

# *Reflections on the Development of Computer-Assisted Translation in China under the Background of Artificial Intelligence*

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**Keywords:** Artificial intelligence, Computer-assisted translation, Development in china

**Abstract:** With the rapid development of science and technology, artificial intelligence technology has also been developed rapidly. Under the background of artificial intelligence, computer-aided translation is also born, which becomes a better help for people to learn translation and also for the better development of China's translation career. Therefore, this paper focuses on computer-aided translation and discusses the thinking on the development of computer-aided translation in China under the background of artificial intelligence.

## 1. Introduction

Artificial intelligence has appeared earlier, but the development of artificial intelligence only belongs to the beginning in the world, and there is still a certain gap from the real artificial intelligence. Therefore, at present, artificial intelligence in China can only be called pre-artificial intelligence. Although the development of artificial intelligence has a long time to go, but only now it has brought great changes to people's lives and production. Translation as a special work and activity, artificial intelligence also involved in it. From simple mechanical translation in the beginning to computer-assisted translation (CAT) today, this not only represents the advancement of AI, but also symbolizes the closer integration of AI and translation. <sup>[1]</sup> Computer-assisted translation first appeared in the 1940s, not only because of the development of artificial intelligence, but also because of the demand for it. Especially in the twenty-first century, with the emergence of information networks, traditional translation can no longer meet the demand for good information. And computer-assisted translation can easily fulfill the requirements of social development. For example, computer-aided translation translates three thousand words per second, which is more than 40,000 times of ordinary translation. At the same time, computer translation is not only ordinary translation, but also a set of scientific system formed by the cooperation of human and machine, which can effectively help translators improve quality, save time and optimize the process. In recent years, China has begun to pay more and more attention to the use of computer translation, which is manifested in the construction of disciplines, personnel training, industry standard development, software development and teaching research, etc.

## 2. The Development of Computer-Aided Translation in China under the Background of

## Artificial Intelligence

Nowadays, computer-aided translation has been paid more and more attention in China, and scientific and technological workers and translators have also got the effect in the actual application, especially some professional translation companies have also tasted the sweetness from computer-aided translation. At present, computer-aided translation has basically completely replaced the traditional translation method, and also improved the translation quality and translation efficiency of translators to the greatest extent. Based on the development of artificial intelligence, the application of computer-aided translation is undoubtedly a cross-generation historical milestone with great significance.<sup>[2]</sup> The author considers the computer-assisted translation in China and discusses some of the problems that still exist today.

### 2.1 Computer-Aided Translation Problems

#### 2.1.1 Short Development Time and Lack of a Perfect System

Computer-aided translation has been developed for a relatively short period of time and lacks a relatively complete and scientific system of industry standards.<sup>[3]</sup> It can even be said that our country's current computer-aided translation is independent and individualized in terms of control, and the work is inspected by professional translation engaged personnel. But from the overall perspective, the lack of authority and written differences lead to the inability to effectively carry out quantifiable control.

#### 2.1.2 Insufficient Teachers and More Cumbersome Operation

The basis of the use of computer-aided translation is proficiency in the operation of the software, so it is difficult to grasp the use of computer-aided translation without time for training, and extremely specialized training is required.<sup>[4]</sup> At the same time, the operation of the group construction is relatively cumbersome, and the level of intelligence in China is still insufficient, so it needs to be more widely popularized in training to achieve better use. Some universities in China are also aware of the importance of maturity and have opened professional courses, but the faculty is still insufficient and the theoretical courses are too rich to be connected with practice.

#### 2.1.3 Relying on Corpus, Lacking Authority

Nowadays, computer-aided translation basically relies on the corpus, but even now, the corpus still does not have a unified standard, and it does not have the advantage in terms of quantity. Although most of the teams have established their own corpora, they are independent in order to maintain their competitiveness, which is not only detrimental to the development of the corpus, but also challenges its authority.

### 2.2 Computer-Assisted Translation Solution Measures

In view of the above problems, computer-aided translation based on the background of artificial intelligence needs to make corresponding solution measures. First of all, reserve a group of high-quality English talents, especially those who are engaged in translation work and interested in computers and new technologies. In the future development of translation work, it is necessary to gradually establish a team proficient in computer software and at the same time prepare a team of bilingual knowledge professionals, with a clear division of labor between the two, according to such as the development and operation of that piece of work of their respective duties, and improve the

industry norms and development system.<sup>[5]</sup> Secondly, to form a professional team and build a corpus. For today's computer-aided translation, it has become imperative to build a unified standard and data-rich corpus, and at the same time, professionals are needed to constantly update it. Among them, the brief description of the corpus not only covers common knowledge points, but also needs to have some colder partial points, such as the slang of various countries. Finally, the construction of teachers and the formation of a professional teaching team. In computer-assisted translation education, students' practical operation ability needs to be cultivated, not just clear conceptual theory to use various software of CAT type. In teaching, we also need to pay attention to students' repeated operation and practice, and finally achieve proficiency. For computer-aided translation, it is more convenient to use and more convenient to carry. With the rapid development of artificial intelligence, computer-aided translation has also been improved to meet the various needs of translation in today's society.

### 3. Conclusion

To sum up, knowledge and innovation have formed a brand new situation under the background of artificial intelligence. Translation has even taken this opportunity to ascend a new ladder, and computer-aided translation has left a colorful stroke in the history of translation, which is rather the coexistence of theory and practice, and has made great contributions to the whole Chinese cultural dissemination and the introduction of Western culture.

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