



PROMOTING VOCABULARY RETENTION THROUGH ETYMOLOGY PRESENTATION

(ETİMOLOJİ SUNUMU YOLUYLA SÖZCÜK SÖZCÜK AKILDA TUTMAYI
ARTTIRMA)

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ABSTRACT

Failing to remember previously encountered words is one of the commonly reported complaints of both EFL and ESL learners. Among the variety of commonly used vocabulary reinforcing techniques, making students aware of etymological accounts of words is a relatively underresearched area in the literature. The present study, therefore, aims at exploring the effect of presenting etymological accounts of 30 low frequent words on short- and long-term vocabulary retention of EFL learners. The participants (n=32) were members of two intermediate intact classes randomly assigned to experimental and control groups. While both groups were asked to look up the meaning of the words in their dictionaries, the participants in the experimental group received a short instruction on the etymologies of the words. The results of both immediate and delayed posttests demonstrated the mnemonic efficacy of etymology presentation. The paper comes to an end by offering a justification of the linkage between the obtained results and the existing psycholinguistic theories.

Keywords: vocabulary teaching, etymology, retention, mnemonics

ÖZ

Hem EFL hem de ESL öğrencileri, daha önce karşılaşmış oldukları sözcükleri akılda tutamamaktan şikayet edegelmişlerdir. Sıklıkla kullanılan sözcük ezberleme teknikleri arasında, öğrencilerin sözcüklerin etimolojik yapılarının farkında olmasını sağlamak, diğer tekniklere kıyasla üzerinde daha az araştırma yapılmış bir tekniktir. Bu sebeple, bu çalışmada 30 adet sıklık düzeyi düşük sözcüğün etimolojik öğelerinin sunulmasının, EFL öğrencilerinin sözcükleri kısa ve uzun vadede hafızalarında tutabilmeleri üzerindeki etkisi araştırılmıştır. Sayısı 32 olan katılımcılar, deney ve kontrol gruplarına rastlantısal olarak atanmış 2 orta düzey dil sınıfının öğrencileridir. Her iki gruptaki öğrencilerden, sözcüklerin anlamlarını sözlükten bakmaları istenmiş olmakla birlikte, deney grubunda yer alan katılımcılara ek olarak, sözcüklerin etimolojik yapıları ile ilgili kısa bir açıklamada bulunulmuştur. Kısa süreli ve uzun süreli sınavlar etimolojik açıklamanın hafıza üzerindeki yararını ortaya koymuştur.

Anahtar Sözcükler: sözcük öğretimi, etimoloji, akılda tutma, hafıza teknikleri

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INTRODUCTION

In the eyes of many learners, and even some teachers, language learning is synonymous with memorization of a myriad of words. Although this does not hold true, we should not forget that words constitute a major part of any language (Bogaards, 2001; Nation, 1997; Sokmen, 1997). In this respect, Morimoto and Loewen (2007) suggest that a mastery of 3000 words is needed for successful language learning, while others such as Schmitt (2008) believe that a large vocabulary of 5000 –7000 word families for oral discourse is required to function in English. The importance of vocabulary acquisition is also clearly reflected in the increasing number of studies made in the last two decades in this area of research (Meara, 2002). Another important point here is that this broad knowledge of vocabulary cannot be gained merely through implicit learning (Ramachandran & Rahim, 2004; Read, 2004). Carter (1998) regards explicit instruction of vocabulary as a kind of prerequisite for implicit learning inasmuch as he believes that in order for learners to be able to get involved in implicit or incidental learning, they need to have passed a level of explicit learning. All these arguments lay emphasis on the importance of exploring effective techniques of vocabulary instruction.

Among the many techniques and strategies for vocabulary instruction (e.g. keyword method, translation, semantic mapping, guessing meaning from the context, mnemonic devices, etc), presentation of etymology has been a relatively underresearched area (for a review of vocabulary learning techniques and strategies, see Decarrico, 2001). The study of etymology has received varied attention at different times in history. While not many people might be eager to work on etymology, this subject has always had its own fervent proponents. Long ago, Trench (1851:4) referred to some linguists who “viewed the language as a repository of wisdom and instruction in etymology as a form of enlightening pedagogy.” In this study, however, we are not interested in the high loads of information or wisdom embedded in etymological studies. We rather aim at a peripheral use of etymology as a memory aid in learning vocabulary. This, however, does not imply that etymology can have no other pedagogical roles in language teaching. It only indicates that we have chosen to focus merely on one particular aspect of etymology in the present study.

The etymology of a word very often consists of a narration of a story related to the word, a list of older versions and variants of the word (usually in older languages, such as Latin, Greek, Old German, or French), and/or an account of the developmental process the word has gone through (See Appendix B for examples of etymologies used in this study). Any of these can play a significant role in an enhanced retention of the target words.

The basic theoretical support for the above claim is how human brain supposedly stores words, or, more generally, any piece of information through

making associations. The more associations the brain makes for a word, the easier it will be to store and retain it. The failure to remember a previously encountered word is in many cases a result of an earlier failure to store that word efficiently by connecting it to the background and already-established knowledge. Schema Theory, for instance, works on the very same basis (Nassaji, 2007). “Schemata serve as a reference store from which a person can retrieve relevant existing knowledge and into which new information is assimilated” (Richards & Schmidt, 2002: 469). Accordingly, the etymological accounts could further help learners associate a new word with the relevant existing knowledge in their minds inasmuch as etymological accounts consist of stories that might sound familiar to many learners, and thus help them activate the related schemata when learning new words.

In line with what has been mentioned above, another theoretical support for the use of etymology as a means to enhance retention comes from Dual Coding Theory, which is based on the general assumption that cognition consists of two classes of verbal versus non-verbal representations. Put simply, a verbal form is stored alongside with a mental, non-verbal image in the memory. The non-verbal class, according to Paivio (1990: 53), can include all sorts of “perceptual, affective, or behavioral knowledge.”

As for Schema Theory, in order to activate the relevant schemata, we need familiar stories (or at least stories similar to what learners already know), but in the case of Dual Coding Theory, the etymological stories are not required to be familiar ones because what matters is not connecting new information to existing knowledge, but raising some sort of reaction or feeling in learners. Such non-verbal reaction or feeling, when coupled with the verbal form, leads to a better storage of new words.

Another theory lending support to the justification of the use of etymological elaboration for the sake of better retention of a word is Levels of Processing Model (For further information, see Cermak and Craik, 1979). Richards and Schmidt (2002:453) consider “elaborative rehearsal” as a level of processing and state:

... elaborative rehearsal [...] involves deep semantic processing, resulting in more elaborate associations and more durable memories. For example, if you need to remember a sequence of numbers for later recall, it is useful to transform the sequence into something that is meaningful.

The present study is an attempt to examine the role of etymological accounts in remembering the meanings of new words, hypothesizing that they will have a significantly positive effect on vocabulary retention due to the theoretical background described above. At the same time, the results of this

study could, at least partially, be considered as further evidence for or against the three long-lived theories mentioned above. Additionally, the results of this study could be of paramount importance in choosing a more effective technique for teaching the words which students do not encounter very often, and are likely to be forgotten soon. Finally, it is hoped that this study will be a contribution to the relatively underexplored topic of etymological accounts and their roles in second/foreign language teaching. To this end, the present paper is intended to answer the following research question:

Does the presentation of the etymological account of a word result in a better short- and long-term retention of it?

METHODOLOGY

This part of the paper will describe the context of the study, the participants, and the procedures of data collection.

Participants

Two EFL classes, taught by two different teachers, at a private language school in Iran served as the experimental (n=18) and control (n=14) groups of this study. All the participants were female adult learners at the intermediate level of language proficiency. The participants' final scores in the previous semester of their English language learning were used to check for the homogeneity of the two groups. The findings revealed no significant difference between the two classes.

Materials

Screened through two filters, thirty words were finally selected for this study. As the first step, 100 words were taken out by browsing through various books, magazines, and newspapers. The first criterion for cutting down this randomly obtained sample was to examine whether or not the words were frequently used in modern American English. The on-line Corpus of Contemporary American English (COCA) was accordingly utilized to check low-frequent words of the last two decades. The purpose in this stage was to minimize the possibility of students' familiarity with the selected words. The next criterion, as another major basis for choosing the words, was the availability of an interesting etymological background or story for those words. One of the researchers, along with the teacher in charge of the experimental group, did the task of judging whether an etymological account was fascinating enough to be included in the study or not. This was done to enhance the internal validity of the study by strengthening the treatment. The whole twofold process resulted in the selection of 30 final words with captivating etymological accounts out of 86 low-frequent words taken out of

the 100 randomly selected words. (See Appendix A for the complete list of the target words used in the study.)

Procedure

The thirty words were presented to both groups in three sessions (10 words each session). In the control group, the primary presentation technique was asking the students to look up the given words in their dictionaries (all the students used *Oxford Advanced Learner's Dictionary*). The teacher would then ask one or two students to explain the meaning to the class. She would clarify the meaning or provide further explanation only when the students had problems understanding the meaning or had questions about it. In the experimental group, the very same presentation technique was used in addition to the teacher's short talk about the etymology or the historical story of each word. In order to make sure that all the students had comprehended the story, the teacher, in addition to asking comprehension questions, would ask one or two students to orally summarize the etymological explanation or the story.

As the final part of vocabulary presentation in the experimental group could possibly make the act of presentation in this group longer than that of the control group, the teachers were asked to report how much time they spent each session on presenting the new vocabulary. Nonetheless, to prevent a drastic difference between the two groups regarding the amount of time allotted to vocabulary presentation, the two teachers were told to finish the whole task in 25 to 35 minutes at most. In practice, the difference found was expectedly negligible. The factor of time was specifically taken into account to further balance the conditions for both groups since the more time spent on the activities related to the target words could possibly put one group at an advantage, and thus decrease the internal validity of the study. Table 1 shows the amount of time spent on vocabulary presentation in each session of the two classes.

Table1. The Time Allotted (in minutes) to Vocabulary Presentation in both Groups

Groups	Session 1	Session 2	Session 3	Total
Control	37	34	34	105
Experimental	35	30	33	98

As for pretesting the participants to check if they had any prior knowledge of the words, before the presentation stage in each of the three sessions, they were given a copy of vocabulary knowledge test developed by Paribakht and Wesche (1997). None of the participants knew the meaning of

any of the target words. Some participants had, however, chosen level 2 (“I have seen this word before, but I don’t know what it means.”) or level 3 (“I have seen this word before, and I think it means”) for some items, but a close look at such words revealed that the participants who had opted for levels 2 or 3 for any of the given words had most probably made a mistake because those words looked somehow similar to other words that the students already knew. The typical examples were “claptrap” (similar to “clap” and “trap”), “drivel” (similar to “drive”), “bawl” (similar to “bowl”), and “candid” (similar to “candidate”). For example, for the word “candid,” one of the students in the control group wrote “being chosen.” The results of the pretest are reported in Table 2 below:

Table 2. The Pretest Results

Groups	No. 1*	No. 2	No. 3	No. 4	No. 5
Experimental	66 %	25 %	9 %	0 %	0 %
Control	71 %	18 %	11 %	0 %	0 %

* No. 1: I don't remember having seen this word before.

No. 2: I have seen this word before, but I don't know what it means.

No. 3: I have seen this word before and I think it means _____ (synonym or translation).

No. 4: I know this word. It means _____ (synonym or translation).

No. 5: I can use this word in a sentence. e.g.: _____ (if you do this section, please also do section IV).

Posttests and Scoring Procedures

Both immediate and delayed posttests (to check for both short- and long-term retention of the words, as indicated in the research question) consisted of the whole list of the 30 words taught to both groups. The participants were given 15 minutes to answer each 30-item posttest (30 seconds for each word). In order to prevent cheating, the participants were informed in advance that the results of these tests would have no effect on the results of their final term score. They were informed of this a very short time before administration of the two posttests.

The participants were asked to define, translate, exemplify, illustrate, or clarify the meaning of each word in any way they could. This freedom in answering the questions was purposefully provided because the retention of the meaning was the only thing we aimed to test, irrespective of how the participants could show a sign of recalling the meanings of the words. One score would be given for any response which indicated knowledge of the

meaning of the word. Leaving an item unanswered or giving a wrong response would be scored as zero. The responses were not scored for spelling, grammaticality, etc. The second researcher scored both tests.

RESULTS

To answer the research question of the study, the results of the immediate posttest of both groups were compared using an independent samples *t*-test. The means of the experimental and control groups were 21.35 and 26.61, respectively (see Table 3). The mean difference, according to the results obtained, was found to be significant, $t(30)=2.64$, $p=0.013$.

Table 3. Descriptive Statistics for Immediate Posttest

Groups	n	M	SD
Experimental	18	26.61	5.12
Control	14	21.35	6.13

Table 4 displays the descriptive statistics obtained for the delayed posttest. The independent samples *t*-test again revealed that the mean score of the experimental group (19.68) is significantly higher than the mean score of the control group (2.46), $t(27)=6.86$, $p=0.000$. It should be noted that since three of the participants were absent for the delayed posttest, the data analysis was done on 29 participants.

Table 4. Descriptive Statistics for the Delayed Posttest

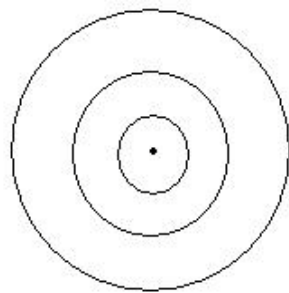
Groups	n	M	SD
Experimental	16	19.68	8.79
Control	13	2.46	2.18

DISCUSSION

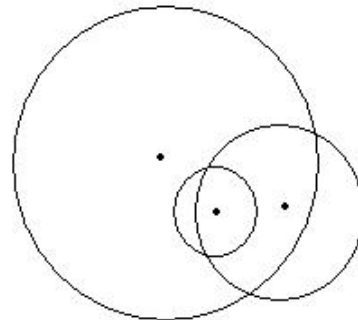
The obtained results clearly indicate the considerable effect of presenting etymologies on vocabulary retention, particularly when it comes to long-term retention. Since a rather large number of words were presented in each single session (10 words per session), it could be, more or less, expected that the participants in the control group would not do much well on the delayed posttest. On the other hand, it seems that the participants in the treatment group took advantage of etymological accounts as an additional resource to rely on in order to remember the meanings of the target words on

the delayed posttest. Furthermore, the results of the present study seem to be satisfactorily consistent with the previously mentioned psycholinguistic theories, i.e. Schema Theory, Dual Coding, and Levels of Processing.

From the perspective of Dual Coding, we could argue that the participants in the experimental group recalled the words more effectively because they might have managed to form a mental representation of the words or might have developed an affective state associating with the words. These mental representations or affective states, as proposed by Dual Coding Theory, are stored with the verbal form of a word in human mind, and thus contribute to a better storage and an enhanced subsequent recall. Students are unique people with unique life experiences and may react in many various ways to the stories or situations included in etymologies. These personalized affective states can be stored in their minds together with the word. The etymology of the word *genial* (cheerful and friendly), for example, is related to wedding or birth, which might arouse various affective states in the students' minds. An example of the formation of a mental representation for a word is the etymology of the word *pavilion* (a kind of decorative tent or temporary building). *Pavilion* originally means "butterfly." Since pavilions were decorative and very beautiful, they were associated with butterflies. Moreover, the doors of such tents were very much like a butterfly's wings, especially when they were opened and closed. Presented with such an etymology, the students would expectedly form related images, which would be attached to and stored with the verbal form of the word in their minds (See Appendix B for a typical mental image of pavilion.) The other highly illustrational etymology used in this study is for the word *banquet* (a formal feast/meal). *Banquet* originally meant "bench," and any meals eaten on benches and tables used to be referred to as banquet, but it is now more formally used. The etymology of the word *eccentric* (odd or strange) is another example which is likely to cause images to be formed in the students' minds. This word was first used in astronomy. When circles did not share the same center, they were called eccentric. One can easily imagine how odd eccentric circles are in comparison with concentric circles (which share the same center):



Concentric (usual – normal)



Eccentric (unusual – abnormal)

From the perspective of Levels of Processing Model, a greater amount of elaborative rehearsal of a word facilitates its recall and increases its durability in human mind. It could be argued that the etymological accounts used in this study served as the elaborative rehearsal referred to in Levels of Processing Model, as they could create new elaborative associations for a word and add sense and meaning to a simple raw verbal/orthographic form of a word. Here, again, a number of etymologies used in this study can be regarded as the relevant examples, one of which is the word *kowtow* (to give in – to act in a servile manner). It originates in an interesting historical story of an English ambassador visiting China. The story teaches the students how and why kowtow is now used in English, and this is what gives sense and meaning to this word.

To the knowledge of the authors, there are very few studies, if any, that have investigated the role of etymological accounts on the learning of new vocabulary. A rather small body of research, however, is available on the effectiveness of teaching the etymologies of idioms to improve some aspects of learning, especially retention (e.g. Boers, 2001; Boers et al., 2007). The findings of the present study are consistent with them, although idioms are supposed to lend themselves much easier and better to etymological accounts. Nevertheless, word etymologies seem to act generally in a similar manner and evoke the same mental processes as etymologies for idioms, and this can mainly account for this consistency.

CONCLUSION

The results obtained in this study indicate ample productivity of presentation of etymological accounts of words for an enhanced subsequent recall. This becomes even more significant when the more longitudinal recall of words is concerned (see Table 4). There were, all the same, some limitations in the study, among the most crucial of which stands the rather small number of participants. Besides, due to some practicality restrictions, the number of sessions in which the participants received instruction on the target words could not be increased, so ten words were presented in each session. Aside from the research limitations, the pedagogical implications of this study need to be accounted for cautiously. The results of this research are generalizable to the words which bear an enlivening etymology, similar to the words used here. Not every word, for sure, possesses such a quality. Fortunately, however, at the hands of creative teachers, the duller or less informative etymologies can be enriched and embellished to grab students' attention and make further associations for the targeted word in their minds. In other words, some etymologies, to qualify as pedagogically significant, might

need some level of processing executed by the materials writer or the teacher before they are presented to the students as a mnemonic device.

While moving on the same line of many previous theories, models, and studies on vocabulary teaching and learning (as discussed in the introduction), this study introduces a rather new vocabulary teaching technique, which has been shown here to be considerably effective in enhancing students' retention of words and their meanings.

This study focused merely on one aspect of vocabulary learning, i.e. retention, but it is hoped that further research will study the role of etymology teaching in other aspects of vocabulary learning such as comprehension, collocations, usage, etc (See Boers et al, 2007 for a similar study conducted on idioms). Replications of the current study with more participants, vocabulary items, and class sessions are also suggested. Using the same teacher for treatment and control groups would probably increase the internal validity, allowing researchers to make stronger claims regarding their findings. Future studies may also probe into the nature of word etymologies by, for example, adding a second treatment group to check the efficacy of words with less elaborative etymologies against words judged to have more elaborative and intriguing etymologies.

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Appendix A

The target words used in this study

Accost
Anathema
Augur
Banquet
Bawl
Candid
Claptrap
Dapper
Drivel
Eccentric
Fiasco
Genial
Hermetic
Homage
Immaculate
Kowtow
Jovial
Limbo
Macabre
Moniker
Nemesis
Nepotism
Ordeal
Oxymoron
Pavilion
Procrastinate
Puny
Quagmire
Somersault
Yarn

Appendix B

Examples of etymologies used in the experimental group

Accost (approach aggressively - attack)

It comes from *kost*, meaning “bone” and later “ribs.” Ribs are located at the two “sides” of the human body. *Side* evolved into *beside*, and *beside* came to mean “come beside something” or “approach.” People usually “approach to talk.” The meaning got more violent by the passage of time, as it started to mean “approach to talk aggressively” or even later “to attack.”

Homage (respect)

Homage comes from the Latin root *homo*, which means “man” (as in *homo sapiens* = human beings). In medieval England, farmers would use this word to show obedience to their landlords by saying “I’m your man.” This used to indicate a high level of slavery, but, now, it only shows respect, not slavery. The meaning has somehow weakened through the passage of time.