Second Language Vocabulary Research: 2005

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This is a review article on second language vocabulary research. Articles published in leading international research journals in 2005 are the scope of this investigation. The present review is composed of the following key themes: the effect of training in word-meaning retrieval on second language reading comprehension; the effect of first language lexicalization on second language lexical inferencing; the effect of extensive reading on second language vocabulary learning; the relationship between examiner support strategies and test-taker vocabulary; negotiated interaction, learner uptake, and lexical acquisition in synchronous computer-mediated communication; the role of text length, sample size, and vocabulary size in determining text coverage; and word identification.

The Effect of Training in Word-Meaning Retrieval on Second Language Reading Comprehension

Fukkink, Hulstijn, and Simis (2005) investigated the effect of training in word-

meaning retrieval on second language (L2) reading comprehension. Specifically, with a view to examining whether training in word-meaning retrieval has a beneficial effect on text comprehension for intermediate L2 learners, the researchers conducted two experiments (Experiment 1 and Experiment 2).

Experiment 1 was designed to test the following two research hypotheses (p. 58): (a) Training in the retrieval of the meaning of written L2 word forms leads to faster word recognition performance; and (b) This¹ training leads to more automatic word recognition performance, as reflected by a reduction in the coefficient of variation of response time (CV_{RT}), along with an increase in the correlation between CV_{RT} and response time (RT).

The participants of this experiment were 41 Dutch learners of English at a secondary school in Amsterdam. They were taken from two intact Grade 8 groups and their ages ranged from 13 to 14. At the time of the experiment, these participants had received EFL instruction for a period of 3.5 years on average (p. 54, p. 59).

The above participants received training in word recognition in two 40-minute sessions within a single week. This training was not limited to the recognition of word forms but included access to word meanings as well. Specifically, they worked with the aid of laptop computers and completed two types of exercises (a translation task and a cloze-sentence task) that were designed to activate form-meaning connections of L2 words. Before and after training, they completed a lexical decision test comprising trained words and control words (pp. 59-60).

The results showed that the RTs of the trained words decreased significantly more than those of the nontrained words, which supported the aforementioned hypothesis (a). In addition, the CV_{RT} of the trained words decreased significantly more than the CV_{RT} of the nontrained words, whereas the correlation between CV_{RT} and RT increased. This finding supported the above hypothesis (b) (pp. 60-61).

After Experiment 1, the researchers conducted Experiment 2 with a view to testing not only the aforementioned hypotheses (a) and (b) but also the following two (p. 58): (c) Training in the retrieval of the meaning of written L2 word forms positively affects L2 reading speed; and (d) This² training positively affects L2 reading performance.

The participants of Experiment 2 were 105 Dutch learners of English from two schools located in Amsterdam. They were taken from four intact classes, two in each school, and their ages ranged from 13 to 14. At the time of the experiment, they had received EFL instruction for 3.5 years on average (p. 61).

The result showed that lexical access for some of the words became faster; this finding provided some evidence in favor of the aforementioned hypothesis (a). In respect of the hypothesis (b), the obtained data provided only partial support for the hypothesis that a significant qualitative change would occur in the lexical access process for the trained words. Furthermore, the training in the retrieval of the meaning of written L2 word forms did not result in faster reading; that is, the hypothesis (c) was not supported. Additionally, the training did not result in better reading comprehension; in other words, the hypothesis (d) was not supported, either (pp. 66-68).

After presenting and discussing possible explanations for the absence of a transfer effect of increased word recognition on reading speed and reading comprehension (pp. 70-71), the researchers state as follows:

The picture that emerges from recent theories and empirical studies is that L2 reading performance is primarily a matter of possessing linguistic and strategic knowledge, and that (processing) speed only plays a secondary role for L2 learners with automatic letter-to-sound recognition skills (like the participants in our study, who were thoroughly familiar with the alphabetic writing system

and fairly familiar with letter-phoneme correspondences of English). For such learners, the essence of acquiring L2 word knowledge is forming a firm relationship between a [sic] L2 word's form and its meaning. Once that has been achieved, in other words, when the word's meaning can be accessed with a certain threshold speed, no substantial benefit will result from an additional increase in word recognition speed. (p. 71)

In my view, this article by Fukkink, Hulstijn, and Simis (2005) would be one of the basic readings for those interested in the issue of whether enhancing L2 lexical access skills is beneficial for the improvement of reading speed and reading comprehension.

The Effect of First Language Lexicalization on Second Language Lexical Inferencing

A study by Paribakht (2005) investigated the effect of first language (L1) lexicalization on second language (L2) lexical inferencing.³

Let me give a concise description of the term L1 lexicalization. This term refers to (a) a situation in which a target word has a lexical equivalent in learners' L1 and (b) a situation in which a target word does not have any lexical equivalent in learners' L1. The words described in the above (a) are called lexicalized words; the words described in the above (b) are called nonlexicalized words.

After reviewing previous studies on L2 lexical inferencing, Paribakht (2005) states as follows and reports on a study that focuses on the issue of L1 lexicalization effects on L2 lexical inferencing:

Although a large body of research now exists on L2 lexical inferencing, relatively few researchers have explored the impact of learners' native language on the process. It is not yet clear how this difference in learners' L1 knowledge base might affect their lexical inferencing, the level of success they achieve, and the amount and kind of vocabulary knowledge they acquire. (p. 704)

The participants of this study were 20 Farsi-speaking undergraduate university students majoring in English at several colleges and universities in Iran (p. 708).

As for testing instruments, the researcher used the following two: (a) the Vocabulary Knowledge Scale (VKS; Paribakht & Wesche, 1993, 1996, 1997; Wesche & Paribakht, 1996) and (b) the Vocabulary Levels Test (Nation, 1990) (pp. 708-709).

The target words used in this study comprised 25 English words that were lexicalized in Farsi and 25 English words that were not. These 50 words were given to a writer, a native speaker of English, to compose paragraphs that served as the basis for data collection. Specifically, a total of six paragraphs were prepared, and each paragraph contained 7-10 of the target words. Each text was designed to contain both lexicalized and nonlexicalized target words, and the draft texts were examined for clarity, difficulty level, and appropriateness of target word context (pp. 709-710).

The main results of Paribakht's (2005) study can be summarized as follows. First, the researcher carried out a qualitative analysis of the obtained data to identify the knowledge sources and contextual clues that the participants of this study used in inferring the meanings of unfamiliar words. The results showed that the participants used a variety of sources in the process of lexical inferencing. Specifically, the sources include such things as the target word itself (word association, word collocation, word morphology, and homonymy), sentence level sources (sentence meaning, sentence grammar, and punctuation), discourse level sources (discourse meaning and formal schemata), and world knowledge (knowledge of the specific topic of a text). Additionally, the findings also revealed that the participants used the same

kinds of knowledge sources and contextual clues in inferring both lexicalized and nonlexicalized words (pp. 711-713).

Second, the results also indicated that although the participants of this study used similar types and proportions of knowledge sources when inferring the meanings of both lexicalized and nonlexicalized target words, they were less successful in decoding the meanings of the nonlexicalized words (p. 702, pp. 713-719). In other words, an examination of the obtained data with respect to the effect of L1 lexicalization on success of L2 lexical inferencing revealed that the participants were more successful in guessing the meanings of the lexicalized words (rate of successful guessing, 17%) than the nonlexicalized words (6%) (pp. 718-719).

The Effect of Extensive Reading on Second Language Vocabulary Learning

A study by Horst (2005) investigated the effect of extensive reading (ER) on second language vocabulary learning.

After reviewing the relevant literature (i.e., studies of ER [pp. 357-358] and studies of incidental vocabulary acquisition through reading [pp. 358-362]), Horst (2005) gave a description of her study (pp. 362-365). Specifically, the researcher presented the following research questions (p. 365): (a) How feasible is scanning whole texts? Is it possible to scan enough to create post-tests that reflect the individual reading experiences of a group of participants each choosing freely from a large collection of titles?; (b) To what extent do off-list items (and words of other frequencies) occur in graded readers? Do simplified materials, which by definition contain large proportions of frequent words, contain enough infrequent items to be useful in making an experimental case for word learning through ER?; and (c) Is⁴ making individualized self-report checklist tests that systematically sample participants' reading choices realistic? How many words can reasonably be tested, and what does the pilot testing reveal about new word learning in an ER context?

This study comprised 21 adult immigrant learners of English as a second language studying at a community centre in Montreal, Canada. Their first language backgrounds included Arabic, Chinese, Farsi, Korean, Polish, Spanish, and Russian. Some learners were recent immigrants, whereas others had been in Canada for as long as five years but had prioritized learning French, the language of everyday life in Quebec, Canada. The participants were divided into two groups on the basis of oral and written answers to a short in-house placement questionnaire. Their proficiency levels ranged from elementary to high intermediate (p. 366).

The aforementioned learners participated in a six-week ER program in which they freely chose books that interested them (p. 355, pp. 366-367).

Several weeks before the ER program started, research assistants began scanning reading materials (graded readers) so that a word knowledge pretest containing words from a sample of books in the collection could be created. (Because it took more than three hours to scan longer books, some of which were more than 100 pages long, the researcher decided to limit scans to the first 20 pages of each book.) After the participants had been pretested on their word knowledge, they started checking out books from the collection (pp. 367-368).

In order to target learning that may fairly safely be ascribed to ER rather than to other sorts of exposure, Horst's (2005) study focused mainly on infrequent words. In this study, the term, *infrequent*, was operationalized as off-list. In other words, in her study, infrequent words mean words that do not appear on lists of the 2,000 most common word families of English (West, 1953) or on the AWL (Coxhead, 2000). By conducting lexical profiling of the words used in the graded readers, the researcher

found that off-list items occurred in 20-page segments of all 37 readers that were scanned and profiled in her experiment (pp. 369-371).

As for the test format used in this study, the researcher adopted a modified version of the self-report checklist technique that Horst and Meara (1999) used in a reading study of a single learner. This test format simply requires participants to register levels of confidence in their ability to recognize the meanings of listed items by circling one of the following three rating options: YES (I know what this word means); NS⁵ (I have an idea about the meaning of this word, but I am not sure); or NO (I do not know what this word means). The NS option would allow learners to register partial knowledge of words. According to Horst (2005), this test is "easy to construct, administer, and score, and it allows for quick assessment of a large number of items" (p. 365).

In order to assess the learning gains, the numbers of words rated YES (I know the meaning of this word) on the pre- and post-tests were tallied and compared. Words in the potentially interesting NS (not sure) category were not included in these counts (p. 373).

The results of *t*-tests for paired samples showed that there was a statistically significant word gain on the measure of off-list items (i.e., infrequent words). In addition, the results also indicated a significant word gain on the measure of words from the 1,001-2,000 most frequent list (p. 373).

There have been a number of previous studies pertaining to the relationship between extensive reading and second language vocabulary learning (e.g., Kweon & Kim, 2008; Pigada & Schmitt, 2006), and I think that this article by Horst (2005) would be a valuable addition to the existing literature.

The Relationship Between Examiner Support Strategies and Test-Taker Vocabulary

Lorenzo-Dus and Meara (2005) were interested in the role of examiner input in oral proficiency interviews, and conducted a study with a view to examining the relationship between examiner support strategies and test-taker vocabulary.

The participants of their study were 29 British secondary school students taking oral examinations in Spanish for their AS qualification. According to Lorenzo-Dus and Meara (2005), "AS is a national examination normally taken by school students at the ages of 17 and 18. The AS examination consists of a written test, a listening test and a speaking test" (p. 241).

The AS oral examinations were conducted by a native speaker of Spanish. All assessment took place in the test-takers' schools⁶ over the course of two weeks. All examinations were audio taped with a table-top recorder and subsequently transcribed by the researchers (p. 242, p. 244).

The resulting transcripts (totalling over 50,000 words) were checked against the original tapes and corrected for initial errors of interpretation. A second native speaker of Spanish provided her own interpretation in cases where the two researchers were unsure of the content of the transcript. Once the transcripts were agreed by the researchers and this native speaker, the number of word types and the value of lexical diversity were calculated for the test-takers and for the examiner (p. 244).

In the case of the test-takers' output, the researchers aimed to test whether vocabulary output and grades (i.e., the grades in the AS oral examinations) were related. Specifically, the researchers hypothesized that both the number of word types and the values of D^7 would correlate with vocabulary grades. Additionally, the transcripts were also analyzed for examiner accommodation in order to test the

hypothesis that low vocabulary levels would be associated with high levels of examiner support (p. 244).

The overall results showed that the number of word types produced by the testtakers in their study discriminated between grades for vocabulary. In addition, it was also shown that the number of examiner support strategies discriminated between grades for vocabulary, with more instances of strategy use in the examinations that received lower grades (pp. 245-248).

Negotiated Interaction, Learner Uptake, and Lexical Acquisition in Synchronous Computer-Mediated Communication

Smith (2005) was interested in the relationship between negotiated interaction and learner uptake. Specifically, the researcher explored whether a negotiation routine's complexity affected learner uptake and whether this uptake affected second language lexical acquisition in synchronous computer-mediated communication (SCMC).8

The data analyzed in this study consisted of chatscripts generated by learners of English as a second language (ESL) during task-based dyadic SCMC interaction over a 6-week period. The number of words (tokens) in the data set was 14,435 (p. 40).

The participants of this study were 24 intermediate level ESL learners from an intensive English language program at a large North American university (p. 40).

The results of this study suggested that the complexity of negotiation routines did not seem to influence learner uptake and that there seemed to be no relationship between degree of uptake (none, unsuccessful, and successful) and the acquisition of target lexical items (p. 33, pp. 48-50). More specifically, Smith (2005) summarized

the findings of his study as follows (p. 50): (a) The notion of uptake must be expanded to include delayed uptake in an SCMC environment; (b) In learner-learner SCMC, successful learner uptake in the conventional sense occurs relatively infrequently; (c) Simple and complex NFFEs⁹ occur in about equal proportions in a task-based SCMC environment; (d) The complexity of the negotiation routine does not seem to affect whether or not learners uptake information from the interlocutor, nor does it seem to affect the type of learner uptake when it does occur; and (e) The¹⁰ presence or absence of learner uptake (successful or unsuccessful) during learner-learner task-based SCMC activities does not seem to be an important variable in the short and middle-term acquisition of target lexical items.

The Role of Text Length, Sample Size, and Vocabulary Size in Determining Text Coverage

A study by Chujo and Utiyama (2005) attempted to explore the role of text length, sample size, and vocabulary size in determining text coverage. Specifically, the researchers investigated "how differing vocabulary size, text length, and sample size might affect the stability of text coverage" (p. 1). In other words, they sought to understand "what specific impact these variables might have on text coverage calculations" (p. 3).

After reviewing the relevant literature on text coverage (pp. 1-3), the researchers presented the following research questions (p. 3): (a) How does vocabulary size affect text coverage?; (b) What is the minimum length of a text sample required to obtain reliable text coverage information?; (c) How many text samples are necessary to provide reliable text coverage information?; (d) What is the relationship between text length and sample size?; and (e) What¹¹ specific parameters

can be defined as a guide for educators in calculating reliable text coverage?

In Chujo and Utiyama's (2005) study, 23 different vocabulary sizes¹² taken from the high frequency words of the British National Corpus and 26 different text lengths¹³ taken from the *Time Almanac* corpus¹⁴ were analyzed using 10 different sample sizes in 1,000 iterations to calculate text coverage (p. 1, pp. 4-6).

The results indicated that text coverage was more stable when the vocabulary size was larger, when the text length was longer, and when more samples were used. It was also shown that the stability of text coverage was greater from a larger number of shorter samples than from a fewer number of longer samples. Additionally, the researchers presented a table which was designed to help teachers calculate reliable text coverage (p. 1, pp. 6-14).

Word Identification

A study by Wang and Koda (2005) investigated commonalities and differences in word identification skills among learners of English as a second language (ESL). These two researchers attempted to explore whether first language (L1) writing system differences would have an effect on ESL learners' sensitivity to the frequency and regularity variability of English words. Specifically, they focused on Korean and Chinese. The former (i.e., Korean) employs an alphabetic writing system, and the latter (i.e., Chinese) a logographic system.

This study comprised 18 adult Chinese ESL learners and 16 adult Korean ESL learners enrolled in ESL classes offered at the English Language Institute of the University of Pittsburgh. The mean age of the Chinese students was 29 years and 5 months, and that of the Korean students was 25 years and 4 months. About 78% of the Chinese students and 56% of the Korean students had a college degree (pp. 78-79).

The results showed that, first, both the Chinese and Korean ESL learners demonstrated faster and more accurate naming performance on high-frequency words than low-frequency words and on regular words than exception words. Second, the difference in naming accuracies between regular and exception words was more pronounced for low-frequency words than for high-frequency words. Third, compared to the Chinese ESL learners, whose L1 (i.e., Chinese) is nonalphabetic, the Korean ESL learners, whose L1 (i.e., Korean) employs an alphabetic writing system, were overall more accurate in naming all categories of words, showed a higher percentage of regularization errors in naming low-frequency exception words, and were more accurate and faster in auditory meaning retrieval (pp. 71-72, pp. 84-89).

In my view, this article by Wang and Koda (2005) would be a significant contribution to the advancement of word identification research because it reminded us of the importance of the differential effects of L1 writing systems (alphabetic vs. nonalphabetic) on alphabetic L2 acquisition. Specifically, Wang and Koda's (2005) study would be a valuable text for those who intend to examine whether L1 writing system differences would have an effect on ESL learners' sensitivity to the frequency and regularity variability of English words.

Conclusion

In this article second language vocabulary research published in leading international research journals in 2005 was reviewed. In addition to the articles examined in the preceding sections, the following papers were also published in 2005: for example, Barcroft and Sommers (2005),¹⁵ Boers and Lindstromberg (2005),¹⁶ Greidanus, Beks, and Wakely (2005),¹⁷ Hunt and Beglar (2005),¹⁸ Ko (2005),¹⁹ Laufer (2005),²⁰ Lindstromberg and Boers (2005),²¹ Meara (2005),²² Nicoladis (2005),²³ Rott

(2005),²⁴ Shapiro and Waters (2005),²⁵ Shen (2005),²⁶ Webb (2005),²⁷ Wilks, Meara, and Wolter (2005),²⁸ Zareva (2005),²⁹ and Zareva, Schwanenflugel, and Nikolova $(2005)^{30}$

This is the fourth attempt to tackle the task of reviewing second language vocabulary research (Tanaka, 2008, 2009, 2010). Specifically, Tanaka (2008) examined articles published in 2006, Tanaka (2009) focused on articles published in 2007, and Tanaka (2010) dealt with articles published in 2008. I hope that the present review, together with the above three (i.e., Tanaka, 2008, 2009, 2010), will be of help to those interested in second language vocabulary research.

Notes

¹ In the present review, there are several places in which sentences beginning with such words as (a), (b), (c), and (d) are enumerated after a colon. It should be noted that in such cases, sentence-initial words begin with an uppercase letter (even if they are preceded by the conjunction and).

² See Note 1.

³ This word (i.e., inferencing) is one of the technical words used in second language vocabulary research. In other words, this is not a typographical error. Lexical inferencing means guessing the meaning of an unfamiliar word.

⁴See Note 1.

⁵ This word (i.e., NS) stands for "not sure."

⁶The test-takers of Lorenzo-Dus and Meara's (2005) study came from two different schools in the UK (p. 242).

⁷D is a measure of lexical diversity proposed by David Malvern and Brian Richards. It has been widely used in vocabulary research. The advantage of D is that it is not as affected by the length of the text being assessed as other measures (e.g., type-token ratio) are. (For a detailed description of D, see Malvern & Richards, 1997, 2002; Malvern, Richards, Chipere, &

Durán, 2004.)

⁸ SCMC refers to "real-time interaction (usually written) between people in a networked environment. Messages are typed, sent, and received instantaneously" (Smith, 2005, p. 34).

⁹NFFEs stand for negotiation-based focus on form episodes.

¹⁰See Note 1.

¹¹ See Note 1.

12 What follows is the 23 different vocabulary sizes used in Chujo and Utiyama's (2005, p. 5) study: the most frequently used 100 words, 200 words, 300 words, 400 words, 500 words, 600 words, 700 words, 800 words, 1,000 words, 2,000 words, 3,000 words, 4,000 words, 5,000 words, 6,000 words, 7,000 words, 8,000 words, 9,000 words, 10,000 words, 11,000 words, 12,000 words, 13,000 words, and 14,000 words.

¹³ The 26 different text lengths are as follows: 10 words, 20 words, 25 words, 50 words, 75 words, 100 words, 250 words, 500 words, 750 words, 1,000 words, 1,250 words, 1,500 words, 1,750 words, 2,000 words, 2,250 words, 2,500 words, 2,750 words, 3,000 words, 4,000 words, 5,000 words, 7,500 words, 10,000 words, 20,000 words, 30,000 words, 40,000 words, and 50,000 words (Chujo & Utivama, 2005, p. 5).

¹⁴Chujo and Utiyama (2005) chose *Time Magazine* as a source for text samples. Specifically, they used *Time Almanac* CD-ROM. According to Chujo and Utiyama (2005), this CD-ROM contains "the entire collection of 14,528 articles" (p. 5) and has "an estimated token count . . . of 8,930,699 words" (p. 5).

¹⁵Barcroft and Sommers (2005) investigated the effect of acoustic variability on second language vocabulary learning.

After reviewing previous studies on "acoustic variability and L1 speech processing" (pp. 389-391), "acoustic variability and L2 phonemic training" (p. 391), and "acoustic variability and L2 vocabulary learning" (pp. 391-393), the researchers described their three experiments (i.e., Experiment 1 [pp. 394-400], Experiment 2 [pp. 400-405], and Experiment 3 [pp. 405-409]).

Experiment 1 examined "the effect of presenting target words in an acoustically varied format using speech produced by one talker in multiple voice types during L2 vocabulary learning" (p. 388). Experiment 2 examined "the effect of presenting target words in an acoustically varied format using speech produced by multiple talkers during L2 vocabulary learning" (p. 388). Experiment 3 examined "the effect of presenting target words in multiple voice types while rotating voice types across subjects in order to control for the potential effects of differential voice type intelligibility" (p. 388). (For the effect of acoustic variability on L2 vocabulary learning, see also Barcroft, 2001.)

¹⁶Boers and Lindstromberg (2005) examined the mnemonic effect of alliteration on vocabulary learning.

¹⁷ Greidanus, Beks, and Wakely (2005) were interested in examining the development of depth of vocabulary knowledge of learners of French as a second language by means of a word associates test. (It should be noted that the use of plural "s" in the above word, associates, is not a typographical error. The term [i.e., the word associates test] is one of the technical words used in second language vocabulary research. See, for example, Read, 1993, 1998 for a description of the test. It should be also noted that the term, the word associates format, is used as well. For instance, it appears on the following pages of Read [1993]: page 359 and page 369. As for the term, the word associates test, it appears, for example, on the following pages of Read [1993]: page 367 and page 368. [More specifically, the term, the word associates test, appears four times on page 367 and once on page 368.])

¹⁸Hunt and Beglar (2005) made a review of second language reading vocabulary research, and proposed that "EFL teachers and administrators adopt a systematic framework in order to speed up lexical development" (p. 23).

¹⁹Ko (2005) investigated the effects of different types of gloss conditions on Korean college students' reading comprehension.

This study comprised 106 Korean undergraduate students at a university in Korea. Their ages ranged from 19 to 21 years old. Specifically, the participants consisted of those assigned to an experiment (n = 94) and those assigned to a think-aloud study (n = 12). In both cases (i.e., the experiment and the think-aloud study), they were instructed to read one of the following three reading texts: (a) a text with no gloss, (b) a text with first language (L1) glosses with Korean definitions or synonyms, and (c) a text with second language (L2) glosses with English definitions or synonyms (pp. 128-130).

²⁰Laufer (2005) replied to Meara's (2005) critique of Lexical Frequency Profile (Laufer & Nation, 1995).

²¹Lindstromberg and Boers (2005) examined whether enactment- and mime-based instruction can be used to help learners (a) acquire English manner-of-movement verbs in their common literal senses and (b) more accurately interpret previously unknown metaphorical expressions.

²² A thought-provoking study by Meara (2005) reported a set of Monte Carlo simulations designed to investigate the reliability and validity of Lexical Frequency Profile (Laufer & Nation, 1995).

²³ A study by Nicoladis (2005) explored the acquisition of deverbal words by a French-

English bilingual child. Deverbal words are "words that incorporate verbs into nominal forms" (p. 416). Examples of deverbal words include the following: *dining room, working mother, coloring book, bookbinder, dishwasher, firefighter,* and *can opener.*

²⁴Rott (2005) attempted to explore why certain vocabulary interventions were more facilitative for word learning than others. Specifically, by using a think-aloud procedure, the researcher examined the effects of multiple-choice gloss condition versus single-translation gloss condition on (a) establishing and strengthening lexical form-meaning connections and (b) text comprehension.

The participants of this study were 10 native speakers of English learning German as a foreign language at a large, public university in the Midwest of the United States (p. 99).

²⁵ Shapiro and Waters (2005) attempted to examine the cognitive processes underlying the keyword method of vocabulary learning.

²⁶ Shen (2005) attempted to examine Chinese character learning strategies employed by nonnative speakers of Chinese.

This study comprised 95 students taking Chinese classes offered at two universities in the United States (p. 53).

²⁷ Webb (2005) examined the effects of receptive and productive tasks on Japanese EFL learners' vocabulary learning.

²⁸ A simulation study by Wilks, Meara, and Wolter (2005) queried some of the assumptions of Wilks and Meara's (2002) study. Specifically, Wilks et al. (2005) followed suggestions made by Brent Wolter, the third author of the 2005 article, and provided a reinterpretation of some of the data presented in Wilks and Meara (2002).

²⁹ Drawing on Henriksen's (1999) model of vocabulary development, Zareva (2005) attempted to identify the smallest set of predictors of lexical knowledge.

³⁰Zareva, Schwanenflugel, and Nikolova (2005) were interested in the relationship between second language (L2) lexical competence and L2 proficiency, and conducted a study with a view to examining what features of L2 lexical competence might vary as a function of an increase in L2 proficiency.

This study comprised 30 native speakers of English (undergraduate students enrolled in an introductory course in linguistics at a North American university) and 34 Bulgarian learners of English as a second language (ESL). As for the ESL group, it consisted of 17 advanced and 17 intermediate learners of English. These ESL learners were enrolled in advanced or intermediate certificate preparation courses in English in a school for foreign languages in Bulgaria (pp. 572-573).

The aforementioned participants (N = 64) of this study self-rated their familiarity with 73 lexical items and were asked to generate word associations to the words they identified in a verifiable way as known (p. 567, pp. 573-580).

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