



A Study on the Current Situation of Negative Transfer of Mother Tongue in College Students' English Learning of Guangxi Zhuang Nationality Under the Background of Third Language Acquisition

Yanmei Wei^(✉)

Liuzhou Institute of Technology, Liuzhou 545616, Guangxi, China
weiyani106@163.com

Abstract. English learning of learners with their mother tongue, Zhuang dialect, is influenced by the transfer among three languages. Negative transfer of mother tongue is a common phenomenon in Zhuang college students' English learning. Based on domestic and foreign research, guided by comparative analysis theory, error analysis theory and interlanguage theory, through questionnaire, DCT (discourse completion test), the paper is to study the negative transfer of mother tongue, (Zhuang dialect) or second language (Chinese language) in English learning of Zhuang college students in Guangxi. The survey shows that the negative transfer of pronunciation, vocabulary and grammar of their mother tongue or second language (Chinese language) does occur in English language learning among college students of Guangxi Zhuang nationality.

Keywords: pronunciation · vocabulary · grammar · negative transfer of mother tongue or second language

1 Introduction

Chinese students' English learning environment is in a special situation. In most parts of China, English lessons are not taught until the third grade in primary school, while in rural areas, English lessons are not even taught until the fifth grade in primary school. Students are exposed to English in an environment full of their mother tongue, especially for students of Zhuang nationality in Guangxi, where English is the third language after their mother tongue, Zhuang dialect, and Chinese. Therefore, when learning English in a trilingual environment, students of Zhuang nationality in Guangxi inevitably transfer the phonetics, vocabulary and grammar their of their mother tongue or Chinese into English. These mother tongue or second language transfers occur consciously or unconsciously. Especially in the context of third language acquisition, students of Guangxi Zhuang nationality who do not have a good English foundation are more likely to transfer the phonetics, vocabulary and syntax of their mother tongue or second language-Chinese into English while they are learning English.

© The Author(s) 2023

B. Majoul et al. (Eds.): ICLACE 2023, ASSEHR 766, pp. 84–93, 2023.

https://doi.org/10.2991/978-2-38476-094-7_12

2 Literature Review

In second language acquisition, when the language rules of the mother tongue are consistent with the target language, the transfer of the mother tongue to the target language will have a positive effect, which is called positive transfer. However, when the rules of the mother tongue are inconsistent with or even contrary to the target language, the transfer of the learner's mother tongue to the target language will have a negative impact, which is called negative transfer. Negative transfer of mother tongue can occur in all aspects of language, such as phonetics, vocabulary, syntax, and pragmatics. In addition to the influence factors of language itself, there are also many external factors, such as thinking patterns, social history and cultural traditions, which may affect language transfer.

2.1 Theoretical Basis

2.1.1 Contrastive Analysis Theory

Contrastive analysis refers to the method of identifying potential errors by comparing different languages, the mother tongue and second language, so as to finally distinguish what must be learned and what is not to be learned in the second language learning environment.

The basic view of contrastive analysis theory is that the similar learning contents of two languages cause positive transfer, while the different contents of two languages cause negative transfer. The purpose of contrastive analysis is to construct the original common language by comparing the different development stages of the same language or two or more languages with kinship. In the process of second language acquisition, learners will find that the parts similar to their mother tongue are easy to learn, while the parts different from or even opposite to their mother tongue are difficult to learn. Therefore, by comparing the second language with the mother tongue and finding out the similar and different parts, we can predict difficulties in the second language acquisition. This method of comparative analysis was popular in Europe in 1960s. Researchers used the four steps of formal description of two languages, selection of specific fields or projects for detailed comparison, determination of similarities and differences of specific items of two languages, and determination of error prone places.

But until the late 1960s, people found that this theory exposed many problems, many predicted problems did not appear as scheduled, and many other problems did not predict in advance. People can not expect the contrastive analysis theory to predict all the problems in second language acquisition, which is beyond the scope of comparative analysis. However, contrastive analysis theory is still an important theory to study the negative transfer of mother tongue, which is still used by many scholars [1, 4].

2.1.2 Error Analysis Theory

It is found that contrastive analysis theory can not predict all the errors in second language acquisition, and it is necessary to make a systematic theoretical analysis of the errors to determine the source of the errors.

Error analysis theory prevailed in the 1970s, and its founder was Corder (1971). Error analysis theory is to objectively describe the interlanguage that learners use between their mother tongue and the target language, and then compare the interlanguage and the target language to make a comprehensive and systematic analysis of the errors made by learners in the process of foreign language learning, so as to explore the causes and nature of the errors [6].

Error analysis theory has three functions. First of all, teachers can make a systematic analysis of students' errors, so that students can know what stage they have reached in the process of learning a foreign language and how much more they need to learn. Secondly, researchers can provide evidence of how students acquire the language and understand the process and steps they need to master in the learning process. Finally, error analysis is very important for students themselves, because error analysis is an important means of learning language.

There are five steps in error analysis, one is to select corpus, the other is to confirm errors, the third is to classify and describe errors, the fourth is to explain the causes of errors, and the fifth is to evaluate education. When error analysis theory is applied to practical teaching, teachers can practice from the following steps: firstly, teachers should select and collect students' exercise books, wrong topic books, written compositions, etc. As corpus materials, and then identify and analyze the collected corpus. Some errors are caused by negative transfer of mother tongue, and some are not. Teachers should identify which are due to negative transfer of mother tongue Errors caused by migration. After completing the judgment, we should further analyze and classify the errors caused by negative transfer of mother tongue. After the classification, teachers should explain the causes of each mother tongue negative transfer in detail, in order to find a good solution. Finally, teachers should evaluate the errors caused by negative transfer of mother tongue, so that students can understand the seriousness of their mistakes and correct them in time [7].

But like the theory of comparative analysis, error analysis theory also has some shortcomings. First of all, the types and distinctions of errors are not easy to determine, and the causes of various errors cross each other. In addition, error analysis theory only reflects students' language learning, but does not reflect the whole process of second language acquisition. Students only know what can not be done, but not what aspects should be done. Therefore, the description of second language acquisition by Error Analysis Theory is incomplete and inaccurate.

2.1.3 Interlanguage Theory

Interlanguage theory is a new generalization of the complex language problems in the process of second language acquisition due to the limitations of contrastive analysis theory.

Interlanguage is a specific target language system of second language learners, which is different from both the native language system and the target language system in phonetics, vocabulary, grammar, pragmatics and culture. Therefore, researchers focus on this kind of language produced by learners themselves.

Researchers call this kind of language system the transitional competence system or the special dialect. They think that the process of second language learning is to make

a series of hypotheses about the structure of the second language, and then verify these hypotheses in language application. Learners' language can be regarded as the dialect of their target language. The purpose of interlanguage research is to reveal the nature of interlanguage, explore the rules of second language acquisition, and provide guidance for English teaching [2].

The main method to study interlanguage system is to analyze errors. There are three steps to analyze errors: identifying errors, describing errors and explaining errors. Among them, explaining errors is the most important, its main purpose is to determine the causes of errors. Interlanguage plays an important role in second language acquisition and second language teaching, which can be seen in five aspects. First, interlanguage provides empirical materials for error analysis. Second, the study of interlanguage enriches the theory of second language acquisition. Third, interlanguage has a certain guiding significance for foreign language teaching. However, like other theories, interlanguage theory also has limitations, such as research methods, research means, research focus and so on [8].

2.1.4 Relevant Studies at Home and Abroad

Foreign researchers have made many remarkable achievements in trilingual acquisition. Cenoz et al. (2001)'s book on the effects of language transfer on trilingual acquisition is a typical representative. The research results of this book show that learners' second language proficiency affects the occurrence of transfer in the process of trilingual comprehension and production. That is, the more contact with the second language, the more proficient the use of the second language, the more second language transfer. Another factor that affects grammatical transfer from second to third language is the psychological type relationship between second and third language. [3, 5] There are more and more studies on foreign language learning of minority students in China. These studies find that the negative transfer of trilingual acquisition originates from both mother tongue and Chinese, but the negative transfer from Chinese plays a dominant role, while the negative transfer from mother tongue has a smaller impact [10].

3 Research Process

3.1 Research Subjects and Instruments

This study adopts quantitative and qualitative empirical research methods. This study mainly adopts discourse completion test (DCT), questionnaire, supplemented by current English learning situation questionnaires and interviews to collect data. The research objects are 100 Zhuang students from the university where the author works, including freshmen, sophomores and juniors majoring in arts and science. Firstly, the researcher conducted questionnaire survey and interview to understand the English learning situation of some subjects. Then, the discourse gestalt method (DCT) is used to collect the corpus, and the collected corpus is classified and analyzed under the guidance of contrastive analysis theory, error analysis theory, interlanguage theory, etc.

The questionnaires is mainly aimed at students, including 20 multiple-choice questions. The content involves students' pronunciation, vocabulary, grammar, learning

habits, views and attitudes towards the influence of mother tongue or Chinese on English. The purpose of this study is to find out how college students of Zhuang nationality are influenced by their mother tongue or Chinese and what aspects of the mother tongue or Chinese affected [10].

Questions 1–3 of this questionnaire are to understand students' English learning situation and their attitude towards English interfered by mother tongue or Chinese factors. 4–5 questions are to understand students' negative transfer of mother tongue or Chinese in English pronunciation learning, 6–9 questions are to understand students' mother tongue or Chinese negative transfer in English vocabulary learning, 10–18 questions are to understand students' mother tongue or Chinese negative transfer situation in English grammar learning, of which 10–15 questions are as for the negative transfer of syntax, questions 16–18 are about the negative transfer of mother tongue or Chinese in the text, and questions 19 and 20 are to understand the basic situation of students' English learning.

DCT (Discourse Completion Test) is a form of questionnaire survey. The researchers first set up and describe the situation in which the dialogue took place, leaving a blank in the scene. After reading, the subjects filled in their possible answers in the situation. This method is mainly used to collect and analyze the corpus. The author can collect the corpus of students' vocabulary and grammar problems in English learning, and analyze whether it is caused by negative transfer of mother tongue and what kind of negative transfer of mother tongue is.

Questions 1–7 of the discourse completion test are given in the form of dialogue. The author designed questions or answers. The students complete the dialogue according to the situation set in the dialogue. The relevant situations include daily life dialogue, time and place questions, answers, holiday arrangements, new semester arrangements, etc., which are closely related to the daily life of college students. The questions are not difficult to ensure that students can complete the dialogue independently.

Questions 8–15 are translation questions, which are Chinese English translation, English Chinese translation and a translation discrimination question. Compared with the previous seven questions, these questions are more difficult, which requires the students have a higher level of English. Students can complete the questions by consulting dictionaries. The negative transfer of vocabulary and syntax in students' English learning is also investigated.

3.2 Research Data Analysis and Discussion

3.2.1 Negative Transfer in Phonetic Learning

The survey found that 85% of students believe Chinese pinyin has a significant impact on their English pronunciation. Because some consonants in English are similar to the pronunciation of Pinyin and Zhuang dialect, students are used to mark these English sounds with Chinese or Zhuang dialect in order to remember the pronunciation of English sounds. For example, English consonants [θ] and Chinese pinyin s; [ð] and Pinyin z; [ʃ] and the pinyin x; [ʒ] and pinyin r; [tʃ] and the pinyin q, ch; [dʒ] and pinyin j, zh; [ts] and Chinese Pinyin c; and the pronunciation of [dz] is similar to that of Chinese pinyin z, etc., but there is a difference actually. According to Error Analysis Theory and

Interlanguage Theory, the students' interlanguage system is not perfect and the level of interlanguage is relatively low. The students fail to master the correct pronunciation of English pronunciation, tongue position and pronunciation methods, so they turn to their mother tongue for help, and resort to Chinese language or Zhuang dialect to make a wrong pronunciation in English learning. Negative transfer of phonetic sounds in English learning influenced by the mother tongue occurs. According to the survey data, only 10% of students felt that they were not influenced by the phonetic system of their native language; only 30% thought they knew all the consonants; and 15% said they could not identify the English phonetic system at all, especially the English consonants.

3.2.2 Negative Transfer in Vocabulary Learning

The survey data show that 71% of students believe that Chinese and Zhuang dialect words have a great influence on English vocabulary learning. 83% of the students thought they had a good command of both nominal and descriptive possessive pronouns; 68% of the students thought they had a good command of non-predicate verbs. But more than 50% of the students felt they could not remember all the meanings of words as well as parts of speech and conjugation. This leads to students' misuse of English vocabularies when they actually use them. In the DCT test, the misuse of pronouns is common. As in this incomplete sentence of the DCT test: "_____ Thank you. I'll have a cup of coffee." The students wrote down such a sentence: "I know you want a drink different from my." The correct expression would be "I know you want a drink different from mine." English has unique possessive and adjective-possessive pronouns that are used to modify a person before a noun, such as "my, your, her," while the latter is used to replace a known noun mentioned earlier. Instead of mentioning the same noun, like "mine, yours, hers" can be used instead. As there is no difference in the form of the pronoun in Zhuang dialect and Chinese language, it is often confused by students who are not good at English, and they are likely to misuse English pronouns.

Another kind of misuse of words is often seen in the misuse of conjunctions, such as conjunction redundancy. In such an incomplete conversation, "What's the weather like there in winter? _____". Nearly half of the students answered "Because it's in the north, so it's cold." Because Chinese conjunctions are used in fixed pairs, such as "because..... So.....". "Although..... But....."; Therefore, under the influence of their mother tongue, students naturally use fixed conjunctions when answering English conversations. But English has a distinction between subordinating conjunctions, such as "because, since, until" and coordinating conjunctions, such as "so, but, and", which often cannot be used together in the same English sentence. However, under the influence of the mother tongue, students often have the phenomenon of redundancy of conjunctions when they use them in practice, which leads to redundancy of sentences, and the phenomenon of negative transfer of mother tongue comes into being.

Another kind of word misuse is seen in part-of-speech misuse. In this dialogue: "What's the weather like today?" Some students responded by saying, "It's a boring raining day." The correct answer would be, "It's a boring rainy day." Some adjective forms of English nouns are formed by adding "-ing" at the end of the word, while some are not. When students need to change the part of speech in a sentence according to the meaning of the sentence, since there is no such end-word change in Chinese and Zhuang

dialect, students tend to confuse and add wrong affixes, which leads to the misuse of the part of speech, thus making the whole sentence wrong. In this example: “What kind of weather do you like?” One of the students responded, “I like summer” It was clear that the students had a strong reaction to the word “weather” Confused with the meaning of “season”, the word “weather” was generalized to the meaning of “season”. Or some students believe that the meaning of English words is one-to-one correspondence with their mother tongue, which will also cause lexical misuse. The negative transfer of mother tongue has a negative effect on English vocabularies usage.

3.2.3 Negative Transfer in Grammar Learning

Zhuang language belongs to the Dai and Zhuang Dong language branch of the Sino-Tibetan language family. Zhuang language uses word order and function words as the main grammatical means. The basic order of sentence elements in Zhuang language is subject-predicate - object - complement, as roughly the same as Chinese basic sentence word order. And the basic simple sentence patterns of English are surprisingly similar to those in Chinese and Zhuang dialect. For instance, Subject-verb structure: “The phone rang; Childhood days are unforgettable; I love my mother. We elected him monitor. We elected him monitor.” Subject-verb + indirect object + direct object: “Mary gave me a book.” In these three languages, the similarity of word order in basic sentence patterns is the universal of language, that is, language weak labeling, so it is easiest for learners to master. It is found that Zhuang students can use the five simple basic sentence patterns correctly, which indicates that their mother tongue or Chinese plays a positive transfer role in their English learning. However, this effect of positive language transfer leads to one consequence - overuse. In the collected corpus, it is found that most of the students’ answers just use simple English sentences.

Another syntax misuse is the misuse of tenses. In this completion conversation, the question was “Where did you go this summer vacation?” and the answer was “I went to Hawaii this summer vacation.” But a third of the students completed the sentence like this: “Where do you go this summer vacation?” This phenomenon is clearly the result of negative transfer of mother tongue; Chinese or Zhuang language does not use word change to distinguish tense, but based on the adverbials of time or the semantics of the time to decide. English, on the other hand, has distinct tenses to express things that happen at different times. This great difference between languages, that is, the language is strong labeling, so it is the least easy for learners to grasp; so misuse is very common.

Under the background of trilingual acquisition, college students of Guangxi Zhuang nationality are also prone to make errors in sentence word order in English syntax. For example, in the completion conversation test, the research subjects would write sentences like: “There are blue big waves on the beaches of Hawaii.” And the correct sentence would be “There are big blue waves on the beaches of Hawaii.” In Chinese and Zhuang dialect, the order of modifiers before nouns can be relatively loose, and it makes sense not to pay attention to a certain order; but in English, the order of modifiers before nouns is relatively fixed. The general order is “size + length + shape + color”. So the “big” in this example is the size and should come before, not after the color word “blue.” In another example, an attributive word order error leads to a syntactic error. As in “Would you like delicious something to eat?” The correct expression is “Would you

like something delicious to eat?” In Chinese, attributive modifiers are usually placed in front of the modified word, such as “delicious food”. In English, however, attributive positions can be prepositional or postpositional, when attributive words modify indefinite pronouns such as “something, anything”, they should be postpositional. However, under the influence of mother tongue and second language, students fail to realize such language differences and directly transfer the usage rules of mother tongue and second language, leading to the error of sentence word order, and the phenomenon of negative language transfer of mother tongue or second language appears.

It is also common for research subjects to write English sentences without predicates. For instance, some study candidates translates such a sentence as “He very hard want to try to do well everything” according to the Chinese meaning. Such translation shows that the students correspond English words to Chinese words one by one according to the Chinese meaning, completely ignoring the grammar rules of English. The sentence “he very hard” lacks the predicate, while “try to do well everything” is also translated one by one according to the Chinese word order, leading to the emergence of Chinglish. In Chinese or Zhuang dialect, the verb of some sentences does not have to appear, but the meaning makes sense. But in English, the predicate verb must be present in order to be grammatical. So the correct translation should be: “He worked very hard to try to do everything well.” Therefore, negative transfer of mother tongue or second language has a great impact on the third language acquisition.

English language uses relative pronouns: “that, which, who”, etc., or relative adverbs such as “when, where, how”, etc., to guide clauses to form complex sentences. This kind of syntactic structure can define the referent of the noun, provide supplement, explanation, or form some logical relation with the main clause. However, in traditional Chinese syntactic analysis system, there is no concept of clause, let alone relative clause. Influenced by Chinese, Zhuang language not only absorbs a lot of Chinese words, but also adopts some grammatical forms of Chinese. Therefore, there is no syntactic analysis system of relative clauses in Zhuang dialect. In the collected corpus, college students of Zhuang nationality would write such English sentences: “I lost you from the library borrowed book.” “She is I most liked student.” Such differences between languages, whether mother tongue or second language, often bring negative transfer to learners. Existing studies have shown that learners will try to avoid using error-prone syntactic structures.

In most cases the “dwg” indicating “yes” is not used in predication sentences in Zhuang language e.g. “Maoh gou hoengz” (my hat is red). Sometimes there is a “yes” in certain sentences in Chinese and sometimes not. In English, the form of “is” changes with the change of tense and person, such as “am, is, are, was, were” and so on. In the collected corpus, it is found that students write such sentences as: “I from Nanning.” “We very happy.” The above sentence may be mistakenly written under the influence of Zhuang language [9].

4 Implication and Conclusion

The results show that under the background of trilingual acquisition, both mother tongue-Zhuang language and Chinese have positive and negative transfer influence on English learning of college students of Zhuang nationality, and the negative transfer effect is

more obvious. College students of Zhuang nationality show some regular mistakes in pronunciation, vocabulary and syntax tense, word order, relative clauses andthetic judgment sentences. Therefore, in English teaching, it is necessary for teachers to understand the language learning background of students, classify and analyze the language mistakes that are prone to occur in some student groups, so as to make the teaching more targeted and improve the teaching effect. In the context of third language acquisition, in addition to comparing the third language with the second language, it is also necessary to compare the teaching of the third language with the first language-mother tongue, so as to achieve better teaching results.

Funding. A Study on Pragmatic Strategies of English Speech Acts of College Students of Guangxi Zhuang Nationality in the Context of Trilingual Acquisition (2021KY1701).

References

1. Bardovi-Harlig, K. 2003 Pragmatics and second language acquisition [A]. In R. B. Kaplan (ed.). *The Oxford Handbook of Applied Linguistics* [C]. Oxford: Oxford University Press, 2002: 182-192.
2. Bergman, M. & G. Kasper. Perception and performance in native and nonnative apology [A]. In G.Kasper & S. Blum-Kulka. (eds.). *Interlanguage Pragmatics* [C]. New York: Oxford University Press, 1993: 82-107.
3. Blum-Kulka, S., J. House & G. Kasper. *Cross-Cultural Pragmatics: Requests and Apologies* [C]. Norwood, NJ: Ablex, 1989.
4. Brown P & S. Levinson. *Politeness: some universals in Language* [M]. Cambridge: Cambridge University Press, 1987.
5. Conez, J. Hufeison. B. & Jessner, U., *Cross-linguistic Influence In Third Language Acquisition: Psycholinguistic perspectives* [M] Multilingual Matters Ltd. 2001.
6. Corder, S.P. *Idiosyncratic Dialects and Error Analysis*. [J]. *International Review of Applied Linguistics in Language Teaching*, 1971(9), pp.147-160
7. Grice. H. Paul. *Logic and Conversation* [M]. New York: Academic Press, 1975.
8. Leech G. *Principles of Pragmatics* [M]. London: Longman, 1983.
9. Cai Lei, *Language Transfer in Third Language Acquisition and Its Teaching Implication* [J]. *Journal of Hubei University of Education*, 2012 (5), pp.112-114.
10. Fengzhen Cai, Zhong Yang *A Study on the Influence of L2 (Chinese) on the L3 (English) Acquisition of Xinjiang Minority Students* [J]. *Foreign Languages and Their Teaching*, 2010(2), pp. 10-13.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

