Exploring the Influence of L1 Chinese on L2 English Acquisition

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Abstract: The impact of L1 Chinese on L2 English acquisition has received more attention as more Chinese students study English as a second language. This paper reviews previous research on Second Language Acquisition (SLA) and introduces some factors that can influence language transfer. The writers focus on three linguistic aspects, syntax, lexicon, and phonology, to explore how English as Second Language (ESL) learners' L1 Chinese has influenced their English acquisitions. Results found that: 1) Syntax: The syntax structure includes many factors influencing Chinese learners' English acquisition, such as subjects, verbs, and adverbs. English requires an issue while Chinese tend to omit the subject; English has a verb conjugation system while Chinese does not; and English adverbs can be placed in different positions according to the type while Chinese adverbs are mainly set in the middle; 2) Lexicon: Lexical errors may occur when ESL learners may make errors when they meet the differences in linguistic features such as polysemy, part of speech and word collocations between the two languages.; 3) Phonology: As Chinese is a tonal language and English is a non-tonal language, their tones of phonology are, to some extent, different, which might cause ESL learners confusion. These features of Chinese and English differ, and how these disparities have prevented positive language transfer from Chinese to English is explored. As a result, this study can inform second language instructors of the distinctions between the two languages and offer resources for future instruction of ESL students.

Keywords: language transfer, syntax, lexicon, phonology, L1, L2, second language acquisition

1. Introduction

SLA is the process by which people learn languages other than their native tongue(s). A more straightforward way to explain SLA is that, just as a second language is the standard term for any language whose acquisition starts after early childhood, including what is chronologically the third or subsequent language, SLA is the acquisition of any language other than the mother tongue(s). The language to be learned is often called the "target language" or "L2."

To objectively describe and scientifically explain learners' language and communication

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capacities, SLA, a significant subfield of applied linguistics, investigates the course of learning a second language and its results. Early theories of second language acquisition emerged to raise educational standards and were subordinate to pedagogy [1-2]. Current research on second language acquisition consists of three main areas: research on the interlanguage, factors internal to the learner, and factors external to the learner [3-5]. With the many research and review papers on SLA throughout time, it is noticeable that all these factors have a significant impact on SLA, including the external aspects of the learning environment, the role of social factors and inputs/interactions, along with the internal elements of language transfer, cognitive explanations, and language universals. One of the most important internal factors is a person's first language (L1). The influence of L1 on L2 is mainly embodied in both the negative language transfer and the positive language transfer, which are all subordinate to language transfer. Negative language transfer is when incorrect, unsuitable, or inconsistent linguistic characteristics from the L1 are transferred to the L2. In contrast, positive transfer happens when some L1 features are comparable to or compatible with L2 characteristics [6-7].

In terms of the organization of this review, it mainly focuses on how language transfer influences the three features of L1 and L2 (i.e., syntax, lexicon, and phonology), and where it applies to SLA. The body part is divided into three parts accordingly.

2. The Influence on L2 Acquisition

2.1. Syntax

The interaction between L1 and L2 in SLA is significantly influenced by syntax. Different syntax patterns between the two languages, such as sentence structure, word choice, grammar, and relative clauses, might affect positive and negative transfers from L1 to L2. Most L1 transfer in SLA is negative when L1 and L2 have different syntactic structures; positive transfer occurs when L1 and L2 have closely related syntax structures. The fewer linguistic properties shared by two languages, the tendency of L1 influence is more likely to be negative [6,8]. In most cases, the transfer tends to be negative.

2.1.1. Subjects

To begin with, the differences in subjects can result in a negative transfer from Chinese to English [7-8]. According to the Chinese way of thought, "People are the main subject for most sentences." As a result, when speaking Chinese, the person performing the activity, who frequently assumes the role of a subject, must often be named. The issue is commonly left out of sentences when apparent and presumed, leading to many subject-omitted statements and sentences without a topic. On the other hand, according to Shi, English is characterized by hypotaxis, which means syntax is closely bound up with punctuation and other typographical devices [7]. Some English sentences cannot be without a subject, so when Chinese people learn English, they tend to omit the subject, causing a usage mistake. This is a kind of negative transfer from L1 to L2. For instance, in a sample sentence of "没时间参加那个会议" in Chinese, since they know the subject is clearly "我(I)", they omit it because this sentence can still express precisely what it means without any ambiguity. Because of this Chinese habit, some people say, "Have no time to attend the meeting." to others, as the English version of this sentence, the correct one should be "I don't have time to attend the meeting." In another example provided by Shi, the Chinese often say "有空就来吧" to the listener, omitting the "你(you)". English learners translate it into "When have time, come to visit me" when they want to express this invitation, but the correct form should be "When you have time, please come to visit me." [7] Finally, in an example of a sentence without a subject, "去年修建了一座大楼", learners

tend to produce a sentence like "Last year constructed a building". This is an incorrect sentence in English expression as there is no subject, and it is not a passive sentence. Since the Chinese version is not an issue, the best way to express this meaning is to turn it into a passive sentence: "Last year, a building was constructed."

2.1.2. Adverbs

Adverbs are also an important part of syntax structure. They are words that characterize actions or states in a sentence and are used to modify verbs, adjectives, other adverbs, or full sentences to indicate concepts such as time, place, degree, and manner. The placement of adverbs differs between various languages. In English, the adverb can be placed at the front, in the middle, or at the end of the sentence according to the type of the adverb, in contrast to Chinese, where the adverb is mainly positioned in the middle, right before the verbs or the adjectives [7,9].

In one example, in a Chinese sentence like "她在优雅地跳舞", the adverb "优雅地(elegantly)" is placed before the verb "跳舞(dancing)". With this language expression habit, people may state the English version in the same word order: "She is elegantly dancing". But as a manner, the adverb "elegantly" should be placed after the verb. Hence, the correct form should be: "She is dancing elegantly." The sentence "我将要在那里度过我的余生" is also an example where the adverb is placed before the verb. "那里(there)" is a location adverb in this sentence. The literal translation of this Chinese sentence is "I am going to spend the rest of my life." This is an incorrect sentence, as the adverb should not be placed before the verb, and the preposition should not be placed before an adverb. The ruling in English should be, "I am going to spend the rest of my life there".

2.1.3. Verbs

Verbs in different languages vary significantly in how they are inflected and their positions in a sentence. In Chinese and English, the parts of verbs are always after the subject, with presence as the predicate. The main difference between them is the verb conjugation system. English verbs greatly value conveying clarity and precision, while Chinese verbs are more vaguely presented. To be more precise, English has a complex system of verb conjugation that includes various tenses such as past, present, and future, progressive, perfect, and perfect progressive, and one to third person singular/plural forms such as "I", "you", "she/he/it" and "they". These changes correspond to the suffixes inflected with -ed, and -ing, as well as the verb changes. On the contrary, Chinese is not inflected in any way, no matter the tenses. The only way to represent different timelines more apparent is by adding specific words that indicate time to a present tense sentence, such as "昨天 (yesterday)", "两天后(two days later)", or "已经(already)".

As a result, Chinese speakers who acquire English are more prone to forget or be perplexed by altering the verb tenses, particularly the complex and comparable tenses. In a sentence like "他昨天终于收到了期盼已久的礼物(Yesterday he finally got the gift he had been expecting)", the tense is supposed to be past perfect progressive, as it is a statement about something that already happened – getting the gift, and something the subject had been doing continuously before achieving – expecting. But with a Chinese speaker, there is a chance that they only grasp the word "昨天 (yesterday)" which indicates the past, and the dynamic verb "期待(expect+ -ing)" which indicates continuous action. In this way, the sentence translated into English would be a past progressive sentence: "Yesterday he finally got the gift he was expecting". The original sentence means that he had been waiting and expecting the gift for a very long and continuous time before he got the talent in the past time. The process of expecting started long before the present and ended when he received one. But the incorrect translation with the past progressive form cannot express the

meaning of started before and ended with the achievement. Instead, it can only describe the importance of continuing for a period, but no exact starting or ending point.

2.2. Lexicon

Another vast difference between Chinese and English lies in the lexicon, an essential part of Second Language Acquisition. English as a Second Language learners cannot avoid making lexical errors, and L1 negative transfer is one of the critical reasons [10-11]. The writers will list several main types of negative language transfer from Chinese to English in the following section.

2.2.1. Polysemy

Some ESL students will assume that every Chinese term has an English equivalent and is always found in pairs in the two languages [12]. However, it can be observed that there is no symmetry between Chinese and English vocabulary. A Chinese term might have several English equivalents in various contexts, known as "polysemy". Polysemy refers to the phenomenon that a word or a phrase is associated with two or several possible meanings [13]. A good example is "看" in Chinese, which can refer to "look", "watch", "see", "read", "visit," and other meanings in English. Chinese people will say "看书" a lot, whose direct translation in English will be "look/watch/see the book", while the correct expression in English should be "read book". Besides, in China, people will also use "看" to express the meaning of "visit". For instance, "看朋友" means "visit a friend," but it is equivalent to "watch/sees a friend" if translated without considering the context [6]. In such a situation, mistaken use of vocabulary will happen because the expressions in Chinese and English do not always have one-to-one correspondence. Therefore, this phenomenon be considered a negative language transfer.

2.2.2. Part of Speech

In Chinese and English, many parts of speech exist, including nouns, verbs, adjectives, and adverbs. However, there are some differences between how the two languages categorize vocabulary [7]. For instance, the word "home" in Chinese is "," which is a noun, whereas in English, "home" is both a noun and an adverb. "回家" is frequently used in Chinese, referring to "go home" in English. People who master these two languages will know "家" is a noun and "home" is an adverb. However, beginners may translate "回家" into "go home" if unclear about the word classification. They may believe that "家" and "home" belong to the same word category based on their knowledge of the Chinese language [7].

2.2.3. Word Collocations

Word collations in English are tricky for ESL learners because many collocations in Chinese do not seem to make sense in English and cannot be used together. This is because the language habits of the two languages are different. However, many Chinese ESL learners will ignore these differences and organize English words like in Chinese [7]. For instance, the literal translation of "休息室" is "rest room," whereas "rest room" refers to a different place - washroom/toilet. The correct expression of "休息室" should be "sitting room". Likely, a beginner will translate Chinese into English due to their Chinese language habits [11]. Many lexical blunders are likely to occur if English collocations are not understood.

2.3. Phonology

The phonological systems of English and Chinese are two separate languages. Chinese is a tonal language, whereas English is not, which is a significant distinction between the two languages. According to the International Phonetic Alphabet for English and the Chinese Pinyin Alphabet, it is noticeable that each phonetic symbol in Chinese can correspond to a particular Chinese character(such as "b" 与, 玻 bo, "p" 女, 坡 po, "g" 〈〈, 哥 ge). Still, each phonetic symbol in English has almost no way to correspond to a complete English word, which means that in Chinese, people tend to extend the pronunciation of a consonant longer than in English, thus resulting in a false.

2.3.1. Similarities and Differences Between English and Chinese Phonemes

There are several similarities among the phonetic systems used in human language. Most languages have similar vocal equipment and have vowels and consonants. In this sense, there are many places where English and Chinese pronunciations are comparable. Both languages have a bilabial, labiodental, problematic tooth, and soft tooth sounds in terms of components. There are 48 phonemes in English and 44 in Chinese. Some phonemes in the two languages are the same, and some are different. Not two phonetics are the same in English and Chinese, whether they have the same phonetic alphabet or not. There are some fundamental differences between the two languages.

A helpful language feature is "tension" or "slack." The "tension" feature is produced by a more extended range of resonating cavities when it occurs; "Relaxation" results from a shorter resonator. "Tension" is the result of more significant changes in vocal organs. Relaxation has little change in the vocal organs. Most phonemes in English are characterized by "tension", while Chinese phonemes are generally characterized by "relaxation." As a result, English is somewhat of a "nervous" language in terms of phonetics, whereas Chinese is a more "relaxing" language.

The main difference between English and Chinese, in terms of vowels, also results from the absence of back vowels in Chinese, which necessitates a significant adjustment to the pronouncing organ. The a, e, and u in Pinyin are not precisely the back vowels, and there is a fundamental difference between the back vowels $\frac{\langle u \rangle}{\langle v \rangle}$ and $\frac{\langle u \rangle}{\langle v \rangle}$ and $\frac{\langle u \rangle}{\langle u \rangle}$ in English.

3. Conclusion

To conclude, this paper reviews many relevant studies and provides examples of the possible misuse of English as an L2 by people who natively speak Chinese as an L1. In the process of SLA, L1 is an essential basis for language study. It is the only language people use daily before learning a new one other than their mother tongue, so all the factors in L1, regardless of whether similar to that in L2 or different from that in L2, can significantly impact the acquisition of L2. It is noted that these factors can either help people learn L2 or cause problems in learning L2, depending on whether the language transfer is positive or negative. The paper compared the difference between the structures of the three factors in L1 and L2, then introduced the language transfer (mainly negative transfer) that influences the syntax, lexicon, and phonology aspects of L1 and L2.

Therefore, it can be concluded that negative transfer often results in a negative effect on SLA. Language teachers should provide students with strategies to learn L2 to reduce incorrect usage due to the negative transfer. Systematically learning the difference between different languages first may help to decrease errors. Nevertheless, the influence of L1 on L2 cannot be eliminated, and it universally exists. The research in the field of SLA and the impact of L1 on L2 acquisition will continue to move on.

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References

- [1] Tian, F. J., Liu, H. W. (2016). The application of Krashen's second language acquisition theory in college English teaching. Modern Communication, (08), 207.
- [2] Chen, S. Y. (2016). The influence of mother tongue on second language acquisition in English language teaching. Journal of Jiamusi Vocational College, (08), 294.
- [3] Ji, J. (2022). An overview of second language acquisition research in the principles and parameters framework. Modern Linguistics, 10(2): 237-243.
- [4] Sun, X., Zhu, S. L. (2015). A comparative review of Chinese second language acquisition and English second language acquisition research in China. Language Education, (02), 40-45.
- [5] Epstein, S., Flynn, S., Martohardjono, G. (1996). Second language acquisition: Theoretical and experimental issues in contemporary research. Behavioural and Brain Sciences, 19(4), 677-714.
- [6] Wang, Z. (2014). Review of the Influence of L1 in L2 Acquisition. Studies in Literature and Language, 9(2), 57-60.
- [7] Shi, W. (2015). Types of negative Chinese transfer to English learning and the countermeasures—theory, and Practice in Language Studies, 5(6), 1226.
- [8] Islam, S. M. (2020). L1 Interference in the Acquisition of English Syntax and Lexis. Journal of Education and Social Sciences, 15(1), 56-70.
- [9] Zhang, Z. H. (2010). The syntactic positions of adverbs and the Second Language Acquisition. Teaching English in China and the United States: English Edition, 7(9), 7.
- [10] Zhai, H. (2009). On the Influence of Native Language Transfer in Second Language Acquisition. Journal of Chaohu College, 11(5), 99-102.
- [11] Wu, M. (2004). Negative Transfer in Vocabulary. Journal of Jiangsu Teachers University of Technology, 10(1), 61-66.
- [12] Yang, X. (2019). A review of negative language transfer regarding the errors in English writing in Chinese colleges. Journal of Language Teaching and Research, 10(3), 603-609.
- [13] Ravin, Y., & Leacock, C. (2000). Polysemy: an overview. Polysemy: Theoretical and computational approaches, 1-29.