Second Language Vocabulary Research: 2003

Yuji Tanaka

This is a review article on second language vocabulary research. Articles published in leading international research journals in 2003 are the scope of this investigation. The present review consists of the following key themes: amplifier collocations in the British National Corpus; a corpus-based study of idioms in academic speech; a corpus-based study aimed at identifying the most frequently used spoken American English idioms; the effects of task types on incidental second language vocabulary learning, task-induced amount of dictionary activity, and time-on-task; second language vocabulary learning from context; comparing vocabulary gains through reading with gains from word-focused activities; and the role of phonological memory and phonological awareness in foreign language word learning.

Amplifier Collocations in the British National Corpus

Kennedy (2003) investigated how adverbs of degree tended to collocate with particular words in the 100-million-word British National Corpus (BNC) and considered some possible implications for English language teaching.

The BNC is one of the largest and most representative corpora of English, and “includes 90 million words of written English from eight genres (80% informative prose, 20% imaginative prose) and 10 million words of spoken English from four social class groupings, collected in 38 locations in the United Kingdom. . . . The spoken and written texts in the corpus cover a wide range of domains of use, from classrooms, courtrooms, and boardrooms to radio chat shows, bedrooms, and pubs. The texts include casual conversation as well as more formal written genres from sources such as newspapers,
biographies, and novels” (p. 471).

In the analysis of the BNC data, Kennedy (2003) used Church and Hanks's (1990) mutual information (MI) measure with a view to examining the strength of the relationship between 24 amplifiers such as extremely or greatly and other words (typically adjectives or participles such as rare or appreciated). “The MI measure compares the probability of two words occurring together... with the probability of the two words occurring together by chance. The actual frequency of co-occurrence of two words is compared with the predicted frequency of co-occurrence of the two words if each were randomly distributed in the corpus. If there is a genuine association between the two words, then the joint probability of occurrence will be much larger than chance, and consequently the MI score will be greater than zero. A ratio of 0 shows that the occurrence of two words together is highly unlikely to be linguistically important. The higher the ratio, the stronger the association between the words” (p. 473).

In respect of the aforementioned 24 amplifiers, they were selected “largely because they are among the most frequent in the corpus” (p. 472). Specifically, the 24 amplifiers examined in Kennedy’s (2003) article are the following (p. 472): (a) maximizers (fully, completely, entirely, absolutely, totally, perfectly, utterly, and dead) and (b) boosters (very, really, particularly, clearly, highly, very much, extremely, badly, heavily, deeply, greatly, considerably, severely, terribly, enormously, and incredibly).

Amplifiers are said to consist of maximizers and boosters. “Maximizers such as absolutely, completely, entirely, fully, perfectly, totally, and utterly maximally intensify the sense of an adjective or verb. One can be, for example, absolutely thrilled, completely unclear, totally devastated, or utterly ruthless. Boosters, on the other hand, signify less than maximal intensity. One can be very unclear, really annoyed, particularly helpful, extremely unwise, heavily sedated, highly skilled, incredibly stupid, deeply suspicious, enormously grateful, severely depressed, terribly sorry, very much appreciated, greatly outnumbered, and so on” (p. 469).

The results of this study have suggested that each amplifier collocates most strongly with particular words that have particular grammatical and semantic characteristics (p. 467, pp. 474-480). For example, severely “is associated especially with constraint or damage (e.g., undernourished, curtailed, depleted, hampered, limited, wounded, injured, bruised); 98% of the collocates end in -ed” (p. 477).

I am in agreement with Kennedy's (2003) comment that “because frequency of experience significantly affects learning, the provision of systematic, repeated exposure to collocations in meaningful contexts lies at the heart of the teaching enterprise” (p. 484). Additionally, the following statement by Kennedy (2003) attracted my attention:

The collocations described in this study reveal a minuscule part of the learning that is necessary in order to become a fluent user of English. A substantial part of
linguistic competence appears to be based on a huge store of memories of previously encountered words and groups of words stored in units of use. Research in cognitive science has explored the mechanisms by which words and groups of words are established in memory (Kirsner, 1994). The frequency with which individuals experience words and groups of words significantly influences the extent to which these linguistic items are associated, stored, and retrievable from memory. (p. 480)

Furthermore, Kennedy (2003) states that “learning to associate forms with forms, forms with semantic or pragmatic functions, and forms and functions with contexts requires huge amounts of exposure. The more frequently individuals are exposed to these units of use (which typically consist of tone units of up to about seven syllables), the faster they can process these units, the more often they exploit probabilistic knowledge about the use of those units, and the more fluent they become (Bybee & Hopper, 2001). The ability of young children to complete sentences from well-loved stories they have previously and repeatedly had read to them (or their concern when parts of such texts are omitted) illustrates the power of the frequency effect” (p. 481).

In my judgment, this article (i.e., Kennedy, 2003) is an excellent source of information for those interested in the teaching and learning of collocations.

**A Corpus-Based Study of Idioms in Academic Speech**

Simpson and Mendis (2003) conducted a corpus-based study of idioms in academic speech.

This study was based on “the Michigan Corpus of Academic Spoken English (MICASE), a specialized corpus of contemporary speech recorded at the University of Michigan between 1997 and 2001 (Simpson, Briggs, Ovens, & Swales, 2002). MICASE, which is freely available and searchable via the Web, contains 197 hours of recorded speech, totaling about 1.7 million words in 152 speech events. These speech events range from large lectures, to dissertation defenses, to one-on-one office-hour interactions and small peer-led study group sessions, and each transcript is categorized along several dimensions, including primary discourse mode and academic division” (p. 422).

After giving a concise description of the frequencies and distribution of idioms in MICASE (pp. 425-427), Simpson and Mendis (2003) discussed the most salient discourse functions associated with certain idioms in MICASE. Specifically, the discourse functions include the following: (a) evaluation (pp. 427-428), (b) description (pp. 428-429), (c) paraphrase (p. 429), (d) emphasis (p. 430), (e) collaboration (pp. 430-431), and (f) metalanguage (pp. 431-432).

After describing the findings of this study (pp. 425-432), Simpson and Mendis (2003) outlined their approach to the teaching of idioms and offered some suggestions for
incorporating corpus data on idioms into teaching materials (pp. 432-435). Additionally, these two researchers discussed some of the challenges learners might face in attempting to acquire English idioms (pp. 435-437).

In my view, an attempt to utilize a corpus in the investigation of idioms is a subject of deep interest to those involved in second language vocabulary research. I think that this article (i.e., Simpson & Mendis, 2003) is an excellent source of information for those wishing to examine idioms with the help of a corpus such as MICASE.

A Corpus-Based Study Aimed at Identifying the Most Frequently Used Spoken American English Idioms

Liu (2003) reported on a corpus-based study aimed at identifying the most frequently used spoken American English idioms.

In this study, Liu (2003) investigated the idioms contained in three contemporary spoken American English corpora: (a) Corpus of Spoken, Professional American English, (b) Michigan Corpus of Academic Spoken English (MICASE), and (c) Spoken American Media English.

The above (a) consists of “transcripts of discussions at the meetings of various academic institutions and professional organizations and White House press briefings” (p. 677). The aforementioned (b) is made up of “transcripts of a variety of spoken academic texts, including lectures, advising sessions, office hours, class discussions, and colloquia” (p. 677).

With respect to the above (c), it includes “transcripts of spontaneous talk from a variety of TV programs downloaded from the Web sites of the major U.S. networks: ABC, CBS, CNN, Fox News, and NBC” (p. 677). In compiling this corpus, Liu (2003) attempted to include “as many different TV programs and topics as possible. The corpus contains such diverse TV programs as news reports, debates, interviews, magazine shows, and talk shows” (p. 677).

All the three corpora are made up of “contemporary, everyday, semiformal spoken American English” (pp. 677-678). The three corpora in combination contain about 6 million tokens, 72,402 types, 1,111 texts, and 4,321 speakers (p. 677).

Liu's (2003) concordance search resulted in four lists of the most frequently used spoken American English idioms. Specifically, one is based on the entire data set (i.e., the combined corpora) and the other three are based on one of the three corpora. (The list based on the entire data set will be hereafter called the overall list. The lists based on the aforementioned [a], [b], and [c] will be called the Professional list, the MICASE list, and the Media list, respectively.) The overall list had 302 idioms, and the researcher (i.e., Liu) classified the 302 idioms into three frequency-of-use bands representing 50 or more, 20-49,
and 2-19 tokens per million words. These classifications are, according to Liu (2003), “rather arbitrary and are intended merely as a reference, not a guide, for ESOL teachers and learners to consider in selecting idioms for study” (p. 681).

In respect of the results of a comparative analysis of the four lists, the findings showed “a rather strong convergence in the idiom selection. Of the 302 idioms in the overall list, 283 appeared in all three sublists. Of the 19 that did not, 7 failed to make the Professional list and 12 the MICASE list. All 302 idioms in the overall list occurred in the Media list” (p. 681).

The results of this study were compared with information in major current idiom dictionaries, and the findings revealed inadequacies of the existing idiom teaching and reference materials in terms of item selection, meaning and use explanation, and the appropriateness of the examples provided (p. 671, pp. 684-686).

**The Effects of Task Types on Incidental Second Language Vocabulary Learning, Task-Induced Amount of Dictionary Activity, and Time-on-Task**

Hill and Laufer (2003) compared the effects of three task types on (a) incidental second language vocabulary learning, (b) task-induced amount of dictionary activity, and (c) time-on-task.

This study comprised 96 learners of English as a second language whose mother tongue was Cantonese or Mandarin. All of them were young adults about twenty years old; they were enrolled in English enhancement courses offered at the English Centre of the University of Hong Kong (pp. 91-92).

These ESL learners read a text which contained twelve unfamiliar target words and were randomly assigned one of the following three tasks (pp. 92-97): (a) a form-oriented production task, (b) a form-oriented comprehension task, or (c) a meaning-oriented task.

The aforementioned target words consisted of four nouns, four adjectives, and four verbs. Specifically, they were the following: *indigenous, arduous, affability, itinerary, saunter, boisterous, squander, weave, stunning, remuneration, dusk, and toil* (pp. 92-93).

The results of this study suggested that regarding incidental second language vocabulary learning, the two form-oriented tasks (i.e., the form-oriented production task and the form-oriented comprehension task) had a tendency to yield better results than the meaning-oriented task (p. 99).

With respect to time-on-task (i.e., the time taken by the learners to complete each task), there was no statistically significant difference among the three tasks (pp. 99-100).

In respect of the amount of dictionary activity provoked by each task, the two form-oriented tasks (i.e., the form-oriented production task and the form-oriented
comprehension task) generated significantly larger number of clicks on the target words than the meaning-oriented task did; no statistically significant difference was observed between the number of clicks of the form-oriented production task and that of the form-oriented comprehension task (pp. 100-101).

I am in agreement with Hill and Laufer's (2003) comment that “an important factor determining task effectiveness for vocabulary learning is the amount of word-related activity that the task induces” (p. 104). In my view, this article (i.e., Hill & Laufer, 2003) is a valuable addition to the existing literature on task effectiveness for vocabulary learning.

Second Language Vocabulary Learning From Context

Nassaji (2003) aims to investigate the relationship between the range of strategies and knowledge sources learners use and their success in second language lexical inferencing. Specifically, this researcher (i.e., Nassaji) is interested in examining (a) how successfully intermediate ESL learners infer word meanings from context in a reading text, (b) what strategies and knowledge sources they use to do so and to what extent, and (c) whether there is any relationship between the range of strategies and knowledge sources they use and their lexical inferencing success (p. 649).

Data consisted of introspective and retrospective think-aloud protocols of 21 intermediate adult ESL learners (10 males and 11 females) who attempted to infer unknown word meanings from context. These learners represented five different language backgrounds, including Arabic ($n = 2$), Chinese ($n = 8$), Persian ($n = 6$), Portuguese ($n = 2$), and Spanish ($n = 3$) (p. 645, p. 650).

The analysis of the obtained data revealed that overall, the rate of success was low even when the learners used the strategies and knowledge sources they had at their disposal, that different strategies contributed differentially to inferencing success, and that success was related more to the quality rather than to the quantity of the strategies used (p. 645, pp. 652-660).

Comparing Vocabulary Gains Through Reading With Gains From Word-Focused Activities

After examining basic assumptions underlying the claim that reading is the major source of vocabulary acquisition in a second language, Laufer (2003) reported on three experiments that compared vocabulary gains through reading with gains from word-focused activities (i.e., completing given sentences, writing original sentences, and incorporating words in a composition).

The results indicated that word-focused activities were more effective than learning
The Role of Phonological Memory and Phonological Awareness in Foreign Language Word Learning

Hu (2003) investigated the role of phonological memory and phonological awareness in foreign language (FL) word learning.

This study comprised 58 children (28 males and 30 females) taken from two preschools in Taiwan. Their native language (L1) was Mandarin, and the FL was English, which was not used in the children's daily conversation. The children were first tested when they were 57 months old ($SD = 3.8$), and testing was completed 18 months later (pp. 436-437).

With a view to evaluating the role of L1 phonological processing skills in children's FL word learning, measures of L1 phonological memory and L1 phonological awareness were administered to the aforementioned participants four times (T1, T2, T3, and T4), at 6-month intervals, across two years (p. 429, p. 435).

With respect to FL word learning, a task called FL word recall and pronunciation learning (FL-WRP learning) was administered at T3 and readministered 6 months later (i.e., at T4). The same set of words was used at T3 and T4 (p. 435). “Given that forgetting and relearning are natural processes of FL acquisition, retention of word learning and the role of phonological memory and phonological awareness in word relearning were explored” (p. 435).

The main findings of this study indicated that, first, phonological memory was related to FL word learning at T3. Second, phonological awareness, which was not related to FL word learning at T3, emerged as a significant predictor at T4 (p. 429, pp. 441-449).

Conclusion

In this article second language vocabulary research published in leading international research journals in 2003 was reviewed. In addition to the articles examined in the preceding sections, the following papers were also published in 2003: for example, Abel (2003), Adachi (2003), Adolphs and Schmitt (2003), Barcroft (2003), Chung and Nation (2003), Daller, van Hout, and Treffers-Daller (2003), Fan (2003), Frantzen (2003), Gu (2003), Lee (2003), McAlpine and Myles (2003), Mondria (2003), Mori (2003), Morin (2003), Nesselhauf (2003), Pulido (2003), Rott and Williams (2003), Tang and Nesi (2003), Verspoor and Lowie (2003), Vidal (2003), and Waring and Takaki (2003).

This is the sixth attempt to tackle the task of reviewing second language vocabulary

Notes

1It should be noted that in the original source, the first letter of this word (i.e., because) was “B” (uppercase letter). In accordance with section 6.07 of “Publication Manual of the American Psychological Association, 2010, p. 172,” the first letter of the first word was changed from “B” (uppercase letter) to “b” (lowercase letter).

2It should be noted that in the original source, the first letter of this word (i.e., learning) was “L” (uppercase letter). In accordance with section 6.07 of “Publication Manual of the American Psychological Association, 2010, p. 172,” the first letter of the first word was changed from “L” (uppercase letter) to “l” (lowercase letter).

3Initially, there were 128 participants. Thirty-two participants' data were excluded from the analysis partly because these learners had been familiar with one (or more than one) of the target words and partly because they missed a test session (Hill & Laufer, 2003, pp. 91-92).

4This 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.

5Abel (2003) investigated judgments that native speakers of German made about the decomposability of English idioms and introduced a model called the Model of Dual Idiom Representation (DIR Model).

6Adachi's (2003) article pertains to accurate learning of L2 word usage.

7Adolphs and Schmitt (2003) analyzed the Cambridge and Nottingham Corpus of Discourse in English and the spoken component of the British National Corpus with a view to examining lexical coverage of spoken discourse.

The results of their study showed that “2,000 word families made up less than 95 per cent coverage” (p. 425) and that “around 5,000 individual words were required to achieve about a 96 per cent coverage figure” (p. 425).

8Barcroft (2003) was interested in semantic elaboration and examined the effect of addressing questions about the meaning of a target word (a semantic elaboration task) on second language vocabulary learning.

9Chung and Nation's (2003) article reported on two studies that investigated technical
vocabulary in specialized texts. Specifically, one of them analyzed an anatomy text and the other an applied linguistics text.

Daller, van Hout, and Treffers-Daller's (2003) study pertains to the measurement of lexical richness in the spontaneous speech of Turkish-German bilinguals.

Fan (2003) reported on a study that investigated second language vocabulary learning strategies used by Chinese learners of English in Hong Kong. Specifically, the researcher sought to examine frequency of use, perceived usefulness, and actual usefulness of the vocabulary learning strategies.

Frantzen (2003) sought to examine factors affecting deriving the meaning of an unknown word from context.

The participants of this study were 11 students (10 female, 1 male; 2 were of Hispanic background) in a third-year university Spanish grammar class taught by the researcher (i.e., Frantzen) at a large public university in the Midwestern United States (p. 170).

Gu (2003) investigated how two successful Chinese EFL learners handled vocabulary learning during and after reading.

These two learners were third-year non-English majors at Beijing Normal University, and were asked to read a text similar to their intensive reading textbook passages and verbalize their vocabulary learning strategies (pp. 78-79).

Lee (2003) examined intermediate ESL learners' vocabulary use in writing. Additionally, the researcher was also interested in the effect of explicit vocabulary instruction on these learners' productive vocabulary use in writing.

McAlpine and Myles (2003) proposed an online dictionary designed to present advanced ESL learners with multi-word lexical items and collocations in English.

Mondria (2003) compared the effects of a meaning-inferred method versus a meaning-given method on the retention of second language word meanings.

This study comprised 38 Dutch learners of French. The ages of these learners ranged from 14 to 16 years old, and at the time of this study, all of them had received French lessons 3 hours a week for at least 2.5 years (p. 480).

Mori (2003) reported on an exploratory study that investigated the roles of context and word morphology in learning new kanji words.

Specifically, she aimed at examining "quantitative and qualitative differences between context and word morphology as determinants of students' guesses of the meanings of novel kanji compounds (i.e., words consisting of two or more Chinese characters)" (p. 404).

This study comprised 74 English-speaking college students learning Japanese as a foreign language (p. 406).

The purpose of Morin's (2003) study is "to examine the acquisition of derivational morphology—the use of suffixes that can change the part of speech and cause variations in
meaning—by native English-speaking learners of Spanish” (p. 200). Specifically, this study aims at exploring whether or not beginning students of Spanish as an L2 can successfully learn to use knowledge of Spanish derivational morphology to increase their vocabulary (p. 203).

19 Nesselhauf (2003) reported on an exploratory study that analyzed the use of verb-noun collocations by advanced German-speaking learners of English in free written production.

20 Pulido (2003) investigated the effects of topic familiarity, second language (L2) reading proficiency, and L2 passage sight vocabulary on incidental vocabulary acquisition through reading.

This study comprised 99 L1 English adult learners of L2 Spanish. They were recruited from three distinct university course levels: beginning (2nd-semester elementary language), \( n = 43 \); intermediate (5th-semester composition), \( n = 39 \); and advanced (8th-semester literature), \( n = 17 \) (p. 246).

21 Rott and Williams (2003) made a qualitative study that explored second language readers' word processing behavior and its effect on the establishment of form-meaning connections. (This study [i.e., Rott & Williams, 2003] is a follow-up investigation of Rott, Williams, and Cameron's [2002] quantitative study.)

22 Tang and Nesi's (2003) article concerns how vocabulary is taught in English language classrooms in Hong Kong and Guangzhou. (Guangzhou is a city which is close to Hong Kong.)

23 Drawing on insights from cognitive linguistics, Verspoor and Lowie (2003) conducted a study with 78 Dutch learners of English with a view to investigating the guessing and retention of the meaning of a polysemous word.

24 Vidal (2003) investigated the effect of listening to academic lectures on EFL vocabulary acquisition.

The participants of this study were first-year university students (\( n = 122 \)) taking a compulsory ESP (English for Specific Purposes) course at the Universidad Autonoma de Madrid, Spain. Because six students did not complete all the sessions, these students' data were excluded from the study; that is, the analyses were finally performed on a sample of 116 students. Regarding these students' proficiency in English (\( n = 116 \)), the average TOEFL score was 507.01 (\( SD = 57.03 \)), and their TOEFL scores ranged from 387 to 661 (p. 61).

25 How many new words are learned from reading a graded reader and retained over time? Are words that appear frequently in the text more likely to be learned than words which appear less frequently? At what rate are newly learned words forgotten? Do different test formats yield different gain scores? These questions were addressed in a study by Waring and Takaki (2003).
References


Laufer, B. (2003). Vocabulary acquisition in a second language: Do learners really acquire...


**About the Author**

Yuji Tanaka is an associate professor of applied linguistics at the Prefectural University of Kumamoto, Japan. His research interest centers on second language vocabulary acquisition.