

Decompositional View of Word Form and Its Pedagogical Implication:

From the Perspective of Word Formation Reference Books

VUE DÉCOMPOSITIONNELLE DE LA FORMATION DU MOT ET SON IMPLICATION PÉDAGOGIQUE:

DANS LA PERSPECTIVE DES OUVRAGES DE RÉFÉRENCE SUR LA FORMATION DU MOT

構詞法及構詞法對英語教學的啟示： 從構詞法參考書的角度看問題

Hou Jin'an

侯晉安

Received 20 December 2007; accepted 15 February 2008

Abstract: The vocabulary of a foreign language is always challenging for L2 learners, especially those morphologically complex words. How do these words stored in the mental lexicon? Over years of research, psycholinguists put forward two influential approaches: the decompositional approach and the full-listing approach. This paper studies the application of the decompositional approach of word form from the perspective of word formation reference books available in China. Questionnaires concerning learners' methods of learning English vocabulary were sent out first, an interview with a smaller number of participants was conducted to provide a deeper insight into the common merits and defects of word formation reference books and provide pedagogical implications for the future vocabulary instruction in China.

Key words: decompositional approach, mental lexicon, pedagogical implications

Résumé: Le vocabulaire d'une langue étrangère est toujours dur pour les apprenants d'une deuxième langue étrangère, notamment pour les mots morphologiquement complexes. Comment stocker ces mots dans le lexique mental? Après des années de recherches, les psycholinguistes mettent en avant deux approches influentes: l'approche décompositionnelle et l'approche de plein-liste. Le présent article étudie l'application de l'approche décompositionnelle de la formation du mot dans la perspective des ouvrages de référence sur la formation du mot disponibles en Chine. Les questionnaires concernant les méthodes d'apprentissage du vocabulaire anglais sont distribués d'abord, puis un interview avec un petit nombre de participants est effectué pour offrir une connaissance plus profonde sur les mérites et les défauts communs des ouvrages de référence sur la formation du mot et donner des implications pédagogiques à la future instruction du vocabulaire en Chine.

Mots-Clés: approche décompositionnelle, lexique mental, implications pédagogiques

摘要: 對於二語學習者來說，辭彙部分總是很有挑戰性的，特別是那些在構詞上比較複雜的辭彙。這些複雜的辭彙是如何儲存在大腦中的？經過多年的研究，心理語言學家們提出了兩個有影響力的說法：分裂構詞和整體呈現。本文從中國市場上已有的構詞法參考書出發來研究構詞法在英語教學中的應用。首先，我發出了一份針對學習者如何學習英語辭彙的問卷，其次，進行了一場只有小部分問卷回答者參與的採訪，採訪的目的是為了對構詞法參考書的作用有更深入的認識，並且為中國未來的英語辭彙教學提供一些方向。

關鍵詞: 構詞；大腦辭彙；教學啟示

1. INTRODUCTION

How the morphologically complex words are stored in the mental lexicon has aroused many researchers' interest. Several modals concerning this question have been put forward, among which the decompositional approach and the full-listing approach are two influential modals. These two modals explore the storage of words in mental lexicon from different angles. The decompositional approach holds that words are stored separately as affixes and stems, while the full-listing approach, on the contrary, believes that words are stored as a whole in the mental lexicon.

The study of vocabulary acquisition has been undervalued for a long period of time, and only in recent decades has it been paid more attention to. Many theories and modals have been mentioned in the literature of vocabulary teaching and learning, including the decompositional method and the full-listing method. This paper first gives a brief review of the decompositional approach in the formation of words, and then presents the various methods mentioned in the literature of vocabulary acquisition. Afterwards, an interview concerning Chinese students' vocabulary learning was carried out, which was based on a questionnaire conducted earlier. The interview tends to find out Chinese students' preference of the vocabulary learning method and to serve as a pilot study of the merits and the defects of the word formation reference books in the Chinese market. Finally, based on the findings of the questionnaire and the interview, recommendations for the further development of the reference books are put forward.

2. LITERATURE REVIEW

2.1 Decompositional Approach vs. Full-listing Approach

The study of mental lexicon is an important part in psycholinguistics and the question concerning word recognition has aroused many researchers' interest. How are words, especially those morphologically complex words, stored in the brain? Are they stored as a whole? How are these words accessed and retrieved when we use language in daily life? Scholars' interest of exploring answers to these questions has led to the propositions of several models in the last decades, but some of them hold contradictory opinions on their basic assumptions about how morphologically complex words are stored and processed in the brain (Longtin & Meunier, 2005).

The best-known model among them is the affix-stripping model proposed by Taft and Forster in

1975. This model holds decompositional approach concerning morphologically complex words. The model claims that the mental lexicon contains separate entries for the stems of words and for affixes, rather than full-word forms. Therefore, the morphological information and base word information are stored separately in the mental lexicon (Carroll, 2000). According to this view, a word such as *government* will be represented in two parts in the mental lexicon: *govern* is stored as the stem or the base word information while *-ment* will be stored as the suffix. If morphologically complex words are indeed represented in this way in the mental lexicon, in order to gain access to these words we would have to first strip off the affixes of a word, and this process of decomposing affixes and stem of a word is obligatory unless in the case of monomorphemic words which are processed in their full-word form (Cole, Beauvillain, & Segui, 1989). Taft (1979) claims that this decompositional procedure is also applicable to inflectional words (words with *-s*, *-ed*, *-ing*, etc.). According to this model, the lexical access of polymorphemic words proceeds in a discontinuous way (Schriefers, Zwitserlood, & Roelofs, 1991).

Evidence from experiments has provided support for the decompositional approach of the mental representation of polymorphemic words. Snodgrass and Jarvella (1971, cited in Carroll, 2000) found that response times were longer for affixed words than for words without affixes, which supported the assumption of the existence of the affix-stripping stage. Mackay (1978, cited in Carroll, 2000) found that there were differences in the degree of complexity among different affixes. According to his study, the suffix *-ment* is linguistically simpler than *-ence*, which is in turn simpler than *-ion* and people's response time for words with *-ion* (such as *decision*) is longer than for words with *-ment* (for example *government*). The differences in response times indicate the independent storage of stem and affixes and the linguistic complexity of different affixes (Carroll, 2000). Some experimental data suggest that access procedures for prefixed words and suffixed words may even be different (Schriefers, Zwitserlood, & Roelofs, 1991).

There is another problem related to the affix-stripping model: the considerable large number of pseudo-affixed words. How are these words represented in the mental lexicon? Are they stored in the same way as the real affixed words? Scholars have already designed experiments to answer these questions (Lima, 1987 & Taft, 1981, cited in Carroll, 2000). In case of pseudo-affixed words, it is believed that a potential affix is stripped off and the potential stem is searched for in the mental lexicon; if this attempt fails, the potential affix is reunited with the stem and the whole form is searched again (Cole, Beauvillain, & Segui, 1989). In support of this viewpoint, Taft found that lexical decision time were longer for pseudoprefixed words (for example *relish*) than prefixed words (for example

remind) (Taft, 1981 cited in Carroll, 2000). The unsuccessful search for the potential stem word (for example *-lish* in the case of *relish*) is presumably responsible for the delayed decision time (Carroll, 2000).

Contrary to Taft and Forster's affix-stripping model, Buttherworth (1983) and Manelis and Tharp (1977, cited in Longtin & Meunier, 2005) claim that all morphologically complex words are listed in the mental lexicon. This full-listing approach claims that for each word, be it mono- or polymorphemic, there is one corresponding word form in the mental lexicon. Different from the decomposition approach, the lexical access of the full-listing approach proceeds in a continuous, left-to-right fashion (Schriefers, Zwitserlood, & Roelofs, 1991). In this processing model, the processing and recognition of affixed words is by no means different from words without affixes.

Generally speaking, in these models, morphologically complex words can be accessed via two routes: either a direct route, leading to the activation of whole word representations, or an indirect route, activating the morphemic units (Schreuder & Baayen, 1995). Whether it is the direct or the indirect route, the linguistic and distributional properties of a word, e.g. frequency, morpheme productivity, lexicality etc., play an important role in the recognition of a word. In more recent models, there is the coexistence of the whole word representation and the morphological information (Longtin & Meunier, 2005).

2.2 Trends in Second Language Vocabulary Instruction

Vocabulary is central to language, however, just as Zimmerman points out, "the teaching and learning of vocabulary have been undervalued in the field of second language acquisition (SLA) throughout its varying stages and up to the present day" (2001, p. 5). The teaching and learning of L2 vocabulary vary as the trends of teaching methodology of SLA vary. The first widely-used teaching methodology is the Grammar Translation Method which was first introduced in Prussia at the end of the eighteenth century. At that time, with the purpose of preparing students to read and write classical materials, bilingual vocabulary lists which usually contained two or three long columns of new vocabulary items with native-language equivalents were provided to the students to remember. In this way, students were exposed to a large number of literary and obsolete vocabularies. The Grammar Translation Method was still used as the primary method for foreign language teaching in the twentieth century, but it was under constant criticism and challenges. One of the challenges came from Thomas Prendergast, who objected to archaic vocabulary lists used in the Grammar Translation Method and he made a list of the most common English words based on his intuition; and

Prendergast's list was surprisingly accurate compared with later lists compiled by other scholars (Zimmerman, 2001). This list is significant because it came out in an era when the common and everyday language was underestimated and scorned. The Direct Method was popular at the end of nineteenth century, the priority of which was to relate meaning directly with the target language without translation. Unlike the Grammar Translation Method, everyday vocabulary was taught to students under this method. However, this method was criticized for its oversimplification of the similarity between L1 and L2 (Zimmerman, 2001). The Reading Method appeared in the 1920s and 1930s in the U. S., and at the same time the Situational Language Teaching was introduced in the Great Britain. These two methods emphasized on the importance of developing reading skills in foreign language teaching and learning. The use of word-frequency lists was recommended by West and his book *A General Service List of English Words* published in 1953 is "still considered the most widely used of high-frequency word lists" (Zimmerman, 2001, p. 9). Thanks to the reformative work of H. E. Palmer and A. S. Hornby, vocabulary was for the first time considered an important aspect in second language teaching. The audio-lingual method was developed during the World War II. The primary purpose of this method was the acquisition of structural patterns, therefore, "the vocabulary items were selected according to their simplicity and familiarity" (Zimmerman, 2001, p. 11). It was also suggested that learning too much vocabulary in the early stage of language acquisition gave students a false sense of security. Twaddell believed that students should be encouraged to guess the meaning of words and tolerate the vagueness of word meaning (1980, cited in Zimmerman, 2001). The communicative language teaching approach, which arose in the middle of the twentieth century, paid less attention to the acquisition of vocabulary. The Natural Approach believes that vocabulary as the meaning bearer is very important to the acquisition process. This method emphasizes the importance of interesting and relevant input in the teaching of vocabulary and reading is regarded as the most efficient means of acquiring new words. In the more current way of teaching vocabulary, it is believed that vocabulary should not be learnt separately but rather as a "chunk", which has an idiomatically determined meaning (e.g. *in a word, as it is*). Lewis put it in this way: "Language consists of grammaticalized lexis, not lexicalized grammar" (1993, p. 89).

In recent years, the methodology of vocabulary instruction has been paid more attention to and many scholars have studied different methods in the teaching of vocabulary. Lu (2001), Mondria (2003), Pulido (2003), Webb (2007), Zhang and Zou (2006) discuss the role of context in the teaching of vocabulary. Lu (2001) and Zhang and Zou (2006) studied the role of context in the teaching of English vocabulary in China. The results of their studies show that context can help establish students' mental lexicon of English, thus facilitate

Chinese students' learning of English vocabulary. In contrast with Chinese scholars, Mondria (2003) and Webb (2007) challenged the idea that context plays a positive role in learning vocabulary. Mondria (2003) made a comparison and contrast between "meaning-inferred" method and "meaning-given" method and drawn a conclusion that if the efficiency of the vocabulary acquisition is the main objective, the meaning-given method is preferable. Webb (2007) stated that to date, research had generated little evidence indicating that context facilitated vocabulary learning and decontextualized tasks tended to be equally or more effective than contextualized tasks at promoting vocabulary learning. Celik (2003) discussed the phenomenon of code-switching in immigrant communities when they are acquiring new words of the target language. He points out that code-switching is a little-known technique in teaching vocabulary and it can help immigrants acquire the vocabulary of the target language. Wang *et al.* (2005) and Feng and Sun (1999) study the role of corpus in teaching English in China. Their studies show that corpus, which contains a large number of examples from daily language, can make students aware of the knowledge of word frequency and help them learn the different collocations of English words.

Other theories are also used in vocabulary teaching, such as the Prototype theory in Xie (2007), the Componential Analysis in Liu (2004), and the theory of Makedness in Xi (2005). However, the decompositional view of word form in teaching vocabulary has not been paid much attention to and the papers exploring the pedagogical implication of decompositional view are also rare. Schmitt and Meara (1997) and Wolter (2001) studied the relationship between decompositional view of word form and L2 vocabulary acquisition. In Schmitt and Meara (1997), 95 secondary and postsecondary Japanese students were tested on word association and inflectional and derivational suffixes for each of 20 verbs, once near the beginning of their academic year and once near the end. The students showed rather poor knowledge of the allowable suffixes for the verbs, especially derivational suffixes. In Wolter (2001), the researcher compared the L1 and L2 mental lexicon. His study shows that at any given time, a particular learner's mental lexicon will probably look different than that of most native speakers, as even learners who manage to become fairly proficient are likely to have a smaller stock of words in their L2 mental lexicon than most native speakers.

Actually, the decompositional view of word form is used widely in China in vocabulary learning and there are many dictionaries and reference books in bookstores which list English stems and affixes. These books are said to be helpful in vocabulary learning and they are also recommended by teachers as useful tools in the learning of English vocabulary. This paper tries to find out the merits and the defects of word formation reference books and to provide recommendations for

the development of these books to facilitate the vocabulary learning in the future.

3. METHODOLOGY

In order to evaluate the reference books which have taken the decompositional view of word form into consideration, two steps were taken. Firstly, a questionnaire which contains eight items was carried out (the questionnaire is included in the appendix) to get a general view of how students learn vocabulary. 40 students (10 English majors and 30 non-English majors) were selected to answer the questionnaire. The participants included my former undergraduate classmates and my friends who have at least received college education. I chose the participants with a higher level of education because they have learnt English for a long time and I assumed they were more experienced in vocabulary learning. Besides, all of them have used some kind of affixes dictionaries before. After analyzing the results of the questionnaire, I found two interesting problems and I selected 10 people for a further interview which gave me some insight into the common merits and defects of word formation reference books.

4. RESULTS AND DISCUSSION

From the questionnaire I found out two interesting problems: (1) Although all the participants have used affixes dictionaries in aiding their vocabulary learning (besides, the 10 people selected in the interview part strongly claimed these dictionaries were useful), when asked which method they are most likely to use in vocabulary learning (item 4), over a half of them (52.5%) chose the pronunciation rules, which was far more than those who chose word formation knowledge (22.5%) and presented a different picture from what most editors claimed in the affixes dictionaries (most of them claimed that the knowledge of word formation is crucial to vocabulary learning). (2) Although the knowledge of word formation was chosen as the second most-frequently-used method in vocabulary learning, when asked what will they do in facing with new words in reading, only 7.5% of them chose guessing the meaning of the new words through stem and affixes, which was far less than guessing through the context (37.5%) and consulting dictionary (35%) and even less than skipping (20%). Why the decompositional view of word form is popular in claims but not widely-used in practice? The interview conducted later on provided some insights.

4.1 The Nature of the English Language

Ten participants were selected in the interview part, including three English majors. I asked them to talk freely about their experience in vocabulary learning and after a while the discussion became heated. When asked why pronunciation rules were considered a better method to learn new words than the decompositional method, my ten interviewees expressed similar opinion: the nature of English determined that pronunciation rules were more useful in learning vocabulary.

What did they mean by the nature of English? I drawn a conclusion that they referred to the writing system of English. Generally speaking, there are three writing systems in the world: the logography system takes the word or morpheme as the linguistic unit and pairs the unit with some pictorial symbol, called the logograph or character, and Chinese is the best-known example of logography; the syllabary system takes the syllable as the linguistic unit and associates it with some visual representations, and Modern Japanese mixes logographic characters with syllabic symbols; the alphabet system has each letter represent a phoneme (although there are many exceptions), and English is an example of this system (Carroll, 2000). Because English belongs to the alphabet system, there are many associations between phonemes and letters. For example, my interviewees pointed out that -tion, -cion usually pronounced as /ʃɒn/; -ea, -a as /ei/; -ie, -ee, -ea as /i:/; -er, -or, -ir as /ɜ:/. Some of these associations were taught by teachers in secondary school while others were found out by themselves in the long period of English learning. Several interviewees believed that these associations between pronunciation and letters were more useful than decompositional method in vocabulary learning because these rules can help in the spelling of English words. Our native language Chinese has a writing system which is greatly different from English and undoubtedly the spelling of English places a heavy burden on memory during the primary stage of learning English; the results of the questionnaire show that even at the level of college education, there are 12.5% of students who still think that spelling is the most difficult part in learning English. Different from the decompositional method, one of my interviewee pointed out that pronunciation rules were helpful in two aspects: first it can help memorize the pronunciation of a word; second it can help the memorization of the spelling.

The decompositional method, on the other hand, divides a word into meaningful components, which only pays attention to the semantic aspect of a word without much considering of the phonological aspect. One of the interviewees who is an English major pointed out that sometimes when affixes and stems were put together, the pronunciation of the whole word was not simply the combined pronunciation of the affixes and the stem, but changed to some extent, especially the stress of the combined word. Therefore, the decompositional method cannot provide much help to the phonological

aspect of a new word, which seems to be one of the primary concerns of Chinese learners.

With respect to the semantic aspect, most of the interviewees prefer to learn the meaning of a word as a whole, not as separated part combined together in the decompositional method. One interviewee, a postgraduate English major, said that to learn meaning using decompositional method was acceptable, but this method left her a feeling of "insecurity". When facing a new word in a context, the interviewees agreed that using the context to imply the meaning of the word was the most efficient way. "If my purpose is to keep reading going, the information in the context is usually enough for guessing the meaning of a new word. If I want to learn more about the word, such as the exact pronunciation and the usage, I will look into the dictionary. If I am not interested in this word or if the ignorance of the word does not hinder my comprehension of the context, I will skip the word so as not to slow down my reading. So I never use stem and affixes in guessing the meaning of a word in a context," one interviewee described what she would do in facing new word in a context and her opinion was generally agreed.

The decompositional method is not as useful as the pronunciation rules when learning new words and it is the least preferred method to use in guessing the meaning of new words, then under what circumstances can the decompositional method be used to help vocabulary learning? "Before the exams," my interviewees gave me their answer. It seems that when an exam is approaching, there is a need for students to memorize a large number of words in a relatively short period of time. The decompositional method can provide students with the combined information of the formation as well as the meaning of words. Even if students only have a quick scanning of the words listed in the decompositional reference books, they will have a vague idea of the meaning of the words when encounter them in the exam, especially in the reading comprehension part. However, most English majors held neutral view concerning this devouring of new words before exams.

4.2 The defects of the stem and affixes reference books

Besides the nature of English, the defects of the word formation reference books also made students feel the decompositional method not as satisfactory as the editors of these books claimed.

Although the interviewees were not familiar with the etymology of the English language, based on their intuition about the English morphology which was formed through the long period of learning English, they pointed out that some explanations of the etymological information given in word formation reference books were not convincing. For instance, in

Secrets of English Words, whose editor claims that many students consider it very useful in vocabulary learning, there are examples of those unconvincing etymological information. In the first part of this book which is about stems, the editor claims that *mansion*, *manor*, *permanent*, *remain*, and *immanent* share the same stem *man* which means dwell or stay (Jiang, 2000). The interviewees were doubtful whether there is such a stem in the English language and they pointed out even if these words were indeed evolved from this stem, this kind of information was by no means helpful in vocabulary learning. Why the interviewees held this opinion? Possibly the reason lies in the aspect of frequency: for example in the case of *man*, the meaning of an adult male human being was so deeply-rooted in the mental lexicon that the meaning of dwell or stay has little chance of leaving any permanent impression on memory, let alone expecting students to identify it in a morphologically complex word. Another example is again in *Secrets of English Words*, in which the editor claims that *hospital*, *hospitalize*, *hospitable*, *hospitality* share the same stem *hospit* which means guest. Several interviewees said that in fact the memory of groups of words like these did not require a specific knowledge of the stem *hospit* because the word *hospital* was very familiar to students and other words in the group were derived from *hospital*, and the knowledge of a non-existent word *hospit* only placed burden on memory.

Besides, some information given in word formation reference books is not consistent with the word formation provided in dictionaries. For example, in several reference books, anthropo- and agri- are listed as stems while in dictionaries (such as *Longman Dictionary of Contemporary English*) these two are categorized into prefixes. Students pointed out that sometimes this kind of inconsistency was puzzling and they believed that the dictionary was more convincing than reference books.

4.3 The Pedagogical Implication of the Decompositional Approach

The questionnaire and interview reflect students' dissatisfaction towards the decompositional approach, and some pedagogical implication of this approach can be derived from the interview part.

First, the role of the decompositional approach in vocabulary learning should be viewed as complementary to other methods rather than the dominant and most useful one claimed by some editors of word formation reference books. The research shows that learners prefer to use pronunciation rules in vocabulary learning, thus editors' subjective conclusion about the role of the decompositional approach is not correct. It is better for students themselves to decide which method suits themselves. Second, the word

formation reference books need improvement. The editors should be well-educated in the field of linguistics and should have a solid knowledge of the etymology of English words to make the stems and affixes listed in the book convincing; the editors should not simply put the whole list of stems and affixes in the book, but rather put students' needs into consideration and list the most frequent used stems and affixes, and the word formation parts in English learners' dictionaries can help them decide which stems and affixes should be included in the book; learners chose the usage of words as the most difficult part in learning vocabulary rather than meaning, to make reference books more useful, it is advisable for these books to include some example sentences to show the usage information; it is better to separate derivational affixes from other affixes because derivational affixes are usually used to change the grammatical category of a word, which have different function than the affixes used to change the meaning of a word.

5. CONCLUSION

The decompositional view of word formation is widely-used in vocabulary learning in China, which can be proved by the large number of publications concerning the word formation of English. A questionnaire about learners' vocabulary learning was sent out and a further interview focusing on collecting learners' detailed comments on the word formation reference books was conducted. The questionnaire and the interview show that the nature of the English language and the defects of the reference books are the major reasons for the subdominant role of the decompositional approach played in vocabulary learning among Chinese learners. Upon the findings from the questionnaire and the interview, several suggestions for the word formation reference books are given.

The study has some limitations. First, the participants of the study are undergraduates and graduates, therefore the findings of the study may not be applicable to middle-school students and a study containing a larger sample is needed in the future to get a more comprehensive view of Chinese learners' use of the decompositional approach in vocabulary learning. Second, some findings of the word formation reference books are based on the opinions and examples given by the participants without a detailed analysis of the books themselves, therefore the merits and the weakness of the books are only briefly mentioned rather than thoroughly discussed and future reviews of particular books are needed in order to provide more concrete and specific suggestions for the future revision of these books.

REFERENCES

- Butterworth, B. (1983). 'Lexical representation'. In B. Butterworth (Ed.) *Language Production, Vol 2.* (pp. 257-294). London: Academic Press.
- Carroll, D. W. (2000). *Psychology of Language*. Beijing: Foreign Language Teaching and Research Press.
- Celik, M. (2003). 'Teaching Vocabulary through Code-Mixing'. *ELT Journal* 54/7: 361-367.
- Cole, P., Beauvillain, C., & Segui, J. (1989). 'On the Representation and Processing of Prefixed and Suffixed Derived Words: A Different Frequency Effect'. *Journal of Memory and Language* 28: 1-13.
- Feng, Y., & Sun, M. (1999). 'The Role of Corpus on the Teaching of English Words'. *Foreign Language Research* 3: 60-62.
- Jarvella, R. J. (1971). "Syntactic Processing of Connected Speech", *Journal of Verbal Learning and Verbal Behaviour* 10: 409-416.
- Jiang, Z. (2000). *Secrets of English Words*, Beijing: Press of China Radio International.
- Lewis, M. (1993). *The Lexical Approach: the State of ELT and A Way Forward*, Hove, England: Language Teaching Publications.
- Lima, S. D. (1987). 'Morphological Analysis in Sentence Reading'. *Journal of Memory and Language* 19: 84-99.
- Liu, Q. (2004). 'The Componential Analysis and the Teaching of English Vocabulary'. *Journal of Sichuan International Studies University* 20(6): 156-160.
- Longtin, C-M., Meunier, F. (2005). 'Morphological Decomposition in Early Visual Word Processing', *Journal of Memory and Language* 53(1): 26-41.
- Lu, Q. (2001). 'Context in Vocabulary Teaching and Learning'. *Foreign Language and Their Teaching* 6: 32-34.
- Mackay, D. G. (1978). 'Derivational Rules and the Internal Lexicon'. *Journal of Verbal Learning and Verbal Behaviour* 17: 61-71.
- Manelis, L. & Tarp, D. (1977). 'The Processing of Affixed Words'. *Memory & Cognition* 5: 690-695.
- Mondria, J-A. (2003). 'The Effects of Inferring, Verifying, and Memorizing on the Retention of L2 Word Meanings: an Experimental Comparison of the "Meaning-inferred Method" and the "Meaning-Given Method"'. *Studies in Second Language Acquisition* 25(4): 473-499.
- Pulido, D. (2003). 'Modeling the Role of Second Language Proficiency and Topic Familiarity in Second Language Incidental Vocabulary Acquisition through Reading'. *Language Learning* 53(2): 233-284.
- Schmitt, N. & Meara, P. (1997). 'Researching Vocabulary through a Word Knowledge Framework: Word Association and Verbal Suffixes'. *Studies in Second Language Acquisition* 19(1): 17-36.
- Schreuder, R. & Baayen, R. H. (1995). 'Modeling Morphological Processing'. In L. B. Feldman (Ed.). *Morphological Aspects of Language Processing* (pp. 131-154). Hillsdale, NJ: Lawrence Erlbaum.
- Schriefers, H., Zwitserlood, P., & Roelofs, A. (1991). 'The Identification of Morphologically Complex Spoken Words: Continuous Processing or Decomposition?'. *Journal of Memory and Language* 30: 26-47.
- Taft, M. (1979). 'Recognition of Affixed Words and the Word Frequency Effect'. *Memory & Cognition* 7: 263-272.
- Taft, M. (1981). 'Prefixed Stripping Revisited'. *Journal of Verbal Learning and Verbal Behaviour* 20: 289-297.
- Twaddell, F. (1980). 'Vocabulary Expansion in the TESOL Classroom'. In K. Croft (Ed.). *Readings on English As a Second Language* (2d. ed.) (pp. 439-457). Cambridge: Winthrop.
- Wang, J., G. G., P. F., Wang, R., & Wen, F. (2005). 'The Use of Corpus in English Vocabulary Teaching'. *Journal of the Fourth Military Medical University* 51: 124-126.
- Webb, S. (2007). 'Learning Word Pairs and Glossed Sentences: the Effects of a Single Context on Vocabulary Knowledge'. *Language Teaching Research* 11(1): 63-81.

- Wolter, B. (2001). 'Comparing the L1 and L2 Mental Lexicon: A Depth of Individual Word Knowledge Model'. *Studies in Second Language Acquisition* 23(1): 41-69.
- Xi, X. (2005). 'The Markedness Theory and the Teaching of English Vocabulary'. *Foreign Language Education* 26(4): 47-49.
- Xie, J. (2007). 'The Application of the Prototype Theory in the Teaching of English Vocabulary'. *Crazy English Teachers 1*: 8-10.
- Zhang, S., & Zou, W. (2006). 'The Effect of Mini-Context on the Cognition of English Lexicon'. *Academics in China* 4: 217-220.
- Zimmerman, C. B. (2001). 'Historical Trends in Second Language Vocabulary Instruction'. In J. Coady (Ed.) *Second Language Vocabulary Acquisition* (pp. 5-19). Shanghai: Shanghai Foreign Language Education Press.

APPENDIX

性別： 年齡： 教育程度： 本科/碩士/博士 專業：

1. 你學習英語有多長時間了？
A. 15 年以上 B. 10-15 年 C. 5-9 年 D. 1-4 年
2. 你的英語程度如何？
A. CET4 B. CET6 C. TEM4 D. TEM8
3. 你認為單詞學習在英語學習中的地位是什麼？
A. 最重要 B. 比較重要 C. 不重要 D. 無所謂
4. 你平時學習單詞的主要方法是什麼？
A. 通過上下文 B. 通過發音規則 C. 通過詞根和詞綴 D. 通過近義或反義等聯想方法
5. 你認為在學習單詞中最難的部分是什麼？
A. 發音 B. 拼寫 C. 意義 D. 用法
6. 你常用哪一種背單詞的方法？
A. 背字典 B. 背專門的單詞書 C. 通過上下文背單詞 D. 其他
7. 你主要在什麼時間學習單詞？
A. 學校考試以前 B. 考級以前 C. 平時積累 D. 其他
8. 面對文章中不認識的單詞, 你通常
A. 跳過去 B. 直接查字典 C. 通過構詞法猜測詞義 D. 通過上下文猜測詞義

THE AUTHOR

侯晉安, 女, 中國北京外國語大學英語學院 2006 級碩士研究生, 研究方向為英語語言學和應用語言學。

Hou Jin'an, female, Grade 2006, majoring in Linguistics and Applied Linguistics in the School of English and Foreign Studies in Beijing Foreign Studies University.

Address: Mailbox 124, School of English and International Studies, Beijing Foreign Studies University, Beijing, 100089, P. R. China.