Acquisition of English Causative Psych Verbs by Chinese Learners

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Abstract [1] - This study centers upon, the form-meaning connections of second language (L2) causative psych verbs. More specifically, it attempts to (1) interpret the Chinese learners' internal representation of knowledge on English causative psych verbs, (2) explain how and to what extent the transfer of the first language (Chinese) motivates similar or different outcomes at different second language (English) proficiency levels, and, consequently, (3) figures out how the Chinese English learners acquire the ability of using second language causative psych verbs' structure accurately, meaningfully, and appropriately. Based on 90 Chinese English learners and 30 native English speakers, it reveals that Chinese is a crucial factor to influence the acquisition of causative psych verbs in English.

Index Terms - causative psych verbs, second language acquisition, Chinese, English

1. Introduction

The acquisition of causative psych verbs has long occupied the interest of second language researchers[1]. The typical problems of the causative psych verbs acquisition for Chinese-speaking English learners can be summarized as below in (1-3) [2].

A. Learning difficulties in morpho-syntactic structure

a. The dog makes Peter frightened. (The original meaning)
b. The dog makes Peter frighten. (Chinese learners' preference)

B. Learning difficulties in syntax-semantic interface

a. The dog frightened Peter. (The original meaning)
b. Peter frightened the dog. (Chinese learners' preference)

C. Learning difficulties in use

a. The recent changes in the Earth's climate worry scientists. (The original meaning)
b. The recent changes in the Earth's climate make the scientists worried. (Chinese learners' preference)

To look into all of these difficulties, Juffs developed the theory of CAUSE/STATE Conflation Parameter, which focused on the conflation of [cause] and [state] into one single root morpheme, or representing them in separate root morphemes[3]. Sharing the same linguistic framework with Juffs, Chen showed greater interests in Pesetsky's zero CAUS theory, which could properly interpret syntax-semantic constraint in the causative psych verbs development[4]. Consequently, it could be assumed that the acquisition of causative psych verbs relies, to a large extent, on the acquisition of the zero morpheme CAUS. By contrast, Zhang rendered the zero CAUS theory and proposed a semantic salience hierarchy model, which argued that syntactically relevant meaning component CAUSE is conceptualized as manifesting itself in human languages according to the salience of meaning component CAUSE[2].By reviewing the relevant studies mentioned above, the limitations could be easily recognized, which neglected a fact that the conflation of causative meaning is strongly influenced by first language(L2).

2. A Comparison of Causative Psych Verbs in Chinese and English

According to Comrie, causative psych verbs fall into three broad categories, namely, the periphrastic or analytic, morphological and lexical[5]. An periphrastic causative involves a predicate embedded within a larger predicate, as in English periphrastic construction with "have", "make", "get" plus a past particle or an adjective. And the Chinese corresponding construction is "shi" plus an adjective. In English, lexical causative psych verbs are most widely used, then morphological, and finally periphrastic. By contrast, in Chinese, the order is in an inverse order[6]. As Chinese is lack of morphological, we will focus the rest two categories of causative psych verbs.

3. Research Questions

(1) How and to what extent do these similarities and differences influence L2 causative psych verbs acquisition by the Chinese learners of English?
(2) What are the specific features for the Chinese learners at different language proficiency levels when they acquire the ability of using English psych causative verb structures properly?

4. Research Design and Methodology

4.1 Research Design

A cross-sectional design was used in this research to explore the relationship between the L1 influence and the L2 causative psych verbs development. Because the dependent variable under investigation — learners' L2 causative psych verbs performance — is contingent upon learner behavior, it was not possible to determine a priori whether it would occur.

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[2] Generally, psych verbs, for instance: frighten and worry, which are called "mental verbs" [7] or experiencer verbs" [8], describe how we feel about someone or something.

Therefore, we resort to the treatment activities, which created contexts for the causative psych verbs to occur, and each participants' performance was subsequently analyzed to determine the extent to which it has occurred.

All of the randomly sampled Chinese participants of English in Lanzhou were required to complete an English proficiency test. They were assigned to the three experimental groups by their English language proficiency levels. Participants of the control group, the 30 native English speakers in Melbourne, were not required to take the language proficiency test as they had been assumed as perfect native speakers. However, participants both in experimental groups and the control group were asked to describe 18 pictures by using verbs supplied during a 40-min task. What's more, to examine the specific situation of the learners' L2 causative psych verbs development, another investigation of the depth of the OE verbs knowledge was carried out among the three experimental groups.

4.2 Method

4.2.1 Participants

4.2.1.1 English as a Second Language Participants.

The participants in this study were 90 college full-time students (69 female and 21 male) from two universities in China's north-western city Lanzhou, in which 60 were undergraduates and 30 were post-gradates. The 60 undergraduates, including 30 freshmen and 30 juniors, were studying in the bachelor degree program of English in Lanzhou University of Technology. The rest 30 were studying in the master degree program of linguistics and applied linguistics in North West Normal University. Their ages ranged from 18 to 27, with an average of 21 years. Their amount of previous English study ranged from 7 to 14 years, with an average of 9.4 years. All the participants were sampled randomly and classified as the elementary, intermediate and the advanced level by their language proficiency test.

Results of One-way ANOVA reflect that the three groups are significantly different from each other in L2 proficiency $(F(2,29) = 369.753; p = .000)$. The results of post hoc test (Scheffé) indicates that advanced group scored significantly higher than both intermediate group (Mean difference = 21.03, p = .000) and primary group (Mean Difference = 36.07, p = .000), and the intermediate group scored significantly higher than the primary (Mean Difference = 14.93, p = .000). It can thus be concluded that the participants sampled represented three distinct levels of L2 proficiency.

4.2.1.2 Native English Participants.

Thirty native speakers of English (18 women and 12 men) from Victoria University of Technology in Melbourne, the capital city of Victoria in southern Australia, served as controls, in which 14 were English language teachers and 16 were teaching staff of machining. Their age ranged from 22 to 47, with an average of 31 years. All the participation in the study is entirely voluntary.

4.2.2 Materials

The testing and treatment materials consisted of three different kinds of tasks, which consisted of the language proficiency test, picture description task and the writing production task as well.

4.2.2.1 English Proficiency Test (EPT)

To measure participants' L2 proficiency level, an English proficiency test was compiled, which was part of the national College English Test-Band 4(CET4) in 2004 and 2005. As a nationwide test, CET4 has enjoyed a good reputation for its reliability and validity in measuring Chinese tertiary students' English proficiency. Therefore, we adopt the result of this test. However, considering a full version of the CET4 is time-consuming and too complicated, we only used the techniques to check the participants' grammatical development and comprehension by designing a test of 30-item grammatical structure component and a 20-item passage closing.

4.2.2.2 Picture Description Task (PDT)

The second task, which included 18 pictures with hints under each of them, was designed to measure the learners' L2 performance by eliciting them to use the causative psych verbs to express the causative meaning. The participants were required to write only one sentence that they assumed to be most acceptable by the native speakers by using the verbs supplied for each picture. This task thus was regarded as a good way of convenience to testify the learners L2 causative psych verbs performance.

Among all the 18 pictures, there are 11 items on OE verbs but we primarily focused on 8 of them[3]. Considering we may raise the participants' awareness of the purposes of this research, we used 7 verbs of other categories as distracors to level out this interference. What's more, to avoid some unnecessary interference of other grammatical forms, we adopted a principle of no passive voice.

"Don't worry, Henry just loves dogs."

(the dog, Henry, embarrass)

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[3] These OE verbs include frighten, please, amaze, annoy, disappoint, embarrass, sadden, delight, among which frighten, please, amaze, annoy are of the mutual OE verbs existed in both Chinese and English, the rest four are of the exclusive OE verbs in English.

For example, the participant is required to write one sentence based on the picture and its hits above. The verb in the bracket is compulsory and passive voice is forbidden.

4.2.2.3 Writing Production Task (WPT)

The third task aimed to measure whether the participants have already mastered all the forms to express the causative meaning. It consisted of 13 different contexts, which had been vividly described by the corresponding short passages. The focus of the study is still on the 8 OE verbs tested in PDT. The participants were asked to write as many structures of sentences as possible based on the hints in the brackets of each setting. The verbs in the brackets are compulsory in each of the sentences.

For instance, the participants will be elicited to produce sentence of different structures based on the following context and the hints in the bracket. The verb disappoint must be used in each sentence.

A western-style of conversation between two people is like a game of tennis. If I introduce a topic, a conversational ball, I expect you to hit it back. If you agree with me, I don't expect you simply to agree with me and do noting more. I expect you to add something. (however, in Chinese conversation, the western-style conversation, people, embarrass)

5. Results

5.1 Picture Description Task (PDT) Data

PDT is intended to illicit the participants to write an appropriate sentence to describe a situation, which is vividly displayed as pictures in the survey. The purpose of this task is, therefore, to examine the L2 English learners' real language performance by comparing of the frequencies of the various causative structures they are most likely to use to depict the pictures. As mentioned, the participants' real performance on the causatives is determined by their L2 proficiency levels. Namely, different language proficiency groups distinguish greatly by using the causative psych verbs of different categories. All the data were analyzed by the chi-square test. χ_2 (12)= 515.83, p=0.000.We can thus conclude that the frequency of the different kinds of causative psych verbs is highly determined by the learners L2 proficiency level. More information will be revealed by figure 1:
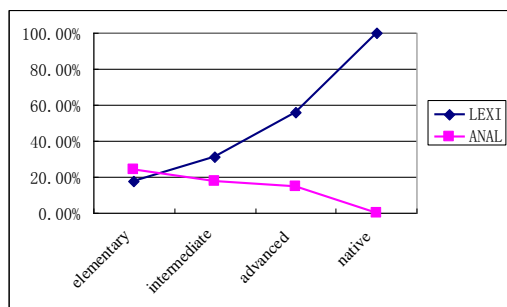

Figure 1. Plot of the Distribution of the Different Categories of Causative Psych Verbs

5.2 Writing Production Task (WPT) Data

As stated above, WPT will spell out the details of causative knowledge in L2 learners' language development. To be more specific, this task required the participants to write as many sentences as possible based on the information given in the survey, which is a very important clue to judge to what extent the learners had acquired the causative structures in English. If the learners know more about the causative structures, they will achieve a higher score in this test, which reflect that they are more likely to access the causatives as the native English speakers.

Based on the assumptions above, we will try to compare the mean scores on the analytic and causative OE verbs between the different groups so as to find out the specific features of the various L2 OE verbs development for the learners of different proficiency levels. Table 1 presents the mean scores on the analytic and causative OE verbs of three proficiency groups.

Table 1. The Mean Scores and Standard Deviation in the WPT.

Groups		Number	Mean	SD
elementary	analytic	30	10.433	4.688
	lexical	30	9.200	4.745
intermediate	analytic	30	11.000	4.051
	lexical	30	13.000	4.127
advanced	analytic	30	12.600	4.375
	lexical	30	15.800	1.690

6. Conclusion

Based on the empirical studies, it is evidently shows that the difference of the prototypical structures of the causative psych verb will result in some learning difficulties. However, the counter part evidence indicates that the similarities would also lead to the learning difficulties, particularly for the elementary learners.As a matter of fact, the learning difficulties are quite distinguished from group to group in terms of the different L2 proficiency level. For the elementary learners, both of the similarities and differences will pose the learning difficulties. This situation will be changed fundamentally for the learners in the intermediate and advanced group. Their learning difficulties, which are mainly caused by the differences between the two languages, will degenerate with the growth of their language proficiency level. The empirical findings demonstrate that the elementary learners are more likely to use the analytic form, which is regarded as the prototype and also the most frequently used causative structure in Chinese. This trend will be diverted for the intermediate learners. They try to use more lexical forms. For the advanced learners, they will use the lexical more frequently than the intermediate learners.

Acknowledgment

References

[1] Chen, D. *L2 acquisition of English psych predicates by native speakers of Chinese and French.* Unpublished Doctoral Dissertation, McGill University, 1996.

[2] Zhang, J. *The acquisition of psych predicates by Chinese-speaking learners of English: A semantic salience hierarchy model.* Unpublished Doctoral Dissertation, Guangdong Foreign Language Studies University, 2003.

[3] Juffs, A. *Learnability and the lexicon: theories and second language acquisition research.* Amsterdam: John Benjamins, 1996.

[4] Pesesky, D. *Zero syntax: Experiencer and cascades.* Cambridge: MA: MIT Press, 1995.

[5] Comrie, B. *Language universals and linguistic typology.* Chicago: University of Chicago Press, 1989.

[6] Kang, J. *The acquisition of L2 causative psych verbs by the Chinese-speaking English learners.* Unpublished Master Dissertation, North West Normal University, 2008.

[7] Croft, W. Case marking and the semantics of mental verbs. In J. Pustejovsky (Ed.), *Semantics and the Lexicon*. Dordrecht: Kluwer Academic Publishers, 1993, pp. 55-72.

[8] Talmy, L. (1985). Lexicalization patterns: Semantic structures in lexical forms. In T. Shopen (Ed.), *Language Typology and Syntactic Description* (Vol. 3.Grammatical Categories & Lexicon). NY: Cambridge University Press, 1985, pp. 57-138.