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Research Article

Multimedia Interaction-Based Computer-Aided Translation Technology in Applied English Teaching

Hongxia Wu

Baotou Medical College, Baotou 014040, China

Correspondence should be addressed to Hongxia Wu; 102012078@btmc.edu.cn

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Multimedia interaction-based computer-aided translation (CAT) is an effective method for translating massive multimedia applications. It is an essential English learning tool for college students with majors in multimedia technology. English teachers need to properly guide their students to use CAT technology by improving the students' English translation capabilities via reasonable setting of courses, selection of multimedia materials for teaching, and implementation of learning multimedia assessment. This paper proposes a semiautomatic evaluation method for a machine translation system based on fuzzy mathematics. It first discusses the characteristics of multimedia CAT software, describes its working principle, and proposes an optimization scheme suitable for translating teaching by analyzing its advantages and disadvantages. The author believes that only through the combination of multimedia interaction-based CAT teaching and traditional translation teaching we can better achieve the purpose of translation education to improve the quality and English-speaking talent.

1. Introduction

Multimedia interaction-based computer-aided translation (CAT) is developed from machine translation (MT). Based on MT, it can be translated by flexible human-computer interaction technology (HCI). It can also be called machine-aided translation (MAT) [1]. Broadly speaking, CAT refers to the operation of computer operating systems by interacting with multiple application software. CAT includes specialized translation software, e.g., SDL TRADOS, TransStar, and Yaxin, used to improve translation efficiency. At present, high-end computer-aided translation research and talent cultivation approaches are gathered in some internationally renowned institutions such as the Higher Education Institute of the Third University of Paris and the Translation Department of the Chinese University of Hong Kong [2]. In mainland China, there are not many colleges and universities that have adopted CAT technology, with the exception of Peking University and Beijing University of Aeronautics and Astronautics. The use of CAT technology in teaching is still a relatively new concept for most colleges and universities, and it has not been given enough attention [3].

The translation courses that are currently offered rarely involve the use of translation technology [4]. Therefore, it is necessary to briefly introduce the development of computer-aided translation [5]. Since the 1990s, CAT has experienced an early stage trial (early 40s and early 50s), a highly optimistic phase (mid of the mid-1950s), a decade of silence and stagnation (60–70s), the revival period (70s), and the transition period (80s to 90s). CAT was gradually accepted, and developers begin to provide translators' software operation platforms for professional translators. True CAT development is suitable for the early 1990s, such as SDL text processing, terminology management, and the emergence of translation memories. According to Professor Scott, the core of CAT technology is Translation Memory (TM). When the translator is working efficiently, CAT synchronizes the language database in backstage to complete the so-called translation memory [6]. Once the currently translated sentence has been translated, the computer will automatically provide the stored translation results. For similar sentences, translation references and suggestions will also be provided, and the translator can select, discard, or reedit the recurring according to the actual needs [7]. CAT provides

text that shortens the translation time and improves the translation efficiency. Another important component of CAT is terminology management. Broadly speaking, any vocabulary that appears in a translation can be saved as a term if it is necessary for repeated use and the set of terms that are saved becomes a term base. Term bases can also be reused, not only in this translation but also in future projects or other people's translation work, which not only improves the efficiency but more importantly, addresses translation consistency issues [8].

The rest of this paper is organized as follows. In Section 2, the literature review is provided. In Section 3, the application of multimedia interaction-based computer-aided translation technology along with its application to English translation teaching is discussed. This section also provides a detailed evaluation of the proposed approach. Finally, the paper is concluded, and future research directions are provided in Section 4.

2. Literature Review

Today, in addition to the leader Trados, the well-known CAT software includes DeJa Vu, Wordfast, Idiom, Catalyst, etc. In 1998, for the first time in China, CAT software was introduced from abroad [9]. The first domestic CAT software was known as Yaxin, and then Snowman, Wynn, and other companies have also designed their own versions of CAT software. The history of domestic translation software is only ten years old. With the development of science and technology, the computer operating system began to transition from one Windows to another, and the original command mode was converted to the current mode of graphics that is more convenient for users. The software development industry has also experienced an unprecedented competitive trend. In such a market environment, many old products such as Landau have faded out of people's horizons. At the same time, some new and more competitive translation software such as Kingsoft and Orient Express appeared. In 2014, Yan Yuxi, a computer-aided translation major at Peking University, conducted a network survey on the application of CAT software in the Chinese market. The results showed that there are four main types of software commonly used in China: Trados, Wordfast, Snowman CAT, and Yaxin CAT [10]. In this section, we explain the features and principles of multimedia interaction-based CAT in Section 2.1, the impact of multimedia interaction-based CAT on teaching objectives in Section 2.2, and finally, the impact of multimedia interaction-based computer-aided translation on teaching organizations in Section 2.3.

2.1. Features and Principles of Multimedia Interaction-Based CAT Software. CAT is the use of computer-aided manual translation, creating a translation process of human-computer interaction. Generalized CAT, including the integrated application of various computer operating systems and application software, involve paper text entry, editing, typesetting, storage, printing, backup, transmission, network resources, use of related electronic software, etc. The loosely coupled machine-assisted translation (MAT) is based on the principle of Translation Memory (TM) in the context of computer software [11, 12].

It is the technical core of machine-assisted translation, supplemented by other auxiliary translation methods such as electronic dictionary, terminology management, alignment tools, quality inspection, word count, text analysis, project management, and other application software systems. In actual translation activities, sentences in different documents are more or less duplicated. By recycling these translation resources, the goal of avoiding duplication of labor can be achieved. In order to make use of these resources, the machine first needs to divide the existing corpus into segments (usually sentences or a clause or phrase), align, and then add other information by the translation unit. The form is stored in the database, and the system automatically finds whether there are sentences in the library that are similar to the current segment, i.e., exact match and fuzzy match, through the similarity algorithm. The translation is used as a reference; if not, the translator can also find the translation of words in the sentence by cross-query.

The management of translation projects is also part of the translation of CAT technology [13, 14]. For a large workload and tight time translation, this requires several translators to assist in the division of labor. Inconsistent terminology may cause difficulties and incomprehensibility such as "details," "specifications," "instructions," etc.. When the project manager determines the unified terminology, it will not appear. Establish a matching mechanism for words, phrases, or sentences (matching), use the computer to complete the finished translation or the existing translation resources, and the translator grasps the quality of the translation and stores it in the memory. The most characteristic of CAT is a self-learning function [15]: the system automatically saves the translation result to the translation server. The next time the system encounters the same or similar sentences, it can refer to it or use it directly, saving the time for the translator to search the dictionary and input, thus effectively avoiding the emergence of the translation process. Repeated phenomena ensure the efficiency of translation. In addition, due to the continuous accumulation of translated corpora, it is more efficient to provide services for professional translators.

The essence of MT is to match the original text and the translated language through the corpus. This kind of translation principle makes the decisive factor of translation quality affected by two aspects: First, the richness of the back-end corpus. In other words, is there a translation in the corpus that corresponds to the input text? If not, it will not be translated. Second, whether the translation vocabulary in the translation machine is more suitable for the original text? It will determine the quality of the translation—the main advantage of CAT software results in the aforementioned two aspects. Software is popular among professional translators and is being applied to translation teaching. This kind of computer-assisted translation requires the users to have considerable foreign language knowledge so that the new model can train the English and translation ability of college students. In short, the quality of translation is mainly

controlled by professional translators. Therefore, computer-aided translation tools cannot determine the quality of translation. This translation software has no corpus at the beginning, just like newborn babies. The parallel corpus is the translation of commonly used related vocabulary and sentences as the translation volume of translators' increases.

2.2. Impact of Multimedia Interaction-Based CAT on Teaching Objectives. For a longer period of time, colleges and universities have different understandings of translation teaching, and they insist on different schooling characteristics. Therefore, these colleges and universities have different tasks for the translation curriculum. Undergraduate translation teaching in key institutions such as 211 and 985 (Chinese Projects) is more inclined to focus on students' testing and consolidation of foreign language knowledge, improve language application ability, literary translation ability, and TEM8 translation test. Students go to practice, and their goal is to send undergraduate students to higher education institutions for further study. Figure 1 shows the classic translation model. The undergraduate translation major of higher translation colleges in higher education institutions, in addition to testing and consolidating foreign language knowledge and improving language application ability, is more inclined to enable students to understand the concepts and rules of the translation profession and to master the ability and skills of bilingual transformation. The subject matter is also more focused on practical texts and is used to illustrate the difficulty and skill of text translation in real work environments and to improve students' ability to work in translation jobs. In comparison, the goal of translation teaching based on computer-assisted translation technology is clear, i.e., to cultivate a composite translation practical talent with a certain professional background and a good ability to translate Chinese and English with strong computer translation software application ability. From a professional background, students can choose legal text translation, business text translation, literary text translation, and political text translation according to their own interests and hobbies. They can choose to construct corresponding professional translation terms in the translation practice process. The libraries and translation memory lay a solid foundation for the translation of the relevant translation business after graduation so that students can smoothly enter the job role. Classic translation mode is shown in Figure 1.

2.3. Impact of Multimedia Interaction-Based Computer-Aided Translation on Teaching Organizations. Helping students understand and master various translation skills is one of the primary goals of translation teaching. Its high-level goal is to develop students' ability to analyze and solve problems by applying what they have learned in future translation practice and actual translation work. The teaching content of the translation course, based on computer translation technology, is similar to that of traditional translation teaching. Therefore, when organizing the translation practice course of CAT technology, students must understand the importance of cooperation between human translation and computer translation. Students need to build sound CAT thinking so that they can establish a sense of responsibility as a qualified translator and actively guide other students to clearly understand the translation activities under computer-assisted translation technology. In the process of teaching, students play the role of participants and researchers, while teachers act as pointers and promoters. Under the guidance of teachers, students should actively participate in classroom activities, study problems, analyze problems and apply what they have learned to solve problems. If students only passively and passively accept the knowledge imparted by teachers, they will not be able to understand the used and technical connotation of CAT in a true sense, let alone the actual development of students' translation practice ability. In the practice of translation under computer-aided technology, a qualified translator needs to have translation memory management skills, computer-assisted translation editing skills, translation project management skills, and high translation skills. Therefore, in the translation practice teaching using computer-aided translation technology, teachers should cultivate students' comprehensive translation ability from the following six aspects:

(1) Cognition and use of the CAT translation system, such as SDL TRADOS computer-assisted translation software;
(2) Understanding and acquisition of translation tools, such as corpus indexing software, translation memory entry, and translation corpus;
(3) Chinese and English bilingual language and cultural conversion ability;
(4) Chinese and English editing ability of translation results;
(5) Translation memory translation terms and content translation ability;
(6) Computer, office software, and other operational capabilities: In the process of teaching organization, a combination of theory and practice should be adopted to enable students to master the theoretical basis, operational principles, operational methods, etc., of computer-aided translation systems in a relatively short period of time. In short, theoretical teaching is the guiding and paving, and specific exercises and applications should occupy a larger part of the curriculum. When students are familiar with and use the relevant computer-assisted translation technology system, the teaching organization should focus on the methods that teachers teach and practice with students.

3. The Application of Multimedia Interaction-Based Computer-Aided Translation Technology in Applied English Translation Teaching

In this section, we discuss the application of multimedia interaction-based CAT technology for English translation.

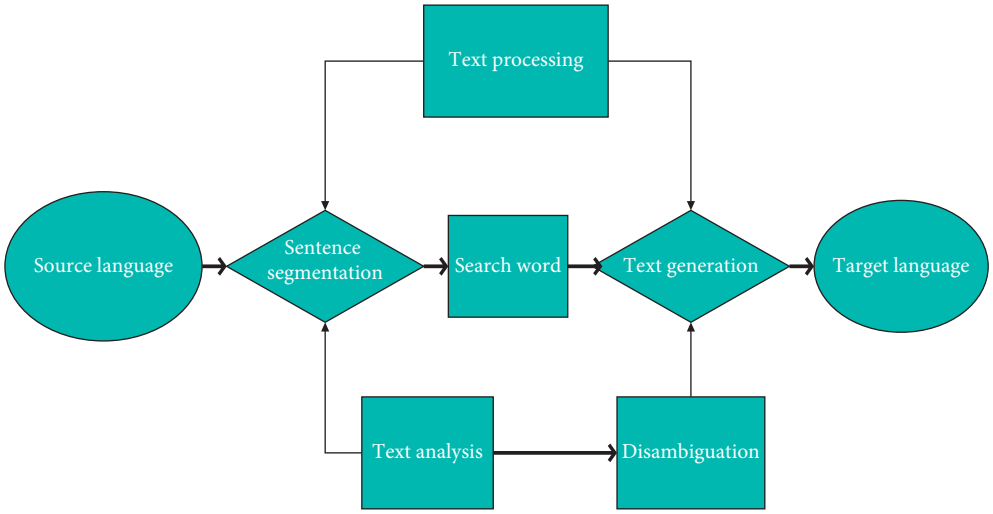

Figure 1: Classic translation mode.

First, we will discuss the translation process in translation teaching followed by curriculum sitting, its preparation before classes, teaching implementation, and assessment of learning effectiveness.

3.1. Multimedia Interaction-Based CAT Software Translation Process in Translation Teaching. CRACIUNESCU believes that the thinking of the human brain is roughly divided into three levels: pragmatic layer, semantic layer, and syntactic layer.

The functions of these three levels are as follows:

(1) *Semantic layer*. There is no simple dictionary translation for the meaning of context and the context of the article.

(2) *Syntactic layer*. Understand the meaning of vocabulary in sentences.

(3) *Pragmatic layer*. It has the meaning of context and the context of the article and understands the human meaning of the vocabulary.

Nowadays, computers can basically understand the semantic layer through simple mechanics. Due to the application of parallel corpora, computer-aided translation software can process large data. Therefore, the translation of the computer also has a certain syntax layer function.

3.1.1. CAT Issues in Applied Teaching. Computer-assisted translation is used for auxiliary translation because the meaning of the language is different in different moods and contexts. Auxiliary translation has studied the following issues.

(1) How to ensure the intelligence and automation of translation in the process of using CAT technology by translators and teachers.

(2) How can I use CAT software to improve the quality and efficiency of manual assisted translation?

(3) How to manage the overall translation process of CAT technology so that the quality of human translation is adequately guaranteed.

In order to solve the above problems, experts began to design computer-aided translation software with the following functions: First, the software translation library is managed to provide translators with more convenient operations, thereby increasing the speed of translation. Secondly, it provides the ability to automatically search the database. Third, in order to achieve better translation quality, the translation results should be tested.

3.1.2. CAT Roles in Applied Teaching. Compared with the traditional translation process, computer-aided translation software is unique because the computer actively participates in the work of landscaping. In the whole process of translation, the role of computer-aided translation software is mainly reflected in the following aspects:

(1) Searching the corpus in the system to provide better choices for translators.

(2) Searching the database of the whole system looking for a similar statement.

(3) The translator's translation results are stored in the parallel corpus corresponding to the term corpus, and the terms specified by the translator are stored in the term corpus.

It can be seen that the computer-assisted translation software mainly helps professional translators to perform "memory" in the whole process of translation, thereby improving the translation efficiency of professional translators. Therefore, this system is also called the TM system-Translation Memory system [9]. Through the translation memory system to establish a matching mechanism of words, phrases, or sentences (Matching, the use of computers to complete the finished translation, or the existing translation resources, the translator grasps the quality of

translation, stored in the memory, the system is the most distinctive). It is a self-learning function of CAT. The system automatically saves the translation result to the translation server. The next time you encounter the same or similar sentences, you can refer to it or use it directly, saving the time for the translator to check the dictionary and entry, thus effectively avoiding the translation process. Repeated phenomena appear to ensure the efficiency of translation.

3.2. Curriculum Setting. There are two types of computer-aided translation technology teaching modes: one is an additional activity type, i.e., students mainly learn computer-aided translation technology through network environment outside the classroom, and the teachers regularly guide. The one is comprehensive type, i.e., the combination of traditional teaching methods and computer-assisted translation technology teaching. Teachers develop computer-aided translation technology learning plans to guide, supervise, and evaluate students' learning outcomes. Teachers use network resources to make reasonable settings for the target course. When choosing a web resource, consider whether the selected material is conducive to improving the student's translation skills and to what extent. Teachers should develop a computer-aided translation technology syllabus, including subject selection, classroom organization, teaching methods, and student English level assessment. The structural diagram of translation classroom teaching mode is shown in Figure 2.

3.3. Preparation before Class. Preparations include browsing the website in advance, selecting translation learning information suitable for students and related task content, and arranging different learning materials according to different learning ability of students.

Before the class, the teacher recorded the language learning knowledge points into the microcourse video, and the corresponding courseware, exercises, and other resources were provided to the learners through the learning cloud space. At the same time, teachers design learning activities based on learning cloud space, students participate in online learning activities, exercise exercises, and summarize learning gains and confusion to prepare for the offline classroom. Teachers provide tutoring to students' online learning activities and design classroom activities in combination with students' preclass learning.

3.4. Teaching Implementation. The teacher should clearly indicate the teaching objectives and teaching contents of this lesson, and then arrange the students to complete the teaching tasks independently or cooperatively according to the actual teaching content.

In the classroom, teachers make breakthroughs in language knowledge points according to the preclass students' learning situation and analyze and discuss students' learning confusion and problems. Communicate, organize students to carry out skills training such as listening, speaking, and reading. Through the teaching activities such as skills training, communication and reporting, problem solving and self-assessment, and mutual evaluation, students will internalize the teaching content of language knowledge, listening, speaking, reading, and writing skills.

3.5. Assessment of Learning Effectiveness. The assessment of the learning outcomes of students can test the learning outcomes of students and test whether students can use computer-assisted translation techniques reasonably and effectively. After class, teachers will provide solid learning based on students' classroom performance. Materials investigate learning effects and improve instructional design and summarize the teaching. Students use the materials provided by the teacher to study, so as to check the lack of knowledge points and at the same time conduct summary and feedback evaluation.

3.5.1. Using the Analytic Hierarchy Process to Construct an Evaluation Model Hierarchy. The evaluation of translation quality considers three main factors: "vocabulary," "grammar," and "discourse." Vocabulary is examined from three aspects: lexical collocation, rhetoric, terminology, and dialect use; grammar mainly examines whether the grammar of the translation is correct; text includes cohesiveness, coherence, intent, and acceptability. The evaluation system structure is shown in Figure 3. As can be seen from Figure 3, A indicates the target layer machine translation evaluation and the criterion layer three indicators. It is represented by C_i ($i = 1, 2, 3$), and each indicator in the criterion layer is set up with its own subindicators. The three indicators can be further divided. Therefore, this paper determines each by establishing an Analytic Hierarchy Process (AHP) model. The weight of indicators in the machine translation evaluation architecture provides a reference for the application of applied English teaching. The evaluation system structure formed by Delphi technology is used to summarize the results of expert consultation, and the following judgment matrices are obtained after processing. Each value in the row represents the relative importance value of the indicator of the row to the index of the column in question and is represented by the quantitative relationship.

3.5.2. Establishing a Judgment Matrix. Prof. Satie's metric method gives quantitative comparisons for different comparisons, as shown in Table 1.

According to the hierarchical structure of Figure 1, applying the method of representation of Prof. Satie, through a questionnaire survey of some teachers and experts of the school, according to the generation method and structural characteristics of the judgment matrix, establishes a comparative judgment matrix for each level of the evaluation system, as shown in Tables 2–5.

3.5.3. Single-Level Sort of Weight. The relative importance value of each factor is determined by a given matrix, and the weight is calculated for each index in its determined weight matrix calculation using the following steps:

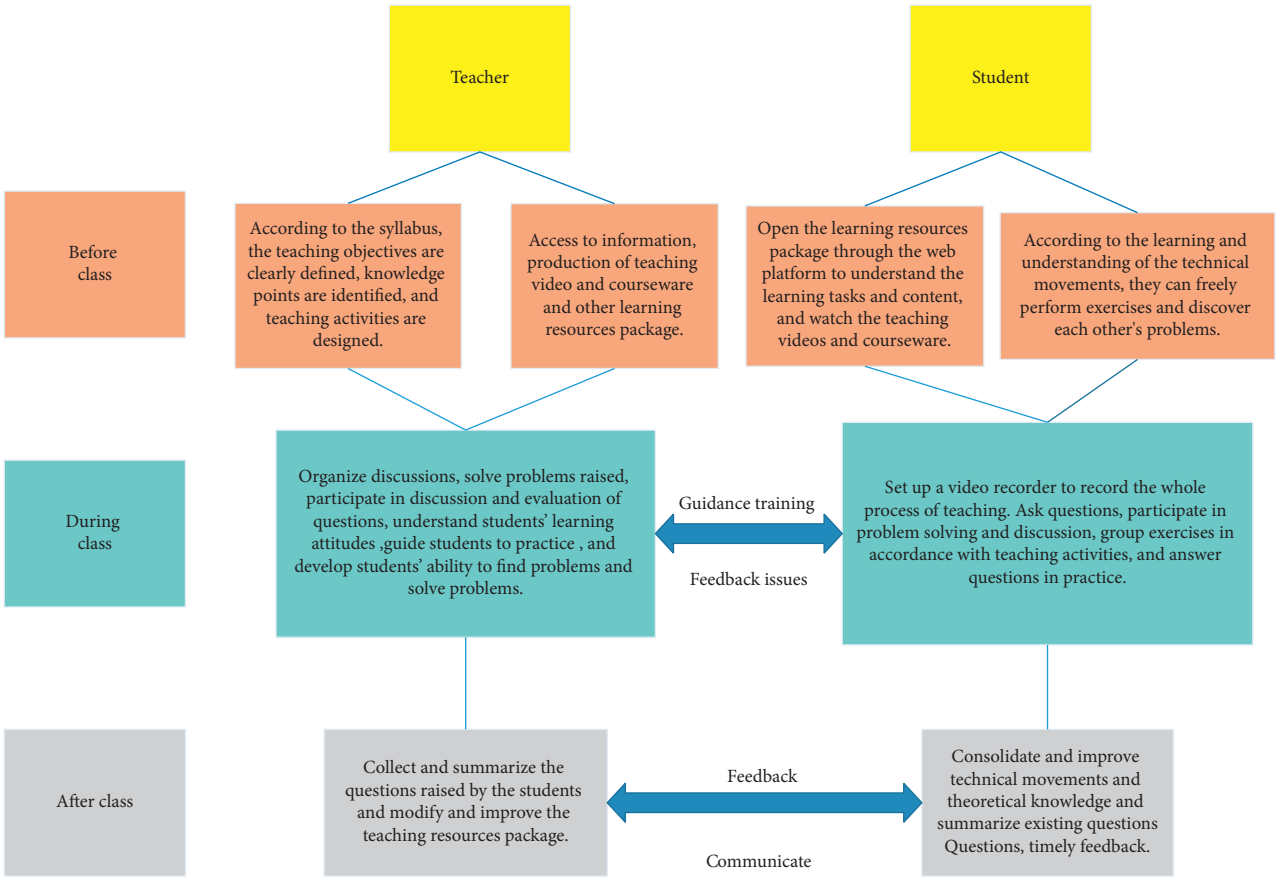

Figure 2: The structural diagram of translation classroom teaching mode.

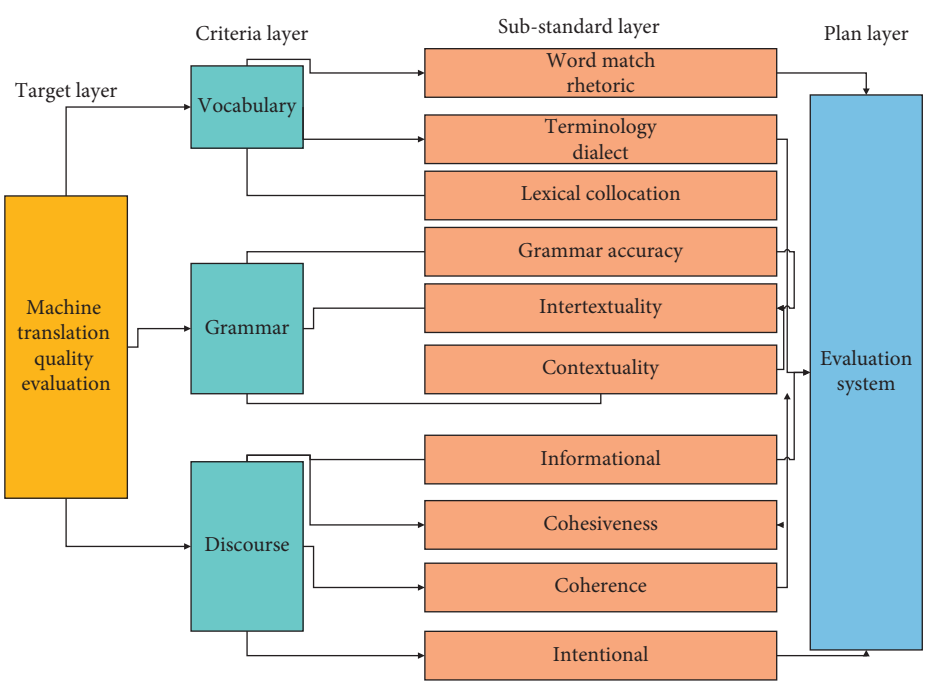

Figure 3: Machine translation evaluation architecture.

(1) Multiplication of matrix elements by rows

$$M_i = \prod_{j=1}^{n} aij, \quad i = 1, 2, \cdots, n. \tag{1}$$

(2) Calculate the weight value

$$W_i = \frac{M_i}{\sum_{j=1}^{n} M_j}, \quad i = 1, 2, \cdots, n. \tag{2}$$

From the judgment matrix A, the weights of B1, B2, and B3 can be calculated. That is, the weights of innovation consciousness, innovation personality, and innovation ability in the criterion layer for the target layer "the translation quality was evaluated" can be determined, and the calculated weight vectors can then be calculated. Fill in Table 2, respectively; get the weight vector of the three criterion factors for the target layer. Similarly, calculate the weight vector of the judgment matrix B1, B2, B3, and fill in the results in Tables 3–5.

3.5.4. Consistency Check of the Judgment Matrix. In order to scientifically reflect the relative importance of each index [15], after the weight vector of the judgment matrix is obtained, the consistency of its validity must be tested. The specific inspection steps are as follows:

(1) Multiply the judgment matrix by its corresponding weight vector.

(2) Calculate the maximum eigenvalue of the judgment matrix.

(3) Calculate the consistency index CI and select the average random consistency index RI. Among them,

$$\mathrm{CI} = \frac{\lambda_{\max} * n}{n - 1}. \tag{3}$$

(4) Calculate the consistency index ratio:

$$\mathrm{CR} = \frac{\mathrm{CI}}{\mathrm{RI}}. \tag{4}$$

The length of the international trade data to be encrypted is defined as n, followed by the standard normal distribution function, the key extension sequence $X = x_1, x_2, ..., x_n$, and the statistics of the binomial and Hof of the encrypted bit sequence $S_n = x_1 + x_2 + ... + x_n$, and the characteristic recombination output of the encrypted data in international trade is obtained as follows:

$$\mathrm{Decrypt}(sk, c^*)AA^{-1} = \begin{pmatrix} t_{1,1} & \cdots & t_{1,m} \\ \vdots & \ddots & \vdots \\ t_{m,1} & \cdots & t_{m,m} \end{pmatrix} = E. \tag{5}$$

The stochastic linear processing model of encrypted data in international trade is constructed by using the MIMO hybrid precoding method. The public key encrypted plaintext sequence of international trade data is obtained by constructing the Hash function.

$$\mathrm{Decrypt}(sk, c^*)A^{(\alpha_1,\cdots,\alpha_m)}\mathrm{Decrypt}(sk, c^*)\left(A^{-1}\right)^{\left(\alpha_1^{-1},\cdots,\alpha_m^{-1}\right)^T} = \begin{pmatrix} \alpha_1 a_{1,1} & \cdots & \alpha_m a_{1,m} \\ \vdots & \ddots & \vdots \\ \alpha_1 a_{m,1} & \cdots & \alpha_m a_{m,m} \end{pmatrix}\begin{pmatrix} \alpha_1^{-1} t_{1,1} & \cdots & \alpha_1^{-1} t_{1,m} \\ \vdots & \ddots & \vdots \\ \alpha_m^{-1} t_{m,1} & \cdots & \alpha_m^{-1} t_{m,m} \end{pmatrix} = E. \tag{6}$$

Gram–Schmidt orthogonal vector quantization method is used to construct the Turbo code model of international trade data. The Turbo code model is obtained as follows:

$$\mathrm{Decrypt}(sk, c^*)\left(A^{(\alpha_1,\cdots,\alpha_m)}\right)^{-1} = \begin{pmatrix} \alpha_1^{-1} t_{1,1} & \cdots & \alpha_1^{-1} t_{1,m} \\ \vdots & \ddots & \vdots \\ \alpha_m^{-1} t_{m,1} & \cdots & \alpha_m^{-1} t_{m,m} \end{pmatrix} = \left(A^{-1}\right)^{\left(\alpha_1^{-1},\cdots,\alpha_m^{-1}\right)^T}. \tag{7}$$

(5) To determine the value of CR is determined based on whether a matrix consistency test by. The conformity test evaluation table is shown in Table 6.

By calculation, the CR values of the judgment matrix A, B1, B2, and B3 are all less than 0.1 and they have satisfactory consistency. It is concluded that they are all valid matrices, and the values of $\lambda_{\max}$, CI, and CR are entered in Tables 2–5.

3.5.5. Hierarchical Total Sorting. Figure 4 shows the development of CAT in recent years. Index System of Quality

Table 1: Correspondence table for quantitative comparison.

Degree a_{ij}	Definition	Explanation
1	Equally important	The i element is as important as the j element
3	Slightly important	The i element is slightly more important than the j element
5	Obviously important	The i element is significantly more important than the j element
7	Much more important	The i element is much more important than the j element
9	Extremely important	The i element is more important than the j element
2 4 6 8	Between the above adjacent judgments	For the above two judgments of the compromise
The above number is reciprocal	Reverse comparison	i and j elements

Table 2: Judgment matrix A.

A	B1	B2	B3	W	Consistency check indicator
B1	1	1/3	1/2	0.16	$\lambda_{max} = 3.001$
B2	3	1	2	0.54	CI = 0.005
B3	2	1/2	1	0.30	CR = 0.0086 < 0.1

Table 3: Judgment matrix B1.

B1	C1	C2	C3	W	Consistency check indicator
C1	1	1/3	1/5	0.11	$\lambda_{max} = 3.000$
C2	3	1	1/2	0.31	CI = 0.002
C3	5	2	1	0.58	CR = 0.0034 < 0.1

Table 4: Judgment matrix B2.

B2	C4	C5	C6	C7	W	Consistency check indicator
C4	1	1/2	2	2	0.26	$\lambda_{max} = 4.000$
C5	2	1	4	4	0.50	CI = 0
C6	1/2	1/4	1	1	0.13	CR = 0.4 < 0.1
C7	1/2	1/4	1	1	0.14	

Table 5: Judgment matrix B3.

B1	C8	C9	C10	W	Consistency check indicator
C8	1	1/3	1/5	0.11	$\lambda_{max} = 3.004$
C9	3	1	1/2	0.31	CI = 0.002
C10	5	2	1	0.58	CR = 0.0034 < 0.1

Table 6: Conformity test evaluation table.

CR	Result
CR = 0	Completely satisfactory consistency
CR < 0.1	With satisfactory consistency
CR > 0.1	Need to reevaluate relative importance until CR < 0.1 is satisfied

Evaluation Model for Innovative Talents Cultivation is shown in Table 7.

The weight of each factor indicator is shown in Figure 5.

It can be seen from Figure 5 that the talent evaluation index changes with the change of factor level, and there is a certain correlation between various factors, which requires us to take into full consideration when translating English, and only after we fully understand the meaning can we translate.

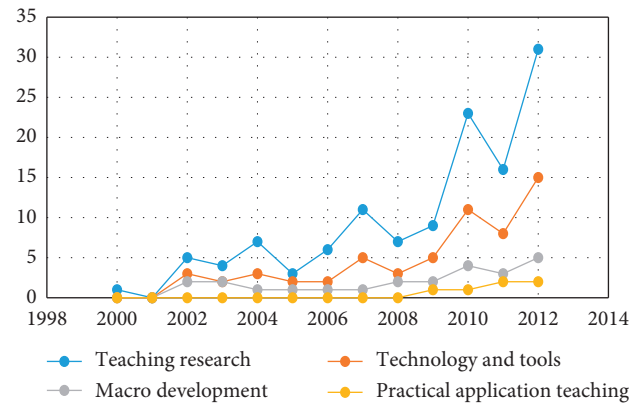

Figure 4: Trend of the number of documents in each theme in China is changing year by year.

Table 7: Index system of quality evaluation model for innovative talents cultivation.

Target layer A	Criterion level B	Factor layer C	The weight of each factor index
The evaluation of translation quality A	Vocabulary B1	Rhetoric C1	0.02
		Dialect use C2	0.05
		Lexical collocation C3	0.10
	Discourse B2	Cohesiveness C4	0.14
		Coherence C5	0.27
		Intentional C6	0.01
		Acceptability C7	0.01
		Contextuality C8	0.03
	Grammar B3	Intertextuality C9	0.10
		Grammar C10	0.18

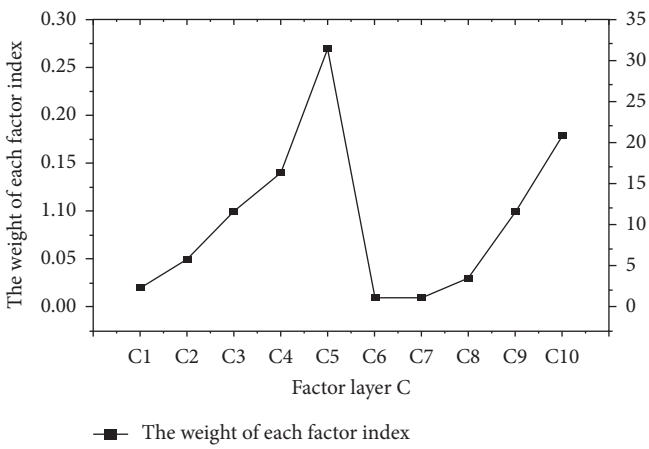

Figure 5: The weight of each factor indicator.

4. Conclusion

Today, with the development of the Internet, our translation and interpretation teaching will inevitably use new tools and technologies. Whoever takes the first step and whoever takes the lead can obtain new resources. English translation trains talents that are technical rather than academic. According to the survey of the translation industry, various types of CAT software have long been the core tools of front line practitioners in translation work. Therefore, CAT enters the translation of this practical professional curriculum system, which can rightly be considered as part of the course. As China becomes more integrated into the process of internationalization and the increasingly close international exchanges and cooperation, it has provided an unprecedented opportunity for the development of the translation market, and the development of the translation market has also fostered the cultivation of talents, especially English undergraduate applicants. The cultivation of typed translation talents raises the requirements for new and higher staff members. A good translator should have not only good translation skills but also be good at using translation techniques to complete translation tasks more efficiently. This paper proposes a semiautomatic evaluation method for a machine translation system based on fuzzy mathematics. Compared with the manual evaluation method, the proposed method is not only fast but also greatly reduces the workload of the evaluation, and the evaluation process is more objective, reducing the influence of subjective factors on the evaluation results. This method can evaluate the quality of a certain aspect of a system and can also compare the quality of different systems. These results can be used as a training sample for another neural network-based machine translation evaluation method. The established neural network evaluation system can evaluate any machine translation system automatically, conveniently, objectively, and quickly.

Data Availability

The data used to support the findings of this study are available from the corresponding author upon request.

Conflicts of Interest

The author declares that she has no conflicts of interest.

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