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Do Learners use Different Strategies for Learning Concrete vs. Abstract Nouns and Verbs?

by

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A Thesis

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Abstract

It is hardly possible to find a learner of a second language who does not use any vocabulary learning strategies. Students might do it unconsciously. The aim of the study is to investigate the strategies that second language learners use to memorize the meanings of the concrete and abstract nouns and verbs and see if they are different. Twenty-seven participants were recruited for the research. One hour interview was held during which students attempted to memorize new words. The results show that the most commonly used strategies for concrete and abstract nouns and verbs were simple word rehearsal, writing of a word and/or its meaning, sound link, cumulative rehearsal, mnemonic use. According to results of the final test nouns had advantage over verbs within concrete category. No other significant differences were found. As for the strategy choice, the research showed that there is no significant difference in the use of strategies between such categories as concrete nouns, concrete verbs, abstract nouns, and abstract verbs. Only abstract verbs seem to stimulate deeper processing which results in the use of more strategies.

Key words: noun, verb, concrete, abstract, strategy, memorization, meaning, ESL, vocabulary, VLS.

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Chapter I: Introduction

The problem of expanding vocabulary usually arises when learning a foreign or a second language, rather than using a native tongue. Second/ foreign language learners oftentimes find themselves in a situation when they cannot come up with a right word in a particular situation, cannot find a synonym or explain it in different words. In that case they consult a dictionary. It is easier with the L1. If a desired lexical unit doesn't come to mind we will always find a way to overcome that barrier by using more or less exact equivalent. So, the main difference between two situations described above is the vocabulary size. It is not a secret that in order to be a proficient speaker of a second language one should have a wide vocabulary. Knowledge of a large amount of lexical items helps to express thoughts, emotions, and attitudes as precisely as possible and to have an effective communication.

To make the acquisition of new vocabulary more efficient, students usually resort to vocabulary learning strategies. In fact, strategies are used by people all the time when they are trying to learn new skills, not necessarily a language. The application of strategies can determine whether one will be a good second language learner, or if one will accomplish good results in a field that is being studied.

In this particular study we want to focus on vocabulary learning strategies that second language learners use to memorize new vocabulary items. Words in any language possess many characteristics, and those word features might make acquisition of words easier or more difficult. We will focus on such features as concreteness/ abstractness and word class, specifically on nouns and verbs. It was established in previous studies that words with before-mentioned traits are processed differently (Altarriba & Basnight-Brown, 2011; Asplin, 2002; Bauer et al., 2009;

Colombo, Navarrete & Arfe, 2017; Gentner, 1982; Kauschke, Lee, & Pae, 2007, etc.), therefore strategy use might vary depending on those characteristics.

Chapter II: Literature Review

Vocabulary Learning Strategies

In the process of learning, students use a variety of learning strategies. According to Green and Oxford (1995), learning strategies are "specific actions or techniques that students use, often intentionally, to improve their progress in developing L2 skills" (p. 262). As Schmitt (1997) pointed out, language learners use strategies more in vocabulary acquisition, rather than in the process of acquisition of other elements of a language. A number of research has been done in investigating the relationship between vocabulary learning strategies (VLS) of second language learners and their success and/or proficiency level (Gu, 2003; Green & Oxford, 1995; Gu, 1994; Kojic-Sabo & Lightbown, 1999; Behbahani, 2016). It has been established and repeatedly proven that good learners use multiple strategies and they use them more frequently than their counterparts. Moreover, Gu (2003) has demonstrated that it is not necessarily true that successful students use the same set of strategies. It is not the quantity, but the quality of the strategies used. Good learners knew what strategies to use in a certain situation and that very reason makes them efficient learners (Kojic-Sabo & Lightbown, 1999).

Some researchers have investigated strategy use through different levels of proficiency. Zarei and Baharestani (2014) corroborated findings of previous research in that there is certainly a difference in the use of strategies by learners of different levels of proficiency (see Green & Oxford, 1995). However, Behbahani (2016) found no evidence of relationship between strategy use and proficiency level with the explanation of the lack of a certain level of autonomy among the participants under investigation (p. 652).

The question of gender as a factor that influences the use of vocabulary learning strategy was investigated a lot (Gu, 2002; Bahbahani, 2016; Green & Oxford, 1995; Haghi & Pasand,

2013). It has been established that males and females use different strategies to acquire vocabulary. Gu (2002) states that females used significantly "more vocabulary learning strategies that were found to be correlated to success than males" (p. 35) This finding corroborated with that of Green and Oxford (1995) and Bahbahani (2016). Furthermore, the relationship between a certain group of strategies and gender was found. For example, Behbahani (2016) found that females prefer to use metacognitive strategies, while males use determination strategies.

Taxonomies of Vocabulary Learning Strategies

One of the widely used taxonomies of vocabulary learning strategies is Kudo's taxonomy. It is represented as follows:

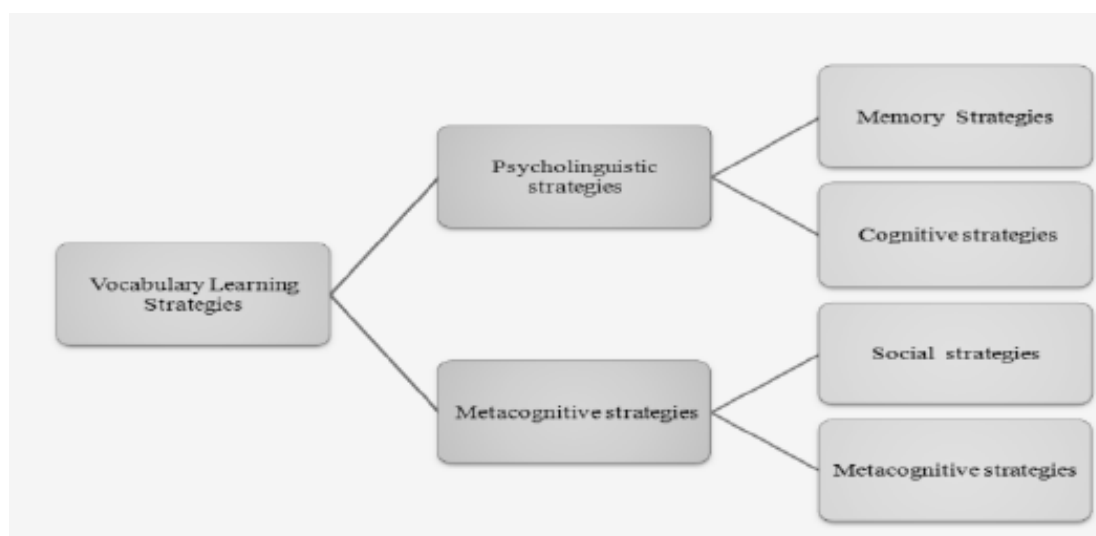


Figure 1. Kudo's Taxonomy (cited from Kalajahi, 2012, p. 149)

As we can see from the figure, vocabulary learning strategies are divided into psycholinguistic and metacognitive. Psycholinguistic strategies in its turn comprise memory strategies and cognitive strategies. Memory strategies, also known as mnemonics, here refer to the process of "relating the word to some previous knowledge", i.e. using visuals, relating new words to the ones that are already known, to synonyms (Kalajahi, 2012, p. 139). Orthographical

and phonological forms and word parts are also considered to belong to this category. Cognitive strategies focus on "repetition and mechanical means to study vocabulary" (Kalajahi, 2012, p. 139). Usually, it implies written or verbal repetition, use of flash cards, study aids, etc.

The second category, metacognitive strategies, consists of metacognitive and social strategies. As Kalajahi (2012) states, "metacognitive strategies are strategies used by learners to control and assess their learning" (p. 140). According to Schmitt (1997), metacognitive strategies "involve a conscious overview of the learning process and making decisions about planning, monitoring or evaluation the best ways to study" (p. 8). As for the latter, the example of social strategies would be interaction with native speakers, asking peers or teachers for clarifications.

Another taxonomy, proposed by Nation (2013), is based on the principles of what is involved in knowing a word.

Table 1. Paul Nation's Taxonomy of Vocabulary Learning Strategy

| General class of strategies | Types of strategies |
|---|---|
| Planning: choosing what to focus on and when to focus on it | <ul style="list-style-type: none"> • Choosing words • Choosing the aspects of word knowledge • Choosing strategies • Planning repetition and spending time |
| Sources: finding information about words | <ul style="list-style-type: none"> • Analyzing words • Using context • Consulting a reference source in L1 or L2 • Using parallels in L1 and L2 |
| Processes: establishing knowledge | <ul style="list-style-type: none"> • Noticing • Retrieving • Generating (creative use) |
| Skill in use: enriching knowledge | <ul style="list-style-type: none"> • Gaining in coping with input through listening and speaking • Gaining in coping with output through reading and writing • Developing fluency across the four skills |

Cited from Nation (2013), p. 328.

The author of this taxonomy correlated types of strategies with the steps that are involved when a learner acquires vocabulary. So, the first stage of learning a word would be planning, and, therefore, such strategies as choosing a word, the aspect of a word, a strategy would be used by a second language learner. On the next stage, students work on the meaning of a word so they resort to context, dictionaries, analysis of the words. Thus, the strategy types mentioned in the chart above are used by the learners. For the third stage, such strategies as noticing, retrieving, and generating are used to help L2 earners to establish knowledge. Lastly, for "enriching knowledge" learners are working with vocabulary through development of different skills.

The next taxonomy that I would like to mention was developed by Lawson and Hogben (1996) in their study 'The vocabulary-learning strategies of foreign-language students'. In this study researchers were observing students attempting to learn the meanings of new words in order to see what strategies they use. The authors developed fifteen categories which were grouped into 4 higher level categories for the purpose of classifying the findings from their research. It can be presented as follows:

Table 2. Lawson and Hogben's Taxonomy

| | |
|-----------------------|---|
| Repetition | 1) Reading of Related words 2) Simple word rehearsal 3) Writing Word and Meaning 4) Cumulative Rehearsal 5) Testing |
| Word Feature Analysis | 6) Spelling 7) Word Classification 8) Use of Suffixes 9) Sentence translation |
| Simple Elaboration | 10) Simple use of Context 11) Appearance Similarity 12) Sound Link |
| Complex Elaboration | 13) Complex Use of Context 14) Paraphrase 15) Mnemonic Use |

Cited from Lawson & Hogben (1996), p. 114-115

Authors provide explanation for each coded category in their work (see Lawson & Hogben, 1996).

Oxford and Crookall (1990) propose four categories of techniques of vocabulary learning: decontextualizing, semi-contextualizing, fully contextualizing, and adaptable (p. 9). Decontextualizing techniques refer to those that extract the word from the context so it won't help the learner remember how it is "used as a part of language" (p. 10). Word lists, flashcards, and dictionary use are the techniques that fall under this category. Semi-contextualizing techniques allow certain degree of context that might be substantial, useful for the learner. In this case words are not used in a "naturalistic communication" (p. 10). This category comprises word grouping, word or concept association, visual/aural imagery, physical response, physical sensation, and semantic mapping. Fully contextualizing techniques on the other hand are the techniques where words are embedded in a regular communicative context. They are reading and listening practice, speaking and writing practice. Finally, adaptable technique is a technique "that can reinforce other techniques at any part of the contextuality continuum" (Oxford and Crookall, 1990, p. 10). One of the examples of this technique is structured reviewing.

Finally, Gu (2003) divided strategies into task-dependent and person-dependent ones (pp. 3-15). To the first group of strategies we can refer guessing, dictionary use, note-taking, rote rehearsal, repetition, mnemonics, word formation. Regarding person-dependent strategies, these are strategies that depend on "how a learner evaluates the task requirement and whether and how a cognitive strategy is deployed" by a particular learner. Basically, these vocabulary learning strategies are related to individual differences of SLL (Gu, 2003, p. 14). It includes learning style, gender, age.

Acquisition of Nouns and Verbs

It has been established that nouns and verbs are processed and acquired differently not only in second language, but also in a mother tongue. It happens because the concepts of nouns are simpler than that of verbs. Gentner (1982) introduces the Natural Partition hypothesis by which she claims that:

(1) the linguistic distinction between nouns and predicate terms, such as verbs and prepositions, is based on a preexisting perceptual or conceptual distinction between concrete concepts such as persons or things and predicative concepts of activity, change-of-state, or causal relations; and (2) that the category corresponding to nouns is, at its core, conceptually simpler or more basic than those corresponding to verbs and other predicates (p. 3).

The author refers to Macnamara (1972) who introduced the idea that "cognitive difficulty predicts the order of different kinds of word meaning, with object reference as the simplest and earliest meaning" (Gentner, 1982, p. 6). Considering these opinions it can be seen that nouns are acquired earlier and easier than verbs.

A lot of studies has been done to investigate this phenomenon in acquisition of nouns and verbs by children when they are learning their mother tongue (Gentner, 1982; Colombo, Navarrete, & Arfe, 2017; Kauschke, Lee, & Pae, 2007; Lavin, Hall, & Waxman, 2006). Gentner (1982), for example, compared early vocabularies of children whose first languages are English, German, Kaluli, Japanese, Mandarin Chinese, and Turkish, and discovered that the number of nouns exceeded the number of verbs in all mentioned languages. She offered possible explanation for this pattern, such as frequency, word order, morphological transparency, patterns of language teaching (see Gentner, 1982, pp. 29-40), although, they failed to explain this

tendency. Gentner (1982) claims that "nouns are learned earlier because their referents are more accessible than those" of verbs (p. 40). It can be supported by the findings from the study that nouns for individuals (proper nouns), food, animate objects and other concrete nouns were acquired earlier and in a greater number than verbs.

Colombo, Navarrete, and Arfe (2017) in their study examined acquisition of nouns and verbs in Italian pre-school children. The participants, who were 3 to 5 years old, were shown pictures and they had to name them using one word. It was demonstrated that it was easier for children to come up with the names for the objects, rather than to produce verbs. In the case of the latter, circumlocution was used. It was stated, that "it reflect[ed] a tendency to focus the conceptual representation on the described entity (i. e., the objects)" (Colombo, Navarrete, & Arfe, 2017, p. 1385). The result of this study was consistent with the natural partitions hypothesis proposed by Gentner (1982). It was stated that such characteristic as imageability played an important role in noun and verb processing with the advantage for the former.

Kauschke, Lee, and Pae (2007) examined noun and verb processing by children in acquisition of their first languages (German, Korean, and Turkish). It was expected that acquisition of nouns and verbs will be different because of the differences in the structure of the languages. Thus, the authors talk about 'noun-friendly' and 'verb-friendly' languages with the latter referring to the fact that these "languages are characterized by a reduction of nouns or noun phrases due to a systematic omission of subject (Kauschke, Lee, & Pae, 2007, p. 1047). So, essentially, this idea is based on frequency and it is supposed that in 'verb-friendly' languages the information is carried out by the verbs mostly. That is why the nouns can be omitted which leads to more frequent use of verbs. That, consequently, might result in an advantage of the acquisition of verbs in such languages. Two languages mentioned in the study (Korean and Turkish) are

considered to be 'verb-friendly', while German is a 'noun-friendly' language. The results of the study showed that representatives of German and Turkish languages were more accurate in naming nouns while Korean children performed better on verb naming tests. Thus, 'language-specific' aspects play an important role in acquisition of words.

Although the information presented above concerns with the acquisition of the first language it also might shed some light on second language acquisition. For the present study the difference between the processing and acquisition of nouns and verbs is important as it may influence the choice of strategy that learners will use for acquisition of the former or the latter.

Concrete and Abstract Words

As practice shows some words are easier learned than the others. One of the reasons might be in the difference between the word types. Generally, linguists distinguish concrete and abstract words. Some researchers discern such category as words of emotion along with the concrete and abstract ones (Altarriba & Bauer, 2004; Bauer et al, 2009; Schwanenflugel & Noyes, 1996). Schwanenflugel (1996) states that concreteness of a word is one of the main signs of a word difficulty. According to Asplin (2002), abstract verbs are the verbs that "describe the thoughts, feelings, or perceptions of other people [which] are much more difficult to distinguish in a scene than an observable action or state" (p. 2). Thus, concrete verbs can be described as the verbs that describe the actions which are observable.

A clear difference between concrete and abstract nouns can be seen from the definition that is provided by the website of Utah State University, which says:

Abstract [nouns] refer to intangible qualities, ideas, and concepts. These words indicate things we know only through our intellect, like "truth", "honor", "kindness", and "grace". Concrete words refer to tangible, qualities or characteristics, things we

know through our senses, [for example] "obese Siamese cat" (Concrete Images, 2008).

Paivio (1991) suggests a theory that explains why concrete words are easier acquired than abstract. It is called the dual-coding theory. According to Paivio (1991) there are two systems in our brain: 1) verbal (the logogen) and 2) imaginal (the imagen) that are involved into the processing of a word. The logogen system is involved when both concrete and abstract words are processed. However, only concrete words are represented in the imagen system. Therefore, "concrete words are remembered better than abstract words because the image provides an additional means through which the concrete words can be stored and retrieved" (Altarriba & Bauer, 2004, p. 390). Thereby, learning of concrete words turns out to be easier due to the presence of such characteristic feature as imageability. This theory was supported by Kounios and Holcomb's (1994) research. In their experiment they have investigated the topographic distribution of event-related brain potentials (ERPs) to concrete and abstract words in lexical decision and concrete-abstract classification tasks. According to Sur and Sinha (2009), ERPs are "small voltages generated in the brain structures in response to specific events or stimuli. [They] help [to] capture neural activity related to both sensory and cognitive processes" (What is event-related potential section). Kounios and Holcomb's (1994) findings showed that concrete and abstract words are processed by the left hemisphere, while only concrete words are processed by the right hemisphere that is responsible for imagination.

Another theory that helps to shed some light on the concreteness effect of the words is called a context-availability hypothesis, which was developed by Schwanenflugel (Schwanenflugel & Shoben, 1983). In accordance with this concept, concrete words are in advantage because it is easier for the learners to think of a context for concrete words rather than

for abstract ones. For example, if the word *table* will be given it is easy to come up with such adjectives as *big, wooden, round*, so basically, we created the context for the word *table* by ourselves and it comes quite naturally without giving too much thought to it. Taking this fact into account, it is suggested that with a sufficient contextual support no difference will be found in the acquisition of concrete and abstract units (Altarriba & Bauer, 2004; Tolentino & Tokowicz, 2009).

As it was mentioned earlier along with concrete - abstract distinction there is such category as words of emotion. Altarriba and Basnight-Brown (2011) in their research describe such word type as emotion words. According to them, emotion words are the words that "either label an emotion or evoke an emotion" (p. 447). For example, the words that label the emotions are *sadness, anger*, while the words that evoke an emotion could be *prison, funeral, wedding*. Such aspect of 'emotionness' of a word should be taken into account as many studies show that this word type is acquired differently than concrete and abstract words.

Altarriba and Bauer (2004) conducted a series of experiments to investigate whether emotion words will behave as abstract words or whether they will have similar characteristics as concrete or abstract words. The first experiment showed that concrete words were better recalled than abstract ones. The new finding was that emotion words were better recalled than either concrete or abstract (Altarriba & Bauer, 2004, p. 394). Based on hypotheses developed by Paivio, mentioned above, the authors gave explanation that like concrete words emotion words also have an image system (dual-coding theory). Respectively, in terms of the context availability theory, they suggested that emotion words, probably, evoke more associations and context relating to subjects' experiences, therefore making stronger connections.

In the second experiment the researchers were focused on such characteristics of emotion words as concreteness, imageability, and context availability. They concluded that concepts represented by emotion words are on the one hand more imageable and are easier to think of a context for than abstract words, but, on the other hand, they are less concrete than concrete words (Altarriba & Bauer, 2004, p. 397). The above-mentioned experiment showed that emotion words differ from concrete and abstract words, which should be taken into consideration by second language instructors.

Research Questions

The research questions of the present studies are the following:

1. What strategies do ESL learners use to memorize the meaning of new words?
2. Is there any difference in learners' strategies between nouns and verbs?
3. Is there any difference in learners' strategies between concrete and abstract words?

Chapter III: Methodology

Participants

The participants of the present study were twenty-seven English language learners of different proficiency levels who were enrolled in (IEP) (levels 3, 4) and EAP program at the time of the experiment at one of the universities in the upper Midwest of the United States. Both females and males were involved with the age range between 18 and 30. The informants were from such countries as China, South Korea, Japan, Saudi Arabia, Egypt, and Mongolia. All of the participants took part in the present study voluntarily and they did not receive any monetary or academic compensation for it.

Table 3 demonstrates demographic information of the participants.

Table 3. Demographics of Participants

| | Frequency | Percentage |
|------------------------|-----------|------------|
| Gender | | |
| Male | 10 | 37% |
| Female | 17 | 63% |
| IEP Level | | |
| Level 3 | 1 | 4% |
| Level 4 | 9 | 33% |
| EAP Level | | |
| Level 1 | 6 | 22% |
| Level 2 | 11 | 41% |
| Native language | | |
| Chinese | 12 | 44% |
| Arabic | 3 | 11% |
| Japanese | 4 | 15% |
| Korean | 7 | 26% |
| Mongolian | 1 | 4% |

Materials

The materials for the study were the following:

1. cards with target words;

2. pictures;
3. audio recorder;
4. final test.

The participants were given 20 cards with English words on one side and translation to their mother tongue on the other. Native speakers of the target languages with advanced level of proficiency in English were asked to provide accurate translation for each target word. The items were selected from two sources. The first source was the 8th-10th lists of thousands of words from the British National Corpus (BNC) and the Corpus of Contemporary American English (COCA) taken from Paul Nation's webpage at the Victoria University of Wellington website. The second one was Robinson's (2000) "Word Smart: Building an Educated Vocabulary" book. Ten words were nouns (five concrete and five abstract) and other ten words were verbs (five concrete and five abstract, respectively). In the process of selecting the words I adapted and followed three criteria mentioned by Lawson and Hogben (1996):

1. each word should be unknown to the students;
2. each word should represent familiar object or concept;
3. each word should be made up of three syllables (p. 109).

As for pictures, they were used as distracters in between the target words. The pictures were taken from Tallarico's (2017) "Favorite Sports: Spot-the-Differences" book.

The final test was composed of twenty target words and we followed the matching format designed by Schmitt (2001). First, two blocks (block A and block B) were created and randomized with the help of randomizer.org. Then, two versions of the final test were designed to avoid the "order effect" by joining the blocks in different order. In the version 1, block B was followed after the block A. In the second version of the test block B preceded block A.

Moreover, to create two versions of the final test 6 items in each section were randomized. In all sets of six words 3 nouns and 3 verbs were inserted. Each word was repeated 2 times in the whole test. Some words were repeated 3 times (see Appendix C). For recording the participants' answers Cowon iAUDIO s9 player was used.

Procedure

The researcher conducted individual interviews with each participant. The interviews lasted in general for one hour and were audio-recorded. During the interview, the researcher also took notes of what participants did. At the beginning of the session students were explained the procedure of the experiment and were told that the research examines the strategies that the students use to learn the meaning of new words.

The participants were given one card at a time which had an English word on one side and an L1 translation on the other. The items were counterbalanced, i. e. the words were presented in different order to different participants. Students were allowed to do everything they need in order to memorize the meaning of the word (i.e. go online, read out loud, write, etc.). A sheet of paper and a pen along with the Longman dictionary were in front of the participants.

First, one card was given to a participant and s/he had one minute to memorize it. Immediate recall technique was used so after one minute of memorization, students were asked to describe in details what they did and what they were thinking about to memorize the word and its meaning. The interviewer prompted the participants by asking such questions as: "Did you think about anything else?"; "Did you do anything else?". Main points were written down by the researcher, but for better analysis consultation with the audio recorded material was made on analyzing data stage. After the participant described all the mental processes s/ he had, the researcher provided two pictures and the students had to find the differences between them.

Picture puzzle break followed after each learned word and took 30 seconds each time. It was done in order to distract the informant from the word and to prevent "recency effect in working memory" (Lawson and Hogben, 1996, p. 112). After this, the next word was provided to the informant.

After all twenty words were learned, the participants were given final test where they had to match the word with its meaning (see Appendix C). No time limit was set for the testing part. If the word was matched correctly with its meaning a score of 1 was given. In cases when the word was matched incorrectly a score of 0 was assigned. Finally, students were asked to reflect on what words were easier to memorize and what were difficult, as well as to think of possible explanation for it. When the interviews were over, the recordings were transcribed for analysis. One of the transcribed interview can be found in Appendix E.

Data Analysis

As the data was collected and transcribed the participants' responses were coded with respect to their answers. Categories of the learning strategies that fit to the description of categories offered by Lawson and Hogben (1996) were borrowed from their study. Because of the differences in research designs, few more categories were added based on observations of the students actions and their responses. Added categories can be seen in the table below with an asterisk next to it. Moreover, in the table below a detailed description of each category is presented with examples.

Table 4. Codes of the Strategies Used

| | |
|--------------------------------------|--|
| Repetition | |
| Simple word rehearsal | - The participant repeats the word a couple of times (either in L1 or L2, or both). |
| Writing word and meaning: | - The participant writes down the given word with or without its meaning. |
| Cumulative rehearsal | - The student goes back to previous words and repeats them. |
| Word Feature Analysis | |
| Spelling | - The student comments on the spelling of the given word. For example: " <i>In the word 'sorcerer' there are three Rs and two Es. It looks like magic</i> ". |
| Word classification | - The student categorizes the word according to its part of speech based on some features. For example: <i>In the word 'doggedness' " 'ness' means noun</i> ". |
| Use of affixes | - The participant comments on affixes in the given word. For example: <i>In 'disparage' "affix 'dis' means something negative</i> ". |
| Simple Elaboration | |
| Appearance similarity | - The participant is connecting the word with another word in L1 or L2 based on how they look. For example: " <i>Plethora</i> ", the first two letters look like 'plus', so it means too much". |
| Sound link | - The participant is connecting the word with another word in L1 or L2 based on how they sound. For example: " <i>The word 'somersault' sounds like 'some result'. So if a person is doing something some result will be a somersault</i> ". |
| *Use of context | - The participant is checking the target word in a sentence. |
| *Definition | - The participant is looking for the meaning of the word in a dictionary. |
| Complex Elaboration | |
| Paraphrase | - The participant is trying to find a synonym for the given word, or paraphrases it . |
| *Creating a sentence with a new word | - The participant is creating a sentence of their own with the given word. |
| Mnemonic use | - The participant is engaging imagination to connect to the given word (forming a picture or an image of the word), trying to relate the word to their own experience. For example: <i>For the word 'daffodil' a participant said "I imagine this flower, and I think of a New Year because we usually have daffodils as decorations"</i> . |

Four major groups of strategies were adopted from Lawson and Hogben's (1996) study. First group is entitled 'Repetition' which comprises three strategies that involve some kind of repetition. They include oral rehearsal, writing, and cumulative rehearsal, i. e. repetition of previously learned words. Second group of strategies is called 'Word Feature Analysis' and includes techniques that involved fragmentation of the words that helped the participants to classify words according to their word class, making use of affixes, or spelling. The third and fourth groups are based on context use which can facilitate the memorization of a word. Depending on the complexity of the word analysis 'Simple' and 'Complex' elaboration groups were formed. The difference between these two groups is in the mental processes that the participants had. In 'Simple Elaboration' group the subjects were relating to the meaning of new words on a recognition stage, while strategies that were included into 'Complex Elaboration' group involved some kind of production and use of imagination. Thus, 13 strategies emerged after all the data had been analyzed.

Chapter IV: Results and Discussion

Results

Difference between concrete and abstract nouns and verbs. Individual characteristics of words, such as concreteness/abstractness and part of speech, might influence the results on the immediate post test. To determine whether it is true t-tests were performed between the categories.

T-tests were conducted to compare the mean differences of concrete and abstract nouns and verbs. Data were analyzed by Statistical Package for the Social Sciences (SPSS). First, we compared the results of the final test of 27 participants between concrete words and abstract words, which included 5 concrete nouns and 5 concrete verbs versus 5 abstract nouns and 5 abstract verbs. Paired-Sample t-test ($t = .359$ [26], $p = .722$) showed that the difference between the two test means was statistically insignificant. When comparing nouns and verbs, Paired-Sample t-test ($t = 1.955$ [26], $p = .061$) showed no significant difference between the means of these two groups as well; however, we can tell that nouns are acquired slightly better than verbs, see Table 5.

Table 5. Results of T-test between Concrete/Abstract Words and Nouns and Verbs

| Category | N | Mean | SD |
|----------------|----|-------|--------|
| Concrete Words | 27 | .9074 | .12987 |
| Abstract Words | 27 | .9000 | .15191 |
| Nouns | 27 | .9333 | .11435 |
| Verbs | 27 | .8741 | .18312 |

Another set of Paired t-tests was conducted between such groups as: 1) concrete nouns vs. concrete verbs; 2) abstract nouns vs. abstract verbs; 3) concrete nouns vs. abstract nouns; 4) concrete verbs vs. abstract verbs. The results showed that the only statistically significant

difference was between nouns and verbs within concrete category ($t = 2.801$ [26], $p = .009$). That being said, we can conclude that word class feature turns out to be more critical than concreteness effect when it comes to acquisition of second language vocabulary. Table 6 provides more information about mean scores within each group.

Table 6: Results of T-test between Concrete Nouns, Concrete Verbs, Abstract Nouns, and Abstract Verbs

| Category | N | Mean | SD |
|----------------|----|------|-------|
| Concrete Nouns | 27 | .956 | .1155 |
| Concrete Verbs | 27 | .859 | .1907 |
| Abstract Nouns | 27 | .911 | .1695 |
| Abstract Verbs | 27 | .889 | .2025 |

There were instances when the participants were familiar with some words. In 12 out of 540 possible cases students knew the word which equals to 2 %. For example, the word 'marinate' was known by 4 participants. In this study we did not eliminate it but in future studies it might be screened out. When we looked at the individual characteristics of the words that the participants already knew we came to the conclusion that discarding their data would not dramatically change the outcomes as in one case the words that the participants were familiar with belonged to abstract words, but the only significant difference was within concrete words. In another person's case three concrete verbs were not new to the participant; however, according to the results only within concrete words nouns had an advantage over the verbs.

Strategy use. After we coded the participants' answers according to the coding system described in the previous section, we calculated the percentage of cases when participants used certain strategy with a word from one of the four categories. The results can be seen in Table 7 below:

Table 7. Descriptive Statistics on Category Usage in Percentage (in round numbers)

| Strategy | Concrete Nouns | Concrete Verbs | Abstract Nouns | Abstract Verbs |
|--------------------------|----------------|----------------|----------------|----------------|
| Simple Word Rehearsal | 79 | 79 | 79 | 79 |
| Sound Link | 40 | 35 | 45 | 36 |
| Writing Word and Meaning | 37 | 37 | 37 | 37 |
| Mnemonic Use | 36 | 35 | 36 | 16 |
| Cumulative Rehearsal | 22 | 22 | 22 | 22 |
| Appearance Similarity | 10 | 14 | 7 | 13 |
| Use of Affixes | 8 | 2 | 14 | 13 |
| Paraphrase | 6 | 7 | 11 | 27 |
| Creating a Sentence | 5 | 7 | 7 | 12 |
| Definition | 4 | 7 | 5 | 8 |
| Use of Context | 3 | 6 | 5 | 6 |
| Word Classification | 1 | 9 | 13 | 4 |
| Spelling | 1 | 1 | 5 | 1 |

Based on these numbers we identified five strategies that were used more commonly among the participants to acquire the meaning of words from a certain group. The results are illustrated in Figure 2.

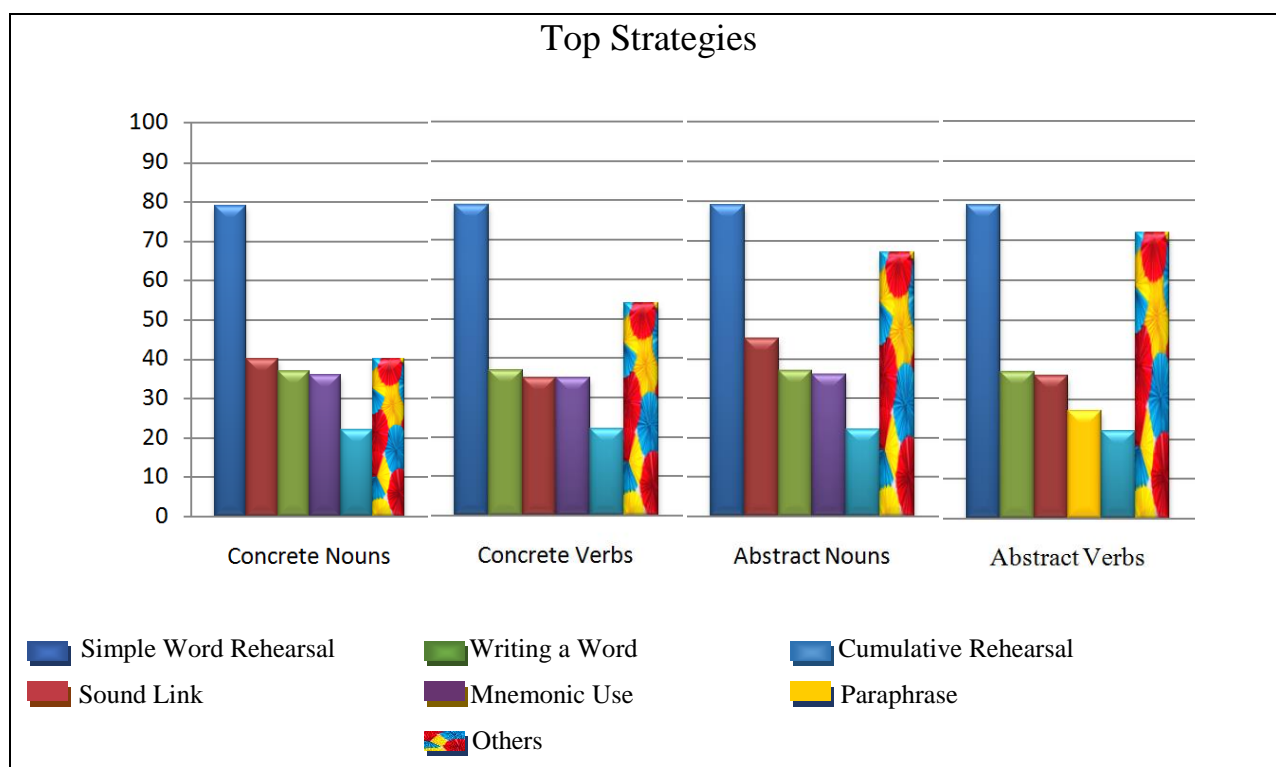


Figure 2: Top 5 Strategies Used for Acquisition of the Words

As you can see from the Figure above, the most commonly used strategy for acquisition of all the words was 'Simple Word Rehearsal'. In seventy-nine percent of cases the informants indicated that they repeated the words while memorizing them (they either repeated only English word or both English and L1 translation). The next strategy that was used a lot is 'Sound Link'. It was the second commonly used strategy to memorize the words that are categorized as nouns, and the third frequently used strategy for memorization of verbs. 'Writing a Word and Meaning' strategy was used in 37% of situations by the students across all four groups. Although it had the same percentage, the strategy's position in the Top 5 strategies varies. In the case of nouns it was the third commonly used strategy, but in the case of verbs it was the second. 'Mnemonic Use' was the fourth frequently used strategy for the Concrete Nouns, Concrete Verbs, and Abstract Nouns categories. Interestingly, it didn't make it to the top 5 strategies for Abstract Verbs group. Instead of 'Mnemonic Use' 27% of time the informants used 'Paraphrase' to acquire abstract verbs. Finally, the fifth common strategy was 'Cumulative Rehearsal', which was used 22% of time by those who took part in the experiment for all four target groups. So, we can see an overlap of the top 5 strategies used for memorization of words from different word categories.

In Figure 1 there is another column, under the name 'Others'. It represents the sum of the rest eight strategies as there were small numbers of participants who used them. We can see how the column raises higher with each group. If we compare the use of 'unpopular' strategies between concrete nouns and abstract verbs, as the words from these two categories differ significantly, we will see that the use of other strategies rises when it comes to memorization of the meanings of a more difficult group, see Figure 3 and Figure 4.

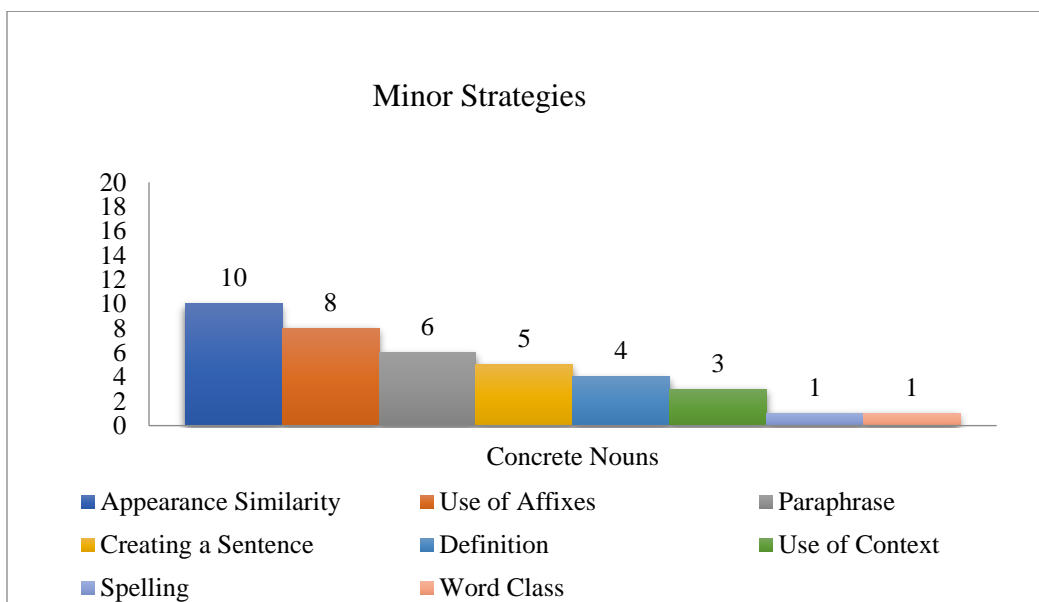


Figure 3. Minor Strategies Used for Memorization of Concrete Nouns Combined into 'Others' Category

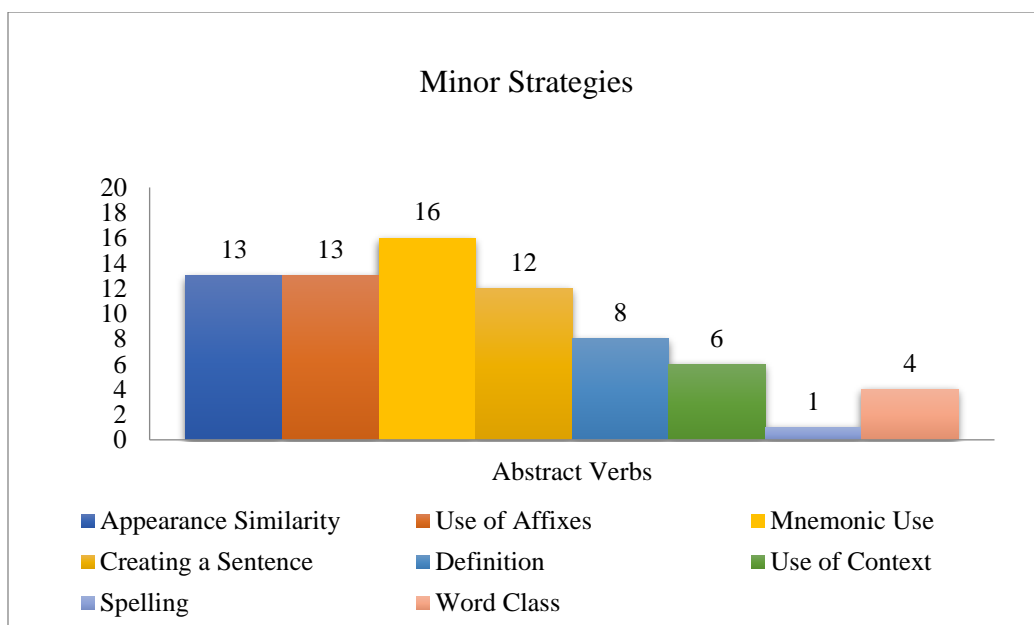


Figure 4. Minor Strategies Used for Memorization of Abstract Verbs Combined into 'Others' Category

The reason why it happens is because more mental processing is required to learn abstract verbs as, according to the results of other studies, abstract words and verbs are in disadvantage when it comes to vocabulary acquisition in comparison with concrete nouns.

Discussion

The goal of the study was to investigate the strategies that ESL learners use to acquire concrete and abstract nouns and verbs. For that purpose we observed the students while they attempted to memorize new words from flash cards. On the flash cards they had the target word in English on one side and its equivalent in their native language on the other. The participants were performing a deliberate vocabulary acquisition task, which might have influenced their behavior; however, everything was done so to create conditions of real learning. Participants were allowed to do everything they need to memorize the target words. As the experiment showed multiple strategies were used by students to acquire new lexical items.

By conducting present research we were trying to find the answers to the following questions:

1. What strategies do ESL learners use to memorize the meanings of new words?
2. Is there any difference in learners' strategies between nouns and verbs?
3. Is there any difference in learners' strategies between concrete and abstract words?

With reference to our first research question, we found out that students use variety of strategies while acquiring new vocabulary items. Thirteen strategies were identified in the process of collecting data. The most commonly used strategy was 'Simple Word Rehearsal'. This finding corroborates with the studies conducted by Lawson and Hogben (1996) and Barcroft (2009). In contrast, Hagni and Pasand (2013) reported that word rehearsal was identified by the students as the least commonly used strategy. Probably, different results were obtained because of the different designs of the studies. The main instrument in Hagni and Pasand's investigation was the questionnaire with a five-point likert scale. In present study we observed the students directly and we were asking questions so that more details were provided which might be more

appropriate as sometimes there is a difference between what the students say they do as opposed to what they actually do.

Other popular strategies among the students who were participating in the study were writing a word and a meaning, cumulative rehearsal, sound link, mnemonic use, etc. Use of mnemonics was reported by 25 participants of 27 which is not in compliance with Lawson and Hogben (1996) and Barcroft's (2009) results. In Lawson and Hogben experiment 3 of 15 students used this strategy, and 5 of 83 in Barcroft's study, respectively. The explanation can be found in the research design as well. In Barcroft's design of the study the informants viewed the words with the pictures on the screen for six seconds each. The design choice might have influenced the use of this particular strategy because the images had already been given so the participants did not have the necessity of creating or thinking of images of their own.

It is important to note that different participants used different amount of strategies. That said, minimum of 4 and maximum of 12 strategies were used by one participant. The indicated amount of strategies were not used for each target word. It seems that L2 learners chose different strategies for different words. It was not our intention to examine the relationship between the number of strategies used and retention; however, there was a correlation between the number of strategies and scores on final test. Nevertheless, more research should be done to answer this question.

In regards to the second research question, whether there was any difference in learners' strategies between nouns and verbs, we saw that, in general, the strategies were the same. Strategies that dominated were simple word rehearsal, writing a word and a meaning, cumulative rehearsal, sound link. The main difference was in the use of mnemonics and paraphrase. Mnemonics was used for memorization of both nouns and verbs (only concrete verbs), but

paraphrase was used significantly only in case of verbs, abstract verbs to be exact. The explanation for not using mnemonics for memorization of abstract verbs is quite straightforward. First of all, nouns are easier to imagine and therefore easier to acquire. Secondly, it is less likely to generate images for abstract words. So, in the case of abstract verbs the participants were trying to paraphrase the words so to make them less complicated as the load of such characteristics as word class and abstractness was high. Talking about concreteness and abstractness, let's come to the last but not least question of our research: difference in learners' strategies between concrete and abstract words.

A lot of studies have been done about acquisition of concrete and abstract words. In theoretical part we mentioned that the main two differences between these two categories are 1) imaginability and 2) context availability. Taking these two theories into account, we can predict that mnemonic use, which includes generation of images, will prevail in acquisition of concrete words. In Figure 4, that is exactly what we see, although the difference is not that prominent. If by context availability we understand the ability to create sentences, then we can see a contradiction. According to our data, more participants used the strategy of creating sentences for memorization of the meanings of the new abstract words. There is a substantial difference in use of 'Paraphrase' strategy with regards to concrete and abstract words by the students. The informants were trying to rephrase abstract words more often than concrete. In fact, it makes sense as usually concrete words represent objects, people, or actions that are observable and it is impossible to think of another equivalent of those words. 'Use of affixes' strategy was used more in the process of acquisition of abstract words. When it came to describing the strategies used for acquisition of abstract verbs the typical answer was "I cannot connect to this word" and then the participants commented on prefixes or suffixes. So, it seems that students tried to catch at least

something from the word. On the other hand, there was only one word with a prefix 'disparage' which is a verb. Almost all the participants knew that prefix 'dis' has a negative connotation, that in its turn made them comment on it more frequently, which boosted the strategy level. As for other strategies that were used for acquisition of concrete and abstract words, it seems that there was no significant difference.

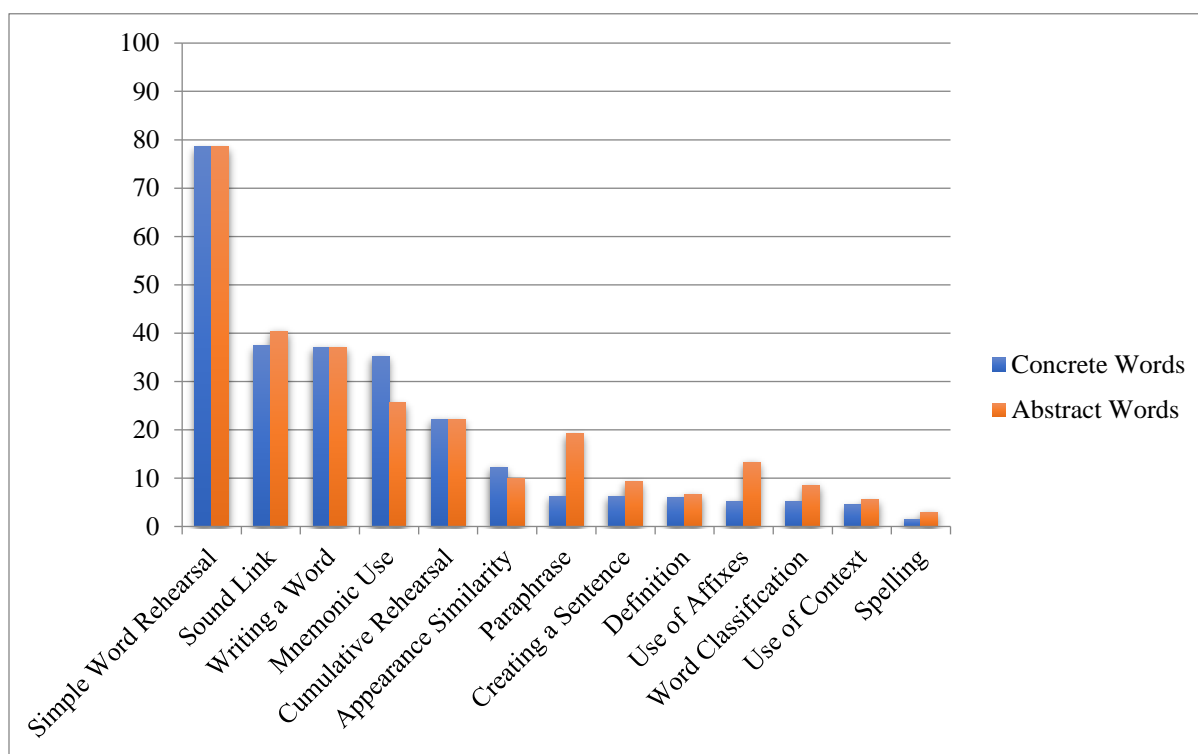


Figure 5. Strategies Used for Acquisition of Concrete and Abstract Words

Finally, we would like to comment more on strategies that were used by the students to acquire concrete and abstract nouns and verbs and their ideas of why certain words are more difficult to memorize. At the end of the interview we asked the participants to reflect on the words that were easy to acquire and those that were difficult, as we believe that it can shed some light on the strategies that they used to learn concrete and abstract words.

According to students' comments, in general, nouns were easier, which supports previous research on the acquisition of nouns (Gentner, 1982). From their reflections we came to conclusion that keyword method was used by almost all the participants. Hulstijn (1997) in his article about mnemonic methods in vocabulary learning acquisition talks about keyword method which comprises three steps: 1) acoustic or orthographic similarity, 2) strong association between the target word and the key word, and 3) visual image (p. 204). In present study we adopted the classification of strategies from Lawson and Hogben's study, so 'sound link' was an equivalent of acoustic similarity, orthographic similarity was under the name of 'appearance similarity', and visual image was under 'mnemonic use'. We did not classify sound link and appearance similarity as a mnemonic strategy; however, in the process of analyzing data we came to the conclusion that there is a link between the first two strategies and the latter. On many occasions students were breaking down the words in the search of hints that will help them to memorize a given item. They were looking for similarities, both acoustic and orthographic, that will help them to connect to another word in English, or their first language, or their experience. Several participants, for example, when were given the word 'compunction', mentioned that the word looks like 'computer', and because they spend a lot of time playing games or surfing the web, they experienced the feeling of guilt. In this case we can see how the strategy of acoustic similarity is in connection with the participant's personal experience, so it may be classified as 'mnemonic use'. Another example of both acoustic and orthographic similarity would relate to the word 'pannikin'. Almost all Chinese speakers mentioned that the pronunciation of one of the characters is pronounced like 'pan' and have an actual meaning of a 'pan'. Other participants indicated that 'kin' looks like 'kitchen' and that this utensil can be found in the kitchen, so that is why it is easy to memorize. Still others, reported that 'nikin' sounds like it is something small,

which partially delivers the meaning of the word. One more example of a verb would be suitable just to show that this method works with the words of different categories. Some of the rephrased answers that were given by the participants when they were asked to memorize the word 'ruminate' were: a) it sounds like a 'roommate' and I actually have a roommate who is sitting in the room and thinking about something; b) the last part looks like 'minute', so the person has a minute to think about something; c) ruminate means to reflect about something, so both of the words start with 'r'; d) it looks like 'run', so I think about running in circles, which basically means thinking a lot, etc. As you can see answers varied from person to person. Each person saw something that is closer to his/her experience.

With regards to imaginability hypothesis, it seems that students pay more attention to the spelling of a word rather than the fact that it can be imaginable. There were many instances when concrete nouns, which are supposed to be the easiest to generate images, were difficult to memorize just because the words looked "weird". For example, the word 'daffodil' was commented on as a word that was difficult to memorize because first of all "it is just a name of a flower" and you cannot imagine situation with this word. Secondly, students could not find any keywords that could help them to memorize the word. In fact, many times concrete words were classified as difficult to memorize. Thus, we can conclude that concreteness of a word does not make it easier to memorize.

All in all, we saw that L2 learners use many different strategies to memorize the meanings of new words, and the strategy choice depended more on peculiarities of the words rather than on such characteristics as word class and concreteness/abstractness.

Chapter V: Conclusion

As Wilkins (1972) stated, "While without grammar very little can be conveyed, without vocabulary *nothing* can be conveyed" (pp. 111-112). Vocabulary plays an important role in acquisition of both L1 and L2. The goal of the study was to investigate the strategies that second language learners use to make the acquisition of concrete and abstract nouns and verb easier for them.

After conducting the experiment we came to the conclusion that second language learners use variety of strategies when attempting to acquire new vocabulary items. Moreover, the number of strategies varies from student to student and depends on a word difficulty. Common vocabulary learning strategies according to our data were simple word rehearsal, writing of a word and/or its meaning, sound link, cumulative rehearsal, mnemonic use.

We have discovered that there is no significant difference between acquisition of nouns and verbs; however, within concrete category nouns are acquired better than verbs. As for the strategy choice for these two parts of speech, the difference was identified in the use of such strategies as mnemonic use and paraphrase. Mnemonic use was used more for nouns, while paraphrase was chosen for verbs.

As for the acquisition of concrete and abstract words, it was determined from students responses that concrete words were easier to memorize than abstract words because they could "connect" to them better. By "connect" they understand the ability to find certain traits that will help them to connect it to another word in their L1 or L2, or their experience. Strategies for the acquisition of concrete and abstract words were more or less the same. Paraphrase and use of affixes dominated for abstract words. The number of participants who used mnemonic use was higher for concrete nouns.

Limitations

The limitations of present study include the following:

1. Similar to other studies there might have been Hawthorne and halo effects. The participants knew that they were observed and therefore they could give the answers that the researcher was waiting from them. Students could look for certain peculiarities in the words just to make their answers more interesting. Moreover, the mode of the experiment was not 100% reliable. Students were supposed to describe in details how they were memorizing the words, but there is a high possibility that not all processes were articulated.
2. While the participants were describing the mental processes that they had when they were memorizing the words the researcher asked questions about what they said so to understand better what a participant meant. It could influence the results of the final test because when the informants repeated themselves they memorized the words better.
3. We have recruited 27 participants for present study. To make the results more generalizable more participants from different L1 backgrounds and of different proficiency levels should be involved.
4. In the process of coding data researcher's personal judgment was involved while classifying participants' answers under a certain strategies. Some other people should have been involved into the process of analyzing data to make sure that there is consistency in the results. In other words, a researcher should have thought about inter-rater reliability.
5. There is the possibility of a ceiling effect. It seems that the words and/or a test were quite simple for the participants as many of them got the highest score. The design of the final test can be revised, for example, production can be involved.

Implications

Present research gives an overview of the strategies that second language learners use to acquire new words. It is helpful for the teachers to get a better understanding of how students memorize new words which can be incorporated into a learning process. The research shows that the most commonly used strategies were simple word rehearsal, writing of a word and/or its meaning, sound link, cumulative rehearsal, mnemonic use. A great number of participants used rote memorization. By rote memorization we understand some kind of repetition (written, oral, cumulative). These results reveal that probably not enough explicit instruction about strategy use is taking place in the classroom.

On the other hand, many participants used keyword technique to ameliorate the learning process. As Hulstijn (1997) stated keyword method can rarely be found in the ESL textbooks and is rarely practiced in the classroom. Maybe ESL teachers should pay more attention to it and incorporate this technique in teaching. We know that teachers tend to give lists with the vocabulary units and they do not require students to process new vocabulary on a deeper level, i.e. relate new vocabulary to the words that they already know, or to use their imagination for a better retention.

As for concrete and abstract words, it was found that abstract words are more difficult to acquire; therefore, more attention should be paid during ESL classes. Introducing and practicing different VLS might result in a better memorization of such words.

Suggestions for Future Studies

For the same study in the future one can change the design by using think aloud method to see if the results will be the same. Another possibility would be to conduct the experiment in the environment where both the researcher and the participants share the same L1, as we noticed

difficulties from the part of the students in articulating the mental processes that they had.

Moreover, adding long term post test would be helpful to determine if there is a difference in the acquisition and/or retention of concrete and abstract words in a long run.

We had problems classifying strategies; therefore, combining 'Sound Link' and 'Appearance Similarity' strategies under 'Mnemonic use' category, or adding a category of a keyword method would be reasonable. If the strategies are grouped in a different way there is the possibility that the results will be different with mnemonic use prevailing other strategies.

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Appendix A: Consent Form

Project: What Strategies Do Learners Use To Learn New Words In Their Second Language?

Consent to Participate

You are invited to participate in a research study that will investigate the strategies that second language learners use to memorize the meaning of new words.

If you agree to be a part of the research study, you will be asked to memorize 20 words during the audio-recorded interview that will last for approximately one hour. At the end of the interview you will be given the list of words that you will learn during the session where you will provide the translation of the words learned.

Present study will help you to raise your awareness about the strategies that you use to learn new words in a second/foreign language. In general, this study will be beneficial for English teachers as it will give an overview of how students learn new vocabulary.

There are no risks and discomforts as all the procedures that will be held during the interview will be similar to those that are practiced in English as a Second Language classes.

Data collected will remain confidential. All individual identifiable information will be removed once the data has been completed using anonymous codes. Before the coding is done, only the researcher will have access to the original data. After the completion of the interviews, you will receive your transcribed interviews. At this point, if you wish to make expand responses or note omissions to the transcription, you may.

Participating in this study is completely voluntary. Your decision whether or not to participate will not affect your current or future relations with St. Cloud State University, or the researcher. If you decide to participate, you are free to withdraw at any time without penalty.

If you have questions about this research study, you may contact the Principal Investigator, i.e. Yulia Koleva at [REDACTED], or my advisor, Dr. Choonyong Kim, at [REDACTED]. Results of the study can be requested from the researcher, see contact information above. Upon completion, my thesis will be placed on file at St. Cloud State University's Learning Resources Center.

Your signature indicates that you are at least 18 years of age, you have read the information provided above, and you have consent to participate.

Signature

Date

Appendix B: Target Words

Target Words in Chinese

| NOUNS | | | |
|--------------|-------------|----------------|------------|
| Concrete | | Abstract | |
| 1. Sorcerer | 1. 魔法师 | 1. Lassitude | 1. 疲倦；厌倦 |
| 2. Banister | 2. 栏杆 | 2. Doggedness | 2. 顽强；坚持不懈 |
| 3. Daffodil | 3. 水仙花 | 3. Compunction | 3. 悔恨；内疚 |
| 4. Dungarees | 4. 粗布工作服 | 4. Plethora | 4. 过多；过剩 |
| 5. Pannikin | 5. 小盘子；小平底锅 | 5. Aloofness | 5. 冷漠；高傲 |

| VERBS | | | |
|----------------|---------------|--------------|------------|
| Concrete | | Abstract | |
| 1. Juxtapose | 1. 并列；并置 | 1. Envisage | 1. 正视；面对 |
| 2. Marinate | 2. 把...浸泡在卤汁中 | 2. Vacillate | 2. 犹豫；踌躇 |
| 3. Scintillate | 3. 发出火花；闪烁 | 3. Ruminare | 3. 沉思；反复思考 |
| 4. Inundate | 4. 淹没；浸水 | 4. Obfuscate | 4. 使模糊 |
| 5. Somersault | 5. 翻筋斗 | 5. Disparage | 5. 蔑视；毁谤 |

Target Words in Japanese

| NOUNS | | | |
|--------------|-----------|----------------|---------|
| Concrete | | Abstract | |
| 1. Sorcerer | 1. 悪魔 | 1. Lassitude | 1. だるさ |
| 2. Banister | 2. 手すり | 2. Doggedness | 2. 粘り強さ |
| 3. Daffodil | 3. スイセン | 3. Compunction | 3. 罪悪感 |
| 4. Dungarees | 4. デニム生地 | 4. Plethora | 4. 過多 |
| 5. Pannikin | 5. 鉄製のカップ | 5. Aloofness | 5. 無関心 |

| VERBS | | | |
|----------------|-----------|--------------|----------|
| Concrete | | Abstract | |
| 1. Juxtapose | 1. 並置する | 1. Envisage | 1. 予測する |
| 2. Marinate | 2. 漬け込む | 2. Vacillate | 2. ためらう |
| 3. Scintillate | 3. 火花を放つ | 3. Ruminare | 3. 熟考する |
| 4. Inundate | 4. 水浸しになる | 4. Obfuscate | 4. 曖昧にする |
| 5. Somersault | 5. 前転する | 5. Disparage | 5. 見下す |

Target Words in Korean

| NOUNS | | | |
|--------------|---------|----------------|-------|
| Concrete | | Abstract | |
| 1. Sorcerer | 1.마법사 | 1. Lassitude | 1.나른함 |
| 2. Banister | 2.난간 | 2. Doggedness | 2.인내 |
| 3. Daffodil | 3.수선화 | 3. Compunction | 3.죄의식 |
| 4. Dungarees | 4.바지 | 4. Plethora | 4.과다 |
| 5. Pannikin | 5.작은금속잔 | 5. Aloofness | 5.무관심 |

| VERBS | | | |
|----------------|---------|--------------|------------|
| Concrete | | Abstract | |
| 1. Juxtapose | 1.나란히하다 | 1. Envisage | 1.상상하다 |
| 2. Marinate | 2.절이다 | 2. Vacillate | 2.흔들다, 서슴다 |
| 3. Scintillate | 3.발하다, | 3. Ruminare | 3.새기다 |
| 4. Inundate | 방출하다 | 4. Obfuscate | 4.모호하게만들다 |
| 5. Somersault | 4.범람하다 | 5. Disparage | 5. 알보다 |
| | 5. 재주넘다 | | |

Target Words in Mongolian

| NOUNS | | | |
|--------------|-----------------------|----------------|----------------------|
| Concrete | | Abstract | |
| 1. Sorcerer | 1.бөө | 1. Lassitude | 1.Ядрангуйбайдал |
| 2. Banister | 2.шатныбаруул | 2. Doggedness | 2.үлшантрахбайдал |
| 3. Daffodil | 3.шарнарцисс | 3. Compunction | 3.Гэмшил |
| 4. Dungarees | 4.хөвөнцаасанматериал | 4. Plethora | 4.элбэжилүүбайдал |
| 5. Pannikin | 5.сэнжтэйаяга | 5. Aloofness | 5.хөндийхүйтэнбайдал |

| VERBS | | | |
|---------------|----------------------|--------------|--------------------------------------|
| Concrete | | Abstract | |
| 1. Juxtapose | 1.зэрэгцээбайрлуулах | 1. Envisage | 1.төсөөлөнбодох |
| 2. Marinate | 2.амтлах | 2. Vacillate | 2.эргэлзэх |
| 3.Scintillate | 3.гялалзах | 3. Ruminare | 3.бодлогошрох, |
| 4. Inundate | 4.усдүүргэх | 4. Obfuscate | санаашрах |
| 5. Somersault | 5.агаартэргэлдэх | 5. Disparage | 4.ээдрээтэйболгох 5.үнэлэхгүйбайх |

Target Words in Arabic

| NOUNS | | | |
|--------------|------------------------------|----------------|------------|
| Concrete | | Abstract | |
| 1. Sorcerer | 1. ساحر | 1. Lassitude | 1. التعب |
| 2. Banister | 2. درابزين السلم | 2. Doggedness | 2. الإصرار |
| 3. Daffodil | 3. النرجس البري | 3. Compunction | 3. ندم |
| 4. Dungarees | 4. شيال (لبس الفلاحة) | 4. Plethora | 4. وفرة |
| 5. Pannikin | 5. كُوبٌ صَغِيرٌ مَعْدِنِيٌّ | 5. Aloofness | 5. انطواء |

| VERBS | | | |
|----------------|------------|--------------|----------------|
| Concrete | | Abstract | |
| 1. Juxtapose | 1. جَاوَرَ | 1. Envisage | 1. تخيل |
| 2. Marinate | 2. انقع | 2. Vacillate | 2. تَرَدَّدُ |
| 3. Scintillate | 3. أومض | 3. Ruminare | 3. تأمل |
| 4. Inundate | 4. غمر | 4. Obfuscate | 4. جعله غامضاً |
| 5. Somersault | 5. تشقلب | 5. Disparage | 5. استخف |

Appendix C: Final Test

Chinese

Version 1

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

- | | |
|----------------|-----------------|
| 1. banister | |
| 2. pannikin | ____ 正视；面对 |
| 3. scintillate | ____ 栏杆 |
| 4. doggedness | ____ 坚持不懈 |
| 5. envisage | |
| 6. vacillate | |
| | |
| 1. marinate | |
| 2. disparage | ____ 内疚 |
| 3. compunction | ____ 把...浸泡在卤汁中 |
| 4. plethora | ____ 并列；并置 |
| 5. dungarees | |
| 6. juxtapose | |
| | |
| 1. vacillate | |
| 2. aloofness | ____ 疲倦；厌倦 |
| 3. lassitude | ____ 魔法师 |
| 4. obfuscate | ____ 犹豫；踌躇 |
| 5. sorcerer | |
| 6. somersault | |
| | |
| 1. ruminare | |
| 2. inundate | ____ 沉思；反复思考 |
| 3. banister | ____ 过多；过剩 |
| 4. lassitude | ____ 蔑视；毁谤 |
| 5. plethora | |
| 6. disparage | |
| | |
| 1. envisage | |
| 2. somersault | ____ 粗布工作服 |
| 3. dungarees | ____ 翻筋斗 |
| 4. compunction | ____ 冷漠；高傲 |
| 5. marinate | |
| 6. aloofness | |

1. sorcerer
2. juxtapose
3. daffodil
4. obfuscate
5. scintillate
6. doggedness

____ 发出火花；闪烁
____ 水仙花
____ 使模糊

1. pannikin
2. ruminare
3. disparage
4. inundate
5. aloofness
6. daffodil

____ 小盘子；小平底锅
____ 淹没；浸水

Version 2

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. disparage
2. daffodil
3. juxtapose
4. dungarees
5. plethora
6. vacillate

____ 过多；过剩
____ 蔑视；毁谤
____ 粗布工作服

1. envisage
2. aloofness
3. somersault
4. sorcerer
5. lassitude
6. scintillate

____ 翻筋斗
____ 冷漠；高傲
____ 发出火花；闪

1. obfuscate
2. aloofness
3. pannikin
4. disparage
5. daffodil
6. ruminare

____ 水仙花
____ 使模糊
____ 小盘子；小平底锅

1. envisage
2. inundate
3. dungarees
4. plethora
5. scintillate
6. banister

____ 淹没；浸水
____ 正视；面对
____ 栏杆

1. pannikin
2. doggedness
3. marinate
4. somersault
5. compunction
6. inundate

____ 坚持不懈
____ 内疚
____ 把...浸泡在卤汁中

1. lassitude
2. sorcerer
3. juxtapose
4. banister
5. obfuscate
6. compunction

____ 并列；并置
____ 疲倦；厌倦
____ 魔法师

1. marinate
2. vacillate
3. doggedness
4. daffodil
5. aloofness
6. ruminare

____ 犹豫；踌躇
____ 沉思；反复思考

Japanese

Version 1

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

- | | |
|----------------|----------|
| 1. banister | |
| 2. pannikin | ___ 予測する |
| 3. scintillate | ___ 手すり |
| 4. doggedness | ___ 粘り強さ |
| 5. envisage | |
| 6. vacillate | |

- | | |
|----------------|----------|
| 1. marinate | |
| 2. disparage | ___ 罪悪感 |
| 3. compunction | ___ 漬け込む |
| 4. plethora | ___ 並置する |
| 5. dungarees | |
| 6. juxtapose | |

- | | |
|---------------|----------|
| 1. vacillate | |
| 2. aloofness | ___ だるさ |
| 3. lassitude | ___ 悪魔 |
| 4. obfuscate | ___ ためらう |
| 5. sorcerer | |
| 6. somersault | |

- | | |
|--------------|----------|
| 1. ruminare | |
| 2. inundate | ___ 熟考する |
| 3. banister | ___ 過多 |
| 4. lassitude | ___ 見下す |
| 5. plethora | |
| 6. disparage | |

- | | |
|----------------|-------------|
| 1. envisage | |
| 2. somersault | ___ オーバーオール |
| 3. dungarees | |
| 4. compunction | ___ 前転する |
| 5. marinate | ___ 無関心 |
| 6. aloofness | |

1. sorcerer
2. juxtapose
3. daffodil
4. obfuscate
5. scintillate
6. doggedness

____ 火花を放つ
____ スイセン
____ 曖昧にする

1. pannikin
2. ruminare
3. disparage
4. inundate
5. aloofness
6. daffodil

____ 鉄製のカップ
____ 水浸しになる

Version 2

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. disparage
2. daffodil
3. juxtapose
4. dungarees
5. plethora
6. vacillate

____ 過多
____ 見下す
____ オーバーオール

1. envisage
2. aloofness
3. somersault
4. sorcerer
5. lassitude
6. scintillate

____ 前転する
____ 無関心
____ 火花を放つ

1. obfuscate
2. aloofness
3. pannikin
4. disparage
5. daffodil
6. ruminare

____ スイセン
____ 曖昧にする
____ 鉄製のカップ

1. envisage
2. inundate
3. dungarees
4. plethora
5. scintillate
6. banister

___ 水浸しになる
___ 予測する
___ 手すり

1. pannikin
2. doggedness
3. marinate
4. somersault
5. compunction
6. inundate

___ 粘り強さ
___ 罪悪感
___ 漬け込む

1. lassitude
2. sorcerer
3. juxtapose
4. banister
5. obfuscate
6. compunction

___ 並置する
___ だるさ
___ 悪魔

1. marinate
2. vacillate
3. doggedness
4. daffodil
5. aloofness
6. ruminare

___ ためらう
___ 熟考する

Korean**Version 1**

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. banister
2. pannikin
3. scintillate
4. doggedness
5. envisage
6. vacillate

___ 상상하다
 ___ 난간
 ___ 인내

1. marinate
2. disparage
3. compunction
4. plethora
5. dungarees
6. juxtapose

___ 죄의식
 ___ 절이다
 ___ 나란히하다

1. vacillate
2. aloofness
3. lassitude
4. obfuscate
5. sorcerer
6. somersault

___ 나른함
 ___ 마법사
 ___ 흔들다, 서슴다

1. ruminate
2. inundate
3. banister
4. lassitude
5. plethora
6. disparage

___ 새기다
 ___ 과다
 ___ 알보다

1. envisage
2. somersault
3. dungarees
4. compunction
5. marinate
6. aloofness

___ 바지
 ___ 재주넘다
 ___ 무관심

1. sorcerer
2. juxtapose
3. daffodil
4. obfuscate
5. scintillate
6. doggedness

- ___ 발하다, 방출하다
 ___ 수선화
 ___ 모호하게만들다

1. pannikin
2. ruminate
3. disparage
4. inundate
5. aloofness
6. daffodil

- ___ 작은금속잔
 ___ 범람하다

Version 2

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. disparage
2. daffodil
3. juxtapose
4. dungarees
5. plethora
6. vacillate

- ___ 과다
 ___ 알보다
 ___ 바지

1. envisage
2. aloofness
3. somersault
4. sorcerer
5. lassitude
6. scintillate

- ___ 재주넘다
 ___ 무관심
 ___ 발하다, 방출하다

1. obfuscate
2. aloofness
3. pannikin
4. disparage
5. daffodil
6. ruminate

- ___ 수선화
 ___ 모호하게만들다
 ___ 작은금속잔

1. envisage
2. inundate
3. dungarees
4. plethora
5. scintillate
6. banister

___ 범람하다
___ 상상하다
___ 난간

1. pannikin
2. doggedness
3. marinate
4. somersault
5. compunction
6. inundate

___ 인내
___ 죄의식
___ 절이다

1. lassitude
2. sorcerer
3. juxtapose
4. banister
5. obfuscate
6. compunction

___ 나란히하다
___ 나른함
___ 마법사

1. marinate
2. vacillate
3. doggedness
4. daffodil
5. aloofness
6. ruminare

___ 흔들다, 서슴다
___ 새기다

Mongolian**Version 1**

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. banister
2. pannikin
3. scintillate
4. doggedness
5. envisage
6. vacillate

- _____ төсөөлөнбодох
 _____ шатныбаруул
 _____ үлшантрахбайдал

1. marinate
2. disparage
3. compunction
4. plethora
5. dungarees
6. juxtapose

- _____ гэмшил
 _____ амтлах
 _____ зэрэгцээбайрлуулах

1. vacillate
2. aloofness
3. lassitude
4. obfuscate
5. sorcerer
6. somersault

- _____ ядрангуйбайдал
 _____ бөө
 _____ эргэлзэх

1. ruminare
2. inundate
3. banister
4. lassitude
5. plethora
6. disparage

- _____ бодлогошрох, санаашрах
 _____ элбэжилүүбайдал
 _____ үнэлэхгүйбайх

1. envisage
2. somersault
3. dungarees
4. compunction
5. marinate
6. aloofness

- _____ хөвөнцаасанматериал
 _____ агаартэргэлдэх
 _____ хөндийхүйтэнбайдал

1. sorcerer
2. juxtapose
3. daffodil
4. obfuscate
5. scintillate
6. doggedness

- _____ гялалзах
_____ шарнарцисс
_____ ээдрээтэйболгох

1. pannikin
2. ruminare
3. disparage
4. inundate
5. aloofness
6. daffodil

- _____ сэнжтэяаяга
_____ усдүүргэх

Version 2

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. disparage
2. daffodil
3. juxtapose
4. dungarees
5. plethora
6. vacillate

- _____ элбэжилүүбайдал
_____ үнэлэхгүйбайх
_____ хөвөнцаасанматериал

1. envisage
2. aloofness
3. somersault
4. sorcerer
5. lassitude
6. scintillate

- _____ агаартэргэлдэх
_____ хөндийхүйтэнбайдал
_____ гялалзах

1. obfuscate
2. aloofness
3. pannikin
4. disparage
5. daffodil
6. ruminare

- _____ шарнарцисс
_____ ээдрээтэйболгох
_____ сэнжтэяаяга

1. envisage
2. inundate
3. dungarees
4. plethora
5. scintillate
6. banister

_____ усдүүргэх
_____ төсөөлөнбодох
_____ шатныбаруул

1. pannikin
2. doggedness
3. marinate
4. somersault
5. compunction
6. inundate

_____ үлшантрахбайдал
_____ гэмшил
_____ амтлах

1. lassitude
2. sorcerer
3. juxtapose
4. banister
5. obfuscate
6. compunction

_____ зэрэгцээбайрлуулах
_____ ядрангуйбайдал
_____ бөө

1. marinate
2. vacillate
3. doggedness
4. daffodil
5. aloofness
6. ruminare

_____ эргэлзэх
_____ бодлогошрох, санаашрах

Arabic

Version 1

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

- | | |
|----------------|---------------------|
| 1. banister | _____ تخيل |
| 2. pannikin | _____ درابزين السلم |
| 3. scintillate | _____ الإصرار |
| 4. doggedness | |
| 5. envisage | |
| 6. vacillate | |

- | | |
|----------------|------------|
| 1. marinate | _____ ندم |
| 2. disparage | _____ انقع |
| 3. compunction | _____ جاور |
| 4. plethora | |
| 5. dungarees | |
| 6. juxtapose | |

- | | |
|---------------|----------------|
| 1. vacillate | _____ التعب |
| 2. aloofness | _____ ساحر |
| 3. lassitude | _____ تَرَدُّد |
| 4. obfuscate | |
| 5. sorcerer | |
| 6. somersault | |

- | | |
|--------------|-------------|
| 1. ruminate | |
| 2. inundate | _____ تأمل |
| 3. banister | _____ وفرة |
| 4. lassitude | _____ استخف |
| 5. plethora | |
| 6. disparage | |

- | | |
|----------------|--------------------------|
| 1. envisage | |
| 2. somersault | _____ شيال (لبس الفلاحة) |
| 3. dungarees | _____ تشقلب |
| 4. compunction | _____ انطواء |
| 5. marinate | |
| 6. aloofness | |

1. sorcerer
2. juxtapose
3. daffodil
4. obfuscate
5. scintillate
6. doggedness

_____ أومض
_____ النرجس البري
_____ جعله غامضاً

1. pannikin
2. ruminare
3. disparage
4. inundate
5. aloofness
6. daffodil

_____ كُوبٌ صَغِيرٌ مَعْدِنِيٌّ
_____ غمر

Version 2

Choose the right word to go with each meaning. Write the number of that word next to its meaning.

1. disparage
2. daffodil
3. juxtapose
4. dungarees
5. plethora
6. vacillate

_____ وفرة
_____ استخف
_____ شيال (لبس الفلاحة)

1. envisage
2. aloofness
3. somersault
4. sorcerer
5. lassitude
6. scintillate

_____ تشقلب
_____ انطواء
_____ أومض

1. obfuscate
2. aloofness
3. pannikin
4. disparage
5. daffodil
6. ruminare

_____ النرجس البري
_____ جعله غامضاً
_____ كُوبٌ صَغِيرٌ مَعْدِنِيٌّ

1. envisage
2. inundate
3. dungarees
4. plethora
5. scintillate
6. banister

_____ غمر
_____ تخيل
_____ درابزين السلم

1. pannikin
2. doggedness
3. marinate
4. somersault
5. compunction
6. inundate

_____ الإصرار
_____ ندم
_____ انقع

1. lassitude
2. sorcerer
3. juxtapose
4. banister
5. obfuscate
6. compunction

_____ جاور
_____ التعب
_____ ساحر

1. marinate
2. vacillate
3. doggedness
4. daffodil
5. aloofness
6. ruminare

_____ تَرَدُّد
_____ تأمل

Appendix D: Final Test Answer Key

| Version 1 | Version 2 |
|------------------|------------------|
| 5 | 5 |
| 1 | 1 |
| 4 | 4 |
| 3 | 3 |
| 1 | 2 |
| 6 | 6 |
| 3 | 5 |
| 5 | 1 |
| 1 | 3 |
| 1 | 2 |
| 5 | 1 |
| 6 | 6 |
| 3 | 2 |
| 2 | 5 |
| 6 | 3 |
| 5 | 3 |
| 3 | 1 |
| 4 | 2 |
| 1 | 2 |
| 4 | 6 |

Appendix E: Interview Transcript

R = researcher; P = participant; /// = pauses

R: Ready? Here's your first word. You can do whatever you need to. /// Are you ready? So how did you memorize this word?

P: First I just keep repeating word and I try to remind this meaning for Korean. Just watching Eng and remind Korean. Watch Korean remind English

R: Ah ok. Did you think about smth else?

P: No just keep repeating

R: Just repeating? Ok. So now you have 30 sec. You can use the red one because you can see, you can mark it here if you want. It's easier. Ok And you have 30 sec to do that. /// Ok it's time. Oh by the way did I tell you that at the end you will have like a mini test. o you will have the Korean word and The English word and you'll have to match what is what. Ok? You don't have to memorize the spelling. Just the meaning.

P: Ah, ok

R: That's the new word.

P: So difficult word.

R: Ready? How did you memorize this word?

P: It is a difficult word for me and I, when I see the meaning in Korean I can remind another word in Eng. So it has similar meaning 'emit', yeah, so this 'e' and 'emit'.

R: Ok. Anything else? Did you think about smth else?

P: No. Just so difficult. And I try to find a common thing.

R: Ok. Did you do anything else?

P: No

R: No? Ok, then go back to picture. 30 sec. /// Ok it's time. Here is a new word./// Ready?

P: Yes

R: How did you memorize this word?

P: It is so confuse because I think this means only pants but this word I never seen before, so

R: So because you know pants it's confusing

P: Yes

R: Because this is not pants, right?

P: Yeah, so I think I can't memorize this. So confused.

R: But do you understand what kind. Is the translation just pants?

P: Yes, just pants.

R: Because it should be like pants, do you know, what Dr Grether wears? Pants and then these things

P: Ah. This means this? Oh, I can fix

R: Oh can you please?

P: Yes, Yes. Oh yes yes, I got it

R: Ok. Thank you.

P: Even if I correct the word it's so difficult.

R: Difficult?

P: Yes.

R: So what did you do to memorize it?

P: Keep reminding pants. I can't memorize this word.

R: It's ok. When if it's like that you can come back to the picture. 30 sec./// Ok here is a new word. /// Are you ready?

P: Yes

R: How did you memorize this word?

P: When I pronounce it in English it is a little similar in Korean pronounce.

R: How do you say it in Korean?

P: susana. Yes, so I can memorize. Compare pronunciation.

R: Ok. Did you think about smth else?

P: No

R: No? Did you do anything else?

P: Just keep pronouncing to remind it's meaning.

R: Ok. Then the picture 30 sec. /// Ok here's a new word. /// Are you ready?

P: Yes

R: So how did you memorize it?

P: This is help me to remind career

R: Career?

P: Yes. And it's a kind of the same career in Korea. So I can easily memorize this word.

R: Ok. What do you mean by kind of the same? Career in Korean.

P: Career

R: It means career?

P: Some people just pronounce career. Your career. Is your career is bla bla bla.

R: So you think that, so this thing is like a career?

P: Yes. A kind of.

R: Ok. I see. Ok. The picture 30 sec. /// Ok here's a new word. /// Are you ready?

P: Yes

R: How did you memorize it?

P: First, it help me remind 'alone'

R: Alone?

P: Yes. And when people get this people feel alone. So first I realize using this word and second this when this followed by some word it give me a noun. Yeah. So when I saw in Korean it means a noun. Yes, I can memorize this word.

R: Ok. Did you think about smth else?

P: No

R: Did you do anything else?

P: No

R: Ok. If you want you can turn the page there's another set of pictures. But if you want to continue doing that, it's ok. You have 30 sec. /// Here is a new word./// Are you ready? How did you memorize this word?

P: I try to find some common meaning Korean and English. I can't find it so I just keep repeating in Korean-Eng, Korean- Eng.

R: Ok, Did you think about smth else?

P: No, I can't think about.

R: Ok. Then the picture 30 sec. /// Ok here is a New word./// Ready?

P: Yeah. In this word S is used 2 times. This consonant used 2 times. And I remember it and some means smth can't get this ability, so I memorized this.

R: Ok. Did you think about smth else?

P: No

R: Ok then the picture. 30 sec./// Ok here is a new word./// Ready? How did you memorize it?

P: When I pronounce this word it means in Korean 'T' so I can see this occurrence to I. yes. So I used it.

R: Did you think about smth else?

P: Just I try to focus on 'un' because 'date' means in Korean, ah, date means hang out with boyfriend or girlfriend. It gives me a little confused. I try to focus on this.

R: Ok, I see. Thank you. The picture. 30 sec. /// Ok, here's a New word/// Are you ready?

P: Yes. When I see this word I can think about 'vacuum' and it is correct word this means it makes no sense with this in Korean. So I keep compencing

R: With vacuum?

P: Yeah. So I have repeat so it means.

R: Ok. So you kept thinking about vacuum although it's not connected?

P: Yes, yes, yes.

R: And it confuses you. Ok. I see. Ok, then go to the picture. 30 sec. /// Ok, here's a New word./// Ready?

P: It means it can be pronounced 'imagine'. Yes. Different spell but similar pronunciation.

R: Ok.

P: Imagine, I can imagine and visual, yes, visual, I can imagine by visualization in my brain.

R: Ok

P: I used this. It help me.

R: Ok, I see. 30 sec./// here's a new word. /// Ready?

P: Pose mean smth some actions. this means doing some actions in move.

R: Doing what?

P: Some actions. So I try to focus on pose. An remind the meaning in Korean.

R: Ok. Did you think about smth else?

P: No

R: No? Ok, the picture.

P: I find

R: All of them?

P: Yeah

R: Ok, here's a new picture.

P: Oh.

R: New word. /// Are you ready?

P: Yes. When I have this feeling I can be a lazy person.
R: You can be?
P: R(l)azy
R: Razy?
P: Lazy
R: Ah, lazy, ok.
P: Yes, lazy. So yes I try to connect that and this.
R: Ok, I see. Anything else?
P: No
R: No? Ok. Then the picture. 30 sec. /// Here's a new word. /// Are you ready?
P: When I pronounce it 'pani' means some gold or money. And this means some kind of gold. 'kin' mean, when I pronounce kin I can imagine kitchen and this can be seen in kitchen.
R: Ok.
P: Yes. I use this.
R: And the picture 30 sec. /// Ok here's a new word. /// Ready?
P: This seem dangerous when people sit in here and so I imagine 'banish' a word. And 'banish' this is
R: Did you think about smth else?
P: No
R: Did you do anything else?
P: Just keep repeating and pronunciation.
R: Ok. Then the picture there is something wrong with the girl. /// It's time, new word. /// Ready?
P: Yes. It can be seen in 'common' people. Yes. So 'com' I'm trying to think about that. So people have standard to keep punctuation.
R: Punctuation?
P: Yes. So just using the word.
R: Ok. But punctuation like using commas
P: Yes, yes.
R: Ok, I see. Ok. Then go back to the picture. /// New word./// Are you ready?
P: Yeah. Dog, dog is always
R: Like animal?
P: Yes. Always waiting for people to take a walk with them or food. So dog always need a patience. So just try to connect them.
R: I see, anything else?
P: No
R: Then the picture. /// Ok there's a New word. /// Are you ready?
P: First I try to find some common. But I can't find it so I just use ate like a Verb
R: Can you write it down? Oh, ok.
P: So just connect this and keep repeating pronunciation K-E; K-E. That's it.
R: Ok. Picture/// Do you want another picture?
P: No I just want to try.
R: Are you ready?

P: First -cate can reveal verb. Obscure

R: Ok

P: It means this so yes, just obfuscate, yes, same pronunciation.

R: Ok, Thank you. 30 sec. /// Here's the last word. /// Ready?

P: This means can be bad meaning and this is very bad for people

R: Yes

P: It's just that

R: Ok so this is it the picture /// And now you will have a final test so here you have 3 words and 6 options. And you have to put the number. Ok? /// Everything is correct. Did you worry about if you remember all of them?

P: Yes.

R: Now. Did you know any of the words before today?

P: No

R: So all of them were new to you?

P: Yes

R: Ok. Can you take a look at the words and tell me what words were easy to remember and what words were difficult? And why do you think they were easy or difficult?

P: Some words when I connect some other words or other Korean word that can have me remind smth it makes me easy. But just repeat Korean and English just try to memorize using repeating is so difficult

R: Can you give me examples of words that were easy or difficult?

P: Oh yes, this word

R: Number 4, doggedness?

P: Yes

R: Was easy or difficult?

P: Easy. Because usually I can remind dog. Dog is always waiting for people and has patience.
yes

R: Ok.

P: And this was difficult

R: Plethora? Why?

P: Because I think I said to you just repeating Korean and Eng. So I try to remove this one to find some connection so I can remember this meaning. And this is not easy.

R: Wait 5 should be this, right?

P: Yeah, so I try to remember all meaning so I try to remove or not

R: Ok. I see

P: Yes, Yes.

R: Well, so if you have the connection with Korean it's easier for you, right?

P: Yes

R: Ok.