Impact of L1 Grammar Negative Transfer on L2 Translation among Intermediate, Iranian EFL Students

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ABSTRACT

This study tries to investigate why some Persian learners have difficulty in learning certain structures of English language. To answer this question, a general proficiency test was administered to a total of 98 female high school students who were at intermediate level at English language institutes, with the same level and age, out of which 46 participants whose scores ranged from 65-85 out of 100 were chosen as the Intermediate Level. The instruments used in the study consist of a Translation test and participants' PET scores. In order to do this, the translation test administered to the participants included one aspect of grammatical errors which were predicted to be problematic parts of learning. That is, the participants were required to translate 50 Persian sentences into English and then the erroneous parts were determined. A hierarchy of difficulty was developed, to determine the level of difficulty of using English 11 grammatical items namely, using the wrong preposition, infinitive, tense, un-English expressions, incorrect omissions and etc, for Iranian Intermediate participants. After that, the number of errors on each grammatical item in the test was counted. Then by use of descriptive and inferential statistics (Independent Samples T-test, Pearson correlation and Friedmantest) were applied to analyze. The results indicated that L1 grammar negative transfer does affect L2 writing skill (translation in English) among Iranian EFL learners. In conclusion, the study demonstrates that we would probably be able to enhance the L2 writing skill of Iranian EFL learners by drawing the EFL learner's attention to those problematic areas of L2 and so L1 negative transfer would be, to some extent, reduced. In addition, the findings show that L2 teachers, can probably be successful in their teaching and can have successful learners as well.

Introduction

In fact, learning a foreign language (namely, English) is a lifelong process which needs years of constant attempt and especially interest. It doesn't mean that a straightforward process which can be mastered quickly, because there are always new areas, aspects, and registers and so forth in target language (TL) for the EFL learner to master in it. Among all of these areas some are more important which the learner should take them into account because of the differences between linguistic/grammar systems of two languages. For example, using the wrong preposition, infinitive, tense, unnecessary articles, un-English expressions, incorrect omissions, etc which may cause problems owing to interference.

To investigate such problems, contrastive analysis as a branch of linguistics was and still is a relatively sound basis. A brief description (see also Devos, 1995; Mukattash, 2001) of the field is given by Schackne (2002).

Contrastive Analysis, which is a comparative analysis of two languages, was thought by many in the 1940s, 50s, and 60s to be a useful predictor of where EFL learners would likely face with problems in learning a foreign language. Contrastive Analysis proposed that if certain elements of a target language differed greatly from the student's native language (mother tongue), that student would likely encounter difficulties.

According to Lado (1961), "The view of grammar as grammatical structure opens the way to a comparison of grammatical structure of the foreign language with that of the native language to discover the problems of the students in learning the foreign language. The result of such comparison tells us what we should test and what we should not test. It helps us devise test items and techniques that also look quite acceptable from a common sense point of view, and this is the important consideration- we can test the control of language on the part of student."

Contrastive Analysis is a method of comparing and contrasting the structure of any two languages to find the differential aspects of their systems, regardless of their genetic affinity or level of development. It becomes useful, when it, for example, sufficiently describes the sound structure and grammatical structure of two languages, with comparative statements, giving due emphasis to the compatible items in the two systems.

As an immediate offshoot of contrastive studies, a learner's first language was viewed to be an obstacle to acquisition of a foreign language (Hayati, 1997; Keshavarz, 2003). More importantly, the dedicated errors may block the communicative purposes. Such problems may result from L1grammar negative transfer such as the categorization of wrong position of adverbs, unnecessary articles, misuse of infinitive, incorrect omissions and etc., and misuse of which may cause serious misunderstanding on the part of native listeners and readers of the foreign language. In addition, it is clear that the grammatical system in general and these categorizations in particular, are not

totally similar in any two languages, especially when they come to be affected by cultural issues.

In order to facilitate Iranian EFL learners to improve their performance in speaking and especially in L2 writing, many teachers prioritize students' writing problems in syntax, lexis and discourse aspects. However, some teachers ignore the problem of students' native language and culture interfering in written English. However, L1 interference is not a new trend in studies on foreign language learning. L1 interference with regard to the terms 'cross-linguistic and language transfer' refers to the influence of native language structures on students' performance (spoken and written) and development in the target language (Hashim, 1999). When EFL students are writing in the target language, some of their L1 characteristics transfer to their writing. It is important for teachers to consider this issue in teaching EFL writing.

The statement of problem

This study is an attempt to investigate why some Persian learners have problems in learning certain structures of English language. This study tries to answer the question whether there is a relationship between learning a foreign language (English) and Persian by using contrastive analysis or not. Because of the existence of L1 grammar negative transfer, EFL learners will make mistake in producing L2 sentences and this is due to the L1 grammar negative transfer. It means that, they will use structures of their L1 in the structure of L2 unconsciously during learning foreign/ second language. So, these utterances will gradually be fossilized in learners' mind, but it seems that it is possible to solve this problem by using contrastive analysis. It has been assumed that the structure of L1 will cause interference in the structure of L2 during learning and most importantly, this negative transfer (interference) will lead learners to learn ungrammatical structure and the learners will consider them as correct structures. Generally because of probably little knowledge about TL (target language), L1 learners' writing skill (translation) is weak. According to researcher's view they are not good at converting the sentences into L2 and producing TL structures properly. The researcher believes that this can be because of the impact of L1 grammar negative transfer (interference) on the L2 writing skill, which is resulted from different factors that the researcher found out about according to the ex-researcher's findings (Yarmohammadi 2002, Keshavarz 2003, Mirhassani 2004 and Ziahosieni 1985). It must be noted that those kinds of subtle and invisible problems cause such mistakes and learners internalize the ungrammatical learned utterances which are wrong because they have learned them unconsciously and gradually, these ungrammatical structures become fossilized. So, we can use CA in order to prevent such a problem.

Another problem can be "lack of competence". It means that, the learners' linguistic competence and language knowledge about the TL is not enough to adapt themselves to L2 and due to incomplete knowledge towards L2 they will probably have problems with translation (L1 into L2) and also with recognition of ungrammatical structure. Of course, it is possible that participants may translate the sentences incorrectly. This cannot be only because of interference of mother tongue but it has also got other reasons like:

a) The rate of instruction which they were exposed to.

b) fatigue during examination, and

c) Also investigating the test as an unimportant subject by participants during answering, so the researcher can take into account the above factors as the limitations of this study.

The test will be administered for students who have fully mastered their mother tongue (L1) at high-school level and began to learn L2 roughly at the same age. So, the result of this experiment is only related to this groups which the members have good competence and performance in L1. This leads to negative transfer which will definitely have negative effects on learning L2. In addition, they are living in the society of their L1 (it means that, in their mother language environment) and deal with English only when they are in educational settings. In the sense they learn English in the limited educational hours. As a result, the interference of L1 in learning L2 is inevitable. The result of this study is related to these kinds of groups not the other groups like learners who are learning L2 or those who are living in the society of TL and learning the language (L2).

Review of Literature

Despite many theoretical and methodological problems and the criticism expressed against contrastive analysis, many classroom teachers still claim that CA has been useful to them for instructional purposes, Aid (1974). According to ex-researchers' studies and findings and teaching experience, there are some Persian structures (grammatical structures), words and etc, which are different from English ones, which make it more difficult for EFL learners to learn English. If teachers can predict those areas of target language that lead to most difficulty for the learners, the learning process will be facilitated by focusing the learners' attention on those conflicting points.

The predictability of CA has been discussed by Ferguson (1965). Ferguson reached surprising similar conclusion: CA can predict certain errors and points of difficulty applicable for foreign language instruction. Nickel and Wagner (1968) and Moody (1971) convincingly supported the predictability of CA by certain experimental studies undertaken. I also came to this conclusion by this experimental study. These linguists found that by systematic comparing of two languages we can predict the potential sources of errors or the areas that are going to cause most difficulty for the learners, they examined the potentials and limitations of contrastive analysis and found that it can predict the conflicting points between two languages and can give us insights into the nature of the conflict.

Oller (1972) proposed that factor of predictability has the effect of accelerating the learning process. In a report presented to the "Pacific Conference on Contrastive Linguistics and Language Universal" he showed that the importance of predictability of CA had been well established in the literature. Although, he viewed CA as a research technique rather than a basis for the development of materials for teaching languages; he maintained that at present CA does not have validity as a device for predicting some of the errors that a second language learner will make.

According to Brown (1967), teachers of English can improve their teaching strategies through the implications of CA for their foreign language programs. Krezeszowski (1967) believe that surface features seem much more important to the language learner than any possible similarities and differences in deep structure. Based on this view, purposeful contrastive investigations can only be carried out on the basis of a structural approach.

Based on the examination of the potentials and limitations of pedagogical use of error and contrastive analysis indicated in this investigation we will see that while error analysis can, to some extent, be applicable in an ESL course. Contrastive Analysis, can more appropriately meet the needs of EFL programs if it designed with the pedagogical intent. Error Analysis can use to overcome the limitations of contrastive

investigations and extend their power of prediction and pedagogical applications.

According to the ex-researchers' studies and findings and educational experience, because of the negative transfer of the learners' first language structural elements; a set of grammatical errors (ungrammatical structures) have always occurred. Therefore, in order to show the importance of this matter we will take a translation test into account which includes a number of Persian sentences which were thought (and has previously been observed) to be in conflict with their English equivalents were chosen and will be given to a group of 46studentsto answer.

Accordingly, in this study, we attempted to investigate the impact of L1 Grammar Negative Transfer on L2 Translation in Intermediate Iranian EFL Students. To this end, the following research questions were proposed:

Q1: Do learners' L1 (grammar) have any effect on learning L2 translation?

Q2: Do learners' L1 (grammar) have any effect on learning L2 writing?

H1: learners L1 grammar has no effect on L2 translation.

Method

Participants of the study

In order to provide the required empirical data for this present study, a General English Proficiency Test was carry out to a group of 98 female students of the same age 16-19 years old and level of high school as EFL learners with the same high school background for homogeneity, though the participants use Persian and English interchangeably every now and then, Persian, being the mother tongue dominates their daily communication, both at home and at school. Most of the participants have good proficiency in their mother tongue. After administering the proficiency test 'PET' Cambridge preliminary English Test, (Brown, 2005) designed by 'UCLES' University of Cambridge Local Examinations Syndicate, and correcting the whole participants' answer sheets, the participants' scores were ranked and from among them, 46 students whose scores were ranged between 65-85 out of 100 were selected as the main participants namely, 'intermediate level' for the present study.

Instrument of the study

In this study, we use two main instruments which are as follow:

a) Participants' Proficiency test scores (PET)

b) The analysis of participants' papers as Translation test scores

The second one related to their production skill. That is, writing skill.

Procedure and the of the study

In this study, we divided the procedure into two phases. In the first phase, we administered a proficiency test to measures the participants' general proficiency in English and to insure that they are homogeneous. The proficiency test 'PET', the first instrument, including two parts was administered. The first part contained 49 items on Reading and Writing Test and the second part consisted of 51 items on vocabulary and grammar Test as an intermediate level for the present study. (Table 3.1)

In the second phase, in order to check the participants' performance on English grammatical structures, we used the translation (Production) test 'as writing'. This test consisted of 50 Persian sentences that participants were asked to translate all of the items into English.60 minutes for translation test. The objective of the second phase was to find the problem due to L1 grammar negative transfer. This test was conducted to see whether the participants' mother tongue or any other factors influenced their production of L2 grammatical/syntactical

structure in different patterns and in relation to other sentence elements or not. The data was collected by use of mentioned instruments after correcting and analyzing the participants' responses in order to identify the kinds of grammatical errors made by the participants and aimed to show the influence of learners' L1 on their L2 writing skill. Finally, a contrastive framework was provided for all the mentioned patterns of all ungrammatical structure, and the results of the errors made were tabulated and categorized according to linguistic/grammatical items. (Table 4.4)

Statistical collection

The participants' writings and responses translation test were carefully analyzed to find out the errors made and were tabulated accordingly to form a collection. We read carefully and underlined the errors (negative transfer) and tabulated them according to their linguistic/grammatical categories and showed the percentage.

Statistical procedure

The statistical procedure is based on computer-assisted programs SPSS. Having administered the instruments for this research, the responses were collected and interpreted. The data gathered in this study was analyzed through T-Test 'Independent Samples T test, Pearson Correlation Sig. (2-tailed) and Friedman Test using the SPSS analysis method.

Results

Data description

The answers to the research questions clearly showed the existence of negative influence of mother tongue in the writing of L2 because the performance of the participants indicated that the participants thought in their mother tongue before they started writing in L2. This can probably be due to their L1 grammatical features and syntactical structures. This kind of perception helped to grammatical/syntactical disorder in L2 writing as there were significant differences between the Persian language syntactical order and the English language syntactical order. The participants first think in Persian and then e.g. for every English word translate in Persian and vice versa.

Data analysis

T-Test

Inferential statistics is concerned with the relationships between the analyses and changes in variables. In order to answers to the research questions of the present research and to administrate the two mentioned administrating methods, Independent Sample T-test and Pearson Correlation test have been used. To reject or accept the hypothesis of the present research, the obtained information from statistical T-test table has been used.

As can be seen in table 4.1, it includes descriptive information of the test that is, number 1, 2=23, 23, mean 1, 2= 8.46, 9.27, standard deviation 1,2= 4.25, 4.90 and standard error mean 1, 2=0.83, 0.96 respectively. And also table 4.2 shows the obtained information related to the females' translation test scores, that is, (t= 0.63, df= 50 and sig. (2 tailed) = 0.52. We also observed:

Sig (2-tailed) = 0.52> 0.05→ accept Ho

So, the hypothesis of L1 grammar negative transfer on L2 writing skill in Iranian female EFL learners is accepted. That is, there is a negative transfer in Female EFL learners which postponed L2 writing skill.

Correlation

Evaluating the relationship between PET test scores with translation test scores (correlation) in female.

Correlation is significant at the 0.01 level (2-tailed).

The correlation table 4.3 shows the strong relationship between PET scores with the average of translation test scores of female. We can also observe that the Pearson correlation coefficient between these two variables is Mean=0.96 which is very close to number 1 and this shows a very strong relationship. So, there is a positive, direct and strong relationship between these two variables. In addition, the hypothesis of the lack of existence relationship between PET test scores and the average of translation test scores (Ho: $p=0$) using the correlation Sig (significance level) is rejected in female.

Sig (2-tailed) = 0.00< 0.05→ reject Ho

**The Analysis of Linguistic Items**

The grammatical errors gradation Friedman Test was administered to grade the number of errors of the 11 linguistic items of female EFL learners (refer to appendix A).

Friedman Test As can be seen in table 4.4, the errors related to verbs (Mean= 7.77) and incorrect omissions (Mean= 3.12) in column 1 and 11 had the most and the least grammatical errors gradation orderly, and as table 4.4 shows, the hypothesis of equality of the means of the 11 grammatical errors is also rejected and these grammatical items do not have the same Mean. (df=10 and sig=.000) So,Sig=0.00 < 0.05→Regect H0

It is quite clear from the data collected and from the statistic findings that L1 grammar negative transfer (mother tongue) did take place in the translation test of the Iranian EFL learners. Different linguistic items were transferred negatively as it is evident from the participants' performance. From the above chart, we can understand that the eleven linguistic items were mainly transferred negatively.

Hence, it can be concluded that the learning of L2 in Persian schools is seriously influenced and affected by the student's mother tongue. In overall, most of the participants gave the wrong answers.

Breakdown of the Linguistic Items-Interference in L2 writing
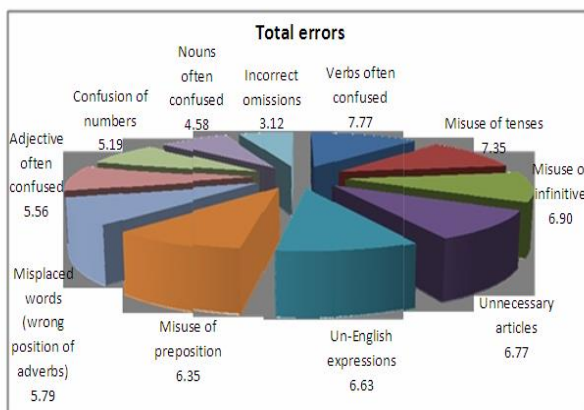
The number and percentage of the errors are given in this figure showed that the Iranian EFL learners had more perceptible problem due to L1 interference in column one with 'verbs' (verbs often confusion). That is, 7.77 in translation test and less in 'incorrect omissions'. That is, 3.12.

The Summary of the Findings and their Implication on the basis of data analysis

Based on the data collected from the analysis of the participants' translation answer sheets, it is possible to draw up the following conclusions about the influence of L1grammatical rules in the writing of L2.

1. Iranian EFL learners should be deductively or inductively taught and informed about the differences of the linguistic items between the L1 (Persian) and L2 (English).

2. Those grammatical items (rules) of the 11 classification that were not found in L2 are used incorrectly in L2 writing due to L1 negative transfer.

3. More importantly, the L2 teacher him/herself should be informed already and should be up-to-dated from different points of teaching view especially cultural and around the language because of the lack of real L2 situation and in other words, L2 learner is living and learning the language in their native environment.

Conclusion

According to the result of the this study, it is clear that Iranian EFL learners experience difficulty when they want to use English 'grammatical items' e.g. verbs often confused, misuse of tenses, misuse of infinitive, unnecessary articles, un-English expressions, misuse of preposition, misplaced words (wrong position of adverbs), adjectives often confused, confusion of numbers, nouns often confused, incorrect omissions because of both L1 negative transfer and the linguistic differences (language system) between source language (L1) and target language (L2). Meanwhile; the absence of article 'the', absence of auxiliary , absence of present and past perfect continuous, differences in noun modifiers, differences in collocations, under differentiation, overgeneralization, etc. There is a believed that 'unlearning is much more difficult than learning.' As a result of these findings, the conclusion is drawn that L1grammar negative transfer (mother tongue) does effect on

Writing Skill On Iranian Efl Learners.

In conclusion, the present research demonstrates that by drawing the learners' attention to those problematic areas of L2, We would be able to enhance theL2 writing skill of Iranian EFL learners and so L1 negative transfer would be, to some extent, reduced. In addition, the findings make clear that L2 teachers, can probably be successful in their teaching and can have successful learners as well.

References

Aid, F M, (1974). Semantic universals in instructional materials, TESOL Quart.

Bown, H. D. (1967) Contrastive Analysis and the language classroom. In Ronlinett(Ed.), On teaching English to speakers of other languages: Paper Read at the TESOL Conference, N.YCity,Washington, D.C. 1967, PP. 80-87

Brown, J. D. (2005). *Testing in Language Programs.* New York, NY: McGraw Hill. Cambridge's Preliminary English Test.

Devos, F, (1995). Contrastive grammar: Tenets and criteria. Papers and in Studies Contrastive Linguistics, 30, 17-29.

Ferguson,C.A.,(1965).General introduction to the contrastive studies. In stockwell et al, The Grammatical Structure of English and Spanish, Chicago: University of Chicago Press, 2, PP,v-vi.

Hashim, A. (1999). Crosslinguistic influence in the written English of Malay undergraduates. Journal of Modern Languages, 12(1), 59-76.

Hayati, A. M. (1997). Contrastive linguistics: Re-evaluation and reformulation. Poznan Studies in Contemporary Linguistics, 32, 228.

Keshavarz, M. (2003). Contrastive analysis and error analysis. Tehran: Rahnama Publications.

Krezeszowski, T., (1967). Fundamental Principles of Structural Contrastive Studies, Glottodidactica, 2, 33-39

Lado, R. (1961). Language teaching: a scientific approach. New York: McGraw-Hill .

Table 3.1 Distribution of items According to proficiency test (PET)

Section	Items	
Part 1	Reading and Writing Test	49
Part 2	vocabulary and grammar	51
Total	100	

Table 4.1Group Statistics of the hypothesis of Females' Translation Test

	N	Mean	Std. Deviation Group	Std. Error Mean	
Female	1	23	8.46	4.254	.834
	2	23	9.27	4.904	.962

Table 4.2 Independent Samples Test of Female EFL learners

Female				t-test for Equality of Means				
	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
						Lower	Upper	
				Equal variances not				
aassumed	.634	49.024	.529	.808	1.273	3.365	1.751	

Table 4.3 The Correlations of Female EFL Learners' PET score

		Females' pet	Females' mean
Females' pet	Pearson Correlation	1	.963**
	Sig. (2-tailed)		.000
	N	46	46
Females' mean	Pearson Correlation	.963**	1
	Sig. (2-tailed)	.000	
	N	46	46

Table 4.4 The grammatical errors gradation of female

English grammatical items	Mean
1. Verbs often confused	7.77
2. Misuse of tenses	7.35
3. Misuse of infinitive	6.90
4. Unnecessary articles	6.77
5. Un-English expressions	6.63
6. Misuse of preposition	6.35
7. Misplaced words (wrong position of adverbs)	5.79
8. Adjectives often confused	5.56
9. Confusion of numbers	5.19
10. Nouns often confused	4.58
11. Incorrect omissions	3.12

Table 4. 5 Friedman Statistical Test of grammatical errors gradation

No	46
Chi square	46.555
Df	10
Sig	.000

Mirhassani, A. (2004). A contrastive analysis of Persian and English parts of speech Tehran: Tarbiat Modarres University.

Moody, K.W., (1971) Pendulum swinging, RELC Journal (Regional English language Center).

Mukattash, L. (2001). Some remarks on Arabic-English contrastive studies. Poznan Studiesin Contemporary Linguistics, 37, 115-126.

Nickel, G & Wagner, K.H., (1968). Contrastive linguistics and language teaching, IRAL. 6, 233-255.

Oller, J. W. (1972), Contrastive analysis, difficulty, and predictability, Foreign Language Annals, 6, pp. 95-105.

Schackne, S. (2002). Language teaching research: I n the literature, but not always in the classroom. Jornal of Language and Linguistics, 1, 1-11.

Yarmohammadi, L. (2002). A Contrastive Analysis of Persian and English. Tehran: Payame Noor

Ziahosseiny, S. M (1985). Contrastive linguistic and language teacher. oxford: pergamon Press.