THE COMPARATIVE STUDY OF VISUAL AND AUDITORY EMPLOYMENT OF FIRST LANGUAGE IN SECOND LANGUAGE CLASSES AND ITS EFFECT ON SPEAKING SKILL

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ABSTRACT
Given the current theories of second language acquisition and reviewing the recent literature, it can be seen that the first language of learners (L1) has an essential and facilitating function in all features of language instruction. This can signify that the ‘bilingual approach’ is gaining more support by incorporating the students’ L1 as a learning tool and also as a facilitator for well-organized communication. At the same time, support for an English-only policy, say, a ‘monolingual approach’ has been declining (Nazary, 2008). In the same way, research in second language (L2) vocabulary learning and teaching has recently regained interest in the field of Second Language Acquisition (SLA). Studies in translation have focused on L1-L2 translation because it is a highly demanding task that involves searching for form, recalling, and evaluating (Laufer and Girsai, 2008). Along this line, one possible effect of using L1, whether visual or auditory, on L2 teaching and learning can be scrutinized in learning a larger amount of vocabulary and in enhancing speaking ability as well. This is the main purpose of the present study.

Keywords: Study of Visual, Auditory, Employment, Second Language, Speaking Skill

INTRODUCTION
Studies in translation have focused on L1-L2 translation because it is a highly demanding task that involves searching for form, recalling, and evaluating (Laufer and Girsai, 2008). Along this line, one possible effect of using L1, whether visual or auditory, on L2 teaching and learning can be scrutinized in learning a larger amount of vocabulary and in enhancing speaking ability as well. This is the main purpose of the present study. Mattioli (2004) believes that "most teachers tend to have opinions about native language use, depending largely on the way in which they have been trained and, in some cases, on their own language education" (p.21). It can be asserted that L2-L1 translation practice and vocabulary acquisition have not been discussed adequately (Goundareva, 2011). L2-L1 translation requires searching for meaning, recognition of word form, later use in word production, and accordingly, enhancing speaking proficiency. Inspired by these views, through investigating two types of exposures to L1-visual/auditory- in vocabulary translation, this paper aims to explore the relationship between L2 - L1 translation as a technique which can be helpful for vocabulary teaching and learning, and the students’ speaking skills. Finally, building on the theoretical and methodological frameworks, together with the author’s own classroom observations, the role of translation is reassessed and a set of activities is proposed which could be used by teachers of English in speaking-oriented classes and teacher training programs alike.

Objectives and Significance of the Study
The role of translation from L2 to L1 in the ESL and EFL classroom has and is likely to continue to be a hotly debated issue. Many teachers and linguists assume that translation does not belong in the classroom because it does not represent making full use of the target language. However, studies such as Daulton (1999) on the use of loan words and Roca (1992) looking at translation usage in bilingual classrooms have illustrated some new ideas that may allow controlled translation usage. Finally, a combination of approaches such as a novel idea offered by Weschler (1997), an ESL teacher in Japan, proposing the newly coined “Functional-Translation Method”, could usher in a new way of using the students’ native language to help them to learn and, hopefully, manipulate a target language in an EFL context.
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Since the questions raised in this study (see 1.3) have not been fully dealt with in the previous literature, it can make this study a genuine one laid along the lines of other scholarly investigations. Therefore, it can give the researcher enough confidence that the study is well worth the effort as it is expected to enhance the existing theories on the relationship between the type of exposure (visual or auditory) to students’ L1 and students’ ability in vocabulary retention and, as a result, in speaking L2.

Research Questions and the Hypotheses

This study aims at investigating the role of visual and auditory learning styles in EFL vocabulary retention and consequently enriching speaking skill. As such, there are two major research questions to be answered in this study:

1. Is there any relationship between type of exposure to L1 (visual & auditory translation) and EFL learners' vocabulary retention?
2. Does the type of exposure to L1 (visual & auditory translation) have a significant effect on the students’ speaking skill?

To pursue answers to the above-mentioned questions, the following null hypotheses were formulated:

1. There is no significant relationship between the type of exposure to L1 (visual & auditory translation) and EFL learners’ vocabulary retention?
2. The type of exposure to L1 (visual & auditory translation) has no significant effect on the students’ speaking skill?

Review of Related Literature

Introduction

This chapter begins with a discussion of the common tenets regarding the influences of L1 on L2 learning with an eye on the role of vocabulary. Then, it discusses several features of second language acquisition such as, receptive and productive learning, vocabulary learning strategy, the use of translation and pictures to facilitate vocabulary learning. Finally, a review of relevant studies in the field is represented to look at the effectiveness of “translation method” in teaching and learning English speaking proficiency in general.

The Influence of L1 in L2 Learning

There is no doubt that learners’ L1 has a great influence on the learning and use of L2. Previous research has shown that learners’ L1 influence the learning and use of L2 vocabulary in different ways (Swan, 1997). For instance Lightbown & Spada, 2006 described the phenomenon of ‘avoidance’ which caused by learners’ awareness that a feature in the target language is so different from their first language, so they prefer to avoid it.

Second language learners use their L1 in learning the target language in many ways. For instance, learners sometime say ‘What is the Persian word for …?’, or use bilingual dictionaries to look up unknown vocabulary. Even though when this does not happen, ‘an immediate association with a mother- tongue word is likely to be set as soon as possible’. In the past, it was necessary to avoid the mother-tongue while teaching a foreign language. Teachers try to explain the meaning of a word without translating; however, after the teacher had spent several minutes trying to explain the word ‘curtain’ to a class of French students, one of them would say ‘Ah, rideau’ (Swan, 1997).

The Use of Translation to facilitate Vocabulary Learning

As it was discussed in the previous section, learners’ L1 has a great impact in the learning of L2. Thus, we come to the question: should translation be used in teaching and testing second language vocabulary? There is a general belief that first language translation should not be used in the teaching of vocabulary. Translation is one of number of ways for conveying meaning, however; it is not better or worse than other ways, such as the use of pictures, real objects, definitions, L2 synonyms and so on.

One of the greatest advantages of using learners’ first language in vocabulary testing is that it provides an easier way to explain the meaning of second language vocabulary. The use of the learners’ first language meaning is like using a simple synonym, while a second language definition usually involves a definition that includes a relative clause or reduced relative clause, and reading such sentences require greater grammatical skills.
MATERIALS AND METHODS
Methodology
Setting and Participants
A number of 120 Iranian pre-intermediate level (according to Interchange Series leveling, subjects have passed Interchange Book 2 successfully) learners of English in the age range of 13 to 17 took part in this investigation. They were selected randomly among two formal language institutes (Omid & Andishe, Nohkbegan) in Gachsaran, a city in Kohgiluyeh and Boyer-Ahmad province. Due to the lack of adequate male students studying at this level and age range in this city, the subjects were all female. In the second phase, in a stratified random selection, the students were assigned to control and experimental groups - with 60 for each. Finally, to accomplish the objective of the study, the experimental group was divided into two sub-groups, namely: visual translation and auditory translation, with 30 members for each sub-group.

Instruments
In order to carry out the study, first, a version of Standard Speaking Test (SST, 2012: see Appendix A) was administered to all mentioned participants (control and experimental groups) taking part in the study as a pre-test. The test is an interview test for a global assessment of functional speaking ability. Since the SST is both structured in stages and adaptive to the perceived level of the examinee as well as his/her personal and professional interests, it was assumed to best measure the aforementioned subjects’ speaking ability.

There is flexibility within this structure and each stage is designed to elicit a speech sample. Interviewers have been thoroughly trained in elicitation technique to ensure that the performance of the examinee will lead to the most accurate rating. The purpose of the interview is to elicit a performance sample that is recorded and evaluated by two evaluators (SST Raters) according to the SST evaluation criteria that are outlined in the SST Manual (see appendix A). The SST interviewers do not formally score the candidate's speaking proficiency. The SST certified rater gives an initial rating. Initial rating must be confirmed by another rater. If the two raters do not agree on their rating, the Master Rater gives the third and final rating. To put it as objective as possible, and for the marks to be numerical and be subjected to all descriptive and inferential statistical analysis in the study, the final mark for each interviewee was a number from one to nine. It must be noted that the raters are experimenter and two other versed experts in the field of Teaching English as a Foreign Language (TEFL).

Given that one of the central focuses of the study is to pinpoint the relationship between the students’ vocabulary knowledge and their speaking ability, some texts were chosen to be utilized as teaching materials in the treatment phase. The texts were all authentic, from authentic sources such as Time and Newsweek magazines (see Appendix B). In topic, genre, and content the texts were not in favor of any specific gender and were assumed to be gender-unbiased. Using Fox index of readability (Farhady et al., 1996), the average texts difficulty were calculated. It was tallied to 19.38 in Fog index of readability formula.

Another instrument was one more version of SST run as a post-test similar in content and structure to the one administered as the pre-test. This version of SST was administered after the treatment sessions.

Procedures
As mentioned above, from among the 120 participants qualified for the current study, 60 were assigned to control group and 60 to experimental group. The main criterion for their final qualification was being in the pre-intermediate level. Since the teaching materials and procedure in the two aforementioned formal, and certified under the Iranian Education Ministry, language institutes (Omid and Andishe, and Nohkbegan) were to somehow similar, this gave the experimenter sufficient confidence in the homogeneity of the subjects. The experimental groups were divided into two sub-groups: auditory-translation experimental group and visual translation experimental group, with 30 participants for each.

Pre-Test
A version of Standard Speaking Test was conducted by two raters, and with one master rater as supervisor, to all above mentioned participants (control and experimental groups) taking part in the study.
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as a pre-test. Each participant was interviewed by two raters (the experimenter and another expert in TEFL). For each participant, the SST interview was 10 to 15 minutes long and consists of 5 stages:

Stage 1: warm-up questions
Stage 2: single picture
Stage 3: role-play with the interviewer
Stage 4: picture sequences
Stage 5: wind-down questions

The SST levels are from Level 1 (Novice Low) to Level 9 (Advanced). The following table shows the correlation between SST and the American Council on the Teaching of Foreign Languages (ACTFL) for Oral Proficiency Interview (OPI) which is a popular standardized procedure for the global assessment of functional speaking ability:

<table>
<thead>
<tr>
<th>ACTFL OPI Levels</th>
<th>SST Levels</th>
</tr>
</thead>
<tbody>
<tr>
<td>Superior</td>
<td>Level 9</td>
</tr>
<tr>
<td>Advanced High</td>
<td>Level 8</td>
</tr>
<tr>
<td>Advanced Mid</td>
<td>Level 7</td>
</tr>
<tr>
<td>Advanced Low</td>
<td>Level 6</td>
</tr>
<tr>
<td>Intermediate High</td>
<td>Level 5</td>
</tr>
<tr>
<td>Intermediate Mid</td>
<td>Level 4</td>
</tr>
<tr>
<td>Intermediate Low</td>
<td>Level 3</td>
</tr>
<tr>
<td>Novice High</td>
<td>Level 2</td>
</tr>
<tr>
<td>Novice Mid</td>
<td>Level 1</td>
</tr>
<tr>
<td>Novice Low</td>
<td></td>
</tr>
</tbody>
</table>

The SST assessment criteria are reliable since it includes the following four categories of assessment criteria:
1. Global tasks and functions performed within the language,
2. Social contexts and content areas in which English is used,
3. Accuracy with which the speaker performs speaking tasks within a specified context and content (Factors included in this category are primarily grammar, vocabulary, pronunciation, and fluency),
4. Oral text types and quantity of speech produced during the testing situations.

The SST is a criterion-referenced assessment tool scored according to the above specified criteria. The test is not designed to discriminate well at levels higher than Intermediate-High, but can suggest when an examinee may be Advanced. SST utilizes a 9 point rating scale to finely discriminate from Novice to Advanced level of English proficiency.

Treatment

For each sub-experimental group, the treatment session lasted 10 weeks, two one and a half hour sessions during each week. The experimenter conducted the whole treatment. Each treatment session consisted of
two main phase activities: a. giving the students a reading comprehension text from authentic sources (Time and Newsweek magazines) and, b. discussing the content of the text in the classroom. In the first phase, for about 45 minutes, the audio translation group was exposed to the Persian translation of new vocabulary items in the authentic texts taken from authentic sources just by teacher’s translation orally without any written illustration on the board or elsewhere, while for the visual group, the written Persian equivalents of the new vocabulary item were transcribed on the board- or on flash cards or through pictures- and the students were asked to have notes of them. The time devoted for this activity was also about 45 minutes. So as to control the teaching bias in each of the two exposures to translation in the treatment sessions, the participants were randomly and unwittingly selected for each sub-group.

In the second phase activity, the content of the texts were discussed. That is, the experimenter asked students for their personal opinions about the text contents. The students, then, gave their opposing or confirming ideas to the ideas presented by the experimenter and the other classmates. In order to give enough time and speaking chance to each participant, the class, for each experimental group was divided into team groups each run by a head. The head was responsible for eliciting the group members’ opinions and presenting the concluding remarks of her own group publicly. The authentic text contents were mainly general not technical and contained social, general knowledge, humanities, and natural sciences topics and contents directed at general readers. Additionally, they were carefully selected not to be gender biased. The justification for the use of authentic texts in this study was to increase motivation and interest in the students to give as much idea as possible, as put forward by Little et al., (1988). This study, as Hutchinson and Waters (1987) argue, is not looking for some abstract concept of authenticity, but for its practical concept of 'fitness to the learning purpose' which is speaking. Since authentic texts contain particular sentence patterns or discoursal patterns and benefit from particular layout such as pictures and the other visual appearances which act as clues to reading comprehension, they may give also additional clues and psychological impetus for speaking as well.

It must be noted that the control group taking part in ordinary class sessions didn’t receive any kind of L1 exposure to translation. Nonetheless, other than exposure to L1, they received the same procedure of teaching speaking (with similar class sessions in time length and frequency) through using reading authentic texts and vocabulary in the same way as the experimental groups explained above.

**Post-Test**
After a 20 session treatment, a post-test was conducted in exactly the same way as the pre-test administered to the all participants.

**Data Analysis**
To delve into the purpose of the study, certain statistical procedures were utilized to analyze and interpret the data elicited by the study. The main statistical procedure employed in the current study was paired t-test in order to compare the general means of the control and experimental groups of the study achieved through the pre- and post tests to determine whether the application of the specific treatment had any significant and considerable effect on the students’ speaking proficiency participated as the experimental groups as compared to that the control group. The two experimental groups’ (auditory and visual) means in both pre-and post tests were subjected to the one sample t-tests as well. The purpose of this inferential analysis was to see if the type of exposure to L1 can affect the subjects’ speaking proficiency significantly. Finally, test of one-way ANOVA was run to determine the effects of various types of exposures on the subjects' overall speaking proficiency at both pre-and post tests.

**RESULTS AND DISCUSSION**

**Results**
In this section, the collected data is analyzed using t-tests for all comparisons between pre-and post tests related to the efficiency of the treatment. The performance of the two experimental groups’ (auditory and visual) in both pre-and post tests were subjected to the one sample t-tests. One-way ANOVAs are also applied when the effects of various types of exposures on the subjects' overall speaking proficiency at both pre-and post tests is intended to be specified.

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The Performance of the Control Group in the Pre-and Post-tests

Table 4.1: Paired t-test for performance of the control group in the pre VS. post-test

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Test</th>
<th>Mean</th>
<th>SD</th>
<th>t_o</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>Pre-test</td>
<td>4.11</td>
<td>1.18</td>
<td>2.105</td>
</tr>
<tr>
<td>Control group</td>
<td>Post-test</td>
<td>4.24</td>
<td>1.13</td>
<td></td>
</tr>
</tbody>
</table>

*P*-value ≤ 0.05  n=60  df=59  *t*-critical = 2.021

For control group, the result was *t*=2.105>2.021. The *t*-observed value exceeded the value of the *t*-critical at 0.05 level which meant that there existed a significant difference between the subjects' means in the two tests.

The Performance of Experimental Sub-groups in the Pre-and Post-tests

Table 4.2: Paired t-test for performance of the auditory group in the pre VS. post-test

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Test</th>
<th>Mean</th>
<th>SD</th>
<th>t_o</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory group</td>
<td>Pre-test</td>
<td>4.59</td>
<td>1.35</td>
<td>3.570</td>
</tr>
<tr>
<td>Auditory group</td>
<td>Post-test</td>
<td>5.24</td>
<td>1.27</td>
<td></td>
</tr>
</tbody>
</table>

*P*-value ≤ 0.05  n=30  df=29  *t*-critical = 2.045

To shed more light on the differences between the means of the auditory sub-experimental group students (with 30 members) in the two tests, paired t-tests were run again. The result was *t*=3.570>2.045. The *t*-observed value exceeded the value of the *t*-critical at 0.05 level which meant that there existed a significant difference between the subjects' means in the two tests.

The same statistical procedure was repeated for the visual sub-experimental group. The result is exhibited in table 4.3.

Table 4.3: Paired t-test for performance of the visual group in the pre VS. post-test

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Test</th>
<th>Mean</th>
<th>SD</th>
<th>t_o</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual group</td>
<td>Pre-test</td>
<td>4.39</td>
<td>1.66</td>
<td>3.880</td>
</tr>
<tr>
<td>Visual group</td>
<td>Post-test</td>
<td>5.44</td>
<td>1.38</td>
<td></td>
</tr>
</tbody>
</table>

*P*-value ≤ 0.05  n=30  df=29  *t*-critical = 2.045

As the above table shows, the *t*-observed value from this analysis also exceeded the *t*-critical at the 0.05 level and this meant that the subjects' means were significantly different in the two tests (*t*=3.880>2.045).

All Students' Performance in the Pre-test (Control VS. Experimental Groups)

Right after the pre-test administration, a comparison was made between all subjects' performance using One-way ANOVA. Table 4.4 indicates the comparison:

Table 4.4: One-Way ANOVA for the subjects' differences in pre-test

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory group</td>
<td>Between groups</td>
<td>34.871</td>
<td>8</td>
<td>4.328</td>
<td>3.408</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>13.900</td>
<td>21</td>
<td>.876</td>
<td></td>
</tr>
<tr>
<td>Visual group</td>
<td>Between groups</td>
<td>9.233</td>
<td>8</td>
<td>3.122</td>
<td>2.432</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>33.356</td>
<td>21</td>
<td>3.560</td>
<td></td>
</tr>
</tbody>
</table>

*P*-value < 0.05

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The F-observed value for the auditory group, 3.408 at 8 and 21 degrees of freedom is lower than the critical F-value, 3.51. For the visual group the same result was also achieved; the F-observed value, 2.432 at 8 and 21 degrees of freedom was much lower than the critical F-value, 3.51.

All Students’ Performance in the Post-test (Control VS. Experimental Groups)

For the post-test, a comparison between the control group and the two experimental groups was made using one-way ANOVA:

<table>
<thead>
<tr>
<th>Subjects</th>
<th>Source</th>
<th>SS</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory group</td>
<td>Between groups</td>
<td>44.871</td>
<td>8</td>
<td>5.609</td>
<td>7.408</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>15.900</td>
<td>21</td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td>Visual group</td>
<td>Between groups</td>
<td>8.466</td>
<td>8</td>
<td>1.058</td>
<td>3.595</td>
</tr>
<tr>
<td></td>
<td>Within groups</td>
<td>37.373</td>
<td>21</td>
<td>1.780</td>
<td></td>
</tr>
</tbody>
</table>

P<0.05

As the above table shows, the F-observed value for the auditory group, 7.408 at 8 and 21 degrees of freedom is higher than the critical F-value, 3.51. In contrast, result of the visual group indicates that the F-observed value, 3.595 at 8 and 21 degrees of freedom was slightly higher than the critical F-value, 3.51. The results show a considerable priority of the auditory group as compared to the visual group in the post-test.

Totally, from the results obtained from tables 4.4 and 4.5, it can be stated, although differently, that the treatment runs by the researcher had significant positive effect on both experimental groups. The potential causes are discussed in 4.2.

Discussion

The results obtained from all inferential analyses in tables 4.1, 4.2, and 4.3 showed that in both experimental groups’ speaking proficiency improved significantly. Therefore, the results rejected the null hypothesis that "the type of exposure to L1 (visual & auditory translation) has no significant effect on the students’ speaking skill". Concerning the howness of the effectiveness of type of exposure, the results of this experiment can support the notion that there exists a close link between perception, action, and ultimately, cognition.

Conclusion and Pedagogical Implications

The current study, though limited in scope, generated a large amount of data touching on important issues in the instruction, assessment and speaking enhancement. The findings of this study suggest that translation process has to be seen within a functional framework to improve speaking skill. Moreover, the principal notion that there exists a close link between perception, action, and ultimately, cognition can be supported.

Relevant implications for the assessment of the effectiveness and efficiency of an instructional program (a speaking course, for example) during its development (formative evaluation), and after its completion (summative evaluation) can also be made on the basis of the findings of this study. Due to the tendency of the EFL students to use their mother tongue in language classes and the conflicting procedures used by teachers in dealing with translation- some completely prohibit translation and some others thoroughly tolerate it- it seems that a more valid course outline to present translation in EFL classroom would be through teacher's ability to: a) make the teaching/learning task as meaningful as possible by exposing to L1translation using voice/picture or the other audio-visual aids, b) regard the interaction of the language learners with the extensive reading text by post-free discussion based on the text topics, and c) lays stress on a multiple strategic nature of teaching speaking, using pictures and sounds in pre-vocabulary building to give as comprehensible input as possible.

The results of the current study have direct prescriptive implications for syllabus designers, curriculum developers, and textbook compilers in general and Iranian ministry of education, in particular. Relying on
the outcomes of this study, they can think of some revisions on the format and content of presenting content in the English textbooks. Relatively, they can prioritize the inclusion of more variable translation-based teaching activities. Also, as proven in this study, educators and educational policy decision-makers can think of teaching training courses in which the duality of audio-visual exposure to L1 is emphasized. Consequently, further research of this sort should be done in conjunction with more controlled empirical method so that reliable as well as valid information on the process conveying comprehensible input using audio-visual L1 can be attained. There is a pressing need for research that examines alternative approaches to the use of translation method that are better suited to the goal of instructional decision making.

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