is the 'Structure Building' part of the hypothesis and the idea that structure building is influenced by properties of the L1 at the relevant point in the construction of grammar and not before is the *Modulated* part of the theory. Therefore, based on this model, learning starts with lexical projections in principle and is, then, followed by structural projections by the L1, and occurs in an incremental manner leading to native like production at higher level of language proficiency.

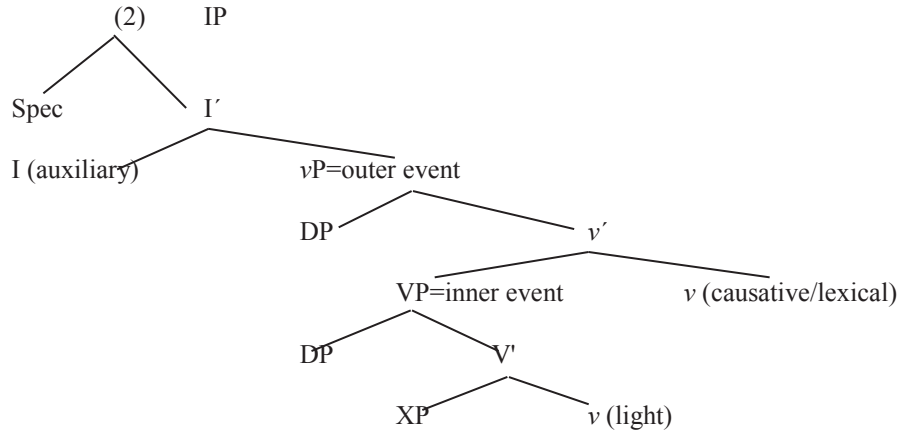
1.2 Linguistic Assumption

The structure of negation and the way functional categories are licensed in English, Persian, and Kurdish are quite different. In English, the negation *not* occupies the specifier of NegP (SpecVP), and the head of the NegP can be realized by an abstract head [Neg], as in (1a), or occupies the AgrAgr' (I) by the affixation of negative *-n* 't to the auxiliary, as in (1b):

- Example (adopted from Yuan, 2003):

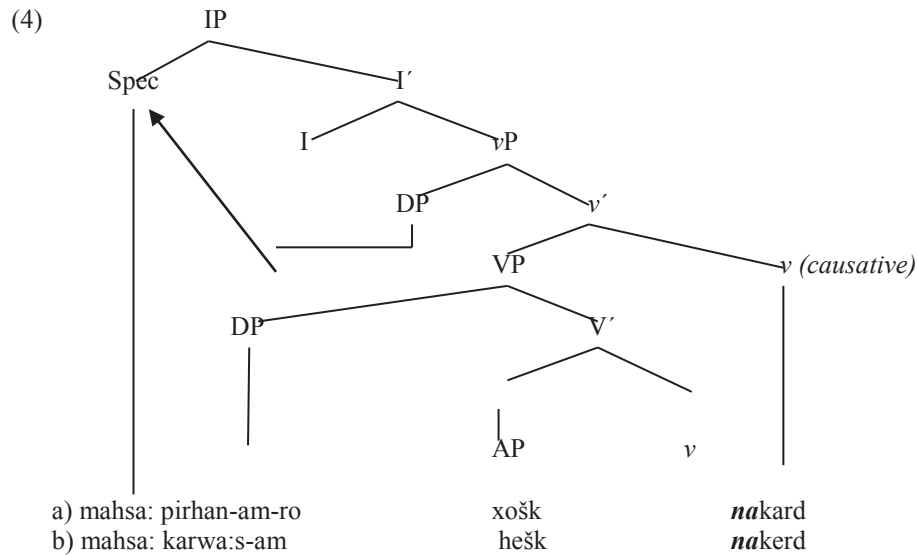


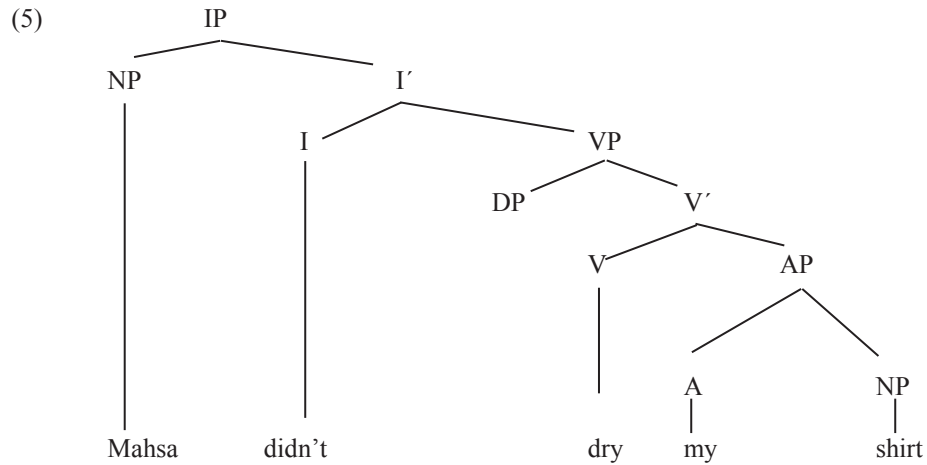
In Persian and Kurdish, however, lexical, auxiliary, causative, and light verbs occupy different positions. Lexical and causative verbs occupy the *v* position in OUTER verb shell, whereas light verbs occupy the *v* position in INNER verb shell and auxiliaries take the I position of IP as shown in 2 below. In both Kurdish and Persian, 'Neg' particles are bound morphemes and inflected (prefixed) to all kinds of verbs (lexical, auxiliary, causative, and light).



- (3) a) mahsa: pirhan-am-ro xošk *nakard*. (Persian)
 mahsa shirt-1PerSin-OM dry Neg-make-Past.
 b) mahsa: karwa:s-am hešk *nakerd*. (Kurdish)
 mahsa shirt-1PerSin dry Neg-make-Past.
 c) Mahsa didn't dry my shirt. (English)

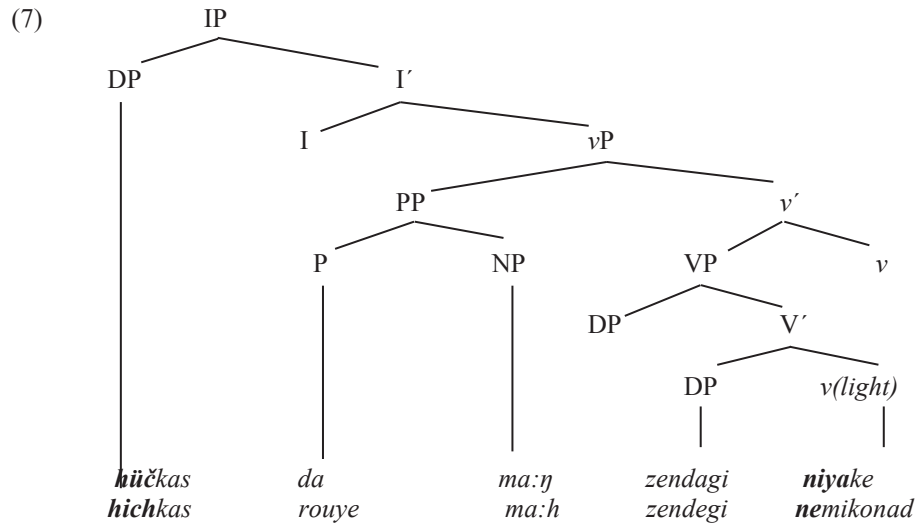
Based on 2 above, 3a and 3b have the derivations in 4a and b, respectively, whereas their counterpart in English (3c) has the configuration in 5:

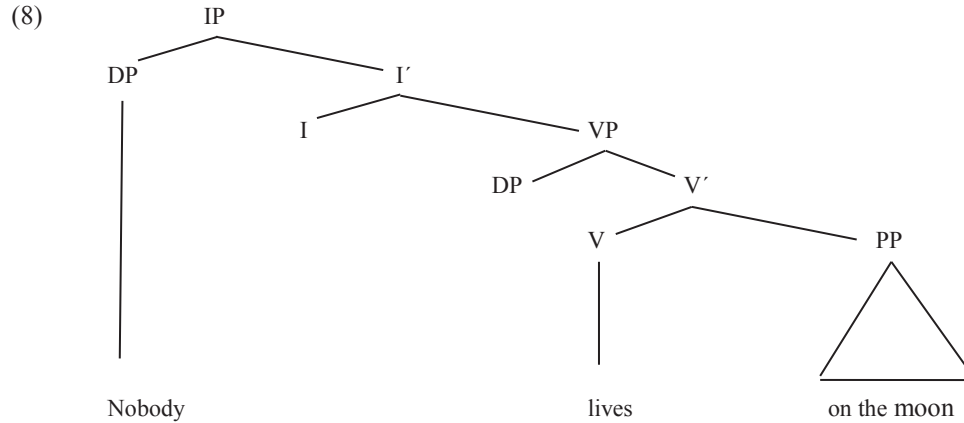




In Kurdish *hüç* and in Persian *hich*, both with the meaning of *no*, are used with a negative verb (auxiliary, light, causative, or finite). So, they allow double-negatives. In English, however, *no* is used before or within affirmative sentences to express a negative idea, but with positive verbs, that is, no double-negative is allowed.

- (6) a) *hüçkas da ma:ŋ zendagi niyake* (Kurdish)
neg-body on the moon living **neg**-make-Pres3PerSing
 b) *hichkas rouye ma:h zendegi nemikonad.* (Persian)
neg-body on the moon living **neg**-make-Pres3PerSing
 c) Nobody lives on the moon. (English)
 6a and 6b have the derivation in 7, whereas 6c has the derivation in 8:





Based on comparisons made among the patterns of the three languages, a number of predictions were made in this study. As was shown above, sentential negation in English is achieved differently from that of Kurdish and Persian, therefore, negative transfer is expected based on the tenets of such theories as , FTFA, MSIH, DA (for the initial stages), MSBH, RDH, and SSH to name the most well-known. The plausible predictions are shown in Table 1:

Table 1. Predictions Claimed by the Given Generative Theories

Type f Neg	FTFA	MSIH	RDH	SSH	MSBH
L1: Neg + Aux	Resetting	Resetting	Resetting	Resetting	Resetting
L2: Neg + Aux	possible	not	not	not	possible as
L3: Aux +Neg	beyond initial state	possible even beyond initial state	possible	possible	proficiency increases

2. Statement of the Problem

The field of L2A has been dominated by different UG-based accounts of L2 development which, in spite of their distinct views, share the assumption that the parameter setting of L1 is the most influential in L2A (Hawkins, 2003; Hawkins & Chan, 1997; Schwartz & Sprouse, 1996; Young-Scholten, 1993; White, 1988). UG-based hypotheses of L2 development have different predictions about the mechanisms of interaction between L1 and L2. The task gets much more complicated when the interaction of L1, L2, and L3 are studied together. A central purpose of this study, therefore, is that understanding the process of L2 and L3 acquisition and the variations observed in these processes will provide a paramount

perspective on the mental processes involved in language acquisition, and as a result, may contribute to a better understanding of language learning in general and multilingualism in particular.

Furthermore, the various and even contradictory findings in previous studies along with the complex nature of language acquisition in general and nonprimary language learning in particular led the researchers to the idea that no single theory can offer comprehensive explanation about the whole process of language acquisition/learning. Each individual theory offers a different insight in the complex process of language acquisition. Therefore, it seems quite reasonable and legitimate to carry out a study that takes a rather inclusive framework in the treatment of L2 and L3 learning. Inspired by the given issue and in the light of current generative theories of language development as well as two of the main factors causing morphological variation in L3 acquisition/learning namely, proficiency and language typology, the present study also tried to investigate the interaction among L1, L2, and L3 in the acquisition/learning of negation constructions by Persian monolinguals and Kurdish-Persian bilinguals as L2 and L3 learners of English within a UG model to see what effects the given interaction yields with regard to the proposed UG Accessibility and Transfer. More specifically, it was attempted to empirically substantiate the claim whether English L2 and L3 learners' distinct language background causes them to develop interlanguage patterns which are different to those of monolingual learners of English, that is, the major question addressed in this study was the impact of the previously learned languages on the L2 and L3 interlanguage patterns. In this respect, the role of the language background possessed by Persian monolinguals and Kurdish-Persian bilinguals was investigated through a comparative study in light of the most recent syntactically-based generative models of L2A, namely FTFA, RDH, MSIH, DA, SSH, and MSBH.

Based on the theoretical framework of the study and linguistic assumptions made above and in order to investigate such issues as parametric resetting, language proficiency, and language background, the present study tried to address and find answers to the following questions:

1. If L1 and L3 differ in parametric values associated with negation, are Kurdish-Persian bilinguals able to reset the negation parametric values of L1 in L3?
2. Which nonprimary language learning model best characterizes the learning of negation by Kurdish-Persian bilinguals?
3. Does proficiency level affects the learning of negation properties in L3 by Kurdish-Persian bilinguals?
4. Does knowledge of an L2 play any role in the development of Kurdish-Persian bilinguals' interlanguage grammar?

3. Method

3.1 Participants

The present study was carried out among L2 and L3 language learners of English. Therefore, the target population was required to sample both Persian monolinguals and Kurdish-Persian bilinguals. The primary population consisted of 240 male and female undergraduate learners of English (110 Persian monolinguals and 130 Kurdish-Persian bilinguals). In the next step, an attempt was made to screen and pick up equal numbers of monolinguals and bilinguals. To do so, the Oxford Placement Test (OPT) was administered to the primary population out of whom 180 participants aged 19 to 25, 90 monolinguals and 90 bilinguals, were picked up. Each group of monolinguals and bilinguals was assigned to three subgroups, each representing one level of English proficiency (elementary, lower intermediate, and upper intermediate). There were 30 participants in each level of proficiency. The participants had learned English for at least 8 years primarily in formal settings. They were all students of English at the University of Ilam, Islamic Azad University of Ilam, Payam-e Nour University of Ilam, Ilam in-Service Center for Teacher Education, and University of Tehran, Iran.

3.2 Instruments

Three tests were used in this study, the OPT, a translation test (TT), and a grammaticality judgment test (GJT). The three tasks were performed in the order in which they are presented as follows. Task 1 was a placement test, more specifically the OPT. The experimental tasks (Task 2 and Task 3, a GJT and a TT, respectively) tested the syntactic properties associated with negation constructions. All of the test sentences were controlled for length and simplicity of vocabulary. The OPT and the experimental tests were administered to the sample in three occasions in the spring semester of the 2010-2011 academic year.

3.2.1 Oxford Placement Test

To place the participants at appropriate level of English proficiency, the OPT (Allan, 1992) was administered. The OPT was chosen because it was objective, valid, reliable and practical as well, that is, it was easy to administer. For evaluation, one point was given for the each correct response, whereas the incorrect responses were assigned no points.

3.2.2 Grammaticality Judgment Test

In the present study an 80-item GJT was administered in order to tap L2 and L3 learners' linguistic competence on negation properties. The participants were asked to read and consequently judge individual sentences as *definitely grammatical* or *definitely ungrammatical*. They were asked to go by first impression and not allowed to go back and change their initial decisions. The purpose of this task was to indicate the degree of certainty of the participants with respect to their

grammaticality judgment. In this task, there were 60 negative and 20 positive items. Among the 60 negative items, 15 sentences were grammatically correct, whereas 45 items were grammatically incorrect with respect to negation properties. All the ungrammatical sentences would have been grammatical both in Kurdish and Persian, but ungrammatical in English. The ungrammatical sentences could be divided into the following categories, based on the subproperties tested:

3.2.2.1 Sentences With Negative Auxiliaries

Placing negating adverb before auxiliaries (numbers below indicate the number of items in the GJT):

- 1. Tom not is playing football this season. He wants to concentrate on his studies.
- 18. I not recommend eating in that restaurant. The food's awful.
- 60. I not will tell Jim what you said. I promise.

3.2.2.2 Sentences With Negative Lexical Verbs

Placing negating adverb before lexical verbs:

- 4. Not tell Ann what I said unless she asks you.
- 56. You not pay attention to what I say.

3.2.2.3 Negation With No Insertion

Co-occurrence of 'no' with negative verbs:

- 20. I do not see no boy students in the classroom.
- 69. I do not put no salt in my soup.
- 74. We did not ask the teacher no questions.

For the evaluation of the task, the GJT was scored based on the following scoring system. The participants were given 1 point if they judged a *definitely grammatical* sentence as *grammatical* and conversely, a *definitely ungrammatical* sentence as 'ungrammatical.' The participants were given no point if they judged *definitely grammatical sentences* as *ungrammatical* and vice versa.

3.2.3 Translation Test

In order to provide sufficient contexts for the purpose of natural elicitation, a 30-item translation test was also employed. The paramount rationale behind applying this kind of task was to account for the possible modality effect on the performance of the subjects. As for the preceding tasks, one point was assigned for the individual sentences that were structurally correct, but no point was given to the structurally incorrect sentences.

3.3 Procedure

In the first step, a recent version of the OPT was administered to a sample of 180 participants. Based on their performance, the participants were assigned to two groups (Kurdish-Persian bilinguals and Persian monolinguals), each consisting

of three subgroups. Each individual subgroup represented one level of English proficiency (elementary, lower intermediate, and upper intermediate). Then, the given six subgroups received two more tasks. The first task was a GJT consisting of 80 items: 45 ungrammatical, negative sentences and 15 grammatical, negative items tapping participants' competence in negating auxiliaries, lexical verbs, as well as making sentences negative by 'no' insertion; the other 20 items were affirmative sentences aimed at tapping participants' competence in areas other than negation properties. The participants were required to mark the items for grammaticality and ungrammaticality. The third task that was given in the third session was a TT. This task consisted of 30 items: 20 negative items and 10 affirmative ones. The participants were asked to translate the items from Kurdish and Persian into English. In these items, just the negative items were corrected.

For scoring the items of the experimental tests, the following procedure was run. In the case of the GJT, the participants were given 1 point if they judged a *definitely grammatical* sentence as *grammatical* and conversely, a *definitely ungrammatical* sentence as *ungrammatical*. The participants were given no point if they judged *definitely grammatical sentences* as *ungrammatical* and vice versa. Lexical errors, if any, were ignored as they were not of any importance in the study. With regard to TT, the same scoring procedure as that of GJT was employed. One point was assigned for the individual sentences that were structurally correct, but no point was given to the structurally incorrect sentences. In other words, each correct response—the one in which negation features were observed—was awarded a score of one, whereas wrong and blank responses were given no point, that is, a score of zero. Again, lexical errors, if any, were ignored as they were not of any importance in the research study.

The results obtained, then, were analyzed using the SPSS software. In so doing, the main test items were given codes and values. The values of similar variables were calculated in percentage so as to have more organized data. Finally, to see if any difference was of significance, one-way ANOVA computation and between-groups comparisons were conducted.

4. Results

As noted earlier in previous sections, this research study was an attempt to investigate the acquisition of the syntactic properties of sentential negation constructions in English as a foreign language (EFL) by Persian monolingual and Kurdish-Persian bilingual learners of English as L2 and L3. To arrive at possible answers to the research questions, the results of the GJT and the TT are given in turn. Figure 1 displays the average of the mean percentages the learners obtained on the GJT:

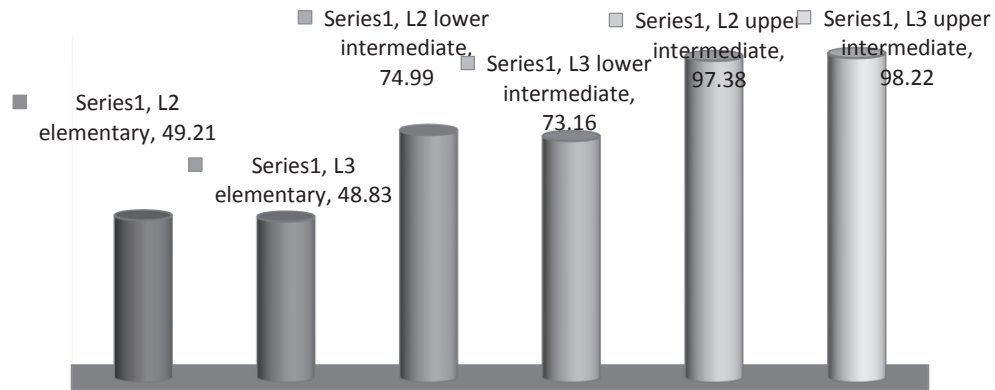


Figure 1. Mean Percentages of the Participants' Performance on GJT

As it can be inferred from Figure 1, the Persian monolingual learners of English performed better, though to a small degree, than the Kurdish-Persian bilinguals both at the elementary and lower intermediate levels, whereas the Kurdish bilinguals at upper intermediate level of language proficiency had a better performance than their Persian monolingual peers. However, these differences as supported by the results of conducting ANOVA (see Table 2) are not significant. The results, highlighting the UG accessibility, clearly show that the higher the level of language proficiency, the closer the performance of language learners to native-like proficiency. In other words, varied realizations of the syntactic properties in the L1 seem not to affect [?] the end-state grammar of EFL learners, even though at the initial state this is not the case. In order to find out whether the difference between (or among?) learners' performance at various levels of language proficiency was statistically significant, the inferential ANOVA was run the results of which are presented in Table 2:

Table 2. Results of ANOVA Comparing the Participants' Performance on GJT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	71461.604	5	14292.321	255.803	.000
Within Groups	9721.802	174	55.872		
Total	81183.407	179			

As one can observe from Table 2 above, the participants' overall performance on various parts of the GJT amongst the six groups across the levels of proficiency is significantly different at the level of $p < .000$ ($F = 255.803$). Furthermore, multiple comparisons of post-hoc Scheffe test (see Appendix) confirming the results obtained by ANOVA showed that the elementary L2 and L3 learners performed differently from both lower and upper intermediate L2 and L3

learners at a significant level. Moreover, the lower level monolinguals and bilinguals performed significantly different from upper intermediate learners.

The next piece of data presents the analysis of the average of the participants' performance on the TT. This starts with Figure 2 displaying the learners' mean percentages across the three levels of language proficiency:

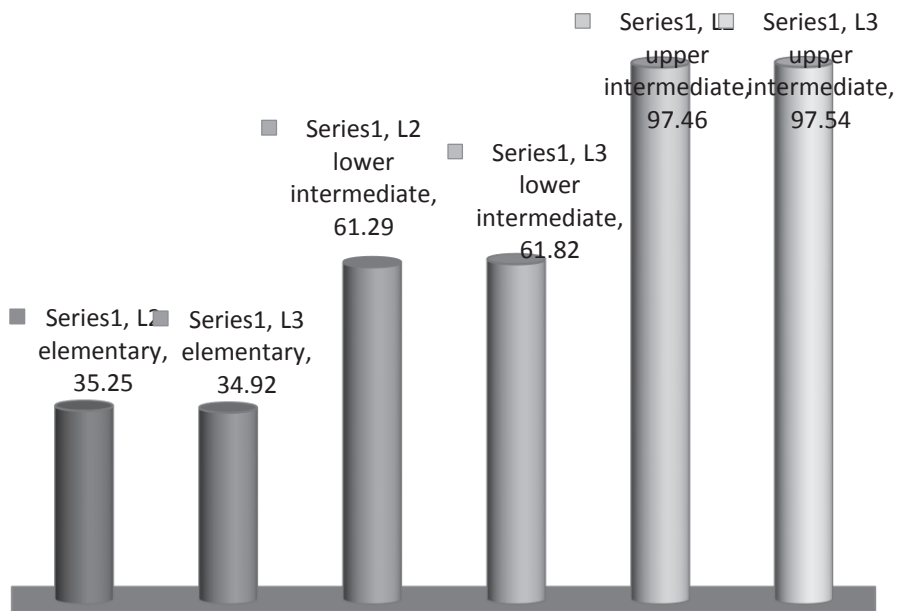


Figure 2. Mean Percentages of the Participants' Performance on TT

As displayed in Figure 2, L2 elementary learners of English had a better performance compared to that of L3 learners at the same level of language proficiency, whereas at the higher levels, that is, lower and upper intermediate levels, L3 learners have scored higher than their L2 counterparts. These differences between L2 and L3 learners' performance seem not to be significant at each level of proficiency at all. However, as the results of conducting ANOVA (see Table 3) show, the differences in the participants' performance across levels of language proficiency were found statistically meaningful:

Table 3. Results of ANOVA Comparing the Participants' Performance on the TT

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	117760.751	5	23552.150	204.857	.000
Within Groups	20004.590	174	114.969		
Total	137765.341	179			

The data in Table 2 evidently indicate that the differences in learners' performance across language proficiency levels are significantly meaningful $p < .000$ ($F = 204.857$). In other words, the participants' performance shows improvement as their language proficiency increases, meaning that there is a positive relationship between the participants' proficiency and their performance on the test. The results of the post-hoc Scheffe multiple comparisons (see Appendix) on the differences among the six groups' average performance indicate that the L2 and L3 upper intermediate learners outperformed the participants' on other levels of proficiency to a significant degree.

The overall performance of the Kurdish-Persian bilingual and Persian monolingual learners of English on the GJT and TT was compared in terms of their mean percentages. The result is illustrated in Figure 3:

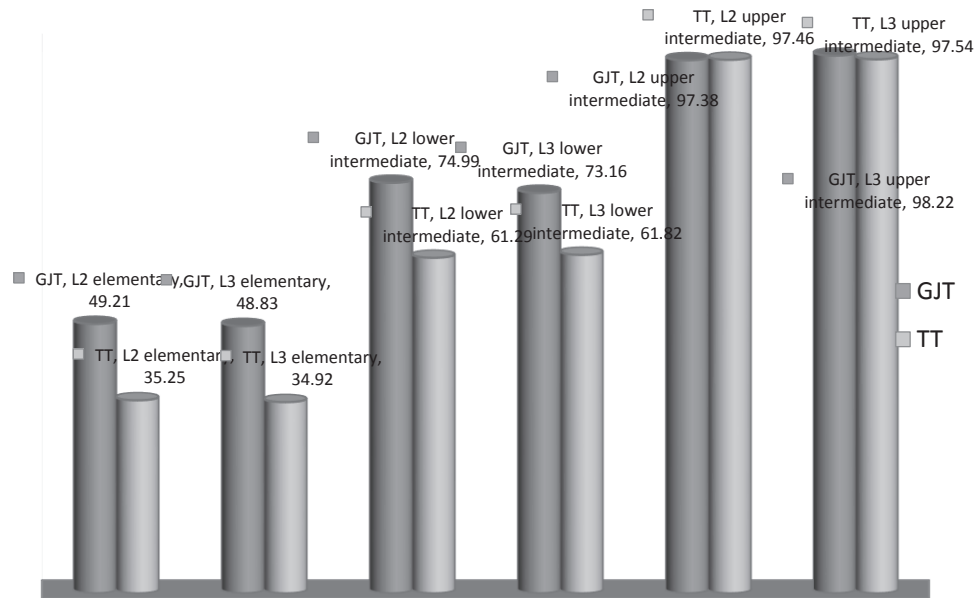


Figure 3. Mean Percentages of the Participants' Overall Performance on the GJT and TT

The results presented by the above Figure show that across levels of language proficiency, the participants obtained comparatively different scores on the grammatical structure in question. As it can be observed, the participants at both elementary and lower intermediate levels of language proficiency have performed quite better on the GJT than on the TT, whereas the upper intermediate learners performed almost the same on both tests, indicating that ample exposure to TL and increase in language proficiency would result in minimizing language transfer and hence improving language learners' performance. In addition, L2 elementary learners have obtained higher scores on both GJT and TT than their L3 peers; L2 lower intermediate participants have outperformed the L3 lower intermediate learners on the GJT, whereas on the TT, L3 lower intermediate the participants have done better compared with their counterparts. These differences in the participants' performance, however, are not statistically meaningful. Upper intermediate L3 learners have overtaken their L2 peers on both GJT and TT, but not at a significant level.

5. Discussion and Conclusion

The present study was carried out to investigate the acquisition of sentential negation and the related syntactic properties in EFL by Persian monolinguals and Kurdish-Persian bilinguals as their L2 and L3, respectively. For the purpose of the research, the acquisition of negation parameters was explored by Persian monolingual and Kurdish-Persian bilingual learners of English across different levels of language proficiency (elementary, lower intermediate, and upper intermediate), within a generative framework and against a number of dominant theories (namely, FTFA, DA, RDH, MSIH, MSBH, and SSH) concerned especially with such issues as L1 transfer and UG accessibility in nonprimary language development and morphological variability as well.

The results of the analysis of the monolingual and bilingual learners' overall performance on the GJT and TT support RDH and the SSH at the initial state. The RDH argues that L2 and by extension L3 learners will not be able to acquire features that are not instantiated in the L1. The SSH also argues that whereas native speakers use syntactic and lexical information to process parametric values, L2 (and L3) learners only use a lexically driven strategy, and they underuse syntactic structure in their processing of English negation regardless of the status of negation structures in the L1. Both theories predict that even L2 and L3 advanced learners of English will not acquire the negation structure in English.

We also found in the results of the grammaticality judgment task that as proficiency increases the ability of L2 and L3 learners in judging different types of test sentences as grammatically correct/incorrect increases. These results are predicted by the FTFA and DA theories. DA like FTFA holds that with a high level

of proficiency, L2 learners will acquire both the surface and underlying structures in English negative clauses, whereas RDH and SSH strongly claim that the TL parameterized properties that are not instantiated in L1 are inaccessible in L2 even for advanced learners. In addition, our findings suggest that although transfer can happen in development stages, native-like performance can be achieved at the advanced proficiency level, which is predicted by the FTFA theory and MSBH. As MSBH predicts, the results showed that learning of negation features took place in an incremental manner and differences almost disappeared in final stages.

The findings contradict with the predictions made by MSIH claiming that learners' problems at the initial state will not disappear due to the mapping problems. The learners' poor performance at the elementary level improves as proficiency increases, although the parametric features in question are assembled in different ways in subjects' native languages and in the TL. In English, the negator 'not' originates in SpecV and in the case of negative auxiliary contractions it move from SpecV up to I, whereas in Kurdish and Persian, negation markers are bound morpheme inflected to the beginning of verbs, hence negators are not required to undergo movement. This difference in the location of negative markers found in the L1s and the TL could be a reason for the differences among the learners across the levels of proficiency. The learners at the elementary level may have had difficulty with resetting or reassembling of their L1s features into the interlanguage grammar because of negative transfer, whereas with more exposure to TL input and as the proficiency increased these mapping problems disappeared.

Finally, the overall results of TT showed that the shift in the mode of data collection and elicitation did not highly affect the subjects' performance on the acquisition of English negation properties, though the subjects performed better on the selection test (GJT) rather than the production one (TT). All the L2 and L3 subjects across different levels of proficiency showed similar patterns of language acquisition and development. Based on the results of the study we can conclude that:

- Exposure to L2/L3 and language use is a highly determining variable. Increased L2/L3 exposure and use lead to less language transfer, and consequently approximation to native-like performance.
- Proficiency is another important factor in cross-linguistic influence. It was found that much of L2 and L3 transfer is the result of low language proficiency. Cross-linguistic influence or language transfer most happened in the early stages of acquisition. Therefore, the proficiency level in the TL plays a key role as to the degree and manner in which a background language will influence an L2/L3. As is generally assumed, the lower the proficiency level in the TL, the more the background languages will exert influences in order to solve communicative problems. In other words, as

proficiency in the TL increases, the less transfer will occur and the closer the learner's performance to native-like proficiency.

- Shift in the mode of data elicitation (GJT vs. TT) did not highly affect the participants' performance, meaning that language acquisition takes place in a developmental step-by-step manner: all the L2 and L3 learners showed similar patterns of language development.
- Regarding the role of background languages in the development of the interlanguage grammar, the results suggest that the L3 learners did not bring the knowledge of background languages (Kurdish and Persian) into the task of learning English structures. In other words, knowledge of a second language did not play a significant role in the development of the interlanguage grammars of Kurdish-Persian bilinguals.
- Analyzing the results of GJT and TT indicated that there was no significant difference between Persian monolinguals and Kurdish-Persian bilinguals in the acquisition of negation structures.
- With regard to differences that exist in parametric values between the learners' native languages and the TL, both Persian monolingual and Kurdish-Persian bilingual learners of English were able to reset the negation parametric values of L1 in English as L2 and L3, suggesting that resetting is possible especially beyond initial state of interlanguage grammar.
- In relation to the predictions made by the dominant theoretical UG-based models of SLA tested in the study namely RDH, FTFA, DA, MSIH, MSBH, and SSH, the results of the two tests showed that no single nonprimary language learning model can best characterize learning of the given syntactic properties and offer a comprehensive description of the whole process of language learning/acquisition. Each model offers a somewhat different perspective into the complicated process of language learning/acquisition.

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Appendix
Post-Hoc Scheffe Tests (Multiple Comparisons)
GJT Overall Results: Scheffe

(I) VAR00002	(J) VAR00002	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
L2 elementary	L3 elementary	.38833	1.92998	1.000	-6.1081	6.8848
	L2 lower intermediate	-25.77800*	1.92998	.000	-32.2744	-19.2816
	L3 lower intermediate	-23.94467*	1.92998	.000	-30.4411	-17.4482
	L2 upper intermediate	-48.16767*	1.92998	.000	-54.6641	-41.6712
	L3 upper intermediate	-49.00133*	1.92998	.000	-55.4978	-42.5049
L3 elementary	L2 elementary	-.38833	1.92998	1.000	-6.8848	6.1081
	L2 lower intermediate	-26.16633*	1.92998	.000	-32.6628	-19.6699
	L3 lower intermediate	-24.33300*	1.92998	.000	-30.8294	-17.8366
	L2 upper intermediate	-48.55600*	1.92998	.000	-55.0524	-42.0596
	L3 upper intermediate	-49.38967*	1.92998	.000	-55.8861	-42.8932
L2 lower intermediate	L2 elementary	25.77800*	1.92998	.000	19.2816	32.2744
	L3 elementary	26.16633*	1.92998	.000	19.6699	32.6628
	L3 lower intermediate	1.83333	1.92998	.970	-4.6631	8.3298
	L2 upper intermediate	-22.38967*	1.92998	.000	-28.8861	-15.8932
	L3 upper intermediate	-23.22333*	1.92998	.000	-29.7198	-16.7269
L3 lower intermediate	L2 elementary	23.94467*	1.92998	.000	17.4482	30.4411
	L3 elementary	24.33300*	1.92998	.000	17.8366	30.8294
	L2 lower intermediate	-1.83333	1.92998	.970	-8.3298	4.6631
	L2 upper intermediate	-24.22300*	1.92998	.000	-30.7194	-17.7266
	L3 upper intermediate	-25.05667*	1.92998	.000	-31.5531	-18.5602
L2 upper intermediate	L2 elementary	48.16767*	1.92998	.000	41.6712	54.6641
	L3 elementary	48.55600*	1.92998	.000	42.0596	55.0524
	L2 lower intermediate	22.38967*	1.92998	.000	15.8932	28.8861
	L3 lower intermediate	24.22300*	1.92998	.000	17.7266	30.7194
	L3 upper intermediate	-.83367	1.92998	.999	-7.3301	5.6628
L3 upper intermediate	L2 elementary	49.00133*	1.92998	.000	42.5049	55.4978
	L3 elementary	49.38967*	1.92998	.000	42.8932	55.8861
	L2 lower intermediate	23.22333*	1.92998	.000	16.7269	29.7198
	L3 lower intermediate	25.05667*	1.92998	.000	18.5602	31.5531
	L2 upper intermediate	.83367	1.92998	.999	-5.6628	7.3301

*The mean difference is significant at the 0.05 level.

Multiple Comparisons
TT Overall Results: Scheffe

(I) labels	(J) labels	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
L2 elementary	L3 elementary	.33300	2.76850	1.000	-8.9859	9.6519
	L2 lower intermediate	-26.04467*	2.76850	.000	-35.3636	-16.7257
	L3 lower intermediate	-26.56967*	2.76850	.000	-35.8886	-17.2507
	L2 upper intermediate	-62.20300*	2.76850	.000	-71.5219	-52.8841
	L3 upper intermediate	-62.28867*	2.76850	.000	-71.6076	-52.9697
L3 elementary	L2 elementary	-.33300	2.76850	1.000	-9.6519	8.9859
	L2 lower intermediate	-26.37767*	2.76850	.000	-35.6966	-17.0587
	L3 lower intermediate	-26.90267*	2.76850	.000	-36.2216	-17.5837
	L2 upper intermediate	-62.53600*	2.76850	.000	-71.8549	-53.2171
	L3 upper intermediate	-62.62167*	2.76850	.000	-71.9406	-53.3027
L2 lower intermediate	L2 elementary	26.04467*	2.76850	.000	16.7257	35.3636
	L3 elementary	26.37767*	2.76850	.000	17.0587	35.6966
	L3 lower intermediate	-.52500	2.76850	1.000	-9.8439	8.7939
	L2 upper intermediate	-36.15833*	2.76850	.000	-45.4773	-26.8394
	L3 upper intermediate	-36.24400*	2.76850	.000	-45.5629	-26.9251
L3 lower intermediate	L2 elementary	26.56967*	2.76850	.000	17.2507	35.8886
	L3 elementary	26.90267*	2.76850	.000	17.5837	36.2216
	L2 lower intermediate	.52500	2.76850	1.000	-8.7939	9.8439
	L2 upper intermediate	-35.63333*	2.76850	.000	-44.9523	-26.3144
	L3 upper intermediate	-35.71900*	2.76850	.000	-45.0379	-26.4001
L2 upper intermediate	L2 elementary	62.20300*	2.76850	.000	52.8841	71.5219
	L3 elementary	62.53600*	2.76850	.000	53.2171	71.8549
	L2 lower intermediate	36.15833*	2.76850	.000	26.8394	45.4773
	L3 lower intermediate	35.63333*	2.76850	.000	26.3144	44.9523
	L3 upper intermediate	-.08567	2.76850	1.000	-9.4046	9.2333
L3 upper intermediate	L2 elementary	62.28867*	2.76850	.000	52.9697	71.6076
	L3 elementary	62.62167*	2.76850	.000	53.3027	71.9406
	L2 lower intermediate	36.24400*	2.76850	.000	26.9251	45.5629
	L3 lower intermediate	35.71900*	2.76850	.000	26.4001	45.0379
	L2 upper intermediate	.08567	2.76850	1.000	-9.2333	9.4046