

Study on the Cross-language Influence of Japanese Learning and English Learning

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Abstract: The purpose of this study is to explore the interaction between Japanese learning and English learning and its impact on language learners, as well as cross-language teaching strategies and practices. Based on the literature research method and comprehensive analysis method, based on the overview of the cross-language influence theory, this paper analyzes the mutual influence mechanism of Japanese learning and English learning, including the comparison and cross-influence of phonological learning, vocabulary learning and grammar learning. Then, it discusses the influence of cross-language influence on the cognitive mechanism of language learners and analyzes the causes of language transfer. Finally, the paper puts forward cross-language teaching strategies and practices, including the exploration of cross-language teaching models, effective cross-language teaching strategies of Japanese and English, and the application prospects of cross-language teaching in language education. Based on this research, we can better understand the interaction between Japanese and English learning, and provide theoretical support and practical guidance for cross-language teaching.

Keywords: Japanese learning; English learning; Cross-language influence; Language learners; Cross-language teaching strategies.

1. Introduction

With the development of globalization and the increase of international communication, learning foreign languages has become an important skill in modern society. English has always been one of the most influential and popular foreign languages in the world. However, for many non-native English learners, learning English may face a number of challenges, one of which is cross-language influence.

Cross-language influence refers to the positive or negative influence of a learner's mother tongue on his/her foreign language learning. In recent years, many studies have explored the phenomenon and characteristics of cross-language influence between different language pairs, however, there are relatively few studies based on the cross-language influence between Japanese learning and English learning.

As a language with different structure and phonological features from English, Japanese learning may be challenging and difficult for native English learners. Based on this, understanding the cross-language influence between Japanese and English learning is of great significance for effective teaching and learning strategies.

The purpose of this study is to explore the cross-language impact of Japanese learning on English learning, and to investigate how this impact occurs at different language levels. Specifically, it focuses on the following aspects: similarity and difference of pronunciation and pronunciation, transfer of vocabulary and grammatical structure, and the influence of pragmatic and cultural background.

Based on the research on the cross-language impact, it is possible to better understand the difficulties and barriers that learners may face in learning Japanese and English, and provide targeted guidance and teaching recommendations for teachers and learners. In addition, the research will help to promote mutual understanding and communication between different languages and strengthen cross-cultural communication and international cooperation.

2. Interaction between Japanese Learning and English Learning

2.1. Overview of cross-language influence theory

Cross-language influence refers to the positive or negative influence of a learner's mother tongue on his/her foreign language learning. This concept is derived from research in the field of second language acquisition, which aims to reveal the phenomena of interrelation and interaction between different languages.

Cross-language influence theory holds that learners are often influenced by their native language system when they master a foreign language. This influence can be manifested in different linguistic levels, including phonetics, vocabulary, grammar, semantics and pragmatics. To be specific, cross-language influence theory mainly covers the following aspects:

First, similarity and difference of pronunciation and pronunciation: learners' native language phonetic system will affect their perception and production of foreign language pronunciation. For example, for Japanese language learners, their English pronunciation may be affected by specific phonological features in Japanese, such as consonant turbidity and vowel length. Second, vocabulary transfer: learners' native language vocabulary will have an impact on their foreign language vocabulary learning and use. Some words have similar spelling or pronunciation in different languages, and learners may apply their mother tongue vocabulary knowledge to the foreign language, resulting in the phenomenon of vocabulary transfer. Third, the transfer of grammatical structure: learners' native grammar structure will affect their mastery and application of foreign language grammar. For example, the subject-predicate object structure in Japanese is different from that in English, and learners may have the phenomenon of transferring subject-predicate object structure when learning English. Fourth, semantic transfer:

Learners' native language semantic system will have an impact on their foreign language semantic understanding and expression. Different languages may express the same concept in different ways, and learners may apply the semantic knowledge of their mother tongue to the foreign language, leading to the phenomenon of semantic transfer. Fifth, the influence of pragmatic and cultural background: learners' native language pragmatic habits and cultural background will affect their understanding of foreign language pragmatic rules and cultural differences. Learners may have the phenomenon of pragmatic and cultural background transfer in cross-language communication.

Based on the in-depth study of the cross-language influence theory, we can better understand the difficulties and challenges of learners in the process of learning a foreign language, and provide corresponding teaching strategies and guidance for teachers and learners.

2.2. Interaction mechanism between Japanese learning and English learning

(1) Phonetic learning: A comparative analysis of Japanese and English phonetic systems

This study will explore the differences and similarities between Japanese and English phonetic systems from the perspective of comparative analysis, and further explore the impact of these differences and similarities on Japanese learners' learning of English and English learners' learning of Japanese.

There are a series of significant differences between Japanese and English phonetic systems. One of the most striking differences is in the vowel system. Japanese has only five vowels (a, i, u, e, o), while English has 12 vowels. In terms of consonants, voiced and clear consonants in Japanese come in pairs, while in English there is no such distinction. These differences can lead to a range of difficulties for Japanese learners in learning English, such as correct pronunciation, recognition of vowels and consonants, etc. However, there are also a number of similarities between Japanese and English. First of all, they are stressed languages, with accents in their vocabulary and grammar. Secondly, they all have a sense of rhythm and rhythm, which is also one of their phonetic characteristics. In addition, both the Japanese and English phonetic systems have a series of similar phonemes, such as /s/, /t/, /k/, etc., and these phonemes are also similar in pronunciation. These similarities may make it easier for English learners to master the phonetic system of Japanese. Based on this, in the learning process, it is necessary to pay attention to these differences and similarities, actively use them, and strengthen the relevant training and exercises to improve the phonetic level and expression ability.

(2) Vocabulary learning: comparison and interaction between Japanese and English vocabulary

As two different languages, Japanese and English have different characteristics in their vocabulary systems. When learning these two languages, learners may face a range of confusion and challenges. Therefore, it is of great significance for language learners to understand the lexical similarities and differences between Japanese and English and to explore the mechanism of their mutual influence.

In terms of vocabulary sources, Japanese and English have different sources of vocabulary. The sources of Japanese vocabulary mainly include kanji, loanwords and self-made words, among which Kanji is one of the most commonly used sources of Japanese vocabulary. English, on the other hand,

derives its vocabulary mainly from Old English, Latin, Greek and French. Based on this, when learning these two languages, learners need to learn vocabulary based on memorization and understanding of these different sources in order to better master them.

In terms of word formation, there are a series of differences between Japanese and English word formation. Japanese word formation mainly includes synthesis and derivation, while English word formation includes derivation, grouping and contraction. Based on this, when learning these two languages, learners need to master their word formation in order to better understand and apply their vocabulary.

There is a similar set of words between Japanese and English. These similarities can provide learners with some convenience in learning. For example, both Japanese and English have the word "computer," and the pronunciation and spelling are basically the same. For another example, the pronunciation of "telephone" and "telephone (でんわ)" are also very similar. Based on these similarities, learners can reduce the burden of memory and improve the efficiency of vocabulary learning.

When learning Japanese and English, learners may be influenced by the vocabulary system of their native language, leading to problems such as difficulty in word conversion and memory. Based on this, learners need to make full use of cross-linguistic influences, deepen their understanding and application based on comparing and contrasting the vocabulary systems of the two languages. At the same time, a series of effective vocabulary learning strategies, such as activating existing knowledge, multi-angle memory, etc. are adopted to help learners better grasp the vocabulary of the two languages.

(3) Grammar study: Comparison and cross-influence of Japanese and English grammatical structures

There are significant differences between Japanese and English grammatical structures. The grammatical structure of Japanese is complex, mainly based on the change of word endings to express tense, person, honorifics and other information. The grammatical structure of English is relatively simple, mainly based on auxiliary verbs, punctuation marks and other ways to express grammatical meaning. This difference will have a certain impact on learners' grammar learning.

In grammar learning, language learners are influenced by the grammatical structure of a language they already know. For example, when Japanese learners learn English, they may apply Japanese endings to English, resulting in grammatical errors. Similarly, English learners may apply English grammatical structures to Japanese and make grammatical mistakes.

At the same time, there are a series of similarities between the grammatical structure of Japanese and English. For example, they all have basic grammatical categories such as nouns, verbs, adjectives, and grammatical elements such as tense and mood. These similarities can provide language learners with a series of conveniences. For example, when they understand grammatical rules and use grammatical structures, they can find similarities based on the comparison of grammatical structures of two languages, so as to better understand and apply grammatical rules.

A series of studies have shown that the transfer of grammatical knowledge is universal when learning multiple languages. That is, when learners master the grammatical structure of one language, they may apply this grammatical

structure to learning another language, thus speeding up the learning process. However, this migration can also lead to syntax errors, which require special attention.

Therefore, in grammar learning, teachers should guide students to fully understand the differences and similarities between Japanese and English grammar structures, and help students reduce the occurrence of grammatical transfer. Teachers can make students better understand the differences between the two languages based on the comparison of their grammatical structures, and encourage students to flexibly apply different grammatical structures in grammar use. In addition, teachers can correct and guide students' common grammatical mistakes, help students overcome grammar difficulties and improve their grammar level.

3. The Impact of Cross-language Influence on Language Learners

3.1. Research on cognitive mechanisms of language learners

When language learners learn different languages, they will encounter various phenomena such as transfer, interference and transformation of language knowledge. These phenomena are closely related to the cognitive mechanism of language learners. Based on this, many studies have focused on the impact of cross-language influence on the cognitive mechanism of language learners in order to better guide cross-language teaching and learning.

(1) Language learners' attention control

Attention control is one of the important mechanisms by which language learners process information. Research has shown that when language learners learn a second language, they need to adjust the focus and intensity of their attention in order to better process the information input from the language. For example, when learning Japanese, English learners may focus on the pronunciation and phonological structure of the Japanese language, ignoring the grammar and vocabulary of the Japanese language. This kind of attention bias may lead to the inability of language learners to comprehensively improve their language level.

(2) Working memory of language learners

Working memory is the short-term memory system that language learners use to process language input. Studies have shown that when language learners learn a second language, they need to rely more on working memory to process the input information. For example, when learning Japanese, English learners need to keep information such as newly learned words, grammar rules and pronunciation in their working memory, and update and use this information at any time. This process needs to consume a lot of cognitive resources, which is easy to increase the learning burden of language learners.

(3) Language switching of language learners

Language switching is a cognitive mechanism used by language learners to process different language inputs. Research shows that when language learners learn a second language, they need to frequently switch between different language inputs in order to better understand and apply language knowledge. For example, when learning Japanese, English learners may need to constantly switch language inputs between Japanese and English in order to better understand the phonological, lexical, and grammatical structures of Japanese. This kind of language switching requires language learners to have high cognitive flexibility

and language processing ability.

The cognitive mechanism of language learners plays an important role in the cross-language influence. Understanding the cognitive mechanisms of language learners such as attention control, working memory and language switching can provide important guidance and help for cross-language teaching and learning. Based on reasonable teaching strategies and practical methods, teachers can promote the improvement of students' attention, working memory and language switching ability, so as to strengthen the effect of cross-language teaching and learning.

3.2. Language transfer phenomenon and cause analysis

Language transfer refers to the phenomenon that the previously mastered language knowledge and skills have an impact on the subsequent learning of a language. Language transfer can be positive or negative. Active language transfer can promote language learners to master new knowledge and skills faster in the new language learning, and improve their language application ability. Negative language transfer may lead language learners to form wrong language habits, thus affecting their language learning effect.

(1) Language transfer phenomenon

The phenomenon of language transfer is both universal and unique. In cross-language learning, the phenomenon of language transfer is usually manifested in the following aspects:

1) Universal transfer: It refers to the existence of similar or identical phonological, lexical and grammatical structures between two languages, so as to promote learners' memory and application in the new language learning. 2) Interference transfer: refers to the existence of different phonological, lexical and grammatical structures between two languages, which leads to the interference or wrong language habits of learners in the new language learning. 3) Reference transfer: It refers to applying the language knowledge and skills already mastered into the new language learning, so as to improve the learning effect and language application ability of learners.

(2) Analysis of the causes of language transfer

The reasons for language transfer are complex and mainly cover the following aspects:

1) Language similarity: Assuming that there are similar or the same phonological, lexical and grammatical structures between two languages, it is easier for learners to understand and apply new language knowledge based on their existing knowledge and skills. 2) Language background of learners: Factors such as learners' mother tongue, second language learning experience and cultural environment will affect the emergence and extent of language transfer. 3) Cognitive factors of learners: cognitive factors such as learners' attention, working memory, language switching and metacognitive ability will also have an impact on language transfer. For example, when learning Japanese, the assumption that English learners do not transfer their phonological cognition and language switching ability well can lead them to make mistakes in pronunciation and grammar.

Language transfer is a common phenomenon in the course of language learning. Understanding the phenomenon and influencing factors of language transfer can provide better guidance and help for cross-language teaching. Based on targeted teaching strategies and practical methods, teachers

can help students better understand and apply new language knowledge, so as to promote their language transfer ability and language application ability.

4. Cross-language Teaching Strategies and Practices

4.1. Cross-language teaching model exploration

Cross-language teaching is to promote students' understanding and use of two or more languages based on the comparison and contrast of one language. The cross-language teaching model can be selected and designed according to different teaching objectives and student characteristics.

(1) Comparative and analytical cross-language teaching model

Contrastive and analytical cross-language teaching mode is to compare and analyze the similarities and differences of two languages, so as to improve students' understanding and application ability of the two languages. This model is suitable for students who have mastered a certain degree of basic language knowledge and have a certain ability of comparative analysis. In Japanese and English learning, the contrastive and analytical cross-language teaching model can be implemented based on the following methods:

Comparing pronunciation: comparing the pronunciation features, syllable structure and intonation of two languages in order to build connections and differences between the two languages; Compare vocabulary: compare the meaning, conjugation and usage scenes of words in two languages, so as to deepen students' understanding and memory of words in two languages; Comparative grammar: Comparing the grammatical structure, sentence pattern features and pragmatic rules of two languages to help students understand and apply the grammatical knowledge of the two languages.

(2) Alternate use of cross-language teaching model

Interlanguage teaching means that in the course of teaching, two languages are used alternately, so that students can constantly switch and apply between the two languages. This model is suitable for students who do not have a good grasp of both languages. It is based on constantly switching and applying the two languages in the teaching process to improve students' language application ability. In Japanese and English learning, the interlanguage teaching model of alternating use can be implemented based on the following methods:

Alternate use of language: teachers can constantly switch between the two languages to explain and explain the course content in the teaching process, so that students can convert and apply between the two languages; Multilingual environment creation: Create a multilingual environment in the teaching site, so that students can switch and apply the two languages naturally under the stimulation of multilingual information; Cross-language cooperative learning: Based on organizing students to conduct cross-language cooperative learning, students from different language backgrounds can learn and communicate with each other, so as to improve their language application ability.

(3) Integrated cross-language teaching mode

Integrated cross-language teaching refers to the integration of two languages in teaching, so as to improve students' understanding and application of both languages. This model is suitable for situations where students already have some degree of knowledge of both languages and need a deeper

understanding of the connections and intersections between the two languages. In Japanese and English, the integrated cross-language teaching model can be implemented based on the following methods:

Bilingual teaching: use two languages to explain and explain in the teaching process, so that students can gradually master the language skills and application ability of two languages; Bicultural learning: Based on the different cultural backgrounds represented by the two languages, students will better understand the connections and differences between the two languages; Dialogue practice: Based on organizing students to conduct cross-language dialogue practice, students can gradually master the language skills and application ability of two languages in practice.

The selection and design of cross-language teaching mode should be reasonably matched and adjusted according to students' actual situation and teaching objectives. In teaching, teachers can promote students' two-way learning and application of Japanese and English based on the innovation and practice of cross-language teaching models.

4.2. Application prospect of cross-language teaching in language education

With the development of globalization, Japanese and English are important languages for international communication, and the demand for language education is growing. As a novel teaching mode, cross-language teaching provides language learners with a more comprehensive and diversified learning environment. In the study of Japanese and English, cross-language teaching has achieved certain results and has broad application prospects in the field of language education.

First of all, cross-language teaching can promote learners' language application ability. Based on the comparative analysis of the phonological, lexical and grammatical structures of the two languages, learners can better understand the similarities and differences between different languages, so as to improve their language awareness and language expression ability. Cross-language teaching can also stimulate learners' interest in learning, enhance their learning motivation, and thus improve the learning effect. Secondly, cross-language teaching can broaden learners' linguistic horizon. Based on the knowledge and cultural background of different languages, learners can develop a more open and inclusive way of thinking and enhance their intercultural communication skills. This is of great significance for their future international exchanges and career development. In addition, cross-language teaching can also improve learners' learning efficiency. Based on the comparative analysis and comprehensive application of the two languages, learners can learn and master relevant knowledge more systematically, reduce learning redundancy, and improve learning results. Cross-language teaching can also cultivate learners' independent learning ability and cooperative learning consciousness, making them become excellent language learners with independent thinking and teamwork ability.

However, there are still a series of challenges in the application of cross-language teaching in language education. First of all, teachers need to have rich language knowledge and teaching experience, and be able to flexibly use the contrast and integration of different languages. Secondly, teaching materials and teaching resources also need to be updated and improved accordingly to meet the needs of cross-language teaching. In addition, cross-language teaching also

needs to be combined with other teaching modes to form a more perfect teaching system.

In short, cross-language teaching has broad application prospects in language education. It can promote learners' language application ability, broaden learners' language vision and enhance learners' learning efficiency. In order to better apply the cross-language teaching, it is necessary to further study and explore, and constantly improve the relevant teaching theories and practice methods, so as to provide more high-quality educational resources and learning environment for language learners.

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