

# The Differences in Thinking between First-Language Learners and Second-Language Learners

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## Abstract:

This paper explores the differences in thinking between first-language and second-language learners by analyzing the differences in thinking between first-language and second-language learners from three aspects: language intuition, cultural background, and language use. This paper's method mainly uses comprehensive analysis from the perspectives of linguistics and psychology and combines some relevant literature and research. The results suggest that these differences in thinking give first-language learners an advantage over second-language learners in learning language, which can provide some pedagogical implications for providing some reasons and suggestions for second-language learners.

**Keywords:** SLA; First language acquisition; Differences in thinking.

## 1. Introduction

Nowadays, as the world continues to open up, more and more first-language learners (L1 learners), that is, native language learners, are not satisfied with L1 learning. They must learn a second language (L2) for academics, travel, work, and other purposes. Many L2 learners have inquiries about why they are not learning L2 as easily as they are learning their mother tongue (L1). This article starts from three aspects: language intuition, cultural background, and language use. It cites some linguistic and psychological theories and related literature to comprehensively analyze the differences in thinking between L1 learners and L2 learners. It is found that first-language learners have more advantages than second-language learners. Hence, second-language learners take more time and effort to be as proficient in the second language as their native language. Finally, some suggestions for second-language learners are given.

Most domestic research focuses on identifying good learning options and study plans for second-language learners. Few studies analyze how first-language and second-language learners reflect differences in thinking during learning. Second-language acquisition is based on first-language acquisition, and the acquisition processes of the two are different. This results in second-language learners' language learning influenced by their first language. Our analysis of the thinking differences between L1 learners and L2 learners requires interdisciplinary analysis, and

this difference needs to be analyzed from the perspectives of neurology, psychology, and linguistics. This article reviews some experiments and theories to comprehensively analyze this issue.

## 2. Analysis

### 2.1 Linguistic Intuition

L1 learners and L2 learners reflect the difference in thinking under language intuition. Linguistic intuition is people's ability to understand and use language by intuition and language sense when using language. In terms of this, first-language acquisition has more advantages than second-language acquisition. L1 learners usually have stronger grammar, vocabulary, and pronunciation intuition, while L2 learners may need more thinking and learning to master these aspects. For example, the basic structure of a sentence in Chinese is usually "subject + predicate + object," but sometimes the object can be omitted, and the sentence's meaning can still be understood. For instance, if a learner whose native language is English and whose L2 is Chinese wants to express, I ate food, what comes to mind is "I ate food." In English, the sentence structure is usually strict, and each component needs to be clearly expressed. In Chinese, "eating" is just an action, and there is no need to specify what is being eaten. So, "I ate" can be comprehended. But if "food" is omitted in English, the sentence's meaning is incomplete.

Therefore, in grammar, the language intuition of L1

learners and L2 learners is different. In pronunciation, the language intuition of L1 learners and L2 learners is also different. The four tones of Chinese are an important feature of Chinese, which distinguishes different word meanings through changes in pitch. For learners whose native language is English, English does not have a fixed tone system. Instead, semantics are expressed through changes in stress, vowel length, and consonants. Therefore, the correct pronunciation of the tones of Chinese as L1 speakers is very natural. However, the correct pronunciation of the tones of Chinese as L2 speakers may be confused due to differences in tonal systems. Hence, the factors that contribute to the difference between L1 learners and L2 learners are

Just as Chomsky believes that the generation and understanding of human language are based on a common set of structures and rules called universal grammar, universal grammar is something humans are born with and cannot be acquired through learning [1]. This view is consistent with the critical period hypothesis proposed by Lenneber. He believes learning a language before the critical period is easier and faster. As both hemispheres of the brain are involved in language learning during the critical period, after this time, the brain gradually matures and becomes lateralized. The ability to learn language will be limited by physiological factors [2]. Therefore, first-language learners learning their mother tongue is an instinctive behavior of learning a language. It has physiological advantages and is more natural and relaxed. Second-language learners lose this innate physiological advantage when learning the same language. A critical period for language learning is often defined as a sharp decline in learning outcomes with age [3]. One study examined the correlation between English proficiency and critical periods among U.S. immigrants and found that English proficiency declined with age. In other words, the older they get, the less proficient they are in English[3]. The language learning ability of adults is not as good as children's. This also explains the defects in the language intuition of L2 learners.

### 2.2 Culture Background

L1 learners and L2 learners reflect differences in thinking under different cultural backgrounds. Language reflects culture and affects a person's worldview [4]. Language is part of culture, and the relationship between the two is like a pair of close partners. The two are intertwined and influence each other. In different cultural backgrounds, L1 learners naturally accept the influence of their own national culture. L2 learners must also understand and adapt to different cultural thinking and values. Differences in thinking under these cultural backgrounds will lead to differences in language expression.

“There are great differences in religious beliefs between Eastern and Western cultures. These differences have been infiltrated in their respective language expressions. To understand the different religious beliefs of China and the West in cross-cultural communication, we must understand and respect each other. Otherwise, Not only will it lead to communication failure, but it will also have serious consequences. During the Sui and Tang Dynasties, Buddhism was introduced to China. People believed that the Buddha controlled everything in the world. Therefore, very sacred words related to Buddhism appeared in Chinese, such as borrowing flowers to offer to the Buddha and temporarily holding the Buddha's feet. The most influential religion in Western countries is Christianity, so there are many related words in English, such as angel, monk, etc. When the British and Americans are surprised, they say: My God! After experiencing a thrill, they will say: Thank God! When blessing, they will say: God bless you! When saying goodbye, they will say: Goodbye! Goodbye is the abbreviation of „God will be with you,“ which means “May God be with you.” These simple and vivid English words are widely spread in Britain and the United States and have far-reaching influence. Given these religious and cultural differences, we must fully understand the cultural connotation of the language and strive to retain the religious style of the source language [5].

These translation differences also confirm the Communication Accommodation Theory [6]. The theory points out that we must adjust our language expressions according to the other party's cultural background and language habits in communication. So, in the case of the same language, L2 learners need to put in extra effort when communicating with L1 learners.

Different cultural backgrounds lead to differences in the thinking patterns of L1 learners and L2 learners. These differences in thinking patterns lead to differences in problem-solving, teamwork, and decision-making between L1 and L2 learners. For example, some cultures emphasize individualism, while other cultures emphasize collectivism. One study measured the relationship between individualism, collectivism, and shyness in Japanese, Chilean, and American samples. Japanese people were found to be shyer than Americans and Chileans. So, in different cultures, people have different attitudes and emotional expressions [7]. Another study looked at the critical thinking of Asian and Western students. The study tested some New Zealand European students and Asian students. The results showed that European students in New Zealand significantly outperformed Asian students in critical thinking. The thinking differences between European and Asian students also affect their behavior [8].

Therefore, whether there are differences in language

expression or thinking patterns caused by cultural background, they are obstacles for L2 learners to learn languages. This requires L2 learners to improve their cross-cultural communication capabilities and accept different cultures and thinking.

### 2.3 Language Use

L1 learners and L2 learners reflect the difference in thinking in language use. L1 learners are more comfortable and flexible in using their native language, but L2 learners' language proficiency and self-confidence are still facing challenges, and they may not be able to convey information more directly, concisely, and effectively. Learners may have obstacles such as a lack of vocabulary, grammatical errors, etc., which may affect the smoothness and accuracy of thinking. For example, when a British person whose L1 is English wants to express that they like a certain food, they might say: "I like chocolate." And a learner of English as an L2 might say: "I have a fondness for chocolate." L2 learners are more careful in choosing vocabulary and grammar when using a second language. "Language determines thinking [4]." What causes the difference in thinking when using language? This may be related to the differences in language input methods, learning modes, and learning motivations between L1 learners and L2 learners in language learning.

Language acquisition can only occur when the learner is exposed to comprehensible language input and can focus on understanding the meaning or information rather than the form [9]. The key to language acquisition lies in „comprehensible language input.“ For second-language learners, some expressions in the second language are incomprehensible. Children build understanding through interaction with the environment and their exploration[10]. For L1 learners, the rich language environment makes it easier to understand language through interaction. L2 will have fewer opportunities to interact due to lacking a language environment. One study experimentally demonstrated that input and interactive modification contribute to second language acquisition. Interactive negotiation helps to understand the language better [11].

From the perspective of learning modes, native language learners are in a critical period of learning their mother tongue. The learning mode is more natural. For second language learners, critical periods may be shorter or missed. So, it takes more time and effort to learn a second language. One study found that: a) Strong family literacy, opportunities to use the L2 informally, specially designed study plans, sufficient study time, and explicit instruction given to learners with little exposure to the L2 to master grammar. It is the best condition for L2 learners to immerse themselves in a second language-dominated

society. b) L2 learners who have strong L2 talent and learning motivation, and L1 skills can more successfully master L2. c) L2 teachers need to be proficient in L2, have strong teaching skills and proficiency in students' L1. d) Although it takes L2 learners 3-7 years to become proficient in L2, younger learners need more time and are most likely to reach a level close to their native language [12].

L1 learners and L2 learners often have different learning motivations. For L1 learners, learning the mother tongue is necessary to meet basic survival and communication needs, which are low-level needs. So the motivation to learn your mother tongue is natural. The learning motivations of L2 learners may be more diverse. For some L2 learners, after lower-level needs are satisfied, learning a second language is to satisfy higher-level needs, such as social needs and career development. One study calculated and analyzed Maslow's expectations. The results show that the satisfaction of higher-level needs has to be predicted later than the satisfaction of needs below it in the hierarchy. That is to say, after people satisfy lower-level needs, they will gradually pursue higher-level needs [13].

„Learners' motivation depends on their expectations and value perceptions of learning results [14].“ For L1 learners, learning their mother tongue has high expectations. Because the mother tongue is closely related to daily life, some L2 learners may have high expectations for learning a second language. In contrast, others may have low expectations and value perceptions of second language learning. This also causes a difference in learning motivation between L1 and L2 learners.

### 3. Suggestions

After understanding the differences in thinking between first and second-language learners, this article suggests L2 learning for second-language learners.

a). Find interests in the second language, such as favorite music, movies, books, etc., and use these to increase motivation for language learning. For example, one study examined the impact of instruction that is consistent with students' interests students' interest in learning a second language and their reading comprehension scores. The results show that 1) providing students with personalized teaching materials can help increase their interest in learning a second language. 2) Selecting teaching materials based on students' interests can improve students' reading comprehension skills [15].

b). Understand the cultural background of the second language. Learning cultural background can help people better understand and use the language. Cultural background knowledge can help them better understand vocabulary, slang, and other expressions, making language learning richer and deeper. At the same time, different cultures

have different values and norms, and understanding these can reduce the possibility of misunderstandings during communication. Learning how different cultures think can broaden their horizons and cultivate a more open and inclusive mindset.

c). Communicating with native speakers will help people learn more authentic expressions and pronunciation. At the same time, local people can give immediate feedback and corrections to help correct mistakes and improve language accuracy. People can apply what they have learned to improve their oral expression skills by interacting with local people.

d). Learning a second language requires continuous practice, making a regular learning plan, and improving learning efficiency. Forgetting begins immediately after learning, and forgetting is very fast at the beginning of the learning stage and then gradually slows down [16]. Therefore, the memory of the second language is enhanced by formulating a regular learning plan.

e). Summary and reflection are crucial for learning a second language. For example, one study investigated whether self-reflection is helpful for second language learning by assigning 108 Japanese college students a retrospective self-report task. The results indicate that retrospective reporting did help students improve their knowledge of the second language [17]. Communicating and learning with other L2 learners can also help us learn L2. Questionnaires and interviews coupled with classroom and group discussions help students remain alert to their own and others' learning strategies, beliefs, and attitudes [17].

## 4. Conclusion

This paper analyzes the differences in thinking between L1 and L2 learners from the perspectives of linguistics and psychology. This interdisciplinary analysis can help people better understand why L2 learners have less ease learning their L2 than their native language. In terms of language intuition, this paper analyzed the connection between linguist Chomsky's classic theory, psychologist Lenneberg's critical period hypothesis, and other theories and the differences in language intuition between L1 learners and L2 learners. In terms of cultural context, through joint analysis of theories and quotes, people understand the differences in thinking in cultural contexts. Regarding language use, this paper analyzed the difference in thinking reflected in the difference in language use between L1 and L2 learners. Finally, based on analysis, this study gives second language learners some suggestions for learning L2.

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