Explicit Lexical Elaboration as an Autonomy Enhancing Tool for Acquisition of L2 Vocabulary from Reading

Mahmood Reza Moradian[1,*]; Mohammad Reza Adel[2]

[1]Ph.D. in TEFL. Assistant Professor at Lorestan University, Khorramabad, Iran
[2]Ph.D. Candidate in TEFL, Ferdowsi University of Mashhad, Mashhad, Iran
*Corresponding author.
Email: mrmoradian@yahoo.com

Abstract

Studies (Kim, 1996, 2006; Silva, 2000, for example) indicate that explicit lexical elaboration is the most significant technique to make the meaning of unknown words clear in the text. Through explicit lexical elaboration, definitions or synonyms of the difficult words in the text are provided after the explicit elaborative devices such as *which means* whereas appositive devices are used in implicit lexical elaboration. This study was an experiment to show that explicit and implicit lexical elaborative devices can serve as autonomy enhancing tools which assist L2 learners in recognizing the meaning of the unknown words in a text in the absence of dictionaries and instructors. To do the study, three groups of EFL participants (each group including 45 participants) were exposed to 30 low-frequency words by reading one of the three versions of an experimental text containing these words. A univariate factorial ANOVA was administered to analyze the data of the study. The results of the study showed that explicit lexical elaboration was the most beneficial technique in meaning recognition of L2 vocabulary in the text. It is also implied from the results of the study that the explicit elaborative device creates the best condition for learners' autonomy in acquiring L2 vocabulary from reading.

Key words: Explicit and implicit lexical elaboration; Learner autonomy enhancement; Meaning recognition

INTRODUCTION

There are two major approaches to language learning in general and vocabulary acquisition in particular: implicit and explicit. Implicit vocabulary learning is through conscious attention to the meaning of lexical items in or out of the context, for example in sentences, reading passages, or listening passages. The other name for such type of learning is intentional learning. On the other hand, implicit vocabulary learning is done naturally without learners being exposed to the word forms and their meanings. Learners come to know the meaning of lexical items when their focus is on comprehension of the written or oral text, as an example (See Doughty & Williams, 1998; Long, 1991; N. Ellis, 1994; R. Ellis, 1994; Reber, 1976; for a thorough review). The results of studies carried out so far on the effect of implicit and explicit lexical learning on L2 vocabulary acquisition are paradoxically inconclusive. For instance, Marefat and Moradian (2008), Nation (1990), Paribakht and Wesche (1996), Silva (2000), and Toya (2000) showed that explicit elaboration would lead to the development of vocabulary. Some of them (Marefat & Moradian, 2008; Silva, 2000) further showed that explicit elaboration was more effective in L2 vocabulary acquisition than implicit lexical elaboration while Kim (2006) demonstrated that implicit lexical elaboration was as effective as explicit lexical elaboration. One major purpose of this study was to cast more light on this issue.

Another point worthy of note is to see which type of lexical elaboration (implicit or explicit) leads more successfully to L2 learners' autonomy from classroom

teachers and reference dictionaries on the part of L2 learners who spent a lot time looking up the meaning of unknown words while reading and listening. Research (Marefat & Moradian, 2008; Silva, 2000) even shows that implicit vocabulary learning may lead to L2 learners' confusion in mastery of L2 lexical items because L2 learners are not familiar with the implicit elaboration as asset of devices for learning vocabulary. Ellis and He (1999) emphasize that *appositives*, as implicit elaborative devices, may be new to some teaching settings, and so they should be avoided. This study will show what happens in the Iranian EFL context when Iranian EFL students try to obtain meaning from a text whose difficult words have been explained through implicit and explicit devices for L2 learners' sake of autonomy.

Lexical Elaboration in Second Language Acquisition

This study focused on lexical elaboration as an effective way of modifying input to increase its comprehensibility. Lexical elaboration devices used in the study were of two types: Explicit and implicit. The degree of explicitness or saliency of lexical elaboration devices largely depends on the four major characteristics of helpful context, as extracted from the previous literature by Konopak and Konopak (1986), cited in Watanabe (1997, p.288), including (a) proximity of the illuminating context to the unknown word, (b) clarity of the connection between the context and the unknown word, (c) explicitness of the contextual information, and (d) completeness of the contextual information. Examples of explicit lexical elaboration devices include such structures as definition, questioning, naming, and description (Chaudron, 1982, p.175). In contrast, examples of implicit lexical elaboration devices include such structures as apposition, parallelism, and paraphrase.

The difference between these devices is that in the case of implicit lexical elaboration devices, "there is usually little explicit indication of the relationships between the first lexical item mentioned and the following word(s) or phrase(s) meant to elaborate its meaning" (Chaudron, 1982, p.175). It has been reported that L2 learners often fail to recognize lexical elaborations as synonymous restatements, as the relationships between the words elaborated and their lexical elaborations as ambiguous and interpreted as additional rather than alternative information (Kim, 2003; Vidal, 2003; Watanabe, 1997). Particularly of interest here is that the participants in Watanabe's study "sometimes failed to connect words and their explanations even when the explanations were explicitly stated immediately before or after the words" (Watanabe, 1997, p.288). Unless learners notice the word and the relationship between its form and function, the initial learning (i.e., intake) does not take place (as cited in Schmidt, 1990).

A few studies have investigated the relative effects of lexical elaboration on L2 vocabulary acquisition through both listening and reading. As an example, in L2 listening, Toya (1991; 1992) demonstrated the effectiveness of supplying explicit vocabulary explanations in enhancing vocabulary acquisition. In another study on the impact of lexical elaboration on L2 vocabulary acquisition through L2 listening, Chiang and Dunkel (1992) investigated the listening comprehension of 388 high-intermediate and low-intermediate listening proficiency Chinese students of English as a foreign language. These students listened to a lecture, the discourse of which was (a) familiar-unmodified, (b) familiar-modified, (c) unfamiliar-unmodified, and (d) unfamiliar-modified. The modified discourse contained elaborations. The results of the study indicated that "high-intermediate listening proficiency students benefited from speech modification [of elaborative type]…., but the low-intermediate listening proficiency students did not" (p.345). Also, Ellis and He (1999) reported an experimental study of the differential effects of premodified input, interactionally modified input, and modified output on the comprehension of directions in a listen-and-do task and the acquisition of new words embedded in the directions. The results demonstrated that the modified output group achieved higher comprehension and vocabulary acquisition scores than either of the input groups. There was no difference between the premodified and interactionally modified input groups. In fact, Ellis and He's study shows the ineffectiveness of input modification in listening. The inconclusive results of this type demand further research in this important area of second language acquisition inquiry.

In L2 reading, Konopak (1988) tested the vocabulary learning of 55 high-ability and average-ability 11th grade students who read unelaborated and elaborated versions of passages from a history text. Results show that both the high-ability group and the average-ability group gained substantially more word knowledge from reading the elaborated texts than from reading the original unelaborated texts. Similar results were obtained by Konopak et al. (1987). In a more recent study, Chung (1995) investigated the incidental vocabulary learning of 9th grade Korean EFL learners who received five versions of an unelaborated original text. The modification types in the study included simplification and elaboration and the combination of the two. Results showed that all elaborated groups performed better than the unelaborated groups. Likewise, Kim (1996) demonstrated that college freshman Korean EFL learners who read the lexically elaborated texts performed better on immediate and delayed decontextualized supply-definition posttests than those who read lexically unelaborated texts.

Regarding the differential effects of the types of lexical elaboration (i.e., explicit versus implicit versus no elaboration), previous research has indicated that explicit forms of lexical elaboration are more facilitative of L2

vocabulary acquisition than implicit ones (Kim, 2006; Toya, 1992; Vidal, 2003;), whereas Silva (2000) found no such superiority of explicit over implicit devices. Vidal (2003) reported that the elaborated groups "that received elaboration achieved greater gains than those that received no elaboration and that the more explicit the elaboration that accompanied the TWs [Target Words], the bigger the gain" (p.80). One explanation offered by Silva (2000, pp. 69-70) as to why explicit lexical elaboration was not superior to either implicit or no elaboration in his study is that explicit lexical elaboration devices "may not have made [the lexical elaboration] explicit enough" for the participants in the elaborated groups. The explicit lexical elaboration devices used in Silva (2000) (e.g., *which is to say, that is, in other words*) were later thought to have not been as clear to L2 learners as those used in Toya (1992) (e.g., *X means Y, by X I mean Y, X is the same as Y*). As Silva (2000, p.70) correctly pointed out, the inconsistency in research findings may have been due to the difference in the research design in both studies. Toya's study employed an intentional design, whereas an incidental vocabulary acquisition design was adopted in Silva. Following Silva, the current study adopted an incidental vocabulary acquisition design in order to investigate the relative effects of explicit and implicit elaboration devices on incidental L2 vocabulary acquisition of Iranian learners of English through reading lexically unelaborated texts and explicitly and implicitly elaborated texts. The study was conducted to answer the following research questions:

1- Is explicit lexical elaboration the best autonomy enhancing tool for acquisition of L2 vocabulary from reading?

2- Is implicit lexical elaboration the best autonomy enhancing tool for acquisition of L2 vocabulary from reading?

METHOD

Participants: Participants for the study were 135 adult EFL learners at Lorestan University. They were drawn from ten intact freshman English classes making a pool of 360 students majoring in the English Language and Literature. They were all native speakers of Persian and had studied English as a foreign language for a period of six years at high school. The sample for this study included both males and females. Females accounted for 75% of the participants and males accounted for 25%. This shows that the females outnumbered the males very disproportionately. Because of this disproportion, gender was not studied in this research. Since no information was available to determine equivalence in their initial EFL proficiency prior to the study, a cloze test was administered for this purpose (see the section discussing the Cloze Test the Overall EFL Proficiency Measure below).

Materials: This section provides a detailed description of (1) how a reading text for the experimental groups was selected, and the selection criteria applied; (2) how the reading text thus selected was elaborated; and (3) how target words (TWs) were selected, and the selection criteria applied.

A magazine article that had been written by a native speaker (NS) of English for an audience of NSs of English was initially selected as an unelaborated original NS text. The article dealt with the issue of international organizations today which included intergovernmental organizations and nongovernmental organizations. It contained 621 words and 32 sentences with the text difficulty of 23.2 (using the Fog Index of Readability). This index of readability (i.e., 23.2) was within the range of readability indices of the reading passages of high school English text books in Iran. This was done so that the text does not create problems for the participants regarding the difficulty level of the text. Too difficult and too easy texts would have distorted the outcome of the research. The participants might have guessed the meaning of the unknown words while reading an easy text or might have been disappointed to follow a text which is far beyond their current level of English proficiency.

Three weeks prior to the actual study, a group of freshmen majoring in the English Language and Literature were asked to read the unelaborated original text and write down the words they did not know. The 30 lexical items least known by the participants were selected as the Target Words (TWs) for the study. The overall non-recognition rate of the items was 96 percent for 27 lexical items. The next three lexical items which were known by 10 percent of the participants were replaced with low-frequency words. For instance, the noun "look for" was replaced with "seek" which was known by none of the participants. To make a shorter text that could be read in 25 minutes with reasonable comprehension by participants in the study, some sentences were omitted and some others were shortened only if the gist of the text was not hampered. The number of the unknown words was set at 30 because only a small number of words could be realistically expected to be learned from a single exposure while reading a text.

A few non-target words which were unknown to some participants in the study were also replaced with easier words with higher frequencies. As an example, the verb "virtually" which was unknown to some participants was replaced with the verb "almost".

The resulting text was further evaluated by the researchers to determine whether it would be (1) neither too difficult nor too easy to participants in terms of content schemata; (2) of general interest; and (3) not challenging in terms of syntactic complexity.

The resulting text bore the feature minus elaboration, because it did not undergo any textual elaboration, neither of the explicit nor of the implicit type. It was also the

raw, or original, material from which the two elaborated versions (i.e., explicit and implicit) were created. Finally, it served as a text to be read by the control group to see how much participants in this group could learn from a text that had been neither explicitly nor implicitly elaborated, in comparison to the treatment groups who read one of the versions of the explicitly or implicitly elaborated texts.

After the selection of the TWs, they were lexically elaborated as follows. Several ESL/EFL dictionaries were consulted to find the most appropriate synonyms or definitions for the TWs. Then, the synonyms or definitions were inserted right next to the TWs. Two university professors who were experienced EFL teachers at Iranian universities were requested to make any necessary changes to the synonyms or definitions directly from learners' dictionaries to make the lexical elaborations to the TWs more appropriate to the surrounding context in which they were embedded, and to also check whether the synonyms or definitions inserted filled naturally in the text as a whole while reading the elaborated texts aloud. Their feedback indicated that texts sounded natural.

The lexical elaboration devices used in the study were of two types: explicit and implicit. Examples of explicit lexical elaboration devices include definition, questioning, naming, and description while common examples of implicit lexical elaboration include apposition, parallelism, and paraphrase (Chaudron, 1982, p.175). This study employed definitions and synonyms (*X, which means, Y*) as most explicit elaboration devices and apposition (X, Y) as most implicit elaboration devices (Kim, 2006). Brief descriptions and actual examples of each one is presented below.

The Unelaborated Text: This text is the same as the unelaborated original NS text which did not undergo any lexical elaboration. An example of a TW that was neither explicitly lexically elaborated nor implicitly lexically elaborated is shown below, where a TW (i.e., *ratify*) is not elaborated and its meaning is not provided. The example below is a sentence extracted from the unelaborated original text.

The international organization ratified the treaty banning the use of land mines.

The Explicit Text: The TWs in the unelaborated original NS text were elaborated by using an explicit lexical elaboration device (i.e., *which means*) and providing their meanings in the form of synonyms or definitions. An example of a TW that was explicitly lexically elaborated is shown below, where a TW (i.e., *ratify*) is explicitly lexically elaborated and its meaning is provided in the form of a synonym right after *which means*.

The international organization ratified, which means made an agreement to sign, the treaty banning the use of land mines.

The Implicit Text: The TWs in the unelaborated

original NS text were elaborated by using an implicit lexical elaboration device (i.e., apposition with the use of commas) and providing their synonyms and definitions. An example of a TW that was implicitly lexically elaborated is shown below, where a TW (i.e., *ratify*) is implicitly lexically elaborated and its meaning is provided in the form of an appositional synonym right after a comma.

The international organization ratified, made an agreement to sign, the treaty banning the use of land mines.

Instrumentation: This section provides a detailed description of the measures employed to assess participants' (1) overall L2 proficiency, and L2 acquisition of the vocabulary knowledge. Measures of L2 vocabulary acquisition were the two dependent variables in this study, namely, the form-recognition vocabulary posttest and the meaning-recognition vocabulary posttest.

The Cloze Test as the Overall EFL Proficiency Measure: Information on participants' EFL proficiency based on a reliable standardized measure such as the TOEFL or IELTS was not available. Thus, a cloze test was administered instead in order to see if participants differed in their initial EFL proficiency. Cloze tests are generally known to be a reliable measure of overall EFL proficiency (e.g., Oller, 1979). The cloze test used in this study, originally developed by Brown (1980), was a modified version that had previously been used in Kim (1996; 2006) with a group of Korean EFL learners. Kim reports that the reliability of this test was .73 by Cronbach's alpha, when scored using an acceptable-word scoring method.

The 50-item cloze test was based on a 399-word passage, *Man and His Progress*, adapted from *Man and His World: A Structured Reader* (Kurilecz, 1969). Except for the first two sentences and the last sentence in the passage to provide context to its readers, the cloze test had every seventh word systematically deleted from the passage, leaving a total of 50 blanks. The parts of speech of the deleted words were nouns, verbs, adjectives, adverbs, prepositions, article, etc. Test Takers were asked to provide only one word for each blank in the missing space after each missing word. As the primary purpose of administering the cloze test was to determine pre-treatment group equivalence in EFL proficiency among the participants, the test scores from the cloze test were analyzed for this purpose only and not further used in the main statistical analysis.

A Meaning-Recognition L2 Vocabulary Acquisition Posttest: Then, a meaning-recognition L2 vocabulary posttest was administered to the three groups after they read the passage. It included 30 target words (TWs) in the form of a list plus 50 meanings in Persian. In fact, the meaning-recognition vocabulary posttest was a select-definition test. The participants were told that all 30 words had appeared in the text. The list contained 30 correct meanings for the 30 TWs and 20 incorrect meanings in

Persian, functioning as distracters.

Procedure: The experiment was conducted in two separate data-collection sessions. During Session One, participants were asked to take the 50-item cloze test after the test administrator explained to them the cloze test they would take. Both oral and written instructions of what the test was about and what they were expected to do on the test were given. Then, they were asked to take the cloze test in no more than twenty five minutes. In the second session, which was conducted a week after the first session, the participants were randomly assigned to one of the three groups by random distribution of the three different versions of the experimental text. They were told they would be asked to read a text in English for 25 minutes and that they would have to pay attention to the text content while reading, as the text would be collected after reading, and they would then be tested on their comprehension of the text content without the text present. No mention whatsoever of any vocabulary posttests was made either to the teacher of the class or to the participants, in order to create an experimental condition of the incidental vocabulary acquisition from reading. The text was collected after 25 minutes, and then a vocabulary posttest, that is, the meaning-recognition vocabulary posttest was administered. Contrary to an earlier announcement of a post-reading test of text content comprehension, no such test was actually administered. The participants were given ten minutes for the first test.

Results and Discussions: This section reports on the results of the statistical analyses, both descriptive and inferential, of the cloze test and the meaning-recognition vocabulary posttests.

The Cloze Test: The overall mean and standard deviation of the cloze test scores were 16.92 and 2.16, respectively, with scores ranging from 13 to 20. Reliability for the 50-item cloze test was in the previous studies (Chung, 1995; Kim, 1996, 2006) to be .81, using the Kuder-Richardson formula 21 (K-R 21). The summary of the descriptive statistics for the cloze test is presented in Table 1.

Table 1
Descriptive Statistics for the Cloze Test

Groups	n	M	SD
Unelaborated (A)	45	16.76	2.00
Implicit (B)	45	17.21	2.22
Explicit (C)	45	16.82	2.30
Total	135	16.92	2.16

To identify any preexisting differences in overall proficiency among the three groups, a univariate one-way ANOVA was performed on participants' cloze test scores. No significant differences were found ($F_{(2, 132)}$ = .43, ρ = .66). The statistically non-significant results suggest that the three groups were of similar overall EFL proficiency, as measured by the cloze test, prior to the study. Having

served this purpose, the results of the cloze test were not used any further.

Table 2
Descriptive Statistics for the Meaning-Recognition Posttest

Groups	n	M	SD
Unelaborated (A)	45	9.76	2.95
Implicit (B)	45	10.48	3.70
Explicit (C)	45	12.12	3.72
Total	135	10.79	3.58

The Vocabulary Posttest: The overall mean and standard deviation of the meaning-recognition vocabulary posttest were 10.79 and 3.58, respectively, with the scores ranging from 6 to 18. Reliability indices for the 30-item meaning recognition posttests were calculated to be .62, using K-R 21. The descriptive statistics for the meaning recognition posttest are presented in Table 2. A one-way ANOVA (Table 3) on the meaning-recognition vocabulary posttest revealed that the main effect for lexical elaboration was significant ($F_{(2, 132)}$ =4.00, ρ= .02). In conclusion, it can be stated that the effect of lexical elaboration was evident in the dependent variable of the study, namely, the meaning-recognition vocabulary posttest scores. Where significant F ratios were found, differences between pairs of means among the levels of the independent variable were analyzed using the Scheffé test. The Scheffé test is considered the most conservative post hoc multiple test. Research questions 1 and 2 asked which type of (i.e., explicit or implicit) lexical elaboration was a better autonomy enhancing tool for acquisition of L2 vocabulary from reading as measured by a meaning-recognition vocabulary posttest. In this study, Iranian college students who read the explicitly elaborated text performed significantly better than the unelaborated group. The mean difference (2.80*) between the two groups reached a significance. On the contrary, the implicitly elaborated group did not perform significantly better than the unelaborated group. The mean difference (1.16) between the implicitly elaborated group and the unelaborated group was not statistically significant. It is, as a result, implied from the results of the study that the explicit elaborative device creates the best condition for L2 learners' autonomy in acquiring L2 vocabulary from reading.

Table 3
Results for the Scheffé Test for Groups on the Meaning-Recognition Vocabulary Posttest

Contrasts	Mean Difference	ρ
(C) vs. (A)	2.80 *	.03*
(B) vs. (A)	1.16	.90
(B) vs. (C)	.12	1.00

Note: (*) The mean difference is significant at the .05 level.

This study demonstrated that explicit lexical elaboration is the best technique to make the meaning of the unknown words clear in the text, and by so doing assist the L2 learners in reading the written passage fluently in the absence of dictionaries and classroom teachers. Therefore, syllabus designers and L2 language teachers are advised to employ explicit lexical elaboration techniques for L2 learners' autonomy purposes. The other implication of this research is that caution should be taken for the use of implicit lexical elaboration. Such an elaborative device did not help participants in this study to arrive at the meaning of the unfamiliar words in the experimental texts. Such failure, in this regard, "illustrates the importance of clarity of connections between explanations and what is explained" (Watanabe, 1997, p.303). Language acquisition would be expected if students notice the form, understand its function and make a connection between them. This form-function mapping would occur if the relationship between the lexical item to be elaborated and the elaborative device is clear-cut. Lack of explicit lexical elaborative devices such as "*which means*" makes the relationship between form and function blurred. Students often see elaborations as textual extensions than restatements. As reading a text with appositives is a new "discoursal experience", to use Ellis and He's (1999, p.298)) term, in some instructional settings like the one researchers in this study witnessed, it requires that students have a certain reading ability and familiarity with the format and function of appositives as restatements (as cited in Stoller & Grabe, 1993; Watanabe, 1997). This was one limitation of the study which we couldn't control. Before administering the reading passage, students could have been taught about appositives as implicit elaboration devices, and explicit elaboration devices to remove such a problem. An additional study is necessary to shed light on this issue.

CONCLUSION

This study showed that explicit lexical elaboration, compared to implicit lexical elaboration, is the most effective type of lexical elaboration in the acquisition of L2 lexical items. The explicit group who received the explicitly lexically elaborated text performed significantly better than the control group of the study who performed on the unelaborated text. Reversely, the implicitly lexically elaborated group did not perform significantly better than the same control group. It is then implied from the results of this study that explicit lexical elaboration is the most beneficial device for L2 readers to read the written text texts autonomously in the absence of classroom teachers and mono- or bilingual-dictionaries. Explicit lexical elaboration acts like a dictionary in the text or an invisible teacher assisting L2 readers in reading a text fluently and *autonomously*. Another study is necessary to see if explicit lexical elaboration has the same effect on L2 listening.

The gender in this study was not also controlled because the number of female students was greater than that of the males. Further research will show if the participants of both sexes react similarly of differentially to lexical elaboration of a written of oral passage.

REFERENCES

Chaudron, C. (1982). Vocabulary Elaboration in Teachers' Speech to L2 Learners. *Studies in Second Language Acquisition,* 4, 170-180.

Chiang, C. S. & Dunkel, P. (1992). The Effect of Speech Modification, Prior Knowledge, and Listening Proficiency on EFL Lecture Learning. *TESOL Quarterly*, 26, 345-374.

Chung, H. (1995). *Effects of Elaborative Modification on Second Language Reading Comprehension and Incidental Vocabulary Learning.* (Unpublished master's thesis). University of Hawai'i at Manoa, USA.

Doughty, C. & Williams, J. (1998). *Focus on Form in Classroom Second Language Acquisition*. Cambridge: Cambridge University Press.

Ellis, N. (1994). *Implicit and Explicit Learning of Languages*. San Diego, CA: Academic Press.

Ellis, R. (1994). A Theory of Instructed Second Language Acquisition. In N. Ellis (Ed.), *Implicit and Explicit Learning of Languages*. San Diego, CA: Academic Press.

Ellis, R. & He, X. (1999). The Roles of Modified Input and Output in the Incidental Acquisition of Word Meanings. *Studies in Second Language Acquisition, 21,* 285-301.

Kim, Y. (1996). *Effects of Text Elaboration on Intentional and Incidental Foreign Language Vocabulary Learning.* (Unpublished master's thesis). University of Hawai'i at Manoa, USA.

Kim, Y. (2006). Effects of Input Elaboration on L2 Vocabulary Acquisition Through Reading by Korean Learners of English as a Foreign Language. *TESOL Quarterly*, *40*, 341-373.

Konopak, B. C. (1988). Effects of Inconsiderate vs. Considerate Text on Secondary Students' Vocabulary Learning. *Journal of Reading Behavior*, *20*, 25-41.

Konopak, B. C. & Konopak, J. P. (1986). *Development of a Prediction Scale for Text-Based Definitional Information.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Kurilecz, M. (1969). *Man and His World: A Structured Reader*. New York: Crowell.

Long, M. (1991). Focus on Form: A Design Feature in Second Language Methodology. In K. de Bot, R. Ginsberg, & C. Kramsch (Eds.), *Foreign Language Research in Cross-Cultural Perspetives*. Amsterdam: John Benjamins.

Marefat, F. & Moradian, M. R. (2008). Effects of Lexical Elaborative Devices on L2 Vocabulary Acquisition: Evidence from Reading. *The Journal of Teaching English Language and Literature Society of Iran*, *2*(6), 101-124.

Reber, A. (1976). Implicit Learning of Synthetic Languages: The Role of Instructional Set. *Journal of Experimental*

Psychology: Human and Memory, 2, 88-94.

Schmidt, R. W. (1990). The Role of Consciousness in Second Language Learning. *Applied Linguistics, 11, 129*-158.

Silva, A. D. (2000). *Text Elaboration and Vocabulary Learning.* (Unpublished master's thesis). University of Hawai'i at Manoa, USA.

Stoller, F. & Grabe, W. (1993). Implications for L2 Vocabulary Acquisition and Instruction From L1 Vocabulary Research. In T. Huckin, M. Haynes, & J. Coady (Eds.), *Second Language Reading and Vocabulary Learning* (pp. 24-45). Norwood, NJ: Ablex.

Toya, M. (1991). *Learning Vocabulary from Different Input:*

Elaboration and Highlighting. (Unpublished manuscript). Department of English as a Foreign Language, University of Hawaii at Manoa, USA.

Toya, M. (1992). *Form and Explanation in Modification of Listening Input in L2 Vocabulary Learning*. (Unpublished master's thesis). University of Hawai'i at Manoa, USA.

Vidal, K. (2003). Academic Listening: A Source of Vocabulary Acquisition? *Applied Linguistics, 24*, 56-89.

Watanabe, Y. (1997). Input, Intake, and Retention: Effects of Increased Processing on Incidental Learning of Foreign Language Vocabulary. *Studies in Second Language Acquisition, 19*, 287-307.