

# Cognitive Explanations and Pedagogical Implications of Second Language Transfer

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**Abstract:** Language transfer is one of the most important issues in the field of second language acquisition. However, the issue of second language transfer has not received much attention. This essay first reviews the theoretical and practical significance of second language transfer. The author conducted a survey to find out the claimed features of second language transfer claimed by advanced English learners and whether it can be explained by cognitive theories. At last, it summarizes the results and analyzes them with cognitive explanations from five perspectives: thinking mode, syntax, pragmatics, pronunciations and lexis. Hopefully, it will provide information, evidence and new perspective to the field of second language teaching and learning.

## 1. Introduction

Language transfer is one of the most important issues in the field of second language acquisition. In terms of language transfer, there are a lot of discussion on the first language function towards the second language acquisition, previous studies and literature shows the coexistence of the positive and negative influences from first language onto the second language [1]. However, the issue of second language transfer has long been neglected [5]. There are few studies focus on this problem in the literature. Previous scholars pay attention to the aspects of influences of the second language to the first language production [4, 6]. They claimed that second language transfer phenomenon existed in learners' first language pronunciation, vocabulary choice, pragmatics, syntax, language producing process [12, 15].

In china, it is noticed that many English learners frequently generate improper Chinese expressions due to the influence of second language learning. Students who majored in English language and literature focus too much on their foreign language study rather than improving Chinese proficiencies. Investigation and observation show that the transfers from English to Chinese exist broadly among such learners, especially those who have reached upper-intermediate and even advanced English level [14].

Thus, there is of great importance that studies should shed light on this line of research [4-5]. This essay tries to discuss the theoretical and practical significance of second language transfer and try to interpret them with cognitive linguistic theories. There are two questions to be answered: first, what are the claimed features of second language transfer among advanced English learners? And second, can it be explained by cognitive theories? Hopefully, the essay will provide evidence and to the study of this unnoticed issue and bring new perspective in second language teaching and second language acquisition research. Implications for both English and Chinese teaching are drawn from the conclusion.

## 2. Second Language Transfer

Odlin point out that "language transfer has been a central issue in applied linguistics, second language acquisition, and language teaching for at least a century" [8]. In 1972, language transfer has always been a hot issue since selinker brought this concept in the field of second language acquisition [11]. In learning theory, transfer originally bear the meaning of carrying over of learned behavior from one situation to another. There are two aspects of transfer, positive and negative.

Positive transfer means learning in one situation which facilitates learning in another later situation, whereas negative transfer indicates learning in one situation which interferes with learning in another later situation (Ge, 2011). Transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously but perhaps imperfectly acquired [8]. Ellis (1994) indicated that transfer may incorporate linguistic, psycholinguistic, and sociolinguistic factors, all of which include language level from the aspect of phonology, lexis, grammar, and discourse, as well as social factors like the effect of the addressee and of different learning contexts on transfer. The perceptions that speakers have regarding the similarity and difference between languages, and developmental factors such as constraints relating to the natural processes of interlanguage development are also related.

Most of the studies regarding related fields focus on the effect of mother tongue in the process of learning a second language [4,12]. They wanted to figure out whether the transfer is positive or negative. Does it facilitate or obstruct students' learning process? According to many studies, people find that positive and negative transfer coexist and influence the acquisition of second language. Wang pointed some changes in Chinese language may appear in attribute number or sentence length, and even head of a noun phrase [15]. Many attributes were put in front of a noun phrase which resulted in longer and more complexed sentences structures. In previous literature, two different angles towards the influences of foreign languages on Chinese were frequently discussed. The positive influence that foreign languages help to enrich Chinese words and promote its development, while the negative influence always impacts the use of Chinese. Massive use of the foreign sentences and phrases actually have changed the meaning of Chinese words and at the same time similar pronunciation may influence the purity and development of Chinese. As a matter of fact, Chinese language has strong life and can be quite flexible, tolerate. Cai and Dong states that those who worry about the possibility that the purity and development of Chinese language is decreased by using foreign words hold a narrow national perception instead of the pragmatics nature of language [2].

However, more and more people turn their focuses to the other side of the issue, which is second language transfer [15]. In 1989, Odlin stated "transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously (and perhaps imperfectly) acquired." [8] it is the first time that second language transfer has a clear definition and explanation in discourse, semantics, syntax and phonology, etc. Odlin divided language transfer into two categories: substratum transfer and borrowing transfer. Substratum transfer is related more to the mother tongue effect, while the latter one focuses more on second language transfer effect [8].

There have been several empirical studies referring to this issue. For example, Pavlenko and Jarvis conducted a study on the essence of second language transfer [9]. They asked 22 Russian and English bilingual speakers to watch a 3 minutes silent movie episode and then required them to retell the content of the movie with two languages. They found out that 82% of mother tongue transfer effect reflected in the order of the words and articles. 77% of second language transfer effect reflected in lexical borrowing. There are other studies about second language transfer [2,6,7,9,10,13]. They compare the first language of bilingual and native speakers and find that they have differences in using their mother tongue which is the result of second language transfer.

### **3. The Current Study**

In order to further address the issue of second language transfer and further explore cognitive explanations and related pedagogical implications. This study was set to answer the following two questions: a) what are the claimed features of second language transfer among advanced English learners? B) can it be explained by cognitive theories? This study conducted a survey in the form of questionnaires to about 150 participants. We first briefly explained what second language transfer is, and then asked the subjects, as advanced English learners, to write down at least three examples of second language transfer effect in their process of learning and daily life. There are 150 subjects who are all postgraduate students in a top university in China, majoring in English education and

interpretation. 150 pieces of questionnaires were sent out and 138 of them were reclaimed. 3 of the reclaimed ones misunderstood the requirements. Thus, all in all there are 135 pieces of effective questionnaires. The results of the questionnaires reflect many features of second language transfer. In the following part, this essay will divide them into five categories and try to analyze them with cognitive explanations.

#### **4. Cognitive Explanations**

In the perspective of cognitive linguistics, language is not an arbitrary and autonomous grammatical system. People use their cognitive ability to transform their ideas into certain sentence structures in written or oral form with the help of coding rules. There are different coding rules of different languages. For advanced English learners, people are wondering how the two coding rules of two languages they speak affect each other, especially the effect of second language transfer.

##### **4.1 Thinking Mode**

From the results of the questionnaires, we notice that many subjects talk about the difference of thinking between their first and second languages. They claim that they are all influenced by the foreign way of thinking which we call it thinking mode. There are three major differences of the thinking mode between English-speaking people and Chinese-speaking people. The first one is the difference between individual thinking and integral thinking. The value of individual thinking has always been stressed by lots of western philosophers. Western culture has a long history of believing that every individual thing has its own value. While integral thinking, emphasized by Chinese traditional philosophy, has had a deep influence upon Chinese language. Under the influence of Confucian school, Taoist school and Buddhism, they believe that man was an integral part of nature. The second is the difference between rational thinking and perceptual thinking. The rational thinking of English-speaking people prefers scientific experiments and logical forms. In contrast, Chinese speaking people think highly of implication and tacit agreement. The third is the difference between object thinking and subject thinking. Westerners advocated the dichotomy of the outside world and inner world, both were equal and important to human life, which made westerners pay more attention to the outside objects and respect them. The subject thinking of Chinese, however, believes that human being was regarded as the center of the world. They prefer to be the core of almost anything [16]. After they learn English, the subjects find that they tend to think in the way of English thinking mode.

##### **4.2 Syntax**

###### **4.2.1 Sentence Structure**

Many subjects mentioned that English language tends to put a lot of into one long sentences, while Chinese language prefer to cut the long sentences into short pieces and link them with comma to form a paragraph. This phenomenon can be abstracted into the theory of “trunk and bamboo”. English language focuses more on the subject, predicate and object element in a sentence. When they express complicated information, they first state out these three elements and then add other minor element in the sentence with the help of linking words and prepositions, etc. It is like the trunk of a tree. In contrast, Chinese language uses many short sentences to express one idea. The short sentences are ordered according to time or other logical reasons. It is what we the “bamboo structure”. These two structures reflect the differences between detail-oriented feature of English and integral-oriented feature of Chinese language. Now the second language transfer has made the subjects tend to use trunk structure when they speak Chinese.

###### **4.2.2 Sentence Length**

Many subjects pointed they tend to use much longer sentences in Chinese after they learned English. They put a lot of modifiers in front of the center noun and use many linking words and parenthesis unconsciously.

### 4.2.3 Sentence Order

Sentence order is one of the most common features that the subjects claimed in the questionnaires. According to the results, this essay will focus only on the order of the sentence elements. Generally speaking, there are not many differences of sentence order between English and Chinese. The order of subject, predicate and object is the almost the same, whereas the order of adverbial and attribute are rather different.

(1)Adverbial. In English, adverbial could be put in the front, middle and back of a sentence, but in Chinese adverbial only exists in the front or the middle part. However, with the influence of second language transfer, many subjects noticed that they tend to put adverbial at the back of a sentence when they speak Chinese. There is an example from the questionnaires. One person wants to ask another person what he will do this afternoon in Chinese. The appropriate way to express this sentence is “You-this-afternoon-want-to-do-what. (Translation specifically made following the order of Chinese language)” However, now they tend to say “What do you want to do, this afternoon? Translation specifically made in the order of English language.” This is a typical feature of second language transfer. There is another one. In English conditional clause, people usually put “if-clause” at the back of the sentence. As a result of second language transfer, they apply this habit to the usage of Chinese. For example, “I will go to Yuan Mingyuan, if you go there too.”

(2)Attribute. In English, attribute could be found both before and behind the center noun. When they use adjectives, nouns and participles as attribute, people tend to put them before the center noun, while the attribute are phrases or clauses and other long modifiers, people usually put them behind the center noun. In Chinese, no matter how long the attribute is, we put them before the center noun. However, due to the effect of second language transfer, the subjects pointed that they began to put attribute behind the center noun in Chinese. For instance, they say “She is the one who I love most.” or “This is a city where I spent my childhood in.” In sense of Chinese grammar, we would say “She is my favorite person.” or “I spent my childhood in this city”.

(3)Pronunciations. Many subjects found that their Chinese pronunciation has been influenced by English pronunciation. For example, the pronunciation of vowels has influenced their Chinese pronunciation. When they pronounce “\mai\” in Chinese pinyin), it sounds more like “my”. The place of articulation moves backward. Besides, they noticed that their speed of speaking became faster after learning English. There is also an important positive second language transfer effect. That is for English learners from Sichuan province of China, practicing the pronunciation of “l” and “n” helps them to improve their mandarin pronunciation of “l” and “n”.

### 4.3 Pragmatics

Pragmatics is another common feature that the subjects claimed in the questionnaires. Due to the effect of second language transfer, the content of people’s conversation has changed. In the western culture, it is not polite to ask people’s ages, salaries, weights and other personal questions. The subjects pointed that before they learn English they don’t pay attention to such problems, but now they do. When they meet, they do not use “Have you taken dinner already?” any more, but “Hi”, “Hello” or “How good the weather is!”. They say “thank you” but not “no” when they accept praises. When they are shocked, they use “Oh my God!” to express their surprises. All of these changes are the results of second language transfer.

### 4.4 Lexics

Words are most basic elements of a language for English learners. When refer to words, the subjects illustrate a great number of examples for the effect of second language transfer. First, they pointed out that in English there were certain words expressing certain meanings which did not have equivalent in Chinese, such as charming, metropolitan, presentation, impressive, “check” my email and scenario, etc. Second, because of second language transfer, they use code switching more frequently. For example, “why are you still single? Go find someone. Is there anyone [available]?”, “Your outfit is fantastic!” Third, people use English initial-letter abbreviations much more frequently. It is convenient and effective. What is more, English abbreviations bring the idea to us

that we could also use Chinese Pinyin abbreviations, such as “lz (thread starter), rt(as mentioned above), KBFZ (terrorists), etc.” Fourth, we borrowed many words from English, such as “flagship, bull market, bear market, etc.” Second language transfer helps add new concepts into Chinese languages.

## 5. Conclusions

The issue of second language transfer has long been neglected. This essay first reviews the theoretical and practical significance of second language transfer. And then conducted a survey in order to answer the two research questions: What are the claimed features of second language transfer among advanced English learners? Can it be explained by cognitive theories? The results of the survey reflect many features of second language transfer. This essay summaries the results and analyze them with cognitive explanations from five perspectives: thinking mode, pronunciations, syntax, pragmatics and lexis. Hopefully, it will provide information and evidence and new perspective to practical in field of second language acquisition.

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