

The Influence of Inter-Lingual Subjective and Objective Similarity Judgments Between the Second and Third Languages on the Language Transfer in Trilingual Acquisition

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Abstract. The research on the influence of subjective similarity on second language acquisition is relatively in-depth both domestically and internationally, but there is still a lack of research on the impact of subjective similarity on third language acquisition. This article analyzes the impact of differences in inter-lingual subjective and objective similarity on language transfer. This article analyzes how the subjective similarity judgment between languages can affect the occurrence of language transfer, and the difference in subjective and objective similarity can also have an impact on language transfer. The higher the subjective objective similarity, the more favorable it is for positive transfer to occur. Therefore, this article proposes the following suggestions: teachers should have a correct understanding and comprehension of the impact of subjective and objective similarity on learners' language learning. Through various teaching designs, actively guide learners to strengthen subjective similarity associations between languages during the process of trilingual acquisition, and help learners quickly form a reasonable framework and learning logic for trilingual acquisition cognition.

Keywords: Trilingual acquisition, subjective similarity between languages, objective similarity between languages, language transfer

1. Introduction

Internationally, the number of Chinese students studying Japanese is on a steady rise. Data shows that the number of Japanese language learners in China exceeds 1.05 million, ranking first in the world. Among them, the proportion of Japanese language learners in junior and senior high schools is gradually increasing. At the same time, in China's compulsory education environment, students start learning English from the third grade of primary school. It can be seen that before starting Japanese language learning, a large proportion of trilingual Japanese learners have experience in learning a second language, English.

The theory of language transfer holds that the acquired language knowledge and related concepts will have an impact on the acquisition and use of another language through language transfer. It can

be inferred that the second language English previously acquired by Chinese and Japanese learners has a transfer effect in the learning of the third language Japanese [1]. In the field of second language acquisition both domestically and internationally, research on language transfer has always held a central position. Among them, interlingual similarity, as one of the key driving factors of language transfer, has received widespread attention. In the field of multilingual acquisition research, existing studies have revealed the impact of interlingual similarity on second and third language transfer. However, existing research has mainly focused on the study of Western European languages and has not made a detailed distinction and analysis of the correlation between interlingual subjective similarity and language transfer. At present, preliminary studies on second language acquisition have confirmed that learners' subjective similarity judgments have an impact on their transfer when acquiring vocabulary and phrases. However, in trilingual studies, the focus is still on objective similarity between languages, or only subjective similarity is briefly discussed as an influencing factor. Less attention is paid to the impact of learners' subjective similarity judgments on language transfer, and the level of learners' trilingual acquisition is less included in the scope of examination. From this, it can be seen that the subjective similarity between second and third language learners with different trilingual proficiency levels still needs further exploration on its impact on trilingual language transfer.

2. Definition of trilingual acquisition and language transfer

2.1. Definition of second language and third language

Trilingual learning involves not only the learner's native language and proficient second language, but also one or more other languages being learned. 'Being trilingual isn't just about the number of tongues a person speaks; it's more about actively learning one or more languages in addition to their mother tongue and the second one they've either mastered or are still in the process of mastering [2].

Pioneering academics often viewed research on the acquisition of a second language as a subset of the broader field of second language learning, frequently substituting the term "second language acquisition" for "trilingual" or "multilingual acquisition" in their discussions. Zeng and Li compared and analyzed the differences between second language acquisition and third language acquisition, and found that although the two are closely related, third language acquisition has different characteristics from second language acquisition, such as non-linear development of language ability, difficulty in language loss and reversal, complex interlingual transfer, complex social environmental factors, diverse acquisition processes, and cognitive advantages, which cannot be reflected in the connotation of second language acquisition [3]. Feng and Wang also summarized that trilingual languages have different characteristics from second languages, such as high language consumption, complex language systems, complex language environments, and diverse acquisition methods [4]. Trilingual learning research constitutes a distinct discipline, branching from the field of second language acquisition and contrasting with it.

2.2. Definition of language transfer

Interlanguage influence, also known as language transfer or cross-linguistic effects, involves the interactive effects caused by the commonalities and differences between the target language and any previously acquired language (including those that have not been fully mastered) [5].

Cross-linguistic influence refers to the impact that a person's knowledge of one language has on their knowledge or use of another language [6]. Cai and Li further elaborated and expanded the

concept, enriching the connotation of the term "language transfer" and incorporating it into the scope of concept transfer [1]. They propose that language transfer involves the effects of an individual's knowledge system and related conceptual patterns in one language on the acquisition or application of knowledge in another language [1].

Language transfer includes many categories, which can be divided into language transfer and concept transfer at the cognitive level [7]. Concept transfer is a special cross-linguistic influence that arises from the concepts or conceptualization patterns acquired by speakers when acquiring another language [8]. To determine the occurrence of concept transfer, it is necessary to first determine the occurrence of language layer transfer. At present, the focus of academic attention is gradually shifting from language transfer to concept transfer, but most research focuses on the transfer effects of native Chinese in English acquisition, with insufficient attention paid to the acquisition of other languages and trilingual languages.

2.3. Definition of inter-lingual similarity

Interlanguage similarity can be divided into objective similarity and subjective similarity. Objective similarity refers to the actual similarity in language form and meaning between the mother tongue and the target language, and is the basis for language transfer [9].

Subjective similarity can be divided into perceived similarity and assumed similarity. Perceived similarity is a concept recognized by learners based on language form when distinguishing language similarities in the presence of objective similarities between languages. Assumed similarity is the subjective assumption of language similarity when learners are unable to recognize the similarity between languages in the absence of objective similarity. Both perceived similarity and assumed similarity are closely related to learners' subjective thoughts.

The objective similarity between languages does not fully match the subjective similarity. Research has found that there are often differences between objective similarity and learners' subjective similarity judgments. Specifically, it can be summarized into the following three situations: Firstly, learners are not aware of objective similarity. Secondly, learners misunderstand the objective similarity between languages. Thirdly, learners consider languages that do not have objective similarity to have similarity. When subjective similarity matches objective similarity, it promotes language acquisition; When it does not match the objective similarity, it often leads to misuse [10].

3. The role and influence of interlinguistic subjective and objective similarity on language transfer

3.1. The correlation between subjective similarity and language transfer

Firstly, in the field of trilingual acquisition, previous research has mainly focused on the correlation between objective similarity and language transfer. Tang, Zhan, and Zhu found through comparative analysis of students' Chinese, English, and Japanese compositions that due to the close objective language distance, the objective similarity between Chinese and Japanese languages is greater than that between English and Japanese languages. The proportion of mother tongue transfer in each part of speech in the tested compositions is greater than that of second language transfer [11]. However, research on second language proficiency has shown that compared to objective similarity between languages, learners' subjective similarity judgments between languages are more correlated with language transfer behavior. Kellerman believes that learners' perception of the overall distance

between languages (i.e., subjective similarity judgment) largely determines whether transfer occurs or not [9]. In other words, even if there is objective similarity between two languages, if learners do not judge similarity, transfer will not occur. Odlin also demonstrated through empirical research that although objective similarity is the basis for language transfer, language transfer is related to learners' judgments, and subjective language similarity is more important than objective language similarity [5]. Zhang and Yu found through empirical research that learners' subjective similarity judgment between languages is more in line with their actual transfer behavior in understanding English idioms compared to objective similarity between languages [12]. Meng believes that compared to objective similarity between languages, subjective similarity judgment between Chinese and Japanese languages has a stronger correlation with transfer behavior in Japanese comprehension and production [10]. Therefore, the subjective similarity judgment between languages can affect the occurrence of language transfer. Kellerman proposed that subjective similarity assessment also undergoes dynamic changes as the number of learners exposed to the target language increases [9]. In the empirical study of second language English learners' understanding of idioms by Zhang and Yu, it was verified that second language proficiency has an impact on language transfer when understanding the semantics of English idioms. Learners with higher second language proficiency believe that interlingual subjective similarity is higher and more likely to undergo language transfer [12].

3.2. The impact of differences in inter-linguistic subjective and objective similarity on language transfer outcomes

Firstly, the preliminary research mainly examined the correlation between objective interlingual similarity and transfer results. Zhang found through analysis that the positive transfer of English to Japanese is reflected in vocabulary with high similarity of objective elements such as morphology and phonemes, while the negative transfer is reflected in vocabulary with low similarity of objective elements such as part of speech and semantics [13]. Zhu also believes that objective similarity between languages has an impact on learners' language transfer outcomes. For foreign languages with less variation and higher objective similarity between languages, the second language has a certain positive transfer effect on third language acquisition. On the contrary, when the foreign language changes and deviates from the original English word in terms of pronunciation, meaning, form, and part of speech, and the objective similarity between languages decreases, it is easy to have a negative transfer effect on second language to third language acquisition [14]. Zhu et al. conducted an empirical study on the impact of subjective cross-linguistic similarity judgments on the acquisition of Chinese, English Japanese beginners, focusing on vocabulary and grammar. They found that there are differences in the subjective similarity and transfer between different parts of speech in Japanese. Later research in the field of second language acquisition overturned the inevitable relationship between objective similarity and learning difficulty, and found that the differences in subjective and objective similarity between languages are correlated with transfer results [15]. Meng believes that when the subjective similarity between languages matches the objective similarity, it is conducive to promoting positive transfer and enabling learners to better infer and understand vocabulary [10].

Secondly, preliminary research has found that learners' second language proficiency has an impact on the results of second language transfer. Learners with high second language proficiency will engage in more second language positive transfer during learning. In addition, in empirical research on the understanding of idioms by second language English learners, it was found that learners with higher second language proficiency have higher accuracy in inferring idiom semantics.

4. Problems and suggestions in third language acquisition teaching

In summary, it can be seen that in the process of trilingual acquisition teaching, the difference in subjective and objective similarity between languages has a certain impact on students' learning of the third language. Especially when the subjective and objective similarity is low, it will have a certain negative transfer effect. Therefore, in trilingual teaching, the following suggestions are proposed to address the existing problems.

4.1. Regarding vocabulary and sentence structure learning issues

Previous research in the field of second language acquisition has shown that learners' subjective similarity judgments have a stronger correlation with transfer behavior. Therefore, as learners of Chinese, English, and Japanese, especially beginners, in the learning process, there is a large amount of vocabulary derived from Chinese in Japanese and written in Chinese. Subjectively, they rely on the familiarity brought by L1 Chinese meaning, which reduces their vigilance and motivation for in-depth learning, while ignoring objective differences in word meanings, leading to a large number of misunderstandings and misuse. In addition, most Japanese language learners have a foundation in L2 English learning, but some learners may find it difficult to memorize foreign words in Japanese when they feel that the objective similarity between English and the corresponding foreign words is low, which can lead to difficulties in connecting learned L2 English words. Therefore, most trilingual learners tend to have fixed thinking errors in the initial stage due to differences in subjective and objective similarity between languages, which are difficult to correct in the later stage and hinder the development of in-depth trilingual learning.

From a syntactic perspective, the basic word order of L1 Chinese and L2 English is subject-verb-object structure. When beginners are learning L3 Japanese, they often see many similar sentence components. Subjectively, they believe that the word order of L3 is consistent with L1 and L2, but in reality, the basic word order of L3 Japanese is the subject-object-predicate structure. Due to the influence of subjective similarity, L3 learners have become accustomed to the language order of L1 and L2, resulting in slow processing of information by the brain during the L3 learning process and some difficulty in understanding. In the process of learning L3 Japanese, the predicate verb at the end of a sentence is the core of Japanese syntax and grammar, and tense, voice, negation, etc., are all reflected through the verb changes at the end of the sentence. Cognitive errors in word order can affect the mastery of L3 Japanese core grammar.

4.2. Teaching and learning suggestions

Teachers can actively guide learners to strengthen subjective similarity associations between languages during the process of trilingual acquisition during teaching. Put the words that appear in L3 Japanese and have the same form but different meanings or synonyms as those in L1 Chinese and L2 English into specific conversation contexts, and let students distinguish between right and wrong through specific examples, to help students establish a clear language framework for L3-L2-L1. Thus, it reduces the negative transfer effect caused by the difference in subjective and objective similarity. In addition, teachers can introduce and systematically explain the problems and differences between L3 and L1, as well as between L3 and L2, during the teaching process. When teaching words, teachers can distinguish the connections and differences in interlingual semantic similarity, helping students anticipate and avoid errors in advance. At the same time, students are encouraged to search for corresponding source words in the second language for association,

especially in word learning, to promote understanding of word meanings and form a "vocabulary network" through discrimination. In the process of trilingual acquisition, teachers can also design teaching activities to guide students to think and discuss the similarities and differences between different languages, transform learning problems into learning resources, strengthen the comparison and connection between languages, and narrow the cognitive differences between subjective similarities between languages. With the improvement of later trilingual acquisition level, learners' subjective similarity differences between languages will continue to decrease, and their ability to guess word meanings will be strengthened. Therefore, in the early stage of trilingual acquisition, teachers need to strengthen the correct comparison and guidance of interlingual differences through association, comparison of loanwords and original words, and other means, to quickly form a reasonable framework and learning logic for trilingual acquisition cognition.

5. Conclusion

This article focuses on the fact that most of the current research mainly focuses on subjective similarity in second language acquisition, with less attention paid to the impact of subjective similarity judgments by third language learners on language transfer. Especially, there are relatively few studies using L1 Chinese, L2 English, and L3 Japanese students as research samples. This article collects and organizes previous research on trilingual acquisition both domestically and internationally, and analyzes how subjective similarity judgments between languages can affect the occurrence of language transfer. In addition, when the subjective similarity between languages matches the objective similarity, it is also conducive to promoting positive transfer and enabling learners to better infer and understand vocabulary. With the expansion of the current number of trilingual learners, it is hoped that in the future, starting from the level of trilingual acquisition teaching methods, it can explore the teaching difficulties that are prone to occur in trilingual acquisition teaching, find more scientific and comprehensive teaching methods, and help learners better master the third language.

References

- [1] Cai, J., & Li, J. (2016). Research Methods on Language Transfer and Concept Transfer. *Foreign Language World*, (04), 2-10.
- [2] Pilar, M. (2005). Third language learners: pragmatic production and awareness. *Multilingual Matters*, Cop.
- [3] Zeng, L., & Li, L. (2010). Reflections on 'Trilingual Acquisition' as an Independent Research Area. *Foreign Languages and Foreign Language Teaching*, (02), 6-9.
- [4] Feng, Y., & Wang, H. (2022). The Basis and Practical Significance of 'Trilingual Acquisition' as an Independent Research Area. *Journal of Shanxi Energy Institute*, 35(01), 45-47.
- [5] Odlin, T. (1989). *Language transfer: cross-linguistic influence in language learning*. Cambridge University Press.
- [6] Jarvis, S., & Pavlenko, A. (2008). *Crosslinguistic influence in language and cognition*. Routledge.
- [7] Cai, J. (2022). A Comparative Study of Transfer Research in Multilingual Output--An Inductive Method Framework. *Journal of Foreign Languages*, (01), 73-83.
- [8] Jarvis, S. (2007). Theoretical and methodological issues in the investigation of conceptual transfer. *Vigo International Journal of Applied Linguistics*, (4), 43-71.
- [9] Kellerman, E. (1979). Transfer and non-transfer: Where we are now. *Studies in second language acquisition*, 2(1), 37-57.
- [10] Meng, Y. (2021). Research on the Acquisition of Kanji and Verbs by Japanese Learners Using Chinese as Their Native Language: Survey Report. *Japanese Language Education*, 178, 185-199.
- [11] Tang, J., Zhan, D., & Zhu, L. (2022). Native Language and Second Language Transfer in Japanese Word Usage by Trilingual Speakers of Chinese, English, and Japanese. *Journal of Foreign Languages*, (01), 84-91.
- [12] Zhang, L., & Yu, L. (2011). The Role of Psychological Types in Chinese Students' Understanding of English Idioms. *Modern Foreign Languages*, 34(02), 171-177+219-220.

- [13] Zhang, W. (2018). A Study on the Transfer of Chinese (First Language) and English (Second Language) to Japanese (Third Language) Acquisition. Master's Thesis, Xihua University.
- [14] Zhu, T. (2019). A Study on the Transfer of English to Japanese from the Perspective of Trilingual Acquisition - Focused on Japanese Loanwords. *Journal of Shenyang Jianzhu University (Social Science Edition)*, 21(06), 628-632.
- [15] Zhu, L., Cai, J., Xu, Z., & Zhuang, Q. (2021). Empirical Research on Subjective Cross-Language Similarities of Chinese-English-Japanese Beginners. *Foreign Languages and Foreign Language Teaching*, (05), 90-99+150.