A Study of Negative Transfer of Mother Tongue in English Majors' Writing

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Abstract—This paper, based on the theory of language transfer, aims to study the negative transfer of mother tongue in the English majors' writing as well as its reasons. With the aid of computer software aimwriting and manual checking, this study is conducted with the 47 writing samples from junior English majors from Northwestern Polytechnical University. The students' argumentative writings are chosen as samples for case study. The result of study shows that up to 70% of the students' errors are due to the negative transfer of mother tongue. The errors can be roughly categorized into three: vocabulary, syntax and morphology. The reasons for negative transfer of mother tongue can be ascribed to the lack of awareness of negative transfer of mother tongue, weak mastery of different characteristics between two languages and the lack of cross-cultural awareness. It is hoped that this paper could raise some people's attention to the negative transfer of mother tongue.

Index Terms—Negative transfer of mother tongue, English writing, reasons for errors.

I. INTRODUCTION

Among the five basic English skills--listening, speaking, reading, writing and translation, writing may be considered as the most complicated one for some Chinese students. By correcting the compositions of undergraduate English major students, we find that even if they have mastered a number of words and learned the English grammatical rules, they still have some troubles in expressing their views in writing. During recent years, many researchers have been engaged in the study of English writing and teaching mode. They play close attention to the influence of negative transfer of mother tongue in English writing. However, studies on English majors are still few. Therefore, this study aims to reveal the negative transfer of mother tongue in undergraduate English major students' writing and analyze the reasons caused by this phenomenon in English writing.

II. LITERATURE REVIEW

A. Language Transfer

Language transfer is a hot topic in the SLA (second language acquisition). Although experts and scholars have been concerned about the study of language transfer for a long time, it is still not easy to give it a precise definition. Some scholars think that language transfer is mother tongue interference. This view is derived from the Strong Version of Sapir-Whorf hypothesis in the Contrastive Analysis [1]. That

Manuscript received January 14, 2022; revised April 26, 2022.

is to say, the differences of two languages lead to the interference, and this interference makes foreign language learning difficult. The main obstacle for foreign language learning is the interference of mother tongue. By comparing the similarities and differences between two kinds of language structure, the language errors and difficulties of foreign language can be predicted. Other scholars believe that language transfer is turning to the native language knowledge. The so-called transfer is that learners turn to the native language knowledge when they lack of L2 (second language) knowledge in the communication in the process of foreign language acquisition. Language transfer is the influence resulting from similarities and differences between the target language and any other language that has been previously acquired [2].

B. The Types of Language Transfer

When the views of behaviorism occupy dominant position in the 1960s, language transfer is considered to be "interfference". As time goes by, researchers realize that language transfer does help for learners to learn a L2. According to the influence of mother tongue on L2 learning, language transfer can be divided into three types: positive transfer, negative transfer and zero transfer.

Positive transfer also means facilitation. It is a kind of transfer that native language or mother tongue helps to promote the TL (target language) learning in SLA. Therefore, positive transfer will facilitate the TL learning. Zero transfer refers to a situation that mother tongue has no impact on language learning. Negative transfer is known as interference. It means that the existing syntax structures or rules of native language influence or interfere the L2 learning, which leads to errors or inappropriate forms in TL [3].

C. The Negative Transfer of Mother Tongue

The concept of negative transfer of mother tongue is proposed in the Contrastive Analysis (CA) theory rising in the fifties of 20th century. The negative transfer of mother tongue refers to the grammatical structure or language principles of one language leading to some mistakes or inappropriate forms in the process of SLA. It may appear in various levels of linguistic structure, such as phonetic level, vocabulary level, syntax level and discourse level, etc.

Negative transfer cannot promote learners' foreign language learning, instead, to a certain extent, it hinders the new language acquisition. Thus, negative transfer is the mother tongue interference. Besides, it occurs in the cases when the two kinds of language learning tasks are both associated and different. Though people tend to equate negative transfer of mother tongue with "production errors", the speech acts of L2 learners and native language learners still have certain differences in other aspects, such as

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underproduction, overproduction and misinterpretation [4].

III. METHODOLOGY

A. Research Questions

This research intends to answer following three questions:

1) What's the proportion of negative transfer of mother tongue errors in English compositions written by English majors?

2) Which are aspects of errors produced by negative transfer of mother tongue by English majors?

3) What are the reasons for negative transfer of mother tongue in English majors' writing?

B. Research Subject

The research subjects are the junior English major students from Northwestern Polytechnical University. The students' writings are collected as samples, totally 47 compositions within the same topic. Students are required to finish this theme composition in a given period.

C. Research Instruments

1) COCA

COCA is one of the largest free online corpus, which contains more than one billion words of text from eight genres: spoken, fiction, popular magazines, newspapers, academic texts and so on. It can be used to examine whether our usage of words is idiomatic.

2) Aimwriting

Aimwriting is an online software that can automatically identify common errors such as vocabulary, collocation and grammar and give suggestions for modification. It is adopted to make up the deficiency of manual identification.

IV. RESULTS AND DISCUSSION

A. Global Description of Inter-lingual Errors

English writing could assess learners' competence from two factors: language and thought, so when these samples are analyzed, both language and thought are focused. But thought are usually involved in language, so language should be emphasized.

Errors	Category	Number	Percentage
Negative transfer errors	Lexis	61	35.47%
	Morphology	20	11.63%
	Syntax	33	19.19%
Errors from others		58	33.71%
Total		172	100%

TABLE I: INTER-LINGUAL ERRORS

As we can see from the Table I, the number and percentage of the negative transfer errors and the errors from other sources are shown that most errors caused by students are negative transfer errors. Since the former takes up 66.29% and the latter accounts for 33.71%, which reveals that the negative transfer errors influence students most and have been a big problem in students' writing.

B. Analysis of Lexical Errors

Lexis is the most basic unit in English writing as well as the maximum element appeared in negative transfer of mother tongue [5]. As is well-known, the words and phrases in Chinese and English are not equivalent, so lexical errors are classified in order to make the research clearer. Table II shows the specific relevant data.

TABLE II: LEXICAL ERRORS					
Types of errors	Number	Percentage			
Coinage	9	14.75%			
Confusion of word selection	32	52.45%			
Word collocation Errors	20	33.90%			
Total	61	100%			

1) Coinage

In English writing, students are unconsciously depend on their mother tongue to deliver their ideas when they do not know how to express in English words. Since there are some English words which are similar to Chinese translation, they take this special case for granted. Therefore, many coinage errors caused by students emerge in the TL. Some sentences as follows:

a) Sometimes, self-respect is not yourself feeling

In sentence (a), "你自己的感觉" should be translated into "your own feeling" or just "your feeling". This expression "yourself feeling" doesn't exist in English, so this is a coinage in lexical errors.

b) Confusion of word selection

Though it is easy for most students to remember the meaning and usage of some words or phrases, they are still confused that there are many errors about these simple words in their writing [6]. The reason is that they may not know the proper usage of these words clearly even if they remember many meanings of these words. Some sentences are listed as followed.

c) It invisibly lets people feel more self-respected

In sentence (1) "它无形中使人感到更加有自尊", it should be translated into English "it invisibly makes people feel more self-respected.

2) Word collocation

There are some regular collocations referring to some particular meanings as well as some institutional utterances, including verb phrase, adjective phrase, prepositional phrase etc [7]. But these usages are so tedious that some students are always confused. For example:

a) To love our family and be respect to our parents is the basic tenet

In this sentence, "respect" as a verb can be collocated with "to", so "respect to sb." is the right expression. If respect being an adjective, it should be "be respectful for" or "be respectful of". Therefore, this sentence can be corrected "To love our family and be respectful for our parents is the basic tenet."

C. Analysis of Morphology Errors

In this Table III, we can see from the data that students are inclined to be confused about the usage of verbs and nouns even if they learn them quite easily. When these simple units are used in concrete sentence, students are negligent in them so as to make many errors.

TABLE III: MORPHOLOGY ERRORS				
Type of morphology	Number	Percentage		
Verb morphology errors	10	50.00%		
Noun morphology errors	6	30.00%		
Tense errors	4	20.00%		
Total	20	100%		

TABLE III: MORPHOLOGY ERRO

3) Verb morphology errors

English verbs are classified into two kinds: finite verbs and non-finite verbs. Finite verbs are limited by the persons and numbers, while non-finite verbs are not. Because predicate verb belongs to finite verbs, so it will be changed according to the personal pronoun and the number in the sentence. However, the non-finite verb is not limited by the person and the number. In addition, there are three kinds of non-finite verbs: the infinitive verb, the participle and the gerund. Meanwhile participle can be divided into the present participle and the past participle. However, Chinese verb won't be changed no matter what the person or the number is and this verb is predicate verb or non-finite verb, but the morphological change determines the change of English verb. For example:

a) A man without family like drifting duckweed, he will inevitably feel lonel

In this sentence, "like" as a predicate verb should be limited by the person and the number. Besides, if the person is third person as well as singular, this predicate verb should be changed too. So this predicate verb "like" should be changed into "likes". Though there is another noun "family", we should be based on the noun in front of "without". Thus, the right sentence is "A man without family likes drifting duckweed, he will inevitably feel lonely."

4) Noun morphology errors

As for English, noun is divided into countable noun and uncountable noun, singular noun and plural noun. There are corresponding inflectional changes in these nouns. As is known to all, the article "a/an" is indefinite, and it is usually in front of the singular form of countable noun. The plural form of countable noun is changed by adding the inflectional suffixes "-s", "-es".

a) At that time, parents are the super hero in your heart In the example (a), "parents" means both father and mother, so it is a plural and a countable noun. Thus, the "hero" should be changed into the plural noun "heroes".

5) Tense errors

Tense is a kind of verb forms in English grammar, and different tense means different time and mood. It is the verb form of expressing behavior, action and state under the condition of various times [8]. While in Chinese grammar, the verb form doesn't have difference in the time of past, present and future. Because there is no relation between subject and verb to express the tense, the students are always confused about what tense should be used and how to change the corresponding form of the verb. Some examples as follows:

a) Actually, there are no people who didn't want to born in a loving family

In sentence (a), it consists of main clause and subordinate clause, and this subordinate clause modifies the object "people", so the tense of the subordinate clause should be consistent with the main clause. Thus, the correct sentence is "Actually, there are no people who do not want to born in a loving family".

D. Analysis of Syntax Errors

From the data of syntax errors in the Table IV, clause errors stand top accounting for 39.39%, while redundancy and fixed conjunction come last in number 5, about 15.15%. It indicates that students are so confused about complicated English clauses and various conjunctions that they usually apply Chinese thinking to express their ideas. English sentence attaches importance to form than Chinese sentence, so the students should make clear about the difference about them in order to avoid the negative transfer of mother tongue.

TABLE IV: SYNTAX ERRORS

Type of syntax	Number	Percentage
Redundancy	5	15.15%
Clause errors	13	39.39%
Run-on sentence	10	30.30%
Fixed conjunction	5	15.15%
Total	33	100%

1) Redundancy

Since thoughts and sentence forms between English and Chinese are distinctive each other, it is inevitable for students to use more words to express the same meaning, which exceeds what actually needs in the sentence (5). That is called "redundancy", and the primary reason that students commit such errors is that they are not familiar with the English words thoroughly. For example:

a) People have always behaved in a polite manner

In Chinese, students get used to expressing idea in complicated or even repeated words, but in English, people tend to make sentence simplified so as to delete the redundant words. In this sentence, "behave" and "manner" have the same meaning, and one of them can be seen as redundancy. Thus, "in a polite manner" should be corrected as "politely".

2) Clause errors

In English, there are three dominated clauses: the noun clauses (including the subject clause, object clause, predicative clause, and appositive clause), adjective clauses (attributive clause) and adverbial clauses (adverbial clause, including time, condition, result, purpose, cause, concessions, location, methods, etc.). However, Chinese is not so complex though it also has clause. There is big difference between Chinese and English clause, which makes students commit errors, and most of errors are due to the negative transfer of mother tongue. For example:

a) No sooner people had gotten what they needs than they felt self-respected

As for sentence (a), this is an adverbial clause of time seen from the time makers "no sooner...than...". And when using this conjunction, the sequence of subject and predicate should be noticed. The sentence after "no sooner" should apply inversion, that is, the subject and predicate should be inverted. Therefore, the correct sentence is "No sooner had people gotten what they needs than they felt self-respected".

3) Run-on sentence

If there are two or more simple sentences to express one idea in English, conjunctions must be used to connect these sentences [9]. This is the obvious characteristic of English: hypotaxis. While for Chinese simple sentences, the relation linked by semantic meaning, so Chinese sentence needn't use conjunction but many commas between them are proper. However, influenced by the habit of Chinese expression, a lot of run-on sentences are found in the students' English writing. For example:

a) You can come across someone, you can communicate with them, you can keep in touch with them, you connect with people around you inevitably

In sentence (a), there are four simple sentences should be linked, but it needs corresponding conjunctions to connect them, not commas. Thus, we should add conjunction to make it correct "you can come across someone, communicating with them, keeping in touch with them, then, you connect with people around you inevitably.

4) Fixed conjunction

In English grammar, some conjunctions are fixed and cannot be changed in any cases though other words can also express the same meaning. But when students write the composition, they usually forget this fixed conjunction but to use the wrong conjunction. Some examples as follows:

a) For one thing, man shouldn't live in others' expectations, also man should find his inside value and things he wants to do.

In sentence (a), just thinking about the semantic meaning, this sentence is not wrong. But in English grammar, the fixed conjunction "for one thing...also" doesn't exist. The only collocation with "for one thing" is "for another", so students cannot change the fixed conjunction casually though the semantic meaning is understandable.

E. The Reasons for Negative Transfer of Mother Tongue

Students are lack of awareness of negative transfer of mother tongue, and their English basic knowledge about English is not so sufficient [6], such as English vocabulary, which lead to coinage, word confusion and word collocation errors. Besides, there are many English teachers who are not very familiar with the negative transfer of mother tongue themselves. Even if most teachers know this concept and they are aware of the influences on students' English study, especially English writing, they do not have the consciousness of connecting this concept with English teaching.

The different characteristics of two languages make noun morphology, verb morphology and tense different, and these errors are due to different characteristics in two languages. If students learn English in a more natural environment, they may reduce the negative transfer errors.

Lacking cross-cultural awareness is an important factor which causes syntax errors [10]. Due to the excessive emphasis on the market economy, many English majors are more inclined to master English skills, ignoring the importance of language culture. In this case, it leads to the phenomenon that they cannot find appropriate topic in their communication, or even they cannot express their ideas correctly in writing. Because they usually resort to Chinese culture, so they write the whole words in English with Chinese culture, then make some errors, such as redundancy, sequence errors, run-on sentence and fixed conjunction. Although some students have a good grasp of English skills, if there is no extension of cultural knowledge about the target language, students will still feel very difficult in writing [11].

V. CONCLUSION

As we can see from the present investigation, students commit a lot of errors in the writing process because of negative transfer of mother tongue. Thus, the negative transfer of mother tongue has a great effect on students' English writing. Besides, the results of research also indicate that the negative transfer of mother tongue is an inevitable phenomenon in the process of SLA. What's more, students lack awareness of negative transfer of mother tongue and have insufficient English proficiency; students lack understanding characteristics of two languages; students lack cross-cultural awareness. Therefore, it is significant for our Chinese teachers to take some measures to deal with these reasons effectively, reducing or avoiding the negative influence in English teaching.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Jie Chen conducted the research, analyzed the data and wrote the paper in draft; Yi Zhang supported the research and gave many suggestions.

ACKNOWLEDGMENT

I would like to thank to Professor Yi Zhang, my supervisor in Northwestern Polytechnical University. She helped me ensure the research direction, revise the paper and give me spiritual and financial support to attend this conference.

REFERENCES

- S. P. Corder, "The significance of learners' errors," *International Review of Applied Linguistics*, vol. 4, pp. 161-170, July 1967.
- [2] H. Ellis, *The Transfer of Learning*, New fork: Macmillan, 1965, pp. 45-49.
- [3] H. Ellis, Understanding Second Language Acquisition, Oxford: Oxford University Press, 1985, pp. 67-72
- [4] S. Krashen and T. Tracy, *The Natural Approach*, Oxford: Pergamon Press, 1983, pp. 123-127.
- [5] L. Seiinker, "Language transfer," *General Linguistics*, vol. 9, pp. 67-92, Jan 1969.
- [6] L. Selinker, "Inter-language," *International Review of Applied Linguistics*, vol. 10, pp. 23-30, Jan 1972.
- [7] R. Lado, *Linguistics across Cultures*, Ann Arbor: University of Michigan Press, 1857, pp. 78-79.
- [8] B. Bhela, "Native language interference in learning a second language: Exploratory case studies of native language interference with target language usage," *International Education Journal*, vol. 1, pp. 1-16, July 1999.
- [9] T. Odlin, Language Transfer, Cambridge: Cambridge University Press, 1989, pp. 67-90.
- [10] L. F. Wang and Q. F. Wen, "Transfer of native language proficiency to L2 Writing," *Foreign Language Teaching and Research*, vol. 3, pp. 205-212, July, 2004.
- [11] Z. D. Zhu, "Negative transfer of Chinese in English writing," *Journal of Foreign Languages College of PLA*, vol. 4, pp. 3-5, May, 1999.

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