Negative Transfer of Native Language in the Process of Vocabulary Acquisition - Based on the Study of Xiangning NO.1 Senior School

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ABSTRACT
In China, students from primary school to senior high school have studied lots of English words. However, despite great efforts of teachers and students, the effect of vocabulary learning is not satisfactory. The influence of negative transfer of mother tongue in English vocabulary learning cannot be ignored. Firstly, this paper introduced the background, purpose and significance of errors made by Xiangning NO.1 Senior School students in the process of vocabulary acquisition. Then, the paper reviewed overseas and domestic status of negative transfer. Thirdly, the author designed an experiment and then classified and analyzed students' errors according to the results of questionnaires and English tests. It turned out that they made highlighted errors in terms of part of speech, word meaning and lexical collocation. Finally, the author tried to make suggestions to reduce the impact of negative transfer on students' word learning.

Key Words: negative transfer; vocabulary acquisition; error analysis; senior highschool students

INTRODUCTION

Background of the Study
In recent years, more and more language scholars have paid their attentions to the study of language transfer. SLA research shows that native language transfer is one of the most important factors that affect second language acquisition. It is an incontestable fact that learners’ first language strongly influences their second language acquisition. Nowadays in China, plenty of learners are learning English totally in Chinese environment. They don’t have any chances and surroundings to communicate or use the target language except in classrooms. As a consequence, Chinese strongly influences English learning, especially the vocabulary learning. For learners with limited knowledge of target language, they always tend to depend on their mother tongue when they want to express themselves freely. As the second language or foreign language learners have developed the habit of native language behavior, new language habits must be affected by the old language habits in the foreign language learning process.

Language is mainly composed of three elements: speech sounds, vocabulary and grammar. Vocabulary is one of the most active factors, and it is an important part of language and the basis of all language activities. In the process of second language acquisition, vocabulary acquisition is the key and foundation. Listening, speaking, reading, writing, translation, no language skills can be separated from the right use of vocabulary. Besides, English and Chinese vocabulary is very different. If students do not understand these differences, learning English with Chinese thinking will inevitably lead to negative transfer of mother tongue, and then constrain the correct use of English vocabulary. Therefore, negative transfer of mother tongue in the process of learning English vocabulary of Chinese students cannot be ignored.
Purpose and Significance of the Study
Negative transfer of learners’ native language greatly influences vocabulary acquisition of second language. Thus, it is necessary to explore negative transfer of mother tongue in the process of learning English vocabulary of Chinese students. This study has significance in both theoretical and practical perspectives. It provides supports for interlanguage theory and enriches knowledge of word acquisition. In addition, this study is conducted mainly to find out the different aspects of vocabulary of students' first and second language, analyze various forms of negative transfer of vocabulary, explore reasons for language transfer, and help college students avoid negative transfer in vocabulary acquisition. In addition, this study will also facilitate the teaching methods of vocabulary. More importantly, more suitable English teaching strategies can be explored.

LITERATURE REVIEW

Language Transfer
Transfer refers to the influence of one learning or the influence of experience acquired from completing other activities on another learning. Transfer is a common phenomenon, existing widely in knowledge and skills, behavioral norms and learning attitude. Through the transfer, we can communicate a variety of experience, and experience structure can be integrated.

Language transfer refers to the transfer trend of knowledge acquired by a person in a native language acquisition environment to foreign language learning. The “transfer” in “language transfer” originally belongs to a term in cognitive psychology. It belongs to an activity of the cognitive category. It is the individual psychological processing process, and it includes not only the transfer of language knowledge but also the transfer of emotion, attitude, action skills and other aspects.

Language transfer can be divided into positive transfer, negative transfer and zero transfer. Positive transfer refers to the phenomenon that original knowledge and experience promote the process of new learning and help learners learn new language faster. Negative transfer refers to the use of native language rules hinders the acquisition of new language. The two learnings may also not interact and this state is called zero transfer, a special form of transfer.

Negative transfer or mother tongue interference occurs when learners use native-language rules or patterns which may lead to an inappropriate form. When the learning tasks of the two languages present differences, the phenomenon of negative language transfer is easy to produce. For example, there is a huge difference between Chinese and English in terms of writing system. Because of the difference between the mother tongue and the target language, there are lots of errors made by learners. Therefore, negative transfer will, to a certain extent, hinder the acquisition of new knowledge or new experience. This is more extensive in second language acquisition, especially for English beginners. For example, in the English lexical collocation, junior high school students tend to say some inappropriate phrases such as “listen music” (听音乐). Negative transfer in vocabulary acquisition display in several aspects: part of speech, word meaning and collocations etc.

Theoretical Foundations
In order to study negative transfer precisely, the theory of comparative analysis and error analysis should be introduced.

Benjamin Whorf (1941) used the term “contrastive linguistics” for the first time in his essay. Lado (1957) put forward his own basic idea: when students study foreign languages they think it is easy if the elements of foreign language are similar to that of their mother tongue, and they
feel it is difficult to learn if differences exist. Therefore, if the teacher compares the target language and the native language of their students and finds out the differences between them, he will clearly understand what is the difficulty for students, and teach students more effectively. The method of comparative analysis was widely applied to the preparation of foreign language textbooks and the teaching of foreign language in 1960s. But contrastive analysis theory has caused a lot of controversy. Researchers and teachers found that comparative analysis cannot fully predict the errors made by students when learning the target language. The reasons for the student's errors are varied. It is not worth the effort to spend a lot of time predicting the errors caused by negative transfer of the mother tongue. Besides, learners with different native languages, although their mother tongue is very different, will make some very similar errors.

Due to the limitations of comparative analysis, people turn to begin to analyze the errors of learners. The earliest advocate of error analysis was Corder (1967). The error analysis theory first distinguishes between errors and mistakes. An error results from incomplete knowledge while mistakes which is caused by carelessness. From this point of view, “mistake” is that anyone (whether native speakers or foreign language learner) may make, and the error is due to the learners do not have the ability to correctly express. Errors are generally classified into inter-lingual errors (caused by learners’ native language), intra-lingual errors (resulting from partial or faulty learning of the target language) and other errors.

The theory of error analysis is to analyze the learners’ actual language errors and adopt a tolerant attitude towards them. Although error analysis can find out errors unrelated to the negative transfer of native language, it does not fully reflect all the difficulties and problems students have in English learning. For the phenomenon that learners avoid to use the target language, error analysis cannot explain clearly.

**Relevant Studies abroad and at Home**

The study of Freeman (1976) affirms the influence of mother tongue on language learning. He pointed out that there is no grammatical category of article in Japanese, and Japanese students are more likely to make errors in the process of learning article compared with students whose mother tongue has the article category.

Ringbom (1978) claimed that most of the lexical errors made by Swedes and Finns whose second language is English can be attributed partially to equivalent translation. When the learner’s second language has similarities with their mother tongue, the vocabulary acquisition of the target language will be promoted.

Famous linguists Dai Weidong and Ji Dingfang (1994) found that it is difficult for learners in the foreign language learning process to get rid of the impact of the thinking habits of native language and its structure. The study shows that the degree of dependence on the mother tongue depends on the difficulty of learning tasks: if the task is simple, dependency will be light; while if the task is difficult the degree of dependence will be deepened.

Lu Guoguo (1999) pointed out that the meaning of English vocabulary is complex, especially in its hierarchy, diversity and variability. It is its own characteristics that enhance the difficulty of English vocabulary teaching. Hu zhuanglin (2000) said that foreign language learners especially beginners often use the thinking way of their mother tongue to solve foreign language learning problems. Xu Jingliang (2002) found that Anglo-American and China cultural thinking mode is completely different. There are huge differences between the two languages.
Different national cultural background leads to different thinking patterns and ultimately leads to two different languages.

**RESEARCH DESIGN**

**Research Objects**
Firstly, according to the theory of language transfer, through the analysis of the errors made by Xiangning NO.1 Senior School students in the process of English vocabulary learning, the author tries to find out the causes of errors and the existing problems in English vocabulary learning. More importantly, deep analysis of the existing situation of senior high school English vocabulary learning helps to find the difficulties and problems of senior high school English vocabulary learning, to complete the purpose of senior high school English vocabulary teaching, to solve existing problems and to make relevant suggestions and opinions. Effectively cultivating students' English thinking can help students develop good habits of English thinking and get rid of the negative effects of negative transfer of mother tongue, so as to improve students' vocabulary learning ability. Finally, the research is also conducted to facilitate teaching practice, promote the positive influence of native language on English learning, and improve the efficiency of English teaching.

**Research Subjects**
The research subjects of this study are from an ordinary middle school in Xiangning. In order to ensure the objectivity and accuracy of data collection, the author selected two classes from the Senior One students randomly, with a total of 108 regular students aged between 15 and 16 years old. Both classes are representatives of the general class. They have an average English skill. Their English vocabulary is about 1000 to 1500. However, due to the lack of foreign language learning environment, they grasp few English words. Because of the lack of grammatical knowledge and structure, learning English vocabulary is often influenced by Chinese and negative transfer of mother tongue.

**Research Instruments**
This research includes both the questionnaire and test of English knowledge. In addition, the compositions of the two class students are collected as reference.

The purpose of the questionnaire and test is to understand the students' mastery degree of and interest in English vocabulary, and to find the key and difficulty points in the process of learning English vocabulary. In order to improve pertinence of the study, the author used the questionnaire and the English test from a master thesis.

**Data Collection**
Xiangning NO.1 Senior School is an ordinary school, these two classes are ordinary class, the student’s English level is intermediate, students’ achievement is representative. The author conducted the test and questionnaire on the two classes. Both questionnaires and thematic tests were conducted during class hours. The total time is 60 minutes: the special test paper 45 minutes, the questionnaire 15 minutes.

Before students began to finish the questionnaire and test papers, the teacher indicated the purposes and steps of this research and specifically stressed that the survey should be filled out according to their own real situation. Secondly, the students completed their own questionnaires. Finally, the writer read all the questionnaires and removed all invalid questionnaires, and analyzed the research data. In the process of test and questionnaire, in order to ensure the true and reliable collection of information, the teacher had been
monitoring students so as to avoid their discussion or using dictionaries and related reference materials.

108 thematic test papers were collected, of which three papers were almost blank. As a result, these three papers are considered invalid, and the writer did not analyze them.

**Results and Analysis of Questionnaire**
The following results are based on the analysis of valid questionnaires from students, which basically involves the main problems of negative transfer of mother tongue in senior English vocabulary learning.

**Table 1 Senior high school students’ way of reviewing words**

<table>
<thead>
<tr>
<th></th>
<th>Memorize glossary</th>
<th>Read text</th>
<th>Do exercises</th>
<th>Recite notes</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>87</td>
<td>7</td>
<td>5</td>
<td>6</td>
<td>105</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>82.9</td>
<td>6.7</td>
<td>4.7</td>
<td>5.7</td>
<td>100</td>
</tr>
</tbody>
</table>

According to the survey, 87 (82.9%) of the 105 senior students surveyed remember and review words through the glossary in the textbooks. The number of students who remember words by reading text is only 7 (6.7%). Separating from the text, students are easy to be affected by the negative transfer of Chinese in the process of English vocabulary learning. English vocabulary is characterized by its small independence and the corresponding meaning of Chinese is only relatively speaking. In senior high school, most meanings of English vocabulary used by students is its common meaning, that is, the conceptual meaning. Most word lists of English textbooks are in the form of English-Chinese, which makes students wrongly think that the relationship between English words and the corresponding meaning in Chinese is a one-to-one relationship, which makes students ignore other meanings of words.

**Table 2 The types of dictionaries owned by senior high school students**

<table>
<thead>
<tr>
<th></th>
<th>No dictionaries</th>
<th>E-C dictionaries</th>
<th>E-E dictionaries</th>
<th>C-E dictionaries</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>10</td>
<td>59</td>
<td>4</td>
<td>32</td>
<td>105</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>9.5</td>
<td>56.2</td>
<td>3.8</td>
<td>30.5</td>
<td>100</td>
</tr>
</tbody>
</table>

From the above table, it is enough to see that senior high school students greatly depend on the English-Chinese dictionary, not yet cultivating the habits of using English-English Dictionary.

**Table 3 Senior high school students’ way of getting the meaning of unknown words**

<table>
<thead>
<tr>
<th></th>
<th>Looking up words in dictionaries</th>
<th>Guessing the meaning by one to one translation</th>
<th>Asking teachers</th>
<th>Asking students</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>8</td>
<td>63</td>
<td>12</td>
<td>22</td>
<td>105</td>
</tr>
<tr>
<td>Percentage (%)</td>
<td>7.6</td>
<td>60</td>
<td>11.4</td>
<td>21</td>
<td>100</td>
</tr>
</tbody>
</table>

From the questionnaires, only 8 students look up unknown words in dictionaries. There are up to 63 (60%) students choose to get the meaning by English-Chinese translation when they
encounter English fixed collocation, leading to taking the words too literally and not really grasping the meaning of fixed collocation. This situation is the result of the Chinese environment where students acquire English. In the early days of learning English, students tend to unconsciously compare English with Chinese. The collocation meanings of English words are conventional but not the sum of meanings of single words.

**Error Analysis of the English Test**

The author analyzed the vocabulary errors of 118 papers systematically. In order to ensure the effectiveness of the study, in the face of difficulties the writer often contacted the mentor and surrounding students, or consulted relevant materials. And then the writer classified the errors in detail, which is showed in the following table:

<table>
<thead>
<tr>
<th>Types of vocabulary errors</th>
<th>The numbers of errors</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbs</td>
<td>135</td>
<td>16.9</td>
</tr>
<tr>
<td>Nouns</td>
<td>118</td>
<td>14.8</td>
</tr>
<tr>
<td>Lexical collocations</td>
<td>108</td>
<td>13.5</td>
</tr>
<tr>
<td>Conjunctions and pronouns</td>
<td>73</td>
<td>9.2</td>
</tr>
<tr>
<td>Adjectives</td>
<td>72</td>
<td>9</td>
</tr>
<tr>
<td>Prepositions</td>
<td>69</td>
<td>8.7</td>
</tr>
<tr>
<td>Cases</td>
<td>66</td>
<td>8.3</td>
</tr>
<tr>
<td>Upper and lower case letters</td>
<td>49</td>
<td>6.1</td>
</tr>
<tr>
<td>Other errors</td>
<td>108</td>
<td>13.5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>798</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

The statistics show the number of errors and the proportion of errors that occur in Xiangning NO.1 Senior School students’ English vocabulary learning process. There are 135 verb errors in tests, accounting for 16.9%. The most frequent error is the misuse of verbs, and the verb itself is a part of speech which is difficult to grasp, reflecting in their number and inflection. This fully shows that the use of English verbs is the outstanding difficulty of Chinese students in English learning. The next error type is noun, a total of 118 errors, accounting for 14.8% of the total number of errors. There are also lexical collocations with errors. As a result of the influence of Chinese thinking, the frequency of lexical collocation is relatively high. Although the Senior One students have certain basic knowledge of English language, and they have a general understanding of English grammar, their firmness and proficiency of knowledge are not enough. Therefore, their comprehensive capability of the English language is low, and in actual use of English, errors will be more prominent in the process of writing and translation.

**ANALYSIS OF VOCABULARY ERRORS IN STUDENTS’ TEST**

Negative Transfer in Senior High School Students’ Word Acquisition are embodied in many aspects because of the limited number of words. Here the writer will analyze some representative examples.

**Errors of Part of Speech**

From the aspect of morphological features, English is an inflectional language (Each word can be used to express changes in meaning or grammatical function through its morphological change.). Word class can be inferred through the suffixes of English words (for examples, -ful for adjectives; -ation for nouns; -ate for verbs; -wards for adverbs) and each word class has its relatively fixed function; while Chinese words do not have formal marks, mainly classified in accordance with their meanings. This characteristic is easy to lead Chinese students in the study of English words only focus on their meaning but ignore their word class. In addition, most of the word lists in English textbooks are in the form of English-Chinese, which makes
students mistakenly think that the meaning of English words and the Chinese meaning are completely equivalent. Therefore, when students use English to express meaning, they are greatly affected by negative transfer of native language.

**Misuse of Nouns**
The nouns in English have inflectional changes, while Chinese nouns do not. It is difficult for students to learn English nouns. In English, the indefinite article “a” or “an” should be added before a single countable noun, and there are also changing rules for plural nouns. But the plural forms of irregular words are the difficult points for middle school students. In Chinese the plural forms of nouns do not need inflection. We just add some words such as “很多” “some” “to suggest plurality. Senior high school students always forget this difference and make some errors. For example:

- There are two cup on the table. (There are two cups on the table.)
- They planted many tree in the yard. (They planted many trees in the yard.)

**Misuse of Prepositions**
Prepositions are used with high frequency and wide range; it should be studied and used carefully. However, many learners do not pay much attention to prepositions but rely on Chinese thinking, which leads to misuse of prepositions. In addition, unlike Chinese, there are only verbs that act as predicates in English sentence, so there should be verbs or link verbs before the prepositions. Senior school students are affected by Chinese and often make the following errors:

- They like best friends because they confide secrets to each other.
- Her study style is different with mine. (Her study style is different from mine.)
- Mike’s birthday is on March 21st. (Mike’s birthday is on March 21st.)

**Misuse of Verbs**
English is a synthetic language, it express meaning through grammar, morphological changes, auxiliaries and some functional words, so inflectional changes of verbs in English learning are essential. By observing the inflection changes of verbs, we can know the action is doing or was done. Chinese is an analytic language just by using “着” or “了” to express the relationship between action and time, that is, verbs in Chinese do not need inflection. For instance,

- She go to library yesterday. (She went to library yesterday)
- I have finish my project. (I have finished my project.)

Due to the influence of mother tongue, students are easy to confuse and misuse the transitive and intransitive verbs in English. Most of the verbs in Chinese are very flexible, and many words can be used as transitive verbs and intransitive verbs. But the use of English verbs has restrictive rules. It is uneasy for students to distinguish and master them. For example:

- TV programs should cater all tastes. (TV programs should cater to all tastes.)
- I entered into a room mistakenly. (I entered a room mistakenly)

**Errors of Word Meaning**
English beginners often understand the meaning of English words with the help of Chinese meaning, this is particularly evident in senior high school. The reason is that senior high school students have basically mastered the conceptual meaning of Chinese words. When they learn a new language they will unconsciously migrate Chinese meaning to the foreign language.

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Non-equivalence of Conceptual Meaning
The conceptual meaning of words (dictionary meaning or literal meaning of words) is the core of word meaning and the concept meaning is generally more stable. When writing, students always design compositions by Chinese in the mind and then translate Chinese into English one to one.

Most of the vocabulary in English are not fully correspond to Chinese, the same meaning are expressed differently by different languages. Language learners often take words too literally and output some specious expressions. For examples:
- 红色 red color (red) 非常好 very excellent (excellent)
- 看书 see books (read books)

Non-equivalence of Connotative Meanings
Connotative meaning is the meaning of language to convey the emotional significance. It is the implication of vocabulary, reflecting different national cultures, world outlook, morality, aesthetic taste, lifestyles and so on. The connotation of vocabulary is with emotional and different cultural backgrounds. China and the UK have different history and culture, as a result, there are many words have different connotative meanings in English and Chinese, which may be ignored by students. For example, the word “dog” in English has the meaning of “lucky” and “lovely”. We can see that fact in the following examples: every dog has its day; love me, love my dog. In Chinese besides the above mentioned meaning “狗” has derogatory meaning, which can be seen in “狗急跳墙” “走狗”.

Errors of Lexical Collocation
Lexical collocation is the horizontal relationship between words. There exist big differences of collocations and language habits in English and Chinese. Not every English collocation has its corresponding form in Chinese. Due to the lack of English knowledge, senior high school students always output non-native English. At the time of doing practices, they use Chinese thinking to solve problem, which leads to errors. For examples:
- 红茶 red tea (black tea)
- 大雨 a big rain (a heavy rain)
- 接触社会 touch society (contact society)
- 获得成功 get success (make success)
- 学习知识 learn knowledge (acquire knowledge)
- 如雨后春笋般 like bamboo shoots (like mushrooms)

SUGGESTIONS
Although culture of the east and the west is connected, their thought and value orientation are very different due to distinctions of historical evolution, social customs, religious beliefs and so on. These distinctions are reflected in different ways of expressing. Senior high school students are greatly affected by negative transfer of native language in the process of acquiring English. The writer has some suggestions to avoid such phenomenon.

Firstly, in the process of teaching the teacher could use contrastive analysis to predict and correct students’ errors. Teachers should compare English and Chinese in respects of pronunciation, vocabulary, pragmatics and so on. For those huge differences, students need more explanation and drills so as to enable students master the correct usages of words. Teachers also could assign homework to let students compare the two languages by themselves.
Secondly, teachers should use various methods to teach words. Not just let students read words after the tape, teachers could show pictures or videos about words, tell short stories about words, introduce some background information about words, or organize activities to let students teach students words. In this process, they will look up a large amount of information about words. At the same time, students should be encouraged to remember words through different ways (for examples, by memorizing the glossary, reading text, doing exercises, reciting notes, etc.)

Thirdly, teachers should increase foreign language input. Besides communicating with native speakers, students should learn English through intensive reading and extensive reading. Teachers could help them summarize the usages of words and guide them use those words frequently. As a result, English thinking can be cultivated gradually.

Fourthly, foreign language teaching should not only focus on the cultivation of language knowledge; teaching of culture should also be included in foreign language teaching. Teachers could introduce the history, cultures and customs of English speaking countries.

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中学生英语词汇习得过程中的母语负迁移

摘要：我国学生从小学到中学，已经学习了不少英语词汇。然而尽管老师和学生付出了巨大努力，词汇学习的效果却并不理想。究其原因，母语在词汇习得过程中的负迁移作用不可忽视。本文首先介绍了研究中学生词汇习得过程中所犯错误的背景、目的和意义，其次回顾了国内外母语负迁移研究现状。基于对比分析理论和错误分析理论笔者设计了一个实验，根据问卷调查和英语测试的结果，笔者对中学生词汇错误进行分类和分析，发现他们在词性、词义以及词汇搭配等方面所犯的错误较为突出。最后，笔者尝试对怎样减少负迁移对词汇习得的影响提出建议。

关键词：负迁移；词汇习得；错误分析；高中生

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