Research on the Application of Language Transfer Theory Based on Computer Aided Translation Software in Russian Teaching

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Abstract. At present, the function of Computer-Aided Translation (CAT) is mainly aimed at the level of translation skills and translation effect, and its application in language teaching is still lack of in-depth discussion, especially the establishment of translation corpus and the research of computer translation laboratory in language theory and practice teaching. Based on this, this paper first analyses the development and utilization of language transfer theory, then studies the utilization of computer-aided translation software in Russian teaching, and finally gives the utilization strategy of language transfer theory based on computer-aided translation software in Russian teaching.

Keywords: Language Transfer Theory, CAT, Russian Teaching

1. Introduction

With the iterative progress of intelligent tech represented by computer-aided translation tech, its utilization in the field of language teaching has greatly promoted the development of language teaching reform [1]. At present, the function of Computer-Aided Translation (CAT) is mainly aimed at the level of translation skills and translation effect, and its utilization in language teaching is still lack of in-depth discussion, especially the establishment of translation corpus and the research of computer translation laboratory in language theory and practice teaching. On the other hand, as a complex language learning phenomenon, language transfer can effectively explain the contact and change process between different national languages, thus effectively guiding language teaching and learning. Therefore, language transfer has gained more and more in-depth attention and discussion in the field of language teaching.

In addition, with the development of language transfer theory, its achievements are mainly reflected in the following aspects as shown in Figure 1. Language transfer has become an important research topic for foreign language educators. Language transfer includes not only the transfer of mother tongue to foreign language, but also the transfer of second language to third language. Specifically in the Russian teaching level, students have already had their own language system and rich mother tongue background before they first contact Russian learning, which will interfere and affect their Russian learning process. In view of the influence of Chinese knowledge system on
Russian learning, active intervention and guidance are needed to make language transfer have a more significant positive function.

![Diagram]

**Figure 1.** The embodiment of language transfer theory.

The integration of language transfer theory and CAT software and its utilization in Russian teaching will help to find out the factors affecting the quality and efficiency of Russian teaching [2]. According to the influence mechanism of these factors, the positive transfer of mother tongue knowledge to Russian learning is realized. Based on this, it is necessary to analyze the emergence, development and manifestation of language transfer theory, combined with the characteristics of Russian teaching, to systematically analyze the performance of language transfer in Russian teaching. It can be seen that the correct utilization of language transfer theory in the specific teaching process of Russian can play a positive function in the positive language transfer and overcome the negative influence of negative transfer. Therefore, the research on the utilization of language transfer theory based on CAT software in Russian teaching is helpful to enrich the construction of transfer theory system in Russian teaching, and help Russian teachers and learners systematically understand language transfer theory and master the practical utilization of language transfer theory in Russian teaching and learning, so it has important practical research value.

2. The development and utilization of language transfer theory

2.1. The concept of language transfer theory

As a psychological concept, transfer originates from behaviorism psychology, which means that the existing knowledge or skills of learners will affect the acquisition of new knowledge or skills. On the level of language learning, the first language learning (often the mother tongue) will affect the second language learning. Language transfer is a kind of language psychological process in which second language learners stimulate their mother tongue knowledge to use interlanguage. Some scholars believe that language transfer is a constraint of previously acquired knowledge on the process of language learning [3]. Some scholars believe that language transfer refers to the influence caused by the similarities and differences between the target language and any other language that has been learned or not fully acquired [4].

2.2. Classification of language transfer

Language transfer is the mutual promotion and interaction between the existing knowledge and the new knowledge. The existing knowledge includes the learner's mother tongue and any other language knowledge that the learner has acquired. In addition, language transfer changes dynamically with the improvement of learners' second language proficiency. Language transfer can be divided into different types based on the direction, source, result and level of transfer. At the level of language transfer direction, it can be divided into forward transfer and reverse transfer; at the source level, it can be
divided into intralingual transfer and interlingual transfer; in the result level, it can be divided into positive transfer, negative transfer and zero transfer; at the level of language transfer, it can be divided into phonetic, lexical, syntactic, semantic and pragmatic transfer, as shown in Figure 2 below.

![Classification of language transfer](image)

Figure 2. Classification of language transfer.

2.3. The utilization of language transfer theory in Russian teaching

For learners, as a new language, Russian learning process can be seen as a behavior habit. In the process of learning, learners' original habits will have an impact on their new learning habits. Specific to the level of Russian learning, beginners face the interference of their mother tongue to Russian learning [5]. In order to reduce the adverse interference, it is necessary to systematically describe and compare the mother tongue and Russian of beginners, so as to help Russian beginners predict the difficulties of learning and reduce the difficulty of learning. In addition, different languages have the typical characteristics of commonness, universality and particularity, and the differences between Russian beginners' mother tongue and Russian are not enough as the main basis for the transfer. Therefore, in the process of Russian teaching, it is necessary to correctly understand the function and influence of language transfer, actively apply the positive transfer function of language transfer theory, including positive transfer of vocabulary and positive transfer of grammar, and reduce the negative transfer effect of both.

3. Utilization of computer aided translation software in Russian teaching

3.1. Utilization of computer aided translation in Russian teaching

The utilization of CAT software in Russian teaching is helpful to hand over the mechanical, repetitive and trivial work in the process of Russian translation to the computer. In this way, Russian teachers and learners can spare more energy on translation, so as to further improve the quality and efficiency of teaching. On the one hand, computer translation software can greatly improve the efficiency of translation, but on the other hand, it requires users to have certain information literacy, especially with certain computer operation skills, and be familiar with the retrieval and acquisition of network resources.

With the help of manual or electronic scanning, the CAT software can input the materials to be translated, set up the source language and target language, import the translation materials, and then translate under the project page. The auxiliary translation process is easy to operate and the interface is neat and orderly, which solves the problem of bilingual comparison and is easy to translate. In addition, the CAT materials have the function of translation memory. At the same time of translation, the translation memory database constantly learns and automatically stores new translations in the background, and establishes a language database. With the help of the term management function of CAT software, the unification of terms can be realized.
3.2. Utilization scope of computer aided translation in Russian teaching

First of all, the utilization of CAT software in Russian teaching can establish and broaden the traditional Russian translation teaching approach. The translation system based on CAT software can improve students' translation ability and level in the practical environment [6]. Secondly, CAT has become an important part of the overall construction plan of Russian teaching. On the basis of the translation practice in the CAT laboratory, many extended utilizations can be carried out. Therefore, its utilization can improve and broaden the traditional translation teaching approach, and its extended utilization is also very extensive. Specifically, the utilization scope of CAT in Russian teaching mainly includes several aspects as shown in Figure 3 below.

![Figure 3](image)

**Figure 3.** The utilization scope of CAT in Russian teaching.

In addition, the utilization in the teaching platform can link the teaching process with the establishment of translation and counter translation corpus. The utilization in the teaching experiment platform level helps to form a multi domain and multi-level translation corpus. The utilization of translation service platform helps to build a service platform environment for Russian teaching, scientific research literature and paper translation. The utilization in the technical training platform level will help to cultivate more excellent CAT talents, and improve the computer ability and information literacy of Russian and translation teaching staff.

4. Utilization of language transfer theory based on computer aided translation software in Russian teaching

4.1. Utilization of computer aided language transfer theory in Russian teaching

First of all, in the aspect of Russian phonetic teaching, it should make full use of the corpus constructed by CAT to compare the pronunciation of Russian letters and international phonetic symbols, so that students can have a deeper understanding of their similarities and strengthen the positive transfer of Russian learning. In view of the incompatibility of some vowels and the complicated stress in Russian, this paper uses computer-aided corpus to help students realize the mobility of Russian word stress. Secondly, in the aspect of Russian grammar teaching, based on the corpus, this paper compares the similarities and differences of grammatical rules between Russian and mother tongue to help students accurately understand the grammatical usage of Russian, deepen their memory and learn to use them correctly. In addition, it can help students improve their grammar confusion by changing the influence of their mother tongue and negative transfer.

4.2. Russian teaching strategies based on language transfer theory

First of all, Russian noun category is the first Russian grammar for beginners to learn. Only by internalizing the grammar rules of Russian into the knowledge structure of beginners can it eliminate the interference of mother tongue and reduce the occurrence of errors. The fixed word order of
beginners' mother tongue will affect the learning and utilization of Russian word order, interfere with the understanding of Russian sentences, and can not master the rich expression of Russian sentence word order. Secondly, the use of CAT system to import Russian culture, enrich the way for students to understand Russia, learn about questioning knowledge, and further improve students' Russian utilization ability. In addition, in view of the personal, social and environmental factors that affect language transfer, it should make full use of students' language knowledge to promote positive language transfer. And pay attention to the negative transfer, find the negative factors that affect Russian learning, and continuously improve the teaching effect.

5. Conclusion
In summary, the research on the utilization of language transfer theory based on CAT software in Russian teaching helps to enrich the construction of transfer theory system in Russian teaching. The utilization of language transfer theory in Russian teaching can play a positive function in the positive language transfer and overcome the negative influence. Based on the analysis of the development and utilization of language transfer theory, this paper studies the concept and classification of language transfer. Through the research on the utilization of CAT software in Russian teaching, the scope of its utilization is analyzed. Through the analysis of the utilization of language transfer theory based on CAT software in Russian teaching, the specific utilization process and teaching strategies are given.

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