

# Contextual Word Inferencing Strategy and Its Pedagogical Values

ZHOU Shuang

School of Foreign Studies, Northwestern Polytechnical University, Xi'an Shaanxi, 710072, P.R.China

Inferencing new words' meanings from context is identified as a key vocabulary learning skill and one of the three principal strategies for handling low-frequency words (Nation, 1990). It is also considered an effective reading skill. This paper tends to discuss its positive pedagogical implication to Chinese university students. By discussing the two different teaching Procedures of Clarke and Nation's (1980) and Bruton and Samuda's (1981), a practical instruction of the strategy is proposed. Nevertheless, the strategy's limitations are taken into account as well in the final part.

*Keywords:* word inferencing strategy, reading, Chinese university students

## Introduction

There has been a long-running debate about the importance of either intentional or incidental vocabulary learning. By giving elaborate attention to a word and going beyond the immediate demands of a particular context of occurrence, explicit learning allows students to process a word in its every knowledge aspect. Incidental learning, however, usually occurs during reading with deliberate focus on content meaning rather than each individual word. It is generally agreed now that the 2000 most frequent words deserve attention and class time as they "account for at least 85% of the words on any page of any book no matter what the subject matter" (Nation & Newton, 1997, p. 238). They are also prerequisites for language use. For university students, the top 800 headwords on the academic vocabulary list (Nation, 1990) need to be considered high-frequency ones too. Learners, on the other hand, are generally suggested to learn the low-frequency words implicitly through reading because (1) there are too many of them; (2) they are met infrequently; (3) they have a very narrow range (Nation, 1990).

Inferencing (or inferring, or guessing) new words' meanings from context is identified as a key vocabulary learning skill and a principal strategy for handling low-frequency words (Nation, 1990). It is also shown by research as a strategy that can effectively overcome lexical difficulties and plays a vital role in understanding the meaning of the texts (Wu, 2010; Wang, & Fan, 2012; Liu, Wei, & Wang, 2019).

This paper tends to discuss its positive pedagogical implication to Chinese university students and the actual instruction of it, whereas its limitations are taken into account in the final part.

### The Situation of Chinese University Students

It can be commonly seen in university classrooms when reading students keep looking up dictionaries, especially electronic or online ones. In so doing, they not only slow their reading and interrupt their continuous understanding of the content meaning, but also deprive themselves of the opportunities of learning words through reading by means of inferring. Obviously, it is not advocated that learners should consult dictionaries every time when they meet unknown words as it goes against effective practice of reading skills and vocabulary learning.

As a matter of fact, incidental learning of vocabulary via reading by means of guessing words' meanings seems especially meaningful to Chinese university students, because:

- (1) They are learning in an EFL environment, and are mostly exposed to a large amount of reading rather than to English-speaking people. Reading is taken as a main medium of learning English and a language skill that is required to be well mastered.
- (2) They are at an advanced stage of language learning—they have control of the main grammatical structures of English, and have already grasped the high-frequency words. Laufer's (1991) study on adult learners of EFL about their vocabulary level and reading comprehension shows that the turning point of vocabulary size for reading comprehension of unsimplified text is about 3,000 word families since they give learners coverage of 95% of the academic text according to Nation (2001). Therefore, for the intermediate and advanced Chinese university learners with vocabularies above 3,000 or so, "reading offers a portal of exposure to all remaining words" (Schmitt, 2000, p. 150).
- (3) Limited explicit teaching cannot meet their needs for quantitative and qualitative accumulation of vocabulary. They are expected to enlarge their vocabulary out of class on their own.

In a word, it appears practical and important to introduce word inferencing strategy to Chinese university students to help them enhance reading ability on the one hand, and learn vocabulary through reading on the other. Especially at a time when independent learning becomes greatly important to these advanced learners, *how* to learn rather than *what* to learn is their major concern.

### The Interrelationship Between Reading, Vocabulary, and Word Inferencing Strategy

Inferencing the meanings of unfamiliar words in context is a process of identifying and acquiring new vocabulary by utilizing attributes and contexts that are familiar (Carton, 1971). Most commonly, it refers to inferring a word's meaning from the surrounding words in a written text (Schmitt, 2000). Research indicates that, compared with verbal exposure that contains mostly high-frequency words, written discourse makes a wide variety of vocabulary (a great many words of low frequency are found only in writing) accessible to learners, and accordingly is a better resource for acquiring a broader range of words. Therefore, the consensus on how to increase students' vocabulary appears to have them read more.

Nation (2001, p. 240) claims, "word meanings are context sensitive," thereupon "a variety of contexts will evoke a variety of enriching instantiations" (p. 241). Two "common-sense observations" (Nagy, 1997, p. 64) strongly prove the importance of context in vocabulary learning—"what a word means on any given occasion is mediated by many contexts in which it is used, and such contexts provide considerable input from which language users clearly pick up huge amounts of vocabulary knowledge." Therefore, the extensive reading programs with contextualized learning in nature are proved generally more effective for vocabulary acquisition

than decontextualized instruction (see, for example, Krashen, 1989). Additionally, Nagy (1997) holds that the total lexical resources including idioms, multiple meanings, semantically irregular derivatives, and various types of proper words are mainly gained through reading as well.

It is claimed that the basic skill in vocabulary building for the native speaker of English is guessing from the context by using grammatical and pragmatic clues (Twaddell, 1972; Kruse, 1979). This should be applicable to EFL learners as well. Li (1988) values the dual efficacy of such a process in terms of language use and language learning. In language use, successful word inference contributes to “smooth continuation of communication between the text-receiver and the text” (p. 402)—reading fluency; in language learning, it facilitates vocabulary acquisition. Therefore, it acts as both a key reading skill and vocabulary learning strategy. Reversely, successful guessing relies on the vocabulary size of a learner and his/her reading ability. The 98% of word tokens (which means over 3,000 word families) understood by readers, for example, is the prerequisite of successful guessing (Nation, 2001). Meanwhile, Grabe and Stoller (1997) conclude their study results, saying that vocabulary knowledge and reading ability are correlated together and reciprocally causal, and both of them will develop as a result of extensive reading practice. To sum up, the three factors interact with each other and play a triangle relationship (Figure 1).

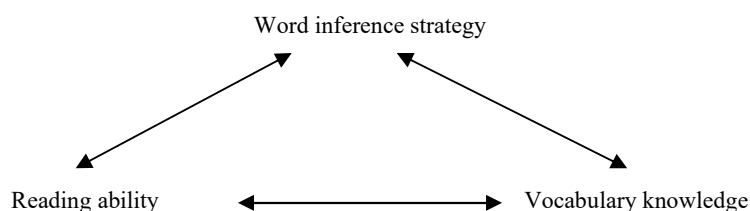


Figure 1. The interrelationship between word inference strategy, reading ability, and vocabulary knowledge.

Accordingly, word inference strategy as an indispensable role is worthwhile to be introduced to the university learners.

### A Discussion of the Word Inference Strategy Instruction

Nation (1990) asserts that most of the unknown words (at least 80%) can be guessed from context. In theory, if one learner can guess 80% of the unknown words with enough clues they find in a passage, then every learner can achieve a similar score with training. Experiments (see, for example, Kruse, 1979) do prove that learners after training can make effective achievement in guessing. Thus to have learners trained in using the strategy of inferring is worthwhile and practical. The course content—various contextual clues and guessing skills, and teaching methodology are discussed in the following sections.

#### Various Contextual Clues Aiding Word Inferencing

Being able to recognise the contextual clues is one of the prerequisites of successful inferencing. Teachers had better keep a well-established list of context clues to make sure they are taught systematically to students. Among the researchers identifying clues, Ames (1966, cited in Nation, 2001) is considered the one who provides a very useful survey of available clues. Kruse (1979) proposes a series of clues and claims that they are effective

especially for students of EFL after conducting experiments on her class. These concrete clues (Appendix) provide readers with specific aids in guessing from context and reading comprehension.

#### **On Clarke and Nation's (1980) Guessing Procedure**

When it comes to the question of “how to guess by employing the above clues”, the following detailed five-step inductive guessing procedure provided by Clarke and Nation (1980, also in Nation, 1990 and Nation, 2001) can be perceived as a good answer.

Step 1. Decide on the part of speech of the unknown word.

Step 2. Look at the immediate context of the word, simplifying it grammatically if necessary.

Step 3. Look at the wider context of the word, that is the relationship with adjoining sentences or clauses.

Step 4. Guess.

Step 5. Check the guess.

Is the guess the same part of speech as the unknown word?

Substitute the guess for the unknown word. Does it fit comfortably into the context?

Break the unknown word into parts. Does the meaning of the parts support the guess?

Look up the word in the dictionary.

In this procedure, part of speech of the word, its immediate and wider contexts all contribute to skilful guessing with learners going through each stage in order. It is believed necessary (Nation, 1990) for the learners, especially those who have not been well-equipped with the strategy, to check their guessing of a word meaning in dint of matching it with the unknown word in terms of its part of speech and contextual meaning, and looking up dictionary. It is worth noting that analysing word part is arranged in the checking stage rather than being considered a guessing skill.

Nation (1990, 2001) emphasizes that guessing meanings by means of identifying words' affixes and roots is not very reliable because the word part rules do not apply to a number of words. As a result, a guess at a word's meaning according to the analysis of its parts “is more likely to result in twisting the interpretation of the context than allowing interpretation of the context to modify the guess of the meaning” (p. 163). Thus, leaving the use of affixes and root until the checking step is suggested to enable learners to approach interpretation of the context with an open mind.

Nation (1990) indicates that the ultimate goal for learners to practice guessing words by systematically going through the five steps is to have them acquire the unconscious skill that an efficient reader already has. It is no longer necessary for learners to apply all the steps once they have mastered them. In addition, several types of contextual aids, namely part of speech of the word, its immediate context and wider context as well as word parts, involved in the procedure are pointed out can be trained separately.

#### **On Bruton and Samuda's (1981) Guessing Procedure**

Bruton and Samuda's Guessing Procedure (Figure 2) proposed in 1981 presents 6 particular stages for teachers to follow when they are instructing guessing strategy. Following this procedure, a teacher first encourages students to guess words on their own. Students at this stage may be involved in deliberately trying their various ways of guessing. By hazarding guesses, the students who are close to the answer justify their choices while those who are not look for context clues leading to approximate meaning. Then the two groups go

through “teacher elaboration” stage—the teacher’s explicit instruction of the guessing skill, and “backup” stage—consolidation of the skill and the knowledge of the word.

Under Clarke and Nation’s procedure, students are taught the word inferencing strategy first, hence are encouraged to employ it to guessing the meaning of a word they meet. A big difference Bruton and Samuda’s procedure has from the Clarke and Nation’s is that it is based on “a trial-and-error approach” (Nation, 1990, p. 161), with guessing occurring at the first stage and justification and elaboration afterwards, therefore is highly valuable. Learners are encouraged to hazard when meeting unknown words in reading. Those who make close answers as well as those who do not will be deeply impressed with the process they have experienced and the teacher’s presentation afterwards. Their learning of the guessing skill will be effectively enhanced.

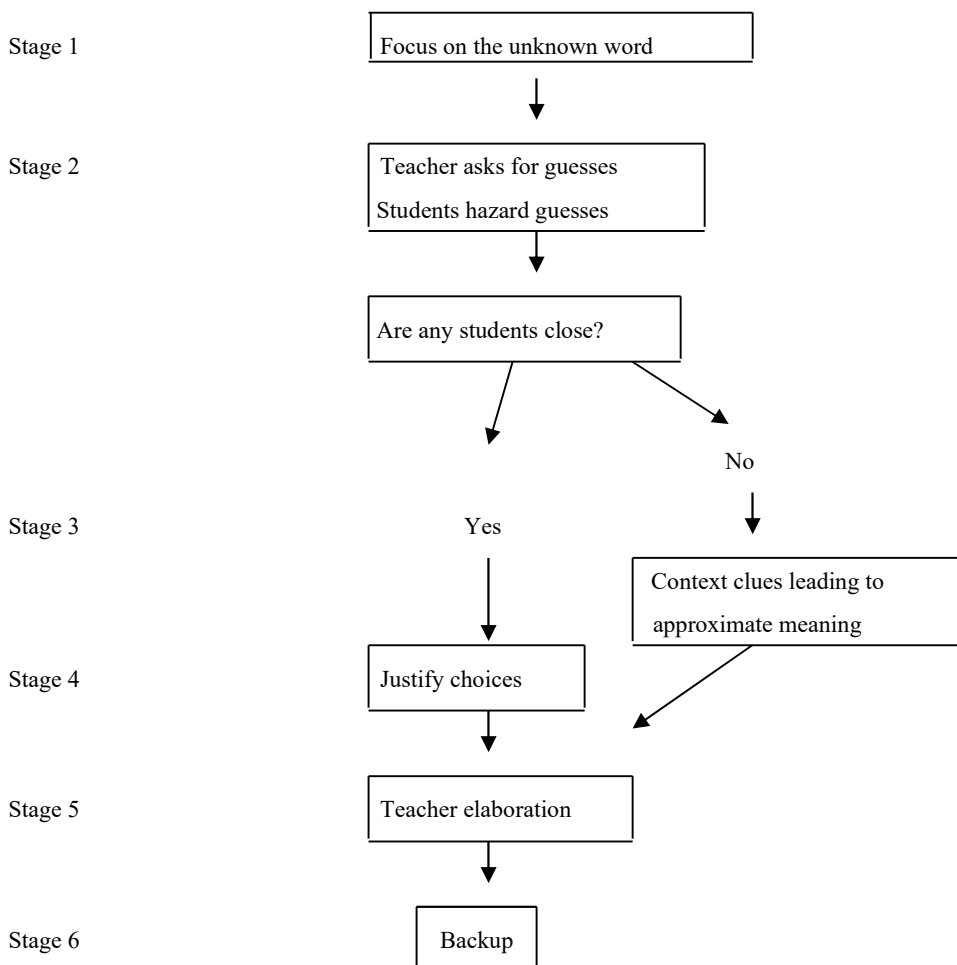


Figure 2. Bruton and Samuda’s Guessing Procedure (1981, also in Nation, 1990).

Comparatively speaking, I assume that Bruton and Samuda’s procedure has an advantage over Clarke and Nation’s for it provides students with opportunities to experience their own ways of inferring. Students are eager to know the results and *why* they are wrong or right, or fail to guess. Therefore the teacher’s subsequent presentation becomes noticeable and the classroom will have an atmosphere of active learning.

However, the two procedures do not work contradiction. Clarke and Nation propose detailed word guessing procedure that, with the contextual clues (see section 4.1), can be integrated into Bruton and Samuda’s fifth

stage—teacher elaboration, at which it is the teacher's turn to demonstrate the actual guessing skill. In other words, teachers explicitly teach Clarke and Nation's Guessing Procedure together with the contextual clues by taking Bruton and Samuda's procedure as their teaching methodology. By recycling the whole procedure, teachers gradually introduce each contextual clue to learners and make them familiar with, hence able to skilfully manipulate Clarke and Nation's guessing procedure.

Notably, the ability to infer can only be acquired by practice (Bright & McGregor, 1970), so the course should be well arranged in terms of time, frequency as well as the content and difficulty of the reading materials.

### **Limitations of the Word Inferencing Strategy**

Enabling students to improve their reading ability and vocabulary acquisition, encouraging them to learn independently, helping them with making form-meaning association to learn effectively etc., guessing from context does deserve explicit teaching and learning especially in an EFL situation. However, its problems also are conspicuous.

First of all, it can be a slow process if guessing from context is taken as the major way of acquiring vocabulary (Sokmen, 1997). Nation (2001) points out the incremental nature of learning from context and states that meaning and knowledge of form are gradually enriched and strengthened in such a process. Studies on native speakers (see, for example, Nagy, Herman & Anderson, 1985) and second language learners (see, for example, Dupuy & Krashen, 1993) indicate that 5% to 10% of the unknown words are guessed correctly to some degree and partially learned when learners meet the words for the first time while reading. So incidental learning from context is very low. Schmitt (2000) confirms that an incidental learning happens providing that learners get maximum exposure to language. Therefore a resolvent to the problem is to stimulate learners' interest in English, and have them read more, which, however, may not be effectively achieved regarding limited amount of time that EFL learners have.

Secondly, a number of studies (see, for example, Parry, 1993; Mondria & Wit de-Boer, 1991) prove that "guessing from context does not necessarily result in long-term retention." The very important prerequisite is the repeated exposures to the word from a great deal of reading, which undoubtedly sets up difficulties in selecting reading materials and overloads teachers with the responsibility for monitoring students to have a certain amount of reading everyday.

Thirdly, "inferring word meaning is an error-prone process" (Sokmen, 1997, p. 238). Laufer (1997) figures out some problems that may seriously impede correct inferencing: (1) Insufficient vocabulary. The threshold of learners' vocabulary size for understanding unsimplified text should be the minimum of 3,000 word families that cover 95% of the vocabulary in a text. However, successful guessing requires a higher percentage, i.e. 98% of coverage; (2) Misinterpretations of deceptively transparent words including words with a deceptive morphological structure, idioms, false friends, words with multiple meanings, and synforms; (3) Unavailability of clues. Though Nation (1990) found that at least 80% of the unknown words can be successfully guessed from the context, "the context must be rich enough to offer adequate clues" (Schmitt, 2000, p. 153); (4) Unfamiliarity with the clue words; (5) Presence of misleading clues; (6) Compatibility between the reader's schemata and the text content. When the two are different, the reader may impose his or her probably misinterpretation on the text.

Therefore, to successfully employ word inferencing strategy in incidental vocabulary learning via reading is confined to a lot of prerequisites. In many cases, it is more plausible to consider it a reading skill.

### Conclusion

Learners can be their own best teachers in learning vocabulary if they are exposed to the target language in an appropriate way (Wallace, 1982). Since the Chinese students are not exposed to English in situations outside the classroom as native speakers are, they can be exposed to English in the form of appropriate reading. Obviously, if a teacher wants to help learners cope with low-frequency vocabulary particularly in their reading, it is sensible for him/her to spend time on strategies of dealing with them rather than on explicit teaching of each individual word. Word inferencing strategy is considered applicable especially to low-frequency words and plays an equally crucial role in its triangle relationship with reading ability and vocabulary knowledge—each one facilitates the other two. In regard to reading frequency and vocabulary learning, word reference strategy is worthy of teaching.

Given the particular situation of Chinese university learners and their learning context, such a strategy deserves classroom teaching as well as it takes effect in facilitating learners' independent learning. Though there are quite a few of limitations of successfully employing such a strategy, it is still the most important way for learners to increase their vocabulary (Nation, 2001). A well-planned strategy teaching program concerning various influential factors should be what we teachers think about.

However, a word needs to be warned. Apparently, a good strategy does not mean it can be applied to every learning situation. Besides, different strategies may suit different individuals. Teachers are supposed to introduce various generally good learning strategies to learners, yet it is each learner's preference that decides which strategy to be employed.

### Appendix

#### Contextual Clues

(1) Definition or description

e.g. Some looked alive, though no *blood* flowed beneath the skin.

(2) Parentheses or footnotes as explanations

e.g. The panther (a large black animal related to a cat) is very dangerous and deadly.

(3) Synonyms and antonyms

They usually occur along with other clues.

a) *is* and *that is* (X is Y; X, that is Y) are easily recognizable signal words.

b) Appositive clause constructions set off by commas, which, or, or dashes (X, Y,; X—Y—; X, which is Y,; X, or Y) are physically recognizable clues.

(4) Modifying phrases

e.g. The thief *slashed* her repeatedly with a knife.

(5) Examples

c) Specific clues: X, e.g. Y; X, for example, Y.

e.g. Iran is trying to *restore* many of its ancient monuments. Persepolis, for example, is being partly rebuilt by a group of Italian experts.

d) No physical clue

e.g. Roberta flack, Aretha Franklin, and Olivia Newton-John are popular female *vocalists*.

(6) Summary

e) Restatement

i) With a physical clue: ...X. This Y ...; ... X. X is Y.

e.g. Many products are sold to stop *Perspiration*. This wetness that comes from your body whenever you are too warm, work very hard, or are afraid, usually doesn't smell very good.

ii) Without physical clue

Either: the same meaning. X, Y. e.g. He's a really good *athlete*. He plays sports well.

Or: Opposite meaning. X. (neg)Y. e.g. He's *bound* to win. He cannot lose.

f) Information

e.g. The *forsythia* was covered with the golden flowers that bloom early in the spring.

(7) Words in series

e.g. *sonnets* and plays of William Shakespeare

(8) Familiar expressions

e.g. expectation was written all over their *faces*

(9) Cause and effect

e.g. He reads not for fun but to make his conversation less *boring*.

(10) Association

e.g. All the little boys wore short *pants*.

(11) Referral clues

e.g. Sweden 15.3 etc. These *statistics* carry an unpleasant message.

(12) Preposition

e.g. He sped along a *freeway*.

(13) Question and answer

e.g. Now, what about *writing* ...?

(14) Comparison or contrast

e.g. Will it be a blessing or a *bane*?

(15) Main idea and detail

e.g. I soon found a *practical* use for it. I put orange juice inside it.

(16) Non-restrictive clauses

e.g. 24 hours – *hardly* a significant period of time

(17) Experience

The reader must decide from his own experiences what is probably meant by a word.

e.g. The old dog *snuffled* and *moped* as he slowly walked from the room.

(18) Pictures, diagrams, and charts

(19) The subject-matter being discussed (Source: Ames, 1966, cited in Nation, 2001 and Kruse, 1979)

## References

- Ames, W. S. (1966). The development of a classification scheme of contextual aids. *Reading Research Quarterly*, 2, 57-82.
- Bright, J. A., & McGregor, G. P. (1970). *Teaching English as a second language*. London: Longman.
- Bruton, A., & Samuda, V. (1981). Guessing words. *Modern English Teacher*, 8, 3, 18-21.
- Carton, A. S. (1971). Inferencing: A process in using and learning language. In P. Pimsleur & T. Quinn (Eds.), *The psychology of second language learning* (pp. 12-31). Cambridge: Cambridge University Press.
- Clarke, D. F., & Nation, I. S. P. (1980). Guessing the meanings of words from context: Strategy and techniques. *System* 8, 3, 211-220.
- Dupuy, B., & Krashen, S. D. (1993). Incidental vocabulary acquisition in French as a foreign language. *Applied Language Learning*, 4(1&2), 55-63.
- Grabe, W., & Stoller, F. L. (1997). Reading and vocabulary development in a second language. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 98-124). Cambridge: Cambridge University Press.
- Krashen, S. (1989). We acquire vocabulary and spelling by reading: Additional evidence for the input hypothesis. *Modern Language Journal*, 21(4), 440-463.
- Kruse, A. F. (1979). Vocabulary in context. *ELT Journal*, 33(3) 207-213.
- Laufer, B. (1991). How much lexis is necessary for reading comprehension? In P. J. L. Arnaud & H. Bejoint (Eds.), *Vocabulary and applied linguistics* (pp. 126-132). Basingstoke: Macmillan.
- Laufer, B. (1997). The lexical plight in second language reading. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition: A rationale for pedagogy* (pp. 21-34). Cambridge: Cambridge University Press.
- Li, X. L. (1988). Effects of contextual cues on inferring and remembering meanings of new words. *Applied Linguistics*, 9, 402-413.
- Mondria, J. A., & Wit de-Boer, M. (1991). The effect of contextual richness on the guessability and the retention of words in a foreign language. *Applied Linguistics*, 12, 3, 249-267.
- Nagy, W. (1997). On the role of context in first- and second-language vocabulary learning. In N. Schmitt & M. McCarthy (Eds.), *Vocabulary description, acquisition and pedagogy* (pp. 64-83). Cambridge: Cambridge University Press.
- Nagy, W., Herman, P., & Anderson, R. C. (1985). Learning words from context. *Reading Research Quarterly*, 20, 233-253.
- Nation, I. S. P. (1990). *Teaching and learning vocabulary*. Boston: Heinle & Heinle Publishers.
- Nation, I. S. P. (2001). *Learning vocabulary in another language*. Cambridge: Cambridge University Press.
- Nation, I. S. P., & Newton, J. (1997). Teaching vocabulary. In J. Coady & T. Huckin (Eds.), *Second language vocabulary acquisition* (pp. 238-254). Cambridge: Cambridge University Press.
- Parry, K. (1993). Too many words: learning the vocabulary of an academic subject. In T. Huckin & M. Haynes & J. Coady (Eds.), *Second language reading and vocabulary learning* (pp. 109-129). Norwood, N.J.: Ablex Publishing Corporation.
- Schmitt, N. (2000). *Vocabulary in language teaching*. Cambridge: Cambridge University Press.
- Twaddell, W. F. (1972). Linguistics and language teachers. In K. Croft (Ed.), *Readings on English as a second language* (pp. 173-188). Cambridge: Winthrop Publishers.
- Wallace, M. J. (1982). *Teaching vocabulary*. London: Heinemann Educational Books.
- 刘雪丽, 魏蓉, 王钰. (2019). 词汇推理加工研究方法: 回顾与展望. *山东外语教学*, (01), 47-55.
- 王震, 范琳. (2012). 语篇阅读过程词汇推理研究的进展. *外语教学*, (03), 56-60.
- 吴琨. (2010). 英语阅读中的生词或难词处理策略. *首都经济贸易大学学报*, (06), 118-119.