

A Corpus Based Study on Conceptual Transfer Involving Classifier-noun Collocation Errors Made by Advanced-level Chinese as Second Language Learners

Sanmao Zhu

School of English and Education
GuangDong University of Foreign Studies
Guangzhou, China

Abstract—Within the framework of conceptual transfer, this study makes an error analysis on 52 classifiers of grade A based on the writing part of HSK advance. The identified systematic features are analyzed in terms of their collocation with nouns and discussed from a lexical conceptual transfer perspective. Three error types are summarized and systematic lexical conceptual transfer is revealed. For Chinese as a second language (CSL for short) learners, if there is no overt linguistic categorization in their first language, conceptual transfer means to obtain conceptual knowledge of classifiers as well as to build up conceptualization models. These findings have largely testified thesis of conceptual transfer in SLA and provided pedagogical significance in CSL teaching.

Keyword—classifiers; conceptual transfer; CSL

I. INTRODUCTION

Chinese is a language extremely rich in the use of classifiers. Due to their absence in nonclassifier languages and the complex nature, Chinese classifiers are notoriously challenging for Chinese as a second language (CSL for short) learners. So far, mainstream beginning-level Chinese textbooks for CSL learners usually introduce the topic by providing a list of commonly used classifiers, a set of nouns they collocate with, and a brief explanation of the semantic features of these nouns. Once the grammatical functions of classifiers are introduced, new classifiers are subsequently presented in the vocabulary list as stand-alone. Follow this approach, the strategy commonly employed by teacher is teaching this complex system by rote. For example, CSL learner may remember the semantic feature of certain classifier, like “zhang” in the list, which is described as “for sheet-like things”, as well as some of the collocations, like zhi’ paper’, piao’ ticket’, zhuozhi’ table’. However, the learner can never get the explanation why “zhang” does not collocate with dengzi’desk’ or shu’book’. Most often, the answer that CSL learners get is that “It is the way it is”. What’s more, learners get bored of rote reciting and show rather low learning achievements. Even after a long period of Chinese learning, lots of students cannot use classifiers correctly and they find it

difficult to make sure when classifiers are necessary and which noun or verb has to match which classifier.

To find out the fundamental reason of this pedagogically challenging system, investigation on the error examples on the writing part of the HSK advance may provide insights to whether and how L1 conceptual transfer has effect on CSL learner’s use of classifiers.

II. THEORETICAL FRAMEWORK

Crosslinguistic influence or language transfer has long been an important topic for second language acquisition (SLA) research. Slobin (1993) emphasized the fact that different languages make certain kinds of meaning more salient than others and an L1-specific world view likely to affect the subsequent acquisition of another language. Slobin’s approach of “thinking for speaking” is similar to Wilhelm von Humboldt and Benjamin Lee Whorf, who are exponents viewing crosslinguistic influence as a manifestation of the “binding power” (to use Whorf’s characterization) of language on thought. Recently, a new perspective emerged in this field focusing on the intersection of SLA and linguistic relativity in what is often termed conceptual transfer. The importance of distinguishing concepts from meanings is emphasized by conceptual transfer. As a theoretical construct, conceptual transfer is often characterized as the hypothesis (Jarvis, 2007; 2011) that crosslinguistic influence originate from the conceptual knowledge and pattern of thoughts (or conceptualization). Being the interface of SLA and cognitive linguistics, conceptual transfer claims that SLA learners or bilinguals from different language backgrounds have complex conceptual system which includes L1 – based concepts, L2 – based concepts and shared concepts. In SLA learning, bidirectional transfer happens on three levels: the lexical level, grammatical level and discourse level. This study focuses on the lexical characterization of classifier conceptual transfer.

III. METHODOLOGY

A. *The Corpus*

This study employed HSK Dynamic Composition Corpus of Beijing Language and Culture University (HSK DCC for short). HSK DCC is a research project funded by China National Office for Teaching Chinese as Foreign Language (NOCFL) and chaired by Professor Cui Xiliang from Beijing Language and Culture University, number HBK01-05/023. The corpus collects a sum of 11,569 composition answer sheets of HSK advance, adding up to 4,240,000 words. There are two versions of original corpus and tagged corpus obtained by online userstudys. This study uses the original corpus only. With a high degree of authority and great research value, the enormous and rich corpus covers various errors foreign students may make in writing, which guarantee the validity and reliability of this study.

B. *Collocation and Colligation*

Collocation reflects the co-occurrence of searching words and collocation words. For example, "tiao 条" is of co-occurrence relation with "river 河". Colligation refers to the co-occurrence of searching words and grammatical category. For example, classifiers can be of co-occurrence relation with both nouns and verbs. The study run software AntConc to find out the most frequently used classifiers in the corpus and list the errors of those classifiers. Because of limited space, this study only investigated the writings of those examinees whose mother tongue belongs to Indo-European language family. The index helps to observe and find out the systematic acquisition features and error laws by means of collocation and colligation.

IV. RESULTS AND DISCUSSION

A. *Error types*

Based on "the Outline of the Chinese Language on Lexis and Chinese character", 52 classifiers of grade A are defined as frequently used classifiers in natural expressions and must be grasped by CSL learners. This study searched these 52 classifiers on the HSK DCC one by one. Altogether 731 example error sentences using grade A classifiers are obtained. When Nationalities of the examinees are also examined, only half of the writing paper are left as subject. Investigation on the 360 sentences showed that higher error rate goes over 2% to classifiers such as "jian 件", "zhong 种", "ge 个", "jian 间", "ci 次", "pian 篇", "wei 位", "duan 段", "ju 句", "xie 些", "tiao 条"; error rate of other classifiers is below 2%. Error examples can be summarized to three error categories roughly, which are using extra classifiers, lack of classifiers and using wrong classifiers.

1) *Using Extra Classifiers*: Using extra classifiers means using classifiers which should not be used in a statement. We find that that the majority of the basic categories of vocabulary are simple and have fewer syllables that can not be analyzed, which results in the arbitrary combination with other words, such as ge (个), wei (位), zhi (只), lei (类), etc. All of them are distinguished from the overall perspective. This kind of classifiers can match with other words flexibly and have a strong ability of word formation. Hence the overuse of

classifier "ge" (个) is easily accountable. As the following example sentences from the corpus:

- a) 我们在虚拟世界里生活得太久，就找不回（个）自己。We are living in the virtual world for too long to find ourselves back.

In sentence, individual classifier "个" is unnecessary. Subject to the length of the article, more examples are omitted.

2) *Lack of classifiers*: Lack of classifiers refers that classifiers are missing at where they should be used in a statement. Sortal classifiers are the major group for CSL learners to lose for their absence in their first languages. The awareness of using sortal classifiers is not strong because CSL learners don't have the habit to use them in natural expressions. What's more, the complex nature of this group of words is also a big challenge for them; as a result, they tend to avoid making mistakes by omitting the words. For example,

- b) 在东京的一()街内，如果发现吸烟的人，公安人员就会马上注意。The smokers will be caught smoking by policeman in the street in Tokyo.
- c) 很多朋友认为，上一辈说的每一句话，每一()行动都是落后于时代的，不时髦的。Many people hold that what parents say and do is out of fashion.
- d) 我们一伙同学沿着河边走，顺便路过一()很大的旧房子。A group of students walked along the bank of the river and passed a big old house.

Sentence b) needs classifier "条", sentence c) is lack of classifier "个", sentence d) should be "一座很大旧房子".

3) *Using wrong classifiers*: Using wrong classifiers is the major error type. Although many classifier-noun collocations have been conventionalized in the process of grammaticalization, exceptions abound. Numerous individual classifiers which are supposed to describe concrete things confuse language users especially CSL learners when abstract objects are put behind them. Another example may also expose the complexity of this group of words, that is, yi ming duo liang (the phenomenon that one noun can be collocated with several different classifiers), such as "yi mian qiang" 一面墙 "yi du qiang" 一堵墙 "yi shan qiang" 一扇窗. "Yi ming duo liang" is so common in modern Chinese that the statistics of the "the collocative table of nouns and measure words" & "the table of nouns" respectively in the "The eight Hundred Words in Modern Chinese" (compiled chiefly by Lu Shu Xiang) show that three nouns in ten can agree with this phenomenon. Consequently, the lack of one-to-one mappings between classifiers and semantic categories of nouns makes Chinese sortal classifiers notoriously challenging for CSL learners. As the following error sentences taken from the corpus,

- e) 在当天晚上，赵老师在一家(座)咖啡店里找到我，并对我进行了训导。MR. Zhao found me in a cafe and lectured me.
- f) 父母培育孩子，其实是父母和孩子一起成长的一段(个)很难得的时光。Child-raising for parents is indeed a period of memorable time growing up with children.

- g). 我最喜欢的一本书是《(斯米坦那) (smetana), 它是一部(本)关于比利时的一个作家一生的作品。My favorite book is "smetana", which is a life story of a Belgium writer.

In these sentences, classifiers in the brackets are wrongly used.

The third type accounts for a large proportion of 74%, the other two types account for 7% and 19% respectively. The portion is shown in "Fig.1".

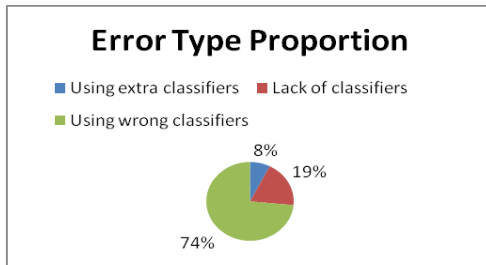


Fig. 1. The error type proportion.

The following discussion will analyze the classifier conceptual transfer to explore the fundamental reasons of errors on the one hand and to provide pedagogical instructions on the other hand.

B. Classifier Conceptual Transfer Analysis

As a unique character of Chinese-Tibetan phylum, classifiers takes a very important part in Chinese. Even after a long period of Chinese learning, lots of students cannot use classifiers correctly, because for CSL learners whose mother tongue belongs to Indo-European language family, classifiers are a group of new words to them and they find it difficult to make sure when classifiers are necessary and which noun or verb has to match which classifier. In order to find out patterns of classifiers' conceptual transfer, conceptual knowledge of this group of words should be presented first.

1) *Concept of Categorization:* An incisive understanding on the historical development of classifiers is indispensable to better understand the cognitive mechanism involved when we use it as a tool to conceptualize the external world. Massive nouns or the collection of objects do not come with boundaries, so in order to measure their quantity, a boundary is put around them through means of containers or metrological units. For example, in English, we use "piece" to set a boundary for massive nouns like "paper" "news", ect. It is easy to find counterpart from another language because it is a universal phenomenon for all the languages. However, homogenous, discrete objects have clear boundaries of their own and do not need a classifier. Instead of setting a boundary to object, classifiers which are collocated with discrete objects have got a function to put items into different categories. Categorization classifiers in many diverse languages seem to employ roughly the same set of parameters for categorization, most notably, animacy, shape, function, consistence, and size (Adams & Conklin, 1973; Allen, 1977; Friedrich, 1970).

As a classifier language, Chinese language groups nouns into classes on the basis of some characteristic of the referents of the nouns. Classifiers are viewed as an instance of a linguistic device of categorization, therefore, a case of overt categorization in language. Consequently, for CSL learners, if there is no overt linguistic categorization in their first language; conceptual transfer means to build up the conceptual knowledge of classifiers and their conceptualization as well.

2) *The Prototypical Conceptual Transfer:* The primacy to build up conceptual knowledge of classifiers is the prototypical conceptual transfer. Prototype theory claims that a particular class represents a complex category which forms a prototype-centered network and prototype members of a category are more central than others (Langacker: 1999). The primacy of CSL learning lies in understanding of the prototype of a certain classifier category and its members. The diachronic inspection of Chinese classifiers has proved that classifier is not a preexistent grammatical category. Instead, most of the categorization classifiers in modern Chinese derive from existed characters. This may be caused by the fact that it is practically impossible and linguistically redundant to create a specific classifier for an object that already has a name. Examples include zhi (只), a general classifier for animals, which originally means "a bird"(Guo, 1987:94); kou (口 "mouth"), a classifier for pigs or people, which is a well-marked part of the nouns it classifies; and jian (间), a classifiers for rooms, which originally means "to separate." In their classifier use, these words denote abstract semantic attributes of the referents they are derived from. The direct semantic attribute that classifiers denote serves as the prototype of a classifier category on which extended usage is based.

3) Collocation Models

a) Image Schema Model

Based on the direct semantic attribute derived from the original noun or verb, the prototypical function of the word class is to reflect a holistic generalization of different kinds of objects which belong to a specific category in terms of their own properties. For example, the classifier "颗 ke" is at first a noun which refers to small and round entities. During the process of grammaticalization, it has lost its reference meaning and could only be matched with granular shaped entities. For example, "yi ke zhenzhu", "yi ke zhongzi". The collocation of "ke" and "zhenzhu" or "zhongzi" provides a holistic concept of the noun. More examples like "一本书" yibenshu, "一个人" yigeren "一条河" yitiaohé "一张桌子" yizhang zhuozi "一支笔" yizhiji. In these structures, the noun and the classifier are inseparable, for the concept of the classifier is highly adhesive and with no conceptual independence but of a categorization concept. The image embodied by these structures is a unified whole as the classifiers trigger our gestalt processing. Take the classifier "门" (men) as an example, its literal sense refers to the entrance and exit of the building. The schema of "men" (门) is shown in "Fig. 2", it is an explicit impression and cognition of the container and the sense of "men" is prominent. As a result, the prototypical concept is extended by means of our own cognitive experience. For instance, "yi men ke mu" (a sub-ject), the subject and the door have the same spatial

meaning. The door is the sole way to pass through a building and the knowledge of this subject can be acquired by passing some tests or exams to acquire.

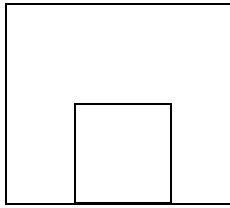


Fig. 2. The schema of "men".

Ideally, prototype provides schematic information, and importantly, further models can be derived from this composite prototype.

b) Metaphorical Model

A metaphor is the expression of an understanding of one concept in terms of another concept, where there is some similarity or correlation between the two. In Lakoff and Johnson's opinion, who are the founders of a framework for Conceptual Metaphor Theory, metaphors are conceptual in nature. They are among our principal vehicles for understanding. Metaphorical expressions are reflections of an underlying conceptual association. In the case of Chinese classifiers, there is a set of metaphoric classifiers derived from words used as names of concrete, discrete objects. Such classifiers are first used to refer to the very objects they originated from, and later generalized to define categories of abstract things that are similar or correlated. Take the most frequently used classifier "条" tiao as an example, the expansion from concrete, discrete members "snakes, ropes, long road" to abstract things "laws, regulations, official affairs" is based on metaphor, because the laws, regulations, etc. can be listed one by one and have an imaginary resemblance in shape to tree sticks.

V. CONCLUSION AND FURTHER QUESTIONS

The present study investigated the error examples on the writing part of HSK advance to examine whether and how L1 conceptual transfer influences L2 in Chinese learning. The three error types reveal the uniqueness and complex nature of Chinese classifiers and we conclude that the conceptual transferring process underlying Chinese classifier learning is a process obtaining the conceptual knowledge of this word category and building up conceptualization patterns. Conceptual knowledge is mainly about the categorizing nature of classifiers with prototypical concept at a center on which conceptualization patterns are based. The findings are also of pedagogical significance in CSL teaching and learning. The traditional rote-reciting way should be avoided and teachers should try to help the CSL learners obtaining conceptual knowledge and build up conceptualization patterns.

Noteworthy is that the subjects of the present study are writings by examinees from western countries, whose L1 are non-classifier languages. There is a large portion of CSL learners whose mother tongue is also classifier language in which classifier system is different from Chinese. The comparison of the underlying conceptual system shows that the

conceptual transfer is even more complicated. Therefore, I recommend that further research to find out more systematic features and transferring laws in conceptual transferring concerning the situation in which L1 is also of a classifier language.

REFERENCES

- [1] Odlin, T. (1998). On the affective and cognitive bases for language transfer. In R. Cooper. (Ed.), *Compare or contrast?* (pp. 81–106). Tampere, Finland: University of Tampere. J. Clerk Maxwell, *A Treatise on Electricity and Magnetism*, 3rd ed., vol. 2. Oxford: Clarendon, 1892, pp.68-73.
- [2] Odlin, T. (2004a). Thinking about linguistic relativity and Benjamin Lee Whorf as a language learner. Universidad de Castilla-la Mancha, Cuenca Campus, Spain, February 25, 2004.
- [3] Odlin, T. (2008). Conceptual transfer and meaning extensions [A]. In P. Robinson & N. Ellis (eds.). *Handbook of Cognitive Linguistics and Second Language Acquisition*[C]. New York: Routledge.
- [4] Jarvis, S. (2007) Theoretical and methodological issues in the investigation of conceptual transfer[J]. *Vigo International Journal of Applied Linguistics*, (4) : 43 -71.
- [5] Jarvis, S. (2011) Conceptual transfer: Crosslinguistic effects in categorization and construal[J]. *Bilingualism: Language and Cognition*, (1) : 1-8
- [6] Lakoff, G. (1987). *Women, fire, and dangerous things: What categories reveal about the mind*. Berkeley: University of California Press.
- [7] Slobin, D. (1993). Adult language acquisition: A view from child language study[A]. In C. Perdue (ed.). *Adult Language Acquisition: Cross-linguistic perspectives*[C]. Cambridge: Cambridge University Press.
- [8] Zhao Jing. Cognitive Models of Chinese and English Quantifier [J]. *Modern Chinese (Language Study)*, 2010(9): 87-88.
- [9] Zhang, H. & Y. Liu. (2014). A corpus study of most frequently used English verbs by Chinese beginner learners from a conceptual transfer perspective. [J]. *International Journal of Corpus Linguistics*, (2) : 252 – 279.