# **Interlanguage Fossilization in English Writing of English Majors**

# Liping Zhang<sup>a</sup>, Huan Zhang<sup>b</sup>, Huiru Nian<sup>c</sup>, Li Zhang<sup>d,\*</sup>

The School of Foreign Language Studies, Anhui Xinhua University, Hefei, Anhui, China <sup>a</sup>1939299379@qq.com, <sup>b</sup>2947169114@qq.com, <sup>c</sup>3075933084@qq.com, <sup>d</sup>33803526@qq.com \*Corresponding author

Abstract: Based on the theory of interlanguage and error analysis, this paper takes English majors as the research object, analyzes interlanguage fossilization in learners' English writing with the quantitative research method, in order to analyze the types and frequency of interlanguage fossilization in learners' English writings. The result shows that interlanguage fossilization does exist in sophomores of English majors, and some errors occur repeatedly, so this study aims to improve this phenomenon through Teaching English Writing.

Keywords: English Major, Interlanguage Fossilization, Error Analysis, English Writing

#### 1. Introduction

Interlanguage is a specific language system formed by second language learners in their second language learning. It's also a transitional language system between the first language and the target language. Fossilization in interlanguage is very common for second language learners. Learners need to constantly correct their mistakes in the learning process, so as to gradually make fewer mistakes and improve their foreign language learning level. In order to help English learners overcome the fossilization more effectively, this paper will take the students of English majors as the subjects of investigation. It will analyze the errors that students make in the writing process in the first semester of sophomore year, trying to find out the common problems of students, so as to help learners pay more attention on fossilization and improve their English writing ability.

# 2. Basic Theory

This paper takes the fossilization of interlanguage as the research topic. According to the theory of fossilization of interlanguage, interlanguage is a dynamic language system between the mother tongue and the target language formed by second language learners in the process of learning a second language. Interlanguage is the second language learners in the second language learning. The formation of a specific language system, the language system in the voice, vocabulary, grammar, pragmatics and so on are different from mother tongue and mother tongue. The target language, but as the learners continue to learn the target language, by a dynamic language system that gradually approaches the correct form of the target language. It is a transitional language system between the mother tongue and the target language [1].

This language system closely connects the mother language with the target language, featuring the characteristics of both the mother language and the target language [2]. However, after reaching a certain level, some features of the interlanguage used by many learners, such as grammar, syntax, and even pronunciation, show a state of stagnation and no longer change. This stagnation will be difficult to eliminate in the process of second language acquisition [3]. Second language learners need to pay much attention to fossilization in this process and summarize their own error types in order to improve their second language level.

In addition, this paper uses the theory of error analysis to analyze the research data. In 1967, Corder published a paper titled 'The Significance of Learner's Errors', which is considered the birth of error analysis theory [4]. It reflects the theories of psychology, linguistics, sociology, and their interdisciplinary combination. For error analysis, the analytical theory is an important aspect of foreign language learning theory [5]. When this study analyzes the students' samples, it will summarize and

conclude the types of errors by comparing the mother tongue and the target language, and further investigate on this basis.

## 3. Methods of the Survey

The subjects of this study are sophomores of English majors of Anhui Xinhua University. Sophomore students have strong learning ability and have accumulated some professional knowledge, and they are urgently need to constantly correct their common mistakes in the learning process to improve their professional level. Understanding interlanguage fossilization is very beneficial to improve students' foreign language learning ability.

The study uses the theory of interlanguage and error analysis, focusing on investigating the phenomenon of fossilization on the writing interlanguage of English majors. With the quantitative and qualitative research method, its research process is mainly divided into three parts. It will collect writing samples from pre-test writing, writing in between, and post-test writing at first, and then categorize the error statistics from writing samples in different kinds and periods. Finally, based on the collected and analyzed data, it will provide answers and suggestions for the following problems:

- (1) Does fossilization exist in the English writing of English majors?
- (2) What types of mistakes do English majors make in writing?
- (3) Can English majors effectively eliminate fossilization under the guidance of professional teaching?

#### 4. Results and Discussion

#### 4.1. Data Analysis of the Pre-test Writing

Table 1: Statistics of errors in pre-test writing

Error Categories	Error Samples	Error	Error
Error Categories	Enor Sumples	number	percentage
Misspelling errors	(i). (after) class I decided my stomach needed a little nourishment.	23	20.9%
Verb Errors	I decided to (ate) something	32	29%
Adjective & Adverb Errors	the most significant thing was to find a free (vacant) seat	5	4.5%
Article Errors	In (a) instant	6	5.5%
Preposition Errors	When he finally (arrived) there.	8	7.3%
Noun Errors	who like to play with mobile (phone)	7	6.4%
Pronoun Errors	(People) entered the dining hall and smiled happily.	5	4.5%
Chinglish	eat with my (plate)	17	15.5%
Because many people use the campus network in the canteen, the signal is too poor, (so) students who~		2	1.8%
Ingredient Missing	looking down at my phone (to) kill the time	5	4.5%

According to the Table 1, it can be found 110 mistakes in students' first writing. With the continuous input of language, it is indeed possible to move closer to the target language in the process of language learning. Even so, it is still difficult to achieve the full sense of the target language [6]. Misspelling errors and verb errors accounted for the highest proportion of the total number of mistakes. Collocation is one of the most important research contents in the field of linguistics, and CLEC (Chinese English Learner Corpus) data show that verb-noun collocation errors occur most frequently among all collocation errors [7]. By consulting students' writing samples, the study can see that students are still not careful enough about word spelling and the case of unique words in the actual writing process. Most of them are influenced by the mother tongue. Learners often apply the knowledge of vocabulary, pragmatics, grammar and syntax in their mother tongue to the context of the target language. Mother tongue transfer will hinder the learning of new knowledge and become negative transfer, leading to the formation of interlanguage fossilization [8]. If students ignore that the rules of target language and source language are not consistent, Chinglish will be formed and the

fossilization of interlanguage will be deepened. The proportion of mistakes in the use of prepositions reached 7.3%. Fossilization is very common during student's English writing. The study finds that when students use prepositions, they mainly add prepositions before some adverbs, use prepositions wrongly, and even mix prepositions. Misuse of nouns accounted for 6.4%. Students mainly used nouns incorrectly, paying no attention to special vocabulary in English and singular and plural nouns. Article errors accounted for 5.5% of the total errors. Article mistakes are due to students' poor daily accumulation, which leads to memory deviation and mistakes. The proportion of missing ingredients also reached 4.5%. Adjective & adverb use errors and pronoun errors accounted for a relatively small proportion, which means the phenomena of interlanguage fossilization has been improved.

When learning a second language, the practical ability of the second language also has a great influence on fossilization. For example, due to the restriction of exam-oriented education, English teaching in China often pays attention to students' written test ability, which leads to poor language expression ability and serious fossilization of second language [9]. For language learners, when the new language rules have not been fully digested and absorbed (internalized), learners will naturally produce sentences that do not conform to the language norms according to the existing language knowledge and creative ability in the brain. This is language error, and this language phenomenon is inevitable [10].

### 4.2. Data Analysis of the Writing between Pre-test and Post-test

Error Categories	Error Samples	Error Number	Error Percentage
Pronoun use errors	people will resist others touching (our) bodies instinctively despite that they don't mean to do that	8	9.5%
Noun use errors	or a mental invasion of (eye-contacts)	3	3.5%
Preposition use errors	Invasion of personal space can be caused not only by physical factors, but also through (by) sensory factors, such as smell and unwanted eye contact.		3.5%
Misspelling errors	It was first used by (Kuith) in 1962,	6	7.1%
Ingredient missing	This boundary is primarily(for) protection		17.9%
Verb use errors	many parents (enters) their children's rooms		19%
Chinglish	And about personal space		17.9%
Adjective &Adverb use errors	when people enter your (person) space	5	6%
Subject-verb agreement error	When this personal space is violated, people (feel) uncomfortable, Insecure and even irritated.	2	2.4%
Article errors	Whether it is contactable invasion or non-contactable invasion of personal space,	6	7.1%
Conjunction errors	Such as, the personal space of the Japanese is relatively small,		6%

Table 2: Data Analysis of the Writing between Pre-test and Post-test

According to the Table 2, interlanguage fossilization was alleviated relatively. The total number of mistakes made by students this time decreased from 110 to 84. However, in the process of error collection, the study found that influenced by the references given by teachers, many students extracted professional terms directly and imitated sentence patterns.

The study found that the proportion of missing components and Chinglish mistakes was the highest and both were 17.9%. This phenomenon is mainly because Chinese learners and native speakers of English have different cultural backgrounds and ways of thinking. Therefore, Chinese students will be more or less affected by the negative transfer of Chinese in the process of learning English, and make various mistakes[11]. Spelling mistakes and article use mistakes accounted for 7.1%. Errors in noun use accounted for 3.5%, adjectives and adverbs 6%, and prepositions 3.5%. By analyzing the samples, the study found that students still lack a good grasp of the parts of speech of various words, which means the fossilization still hindered their improving of English writing. The incorrect use rate of verbs was 19%. Although the teacher constantly emphasized the deformation of verbs in class, students still exposed many problems, such as past tense and past participle deformation. Pragmatic fossilization is

mainly manifested in the rigid use of language, too rigid, and even improper use of errors [12]. Subject-verb agreement also exposed many problems in this analysis. Conjunctions, pronouns and prepositions accounted for 6%, 9.5% and 3.5% of the students' sample errors, because Chinese vocabulary and English vocabulary do not exactly correspond, but rather roughly correspond, and there are significant differences in word order between the two languages [13]. For example, 'such as' cannot be used as an independent component in English, but in Chinese it means the same as' for example' and can be inserted freely in sentences. Some students may experience psychological projection when learning English, believing that the usage in Chinese can also be extended to English. Therefore, they do not consider the fact that the part of speech and form of words may also change due to different meanings expressed in English, which makes them susceptible to interference from their mother tongue and the phenomenon of misuse of part of speech [14].

#### 4.3. Data Analysis of the Post-test Writing

Error Error **Error Categories** Error Samples Percentage Number (%)Misspelling Errors (every one's) personal space 3.5 Verb Errors 54 37.8 because they used to (grew) up. Adjective & Adverb The more (further) he walked inside 11 7.7 Errors when we are in (a) extraordinarily Article Errors 8 5.6 crowded and rumbustious environment. In general, the space invasion can be 14 Preposition Errors 9.8 divided (in) two different parts. Noun Errors 1. The kitchen (staffs)... 9 6.3 people will resist others touching (our) **Pronoun Errors** 8 5.6 bodies instinctively they suddenly (takes) a small step closer Subject Predicate 10 7.0 Agreement Errors to you we quickly chose a line which didn't look Chinglish 20 14.0 (spend) very long time Conjunction Errors but also (through) sensory factors, 0.7 it will lead other people (to) produce **Ingredient Missing** 5.6

Table 3: Data Analysis of the post-test Writing

According to the Table 3, after counting the errors in the last writing, the study found that there were still many errors that students failed to avoid in the process of writing. Among these errors, the most common error students made was verb error, up to 37.8%. The study found that most students still confused the past tense, present tense and future tense, which shows that although tense is the most basic grammatical knowledge, many students are still unable to use it correctly. How to use the verb tense correctly should become the primary focus of students. The percentage of Chinglish and preposition errors reached 14% and 9.8% respectively, ranking second and third in the total errors. This shows that students have memory bias about collocation of words and typical Chinese-style thinking about writing, leading to many confused orders in their compositions. From the perspective of discourse, influenced by the negative transfer of Chinese, some students 'English compositions are still in accordance with the Chinese writing mode. When expressing their views, they like to turn around and not be able to put forward their views openly [15]. Adjective & Adverb errors and subject predicate agreement errors showed the confusion of singular and plural, which accounted for the majority of the total errors. Due to the interference of mother tongue, Chinese learners tend to directly convert Chinese into English when using adverb / adjective collocations, resulting in unauthentic expressions that do not conform to the norms of the native language. The native language norms.

The proportion of connection errors decreased significantly, with only one error. It showed that students were aware of how to use conjunctions correctly and became more proficient. However, students still had major problems in the use of pronouns, articles and nouns, and there were still errors and omissions in the use of words. This is still the problem of students' weak memory of words, which requires students to consolidate their foundation of vocabulary. Learners should use the original English materials as the source of language information, pay attention to the use of words in specific contexts and the idiomatic expression of sentences, improve cultural awareness and cultivate English thinking habits. The spelling of words is the basis of writing. Students should pay more attention to it.

When the target language learners reach a certain level of language proficiency, in ensuring their normal contact with the target language, they should appropriately improve the quality of the target language input, be interesting, diversify the language materials, and gradually increase the difficulty.

# 4.4. Contrast of the Errors in Writing Samples

Table 4: Contrast of Error in Writing Samples

Error Categories	Error Number			Error Percentage (%)		
	Statistics of errors in pre-test writing	Statistics of errors in writing between	Statistics of errors in post-test writing	Statistics of errors in pre-test writing	Statistics of errors in writing between	Statistics of errors in post-test writing
Misspelling Errors	23	8	5	20.9	9.5	3.5
Verb Errors	32	3	54	29	3.5	37.8
Adjective & Adverb Errors	5	3	11	4.5	3.5	7.7
Article Errors	6	6	8	5.5	7.1	5.6
Preposition Errors	8	15	14	7.3	17.9	9.8
Noun Errors	7	16	9	6.4	19	6.3
Pronoun Errors	5	15	8	4.5	17.9	5.6
Subject-verb Agreement Errors	0	5	10	0	6	7.0
Chinglish	17	2	20	15.5	2.4	14.0
Conjunction Errors	2	6	1	1.8	7.1	0.7

According to the Table 4, the number of errors dropped from 110 at the beginning to 84 in the middle of the semester, and then increased to 143 by the end of the semester.

The number of mistakes in Pre-test writing decreased significantly, especially the spelling and verb errors, dropping from 23 to 8 and 32 to 3 respectively, which was caused by the sentence patterns from references that many students extracted and imitated and students consciously revised through the teacher's emphasis in class. Although gerund errors and Chinglish errors had decreased correspondingly, they still occupied a large proportion in the overall population, which was embodied in sentence order, the use of verbs and prepositions in compositions. The use of adverbs and articles was still a difficulty for students with the same number of mistakes. The number of subject-verb agreement errors increased from 0 to 2 in Pre-test writing, and the number of missing components increased to 15. It can be seen that students' basic skills are not solid enough and their understanding of all kinds of long and difficult sentences is not thorough enough. The number of noun pronoun and preposition errors also showed an increasing trend in Pre-test writing, which indicates that students have difficulty in grasping the context and need to practice the use of these words.

Due to the influence of online courses in Statistics of errors in post-test writing, the number of errors has increased significantly, from 84 between Pre-test and Post-test writing to 143 in Post-test writing, which also increased by 33 errors in the whole semester. The following errors have significantly increased. Verb tense errors were the most prominent, surging from 3 in November to 54, which indicated that students were not aware of their own tense errors, so they did not make changes and repeated the same mistakes. Adjective & adverb use errors, article use errors, preposition use errors, noun use errors, pronoun use errors, subject-verb agreement error, Chinglish, and ingredient missing all increased. The study observed the students' compositions and found that many of these errors have been existing and never be corrected, which also for they did not realize the errors and their ambiguity in the use of various words. Although the number of errors was on the rise, compared with the number of errors in Pre-test writing, the number of preposition use errors, noun use errors, pronoun use errors and conjunction error has declined. This shows that these errors are not stubborn and unsolvable, and students need to constantly remind themselves and pay attention to the use of words in the writing process.

In addition, the phenomenon of fossilization is also manifested as permanent fossilization and temporary fossilization. Among them, temporary fossilization refers to the short duration of fossilization, generally not more than 5 years, and through effective input, temporary fossilization can be improved. Permanent fossilization refers to the petrochemical time is longer, more than 5 years, or even a lifetime. Permanent fossilization often lacks effective input. Because the errors in language expression are not corrected in time, this phenomenon persists forever [16].

It is a complex process to understand the phenomenon of fossilization and find out its causes, but only through this complex process can we correctly handle the problems caused by fossilization [17].

#### 5. Conclusion

In order to find out whether interlanguage is common among English majors, we take the writing samples of English majors as the research object, and make statistics on the types and proportions of errors in their writing samples in different periods, and draw the following conclusions.

First, interlanguage fossilization does exist in English majors. Students make such mistakes unconsciously in their writing. After a semester of writing practice, some mistakes are reduced while the number of some errors has an upward trend. This also shows that students will ignore mistakes in the process of second language acquisition when they don't realize fossilization of the interlanguage language. When language learning enters a stable period, if we cannot analyze the causes of stable errors and take timely measures to improve them, the stable period lasting for 2 to 5 years will form petrification (Selinker, 1989) [18].

Secondly, fossilization is manifested as 11 types of errors in our analysis of student' writing samples. Chinglish, component missing and verb misuse are the three most common types of errors. After a semester of writing, students still make mistakes frequently. Therefore, for students, they should pay more attention to the cognition and correction of these three types of errors; for educators, they should realize positive emotional feedback enables learners to develop a positive mentality, enhance learning interest, and help prevent fossilization; negative cognitive feedback is mainly transmitted through language forms, which helps learners correct language errors and avoid fossilization[19].

Thirdly, English majors lack knowledge of fossilization, which may hinder them to eliminate fossilization. In the process of transforming their mother tongue into the target language, they can't clearly understand the differences of language rules, which lead to frequent mistakes. Therefore, students should know more about the accumulation of language rules and fossilization in their daily accumulation.

Finally, there are still some shortcomings in this study and the results. First of all, from an objective point of view, one semester is still relatively short compared with the lifelong language learning process of language learners. Secondly, this study only selects three classes of English majors for analysis, so the research objects are not sufficient. In addition, during the semester, due to the epidemic situation, students studied online instead of offline, which may affect the classroom effect. The error rate of students fluctuates greatly, resulting in a large deviation of the analyzed data, which cannot objectively and accurately reflect the students' real writing level. The shortcomings and limitations of this study also provide some reference for further research and investigators.

#### Acknowledgments

This research was supported by Anhui Xinhua University 2022 Provincial Student Innovation Training Program: Interlanguage Fossilization in English Writing of English Majors (Project Number: S202212216159); 2022-2023 Anhui Xinhua University "School-based Research Project" (No. 2022xbxm007); 2022 Anhui Xinhua University "English Writing" Teaching Reform Demonstration Course (No. 2022jgkc02); 2021 Anhui Province Quality Engineering Project "English Writing" Online Course (No. 2021xskc033).

#### References

[1] Li Zhong. (2018). The Causes and Countermeasures of Fossilization in Interlanguage. Journal of Jilin Provincial Institute of Education, 34(08):178-180.

[2] Wu Ding. (2001). Interlanguage and Its Fossilization in the Acquisition of Second Language.

Foreign Language Teaching. 02:17-22

- [3] Zhang Yajuan, Xu Zejin, Sun Qiushuo. (2019). A Study on the Fossilization of Interlanguage in English Writing of Non English Majors: A Case Study of an Engineering College in Beijing. Modernization of Education, 6(87):249-252.
- [4] Li Li. (2003). Error Analysis Theory and Learners' First Language Conversion Strategies. Journal of Henan University (Social Sciences Edition), (01):90-92.
- [5] Dai Zhongxin. (1998). Error Analysis Theory in Foreign Language Learning. Foreign Language Teaching in Shandong, (01):60-65.
- [6] Xu Jin. (2015). The enlightenment of interlanguage fossilization on college English teaching. Industry and Technology Forum, 14 (02):181-182.
- [7] Zhang Xuemei, Tan Fang. (2021). A Study of Verb-Noun Collocation Errors in English Writing A Case Study of Non-English Majors ' Compositions. Overseas English, (16):105-107.
- [8] Gu Qianbing. (2019). An Analysis of Interlanguage Fossilization and Its Implications for Business English Writing Teaching. Overseas English, (19):230-231.
- [9] Han Dan. (2016). Research on fossilization of Interlanguage. Journal of Kaifeng Institute of Education, 36(12):42-43.
- [10] Li Junyan. (2014). The causes and countermeasures of interlanguage fossilization in college students 'writing. Journal of Hechi University, 34 (06):110-113.
- [11] Zhang Mei. (2022). Research on the Impact and Countermeasures of Negative Transfer of Mother Tongue on College Students' English Writing. English Square, (31):35-39.
- [12] Zhu Qingju. (2013). An Overview of Interlanguage Fossilization. Journal of Chinese Literature (Foreign Language Education and Teaching), 440 (06):3-4.
- [13] He Jianzhen, Yang Lu, Gu Guangming. (2022). Analysis of the Impact of Chunk Teaching Method on Negative Transfer of Mother Tongue in College English Writing. Overseas English, (16):78-79.
- [14] Song Can. (2019). The impact of negative transfer of mother tongue on college students' English writing. Overseas English, (24):81-82.
- [15] Liu Zhicheng. (2014). Causes and Countermeasures of Interlanguage Fossilization in English. Journal of Kunming Metallurgy College, 30 (02):71-75 + 80.
- [16] Zhang Xiaohui. (2006). Interlanguage fossilization and its countermeasures. Journal of Harbin University of Commerce (Social Sciences), (02):124-125 + 128.
- [17] Guo Ying. (2009). The causes and countermeasures of interlanguage fossilization. Journal of Changchun University, 19 (12):107-108.
- [18] Wang Lixia. (2020). Kissinger Effect: Rethinking the Petrification of Interlanguage. English Square, (05):24-27.
- [19] Liu Bei. (2017). Analysis of the Causes of Interlanguage Fossilization and Its Implications for Second Language Acquisition. Journal of Mudan River University, 26 (06):40-42.