Lexical Priming in Thai Learners with Different Degrees of English Exposure

Suparuthai It-ngam[1] and Sudaporn Luksaneeyanawin[2]

[1]Chulalongkorn University, [2]Chulalongkorn University
suparuthai@gmail.com, sudaporn.l@chula.ac.th

Abstract

The present study aims to examine if the organization of the mental lexicon of English in Thai learners are affected by the degrees of English Language Exposure-ELE. Our study selected Thai learners with two distinctive degrees of ELE, the high exposure group and the low exposure group, using the ELE Questionnaire (Luksaneeyanawin et al.) A lexical decision task was used to investigate the semantic priming effect of verb (prime) on noun (target). The pairs of words were in three different conditions: collocation, non-collocation, and combination of words with nonwords (fillers). The findings indicated that L2 learners with different degrees of ELE exhibited different patterns of lexical processing.

Keywords

English language exposure, Lexical Priming Theory, L2 mental lexicon, collocation acquisition

Introduction

Many of L2 learners who are not living in the English speaking context have difficulties producing and comprehending some English phrases and sentences in conversations and texts. The input language is different from acquisition of L1 English speakers. In the English as a Foreign Language context, learners are exposed to English words used properly and improperly outside the classroom. The repeated experience to incorrect use of English may affect their vocabulary acquisition. It could be considered a 'natural' lexical priming which entails the inaccurate use of vocabulary, i.e. a characteristic of L2 learner's interlanguage.

Acquiring collocation is one of the indicator that L2 learners' proficiency is near-native (Conklin and Schmitt, 2012). Lexical priming is an experimental task in psycholinguistics used to explore the lexical processing in L1 and L2 learners. The selection of the stimuli (primes) and the target words is designed to explore the relationship of both words in phonological, orthographic, semantic, or syntactic terms. Previous studies employed this task to examine collocation acquisition (Durrant and Doherty, 2010; Cangir, Büyükkantarcıoğlu, and Durrant, 2017).

The term 'priming' in the Lexical Priming Theory (Hoey, 2005) has a different sense with that one in psycholinguistics. It refers to a process when a lexical item in a language is repeatedly primed by other lexical items in the natural setting, i.e. the exposure to the English language.

English language exposure is claimed to be a crucial factor in the vocabulary acquisition (Fernández and Schmitt, 2015). The present study aims to compare the lexical processing of Thai learners with two distinctive degrees of exposure (high and low exposure).

1 Methodology

This study examines the acquisition of English collocation in L2 learners by exploring the organization of the collocation in their mental lexicon.

Participants

The participants were 304 Thai undergraduate students at a university in Thailand. Out of 304, 10 students (5 high exposure students, HE-group, and 5 low exposure students, LE-group) were selected to be the participants in the lexical decision task.

Apparatus

The present study employed the ELE Questionnaire to select the participants. A Lexical Decision Task-LDT was designed to examine the lexical processing.

ELE Questionnaire

There are three parts in the questionnaire: (1) information about English language experience and the amount of its exposure at home and school, (2) information about the amount of time spent on all kinds of learning methods (formal education, extracurricular, and self-practice activities), and (3) intensive English language exposure. The responses were scored as follows: experience (35%), learning activities (30%), and intensive exposure (35%).

Lexical Decision Task (LDT)

The LDT was used to examine the semantic priming effect of verb (prime) on noun (target). In the mental lexicon, if the elements of a collocation are stored more closely to each other

than those of non-collocations, the reaction time of the collocations should be less. The task was presented on a laptop running DMDX software (Forster and Forster, 2003) with the word presenting in the center of the screen. There are 90 pair items created in 3 conditions: collocation, non-collocation, combination of words and nonwords (fillers). The initial word of each collocation is the prime. For example, '*take*' is the prime for '*place*' (target word). The same prime is used to coin the non-collocation, e.g. '*take school*'.

2 Results and discussion

The results revealed that the degrees of exposure were completely different among the learners. The maximum score earned was 69.00 and the minimum was only 17.63 (=39.55, S.D. =8.00). There was a difference between the degrees of the exposure in the HE-group (=54.29) and the LE group (=28.87). The reaction times in the LDT of these two groups were also distinctive. Table 1 illustrates the reaction time and percentage of errors of each group.

Table 1: Comparison of the HE group and LE group

Conditions	RT (% error)	
	HE-group	LE group
Collocation	502.61 (6.67)	641.98 (33.33)
Non-collocation	554.55 (23.33)	626.87 (23.33)
Fillers	626.55 (53.33)	637.13 (86.67)

The findings showed that the differences among mean reaction times of three conditions were significant in the HE group. The HE group responded to the stimuli in the collocation conditions faster than those in other conditions. This indicates that the associative words (collocations) were stored more closely together than the non-collocations in the mental lexicon of the HE group. In contrast, the mean reaction times of the LE group were arbitrary. It could be assumed that the link between words in the mental lexicon of the LE group was less strong than those HE group.

3 Summary

The different degrees of English exposure seem to play an important role in English collocation acquisition of Thai learners. With the high degree of exposure to English language, the mental lexicon of L2 learners tends to be well organized. However, it is necessary to consider types of exposure and learning activities. L2 learners who are frequently exposed to improper English language being used in public are considered having a negative priming. Some L2 learners may have a lot of chances to encounter English language outside classroom but ignore to learn from it. Learners should be trained to make the most from their language exposure.

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Under the Centre for Research in Speech and Language Processing, the English Language Exposure Questionnaire has been developed by a group of researchers working with Assistant Professor Sudaporn Luksaneeyanawin, Ph.D. Examples of recent studies are as follows:

Jangarun, K. and Luksaneeyanawin, S. (2016). Discourse Connector Usage in Argumentative Essays by American and Thai University Students. *Journal of Pan-Pacific Association of Applied Linguistics*, 20 (1), 95-112.

Worathumrong, S. and Luksaneeyanawin, S. (2016). Interlanguage Pragmatics Study of Compliments among Thai EFL Learners *Journal of Pan-Pacific Association of Applied Linguistics*, 20 (1), 157-182.