A Study of Positive Transfer on Junior High Students in English Vocabulary Learning

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Abstract
Language transfer can be classified into negative transfer and positive transfer. The former is caused by the similarities shared by source language and target language, the latter is attributed to the differences between two languages. Linguists abroad and home have put forward that native language can promote students’ understanding of second language (Jarvis and Pavlenko, 2008; Wen, 2010). In the process of second language learning, especially for Junior High School students, the knowledge of native language can help students to complete their tasks. When learning the target language, they will unconsciously use the previous information to think and achieve the purpose of second language learning. Native language plays a fundamental role in second language learning. For students, it can facilitate the study of second language in some extent. Vocabulary is the foundation of language. As the beginning stage, English teaching in Junior high school should give priority to vocabulary learning. Then, whether Chinese plays a facilitate role in the process of students’ vocabulary learning? And if it has, what are the factors that influence language transfer? What teaching methods can teacher employed to students’ vocabulary learning? These are main contents of this study.

Keywords: Language transfer; Second language learning; Lexicon learning; Positive transfer; First language (L1); Second language (L2).

1. Introduction
Language transfer has been regarded as one of the important concepts in the field of second language acquisition and language teaching. The transfer study has enjoyed a history of more than half a century and gone through many changes. In the past days, the significance of language transfer in second language (L2) learning has been reassessed several times.

In the course of the development of language transfer, we find that the role of mother tongue in the second language learning has always been the core of the study of language transfer. Through the previous researches about language transfer we easily find that the roles of positive transfer and negative transfer were not given equally treatment. Most linguists have ignored the study on positive transfer, let alone experimental study on language transfer. However, we cannot ignore the promotion of mother tongue in second language acquisition.

This thesis aims to explore the influence of native language to English lexicon learning through empirical study. The experiment focuses on whether Chinese plays a facilitate role in the process of students’ vocabulary learning, and if it has, what are the factors that influence language transfer; what teaching methods can teacher employed to students’ vocabulary learning. These are main contents of this study.

2. Literature Review
Language transfer refers to the influence of a language on another. It has become a central topic in the field of second language acquisition. This chapter talks about the studies of language transfer in domestic and foreign countries.

2.1. Related Studies Abroad
The study of language transfer in foreign countries has a history of more than a hundred years. And the research can be divided into three stages, which will be introduced in the next chapter. Since 1950s, numerous works about Language Transfer came into being, including Gass and Selinker (1983), Vildomec (1963), Kellerman and Michael (1986), Ringbom (1987), Odlin (1989), Dechert and Raupach (1989), Jarvis and Pavlenko (2008), etc. Among them, Odlin's works on language transfer are widely regarded as a milestone in the history of second language acquisition. His masterpiece Language Transfer: Cross-Linguistic Influence in Language Learning (Odlin, 1989) gives a most comprehensive coverage of research outcomes before 1990s and it is cited most frequently by other works. Currently, Jarvis and Pavlenko’s masterpiece Crosslinguistic Influence in Language and Cognition (Jarvis and Pavlenko, 2008), is another influential work. This monograph described language transfer from the cognitive aspect and made a detailed description on the study of language transfer theory.

Among numerous studies empirical studies are quite a lot. Many scholars (Gass, 1979; Hyltenstam, 1984) confirmed the facilitate function of transfer through the study of relative clauses. The positive role of language
transfer can also be found in other areas. In terms of lexicon learning, scholars have got some achievements in lexical semantics, lexical representation, and activation of lexicon.

However, the current study is still focus on the negative transfer, so the study of positive transfer is need urgently. Kellerman is one of the earliest scholars who realized the important role of positive transfer. In his published papers, (Kellerman, 1977;1983; Kellerman and Michael, 1986) illustrated that learners have their own views on the structure of their language, dividing the structure into transferable and non-transferable parts, and that these sense determine what they transfer. The studies that Kellerman carried out mainly concentrated in lexicon-semantics. The most influential studies are the “breken” study (1978) and the “eye” (1986) study.

2.2. Related Studies in China

The study of language started comparably later in China than foreign countries. From the late 1990s, Wang W. (1999) and other scholars have achieve certain research results. However, generally speaking the amount of research is not big in number. Among these linguists, Wen (2010) makes an authoritative classification on their major studies. She points out that the domestic study of language transfer mainly concentrated in the following four areas:

Firstly, some linguists have introduced the transfer theory and made some reflections, which include the work of Wang W. (1999), Dai and Wang (2002) and Tang (2003).

Secondly, domestic scholars, including Wang W. and Wen (2002), Liu (2002), have studied the transfer of language skill and learning strategies. These studies have focused on writing skills. The purpose of these studies is to explore the interference of mother tongue in the process of second language writing, and the relationship between native thinking and second language ability.

Thirdly, linguists have implemented transfer study at all language levels, including the studies of pronunciation and intonation (Gao and Shi, 2006), the studies of lexical and syntax (Li, 2002; Wang G., 2006).

Lastly, scholars have studied cultural transfer and pragmatic transfer. The researches have involved the study of cultural transfer and pragmatic transfer during the process of foreign language communication.

Though much research has been done on language transfer, the study of positive is few. And in terms of research method, most studies are lack of scientific data analysis and argument. In the past twenty years, many Chinese scholars realized the important role of positive transfer in second language learning. More and more empirical studies have made to support the facilitated function of mother tongue. Among them, Yu (2004) did empirical study to analysis lexicon similarities between Chinese and English. There are also other researchers and English teachers who carried empirical studies on the positive role of language transfer, including Liao (1998) and Lu (2002). All of them supported the idea that the knowledge of native language of students has great influence on the second language learning.

2.3. Definition of Language Transfer

Language transfer is considered as one of important notions in second language acquisition. It has been studying for over one hundred years. Therefore, it is difficult to give a unified definition since different linguists hold different views on this issue.

Transfer was first used as an important concept in Learning Psychology. According to (Ellis H., 1965), transfer is a hypothesis that the learning of goal A has an impact on the acquisition of goal B, which he considers to be one of the most important concepts in educational theory and application. In his view of point, there exists both negative and active aspect in transfer. If the learner’s existing knowledge can facilitate the process of learning, it will produce positive effects. If it produce negative effects, it means that the learner’s previous knowledge impedes the learning process.

Linguists have been studying language transfer for a long time; however, different linguist holds different views on the definition of language transfer. Some linguists even have opposite opinions on it. Lado (1957) suggested that learners are all depend on their mother tongue in their second language acquisition process. On the contrary, Duly and Burt (1974) believed that language transfer is nearly no use. Behaviorists regarded language transfer as a result of habit formation.Weinreich (1953) regarded language transfer as “language interference” and Kellerman and Michael (1986) considered language transferred as “cross-language influence”.

From the above definition we can see that most early definition about language transfer is negative. These definitions ignored the facilitate effect of mother tongue. In order to clear people’s misconceptions on language transfer, after decade’s years of dedication on his study, Odlin point out the deficiencies of previous study and gave a more appropriate definition. According to Odlin (1989), transfer is the effect of the similarity and difference between the target language and any other language previously acquired (and perhaps imperfectly acquired). This is a relatively broad definition, covering both positive and negative aspect of language transfer, which has been relatively widely accepted by linguists.

According to Odlin’s standpoint, transfer should not confine to the influence of mother language. It should also take the knowledge of other languages into consideration. Most importantly, this definition admits the positive role of mother tongue. He points out that although learner’s native language can produce negative effect, similarity in lexicon can make second language learning easier.

In 2008, in their monograph “Cross influence in langue and cognition”, Jarvis and Pavlenko regard language t as “the effect of a person's knowledge of a language on that person's knowledge or use of another language”. The word “knowledge” and “use” imply that language transfer is far from the linguistic level, but in all dimensional (Yu et al., 2012).
From the above discussion we can see that with the in-depth studies on language transfer, our understanding about it become more and more comprehensive. We should not limited our study and research to negative transfer, the facilitate effect of language should not be underestimated.

3. Classification of Language Transfer
Throughout the existing study of language transfer, people’s standards on the division of language transfer are not identical. It can be divided into inter-lingual transfer and intra-lingual transfer based on the source of transfer. According to the effect of language transfer, there are negative transfer and positive transfer. Depending on different linguistic branches, we can classify language transfer into phonological transfer, lexical transfer, syntactical transfer and discourse transfer. This paper will mainly discuss positive transfer and negative transfer.

3.1. Positive Transfer
According to Richards and Schmidt (2002), positive transfer is transfer which makes learning easier, and may occur when both the native and the target language have the same form. For example, it is easy for Chinese students to learn Japanese since some of them have similar writing system. It shows that the similarity between the mother tongue and the target language can make the learning process easier. In many cases, positive transfer is obvious, but it does not mean that the negative transfer in the process of the second language will completely disappear. It just makes language learner produce less error during their learning process. So, Odlin (2001) proposed that, when studying different native language learners, the comparison of students can effectively observe the effect of promotion. There are also many researches show that similarities in two languages can facilitate the learning of target language thus reduce the study time.

Positive transfer also exists in semantic level when words or expressions of two languages have similar meaning. We can also find evidences between English and Chinese. For example, “Gold help those who help themselves” as in Chinese “天助自助者”, “love me, love my dog” as in Chinese “爱屋及乌”, “black night” as in Chinese “黑夜”, etc. If students are fully aware of the semantic meanings of these phrases and idioms, it will be quite easy for them to learn these English expressions.

3.2. Negative Transfer
Negative transfer, also named as “language interference”, which means that learner’s existing knowledge impede the process of second language learning. In other words, when the first language knowledge is used in the second language learning to cause misunderstanding, negative transfer is produced. According to Odlin (2001), it is easier to identify negative transfer than positive transfer because of their divergences from norms. He also divided negative transfer into underproduction, overproduction and misinterpretation. In terms of lexicon learning, it is not easy for Chinese students to realize that the meaning of “black tea” is “红茶”.

4. Three Periods of Transfer Study
According to Yu et al. (2012), the study of language transfer can be divided into three historical periods, namely: the period of contrastive analysis hypothesis, the period of early interlanguage theory and the period of recent interlanguage theory.

4.1. Contrastive Analysis Hypothesis
1950s has seen the earliest study on language transfer, when the field of linguistic was dominate by behaviorism. Behaviorists believe that language learning is promoted through learner’s response to stimulus. In the 1950s, the comparative analysis hypothesis became popular in the field of second language teaching and research. Influence by the theories of behaviorism and structuralism, Lado (1957) put forward the theory of contrastive analysis hypothesis. According to Lado (1957), language acquisition is mainly blocked by language transfer. Contrastive analysis hypothesis emphasizes the predication and description of modes of difficulties L2 learner may/may not encounter during the learning process by systematically comparing and contrasting native language and culture with target language and culture.

At that time, scholars have a clear attitude to the role of L1 in the process of second language acquisition. Transfer is the process of using L1 knowledge when learning a second language (Ellis R., 1999). Transfer can be positive when a first language pattern identical with a target-language pattern or it can be negative when a first-language pattern different from the target-language pattern. According to Weinreich (1953), the greater the diversity between two systems with multiple mutually exclusive forms and patterns in each language, the greater the learning barrier and potential interference range. Therefore, Lado and other scholars conclude that the similarities between L1 and target languages are easier to learn, and that different parts are harder to learn. This point of view can be expressed by “distance equals to difficulty”.

In 1970s, contrastive analysis was left out with the rise of error analysis, but the study on language transfer has not stopped. Scholars have made a large number of empirical studies based on contrastive analysis hypothesis in the aspect of phonetic, grammar and lexicon. Among them, quite a number of studies proved this theory (Wang W., 1999). Studies on lexicon transfer were limited in number, but all of them proved this theory. Lexicon differences between two languages can interference learning process. For example, since Chinese is in absence of articles, Chinese students tend to use “this” to replace articles.
4.2. Early Interlanguage Theory

The late 1950s and early 1960s witnessed the decline of behaviorism and the prosperous of cognitive science (especially Chomsky’s generative grammar theory). Language transfer was entered into a new stage of early interlanguage. The concept of interlanguage was first put forward by Selinker (1972). He proposes that interlanguage is an independent language system, which is generated by the learner’s attempt to produce the target language specification. According to Selinker (1972), when adults tend to learn a foreign language, they behave in a similar way to that of the children’s performance in native language acquisition. That is, before the proficiency of their target language, they will choose to adopt a transitional form of speech, which is actually a challengeable and independent system close to the target language, such transitional language has been called as interlanguage and it is generally caused by those aspects: language transfer, the generalization of target language, training and avoidance etc. (Ellis R., 1999) defined interlanguage as a separate languist system produced from learner’s attempted production of norms or knowledge about a language which is both independent of both of their L1 and L2 system they are learning. That is to say, learner’s knowledge about language is independent of both their mother language and target language.

The appearance of interlanguage theory changed people’s understanding of language transfer. At that time, contrastive analysis theory was confronted with great challenge. And error analysis theory became popular.

Error analysis theory was put forward by Corder and its theoretical basis was Chomsky’s T-G grammar theory and psycholinguistics’ transfer theory. Error analysis is defined as the systematic study and analysis into the errors made by the learner in his learning of a foreign language in an attempt to account for the linguistic and psychological origin of the errors, and the regularity, predictability and variability of them (Corder, 1967). Error analysis refers to the analysis of errors made by foreign language learners and it is a tool to measure the causes of unsuccessful language. In his famous published paper the Significance of Learner’s Errors, he talked about the importance of error made by language learners. He said (1967):

A learner’s errors……are significant in that they provide the teacher with the information about how much the learner has learnt, the researchers with evidence of how language is learnt or acquired, what strategies or procedures the learner is employing in the discovery of the language. Error analysis, as a research field in applied linguistics, is of great importance to the teaching and learning of foreign language learning.

All in all, the early researches of interlanguage theory have denied the role of mother tongue in the process of second language learning. Scholars overemphasized the importance of universal grammar and ignored the role of language transfer played in second language acquisition. For instance, (Corder, 1967,1983) and Krashen and Terrell (1983) believed that there is no essential difference between first language acquisition and second language acquisition. Enough input and powerful motivation can ensure learners successfully master a second language. Errors are the result of learner’s hypothesis testing. They thought L1 can inhibit second language acquisition or make it harder.

4.3. Recent Interlanguage Theory

In the late 1970s, language transfer received the attention of linguists again. Scholars tended to reach a consensus. That is: though the contrastive analysis hypothesis is out of date compared with interlanguage hypothesis, the enormous and irreplaceable influence of L1 in the process of second language acquisition cannot denied with the decline of contrastive analysis theory (Yu, 2004).

In the late 1970s, linguist reconsidered interlaguage system as a dynamic process. Thus error analysis hypothesis met with great challenge since it is product oriented and regards interlanguage language as a static process. As a process oriented process, data-analytic procedures were employed to investigate the interlanguage system so that the dynamic features of language change will achieve. In that time, linguists realized that influences of mother tongue should be test in the process of second language acquisition, nor the result of acquisition. Evidences got through empirical studies questioned the previous studies of error analysis.

In the 1980s, many valuable works of language transfer were published, including Language Transfer in Language Learning (Gass and Selinker, 1983), the Role of First Language in Foreign Language Learning (Ringbom, 1987), Transfer in Language Production (Dechert and Raupach, 1989), Language Transfer: Cross-Linguistic Influence in Language Learning (Odlin, 1989), etc.. Among them, Odlin’s masterpiece is a milestone in the history of second acquisition. His monograph summarized the studies of language before 1990s, which is considered as the most comprehensive and profound one. This masterpiece also marked that the study of interlanguage entered into maturity stage.

Jarvis and Pavlenko (2008) summed the research achievements of language transfer before 1990s into the following eight aspects:

1. Error is not the only result of cross linguistic influence.
   Language transfer can also accelerate second language acquisition. It may also cause overproduction (Schachter, 1974) or underproduction (Schachter and Rutherford, 1979) of certain language structures.

2. Cross language influence impacts not only L2 learners’ learning speed and final success, but also their acquisition order.

3. Contrary to the prediction of strong version of contrastive analysis hypothesis, differences between source language and target language do not necessarily result in learning difficulties or cross language influence. Differences that easy to identify can make the structure of target language easier to learn,

4. Cross language influence is not decrease linearly with the improvement of learner’s language capability.
(5) Language transfer not only occurs from L1 to L2 (forward transfer), but also from L2 to L3 (lateral transfer) and from L2 to L1 (backward transfer).

(6) In a certain context, cross language influence and other factors will determine the possibility of transfer, that is, transferability.

(7) Language transfer is not confined to linguistic forms; it can also extend to meaning and functions that are closely related with forms.

(8) Individual differences among language users can also reflect in their use of target language.

In fact, it is these landmark discoveries established the unshakable status of language transfer in the field of second language acquisition. Selinker and Lakshmanan (1992) put forward that language transfer is quintessence of interlanguage theory. With the development of interlanguage theory, the study on language transfer is not only focused on linguistic perspective but also on cognitive perspective.

Since the 1990s, with the ongoing convergence of interdisciplinary researches and the mutual learning among different theories and mythologies, there are new developments in the field of language transfer.

5. Research Methodology
Based on Kellerman’s experiments, this chapter mainly talks about the “good” experiment designed by the Gong (2015). This experiment mainly focuses on methodological issues of positive transfer in lexicon-semantics.

5.1. Invitation to the “Good” Experiment
On the basis of Kellerman’s experiments, Gong designed this experiment to explore whether lexical similarity and difference between English and Chinese can influence Chinese students’ acquisition of English. Four tests were included in this test, the true or false test, the translation test, the translation choice test and multiple-choice test. All tests were concern with the polysemous Chinese word “好”(good). 80 eight-grade students in experimental Middle School (group 1) and another 80 nine-grade students of the same school (group 2) participated in this experiment. Each group was divided into four subgroups and the same four tests were conducted in different subgroups.

This experiment is different from Kellerman’s previous studies in two ways. Firstly, Kellerman used nouns and verbs as his experimental materials while this experiment use adjective “good”. Secondly, according to Kellerman’s studies, cognate between source language and target language can facilitate L2 learning process, however, English and Chinese are not cognate. This experiment want to testify dose positive transfer play a role in English lexicon learning for Chinese.

This experiment wanted to predict the facilitate role of lexicon semantic. According to Kellerman and Michael (1986), no model can predict second language performance accurately. So this experiment is an attempt to characterize the constraints on the development of vocabulary. The “good” experiment measures transferability by exploring the possibility that structure 1 will be more transferable than structure 2, rather than propose that structure 1 will be transferred while structure 2 will not, or both structure 1 and structure 2 will transferred, or neither will. The origins of predictions are L1’s intuitions and adopt the form “Is structure 1 greater than structure 2 on the basis of some defined dimensions?” The predictions will compared with transferability estimate of the form “Will structure 1 more likely transfer than structure 2?” The participants do not have to answer whether these two structure are transferable to a given L2. This paper claimed that transferability can established on learner’s native language knowledge.

5.2. Subjects
80 eight-grade students in experimental Middle School (group1) and another 80 nine-grade students of the same school (group 2) participated in this experiment. The experiment was conducted in class time during regular lessons. Students are different at their learning proficiency. Group 1 is one grade below group 2.

For convenience, each group was divided into four subgroups and the same four tests were conducted in different subgroups. For convenience, the subgroups in Group 1 were expressed by Group1-A, Group1-B, Group1-C, Group1-D respectively and the subgroups in Group 2 were expressed by Group2-A, Group2-B, Group2-C, and Group2-D. Group1-A took part in Test A, and so on.

5.3. Material
This experiment use the polysemous Chinese adjective “好”(good) as material. In accordance the extended fourth edition of Oxford Advanced Learner’s English-Chinese Dictionary (2002), apart from its appearance in set phrases and idioms, “good” can be defined as:
1) of high quality; of an acceptable standard; satisfactory;
2) morally acceptable, virtuous;
3) (of food) fit to be eaten; not yet rotting or rotten;
4) not diseased; healthy, strong;
5) (for sb. / sth.) beneficial; wholesome;
6) used in greetings;
7) great in number, quantity;
The Modern Chinese Dictionary is considered one of the most authoritative dictionaries in China. According to this dictionary, the Chinese word “好” can be define as follows:

1) having a lot of advantages, satisfactory;
2) friendly, harmony;
3) be in good health, recovery;
4) large in number, a long time;

“Of high quality; of an acceptable standard; satisfactory” should be the prototypical sense of “好” (good). And according to the senses of “good” mentioned above, seven core senses are represented in the following phrases:

<table>
<thead>
<tr>
<th>No.</th>
<th>Chinese</th>
<th>English</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>好心肠</td>
<td>Good Heart</td>
</tr>
<tr>
<td>2</td>
<td>身体健康</td>
<td>Good Health</td>
</tr>
<tr>
<td>3</td>
<td>晚安</td>
<td>Good Night</td>
</tr>
<tr>
<td>4</td>
<td>美丽的容颜</td>
<td>Good Looks</td>
</tr>
<tr>
<td>5</td>
<td>新鲜的水果</td>
<td>Good Fruits</td>
</tr>
<tr>
<td>6</td>
<td>清新的空气</td>
<td>Good Air</td>
</tr>
<tr>
<td>7</td>
<td>整整一小时</td>
<td>A Good Hour</td>
</tr>
</tbody>
</table>

5.4. Methods
This experiment has four tests, namely, the translation test, the translation choice test, the true or false question test and the multiple-choice test.

**Test A: Translation Test**
In this test, participants were asked to translate each phrase containing the word “good” into Chinese. More senses than the above mentioned common seven senses were involved in this test so that participant should not influenced by biased hint.

The phrases are as follows (the italic English words can be serve as hints for the English and Chinese senses):

- Good heart
- Good night
- Good laugh
- Good knife
- Good humor
- Good air
- Good fruits
- A good hour
- Good looks
- Good nature
- Good health
- A good joke
- Good with one’s hands
- A good loser

**Test B: The Translation Choice Test**
In this test, phrases and expressions containing seven common senses of “good” were presented. All senses were paired randomly and each pair was numbered randomly. In order to minimize unnecessary bias items in each pair were disordered.

Participants were asked to choose which sense in each pair should be translated into “good” in English.

**Test C: The True or False Test**
In this test, all expressions used in Test A were offered corresponding Chinese translation. Participants were demanded to decide whether the translation forms were consistent with their English originals. This test has two different forms. On one side, all phrases and expressions were provided with right Chinese translations. On the other side, all phrases and expressions were offered incorrect answers. In this way, participants were given both negative and positive hints.

**Test D: The Multiple-Choice Test**
In test D, ten senses of “good” were presented. Five of them were selected in Test A (good knife, good nature, good laugh, good time, a good hour) and the other five phrases were chosen from seven common senses of “good” (good night, good looks, good heart, a good joke, good fruits). The phrases selected in Test A were expected more likely to conduct transfer by contrastive analysis since they have more profound meanings.

Each sense will be provided with two kinds of translations, and students can also choose both of them, or neither. If they insist that there is no right answer, they were asked to write out their answer.
6. Conclusion

1) If L2 learners’ semantic space has different but related senses of a certain word. There exists the probability assigned by learners to which sense should be used in English in the first place. Kellerman termed this probability as transferability of a sense and there are both positive and negative ones. At least for the seven common senses of “good”, when Chinese students learn English, the positive transferability are tend to take place when there are similarities between English senses and the corresponding Chinese counterpart.

2) The structure of L2 learners’ semantic space could be expressed by two dimensions, that is, markedness and concreteness. Markedness bear closely with learner’s perceptions of the type “sense 1 > sense 2 > sense 3 ……>sense n”, in other words, sense 1 is more likely to be used compared with sense 2, and the next successively. The arrangement of senses according to these dimensions was supposed to accord with the prototypical sense of “good”. The probable arrangement for the seven common senses is: heart>looks>health>fruits>air>night>hour.

3) Though we cannot exclude L2 knowledge, transferability is established completely based on the L1 specific characteristics, rather than that of L2’s.

4) Positive transfer tends to happen when L2 learners received positive hints and guide; when learner’s detected the close distance between L1 and L2; when learner used facilitate learning strategies. Hints can facilitate the transferability of metaphoric senses rather than common senses. Improper hints maybe counterproductive.

References


