On the Application of Computer Technology in the Processing and Analysis of Fuzzy Information in English Interpretation

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Abstract. This paper discusses the problems existing in the fuzzy information processing in traditional English interpretation and some methods and techniques used in the processing to improve the efficiency of interpretation. At the same time, considering the translation principles that some interpreters must abide by, this paper puts forward a more efficient means of processing and analyzing fuzzy information in English interpretation through computer technology.

Keywords: Computer Technology, English Interpretation, Information Processing

1. Introduction
Computer information is an irresistible trend in the field of English interpretation. To analysis and processing of intelligent information technology with internet technology and multimedia technology as the core has brought incredible changes to people's behavior in all aspects. In addition, globalization has become a trend, and English, as an international common language, is more dependent on communication and communication between countries, organizations and organizations, and people [1]. At the same time, the information age also put forward high requirements for instant communication, and computing technology has been rapidly developed in the breadth and depth of English interpretation fuzzy galaxy processing analysis. English interpretation is very technical and needs the support of information technology and multimedia technology. With the help of computer technology to provide more efficient and timely English interpretation results, under the background of the great development of translation major, its ability of fuzzy information processing and analysis and its application examples are reasonable and urgent.

2. Application and problems of fuzzy ontology
Fuzzy ontology is still in the preliminary research stage, mainly using computer to deal with the fuzziness of human natural language and human thinking logic fuzzy reasoning, applied to the current
fuzzy information processing and semantic Web services \[2\]. The application mainly includes Web information extraction, image interpretation and semantic Web services. These applications can be grouped into two categories. (1) users can query and retrieve information and knowledge directly through human natural language in information systems or Web service systems. (2) To make available to users, in a natural language manner, the results of information processed by computers or data processed by equipment that are difficult to understand.

At present, most of the research on fuzzy ontology focuses on theoretical research and application in a specific field. As a result, the application of fuzzy ontology to practical information systems or Web services requires further research, including the following aspects. Fuzzy ontology modeling is the basic premise of application, but there is no perfect modeling method to establish fuzzy ontology, especially how to describe and define fuzzy information and fuzzy reasoning in information and knowledge, which is the first problem that fuzzy ontology must be solved \[3\]. At present, fuzzy ontology research mainly focuses on modeling fuzzy domain ontology in specific fields, which is limited to applying semantic-based fuzzy processing to specific fields, but not establishing fuzzy top-level ontology which can be shared universally. The application of fuzzy domain ontology in Web services seldom considers user preference and application scenario, and does not make full use of fuzzy membership operation and fuzzy reasoning to provide decision support services for users.

3. The role of fuzzy language in language expression
Oral communication is more casual than written communication, more emphasis on interaction and fluency in communication, need more vague expression. Because there are many occasions where people communicate, different occasions have different manners, traditions and requirements, the use of vague language can better adapt to various special environments in different language communication situations \[4\]. The use of vague language does not make the other side of the communication misunderstand the meaning to be expressed. In some particularly formal situations, the use of vague language can even make the atmosphere and scene play a role in promoting communication. The function of fuzzy language is not only that.

3.1. In general terms
Some words contain all aspects. It is much easier to generalize their commonalities with the fuzziness of language if they not only take a lot of time and energy, but also do not help the conversation. However, we should pay attention to the difference of language ambiguity between different languages in the process of interpretation.

3.2. Improve language flexibility
The rhythm of all aspects of today's society changes very quickly. In order to deal with the change of the situation, we should combine the topic and context in oral communication, avoid saying too full, leave some room for ourselves and each other, so as to revise the viewpoint or adjust the strategy at any time when the situation changes.

3.3. The language conforms to the occasion etiquette
We find that the more formal and serious the situation, the more different communicators will use the commonness and difference between their mother tongue and foreign language to say a large number of vague terms, so that the outside world can interpret the sentences in a variety of ways. Also avoid
communication conflict, achieve mutual respect, courtesy.

3.4. Words are concise and clear
Fuzzy words have a wide range of meanings, and have a lot of extension space, there is no clear boundary, the rational use of fuzzy expression, can express a class or a series of things in short words, not only make people understand semantics flexibly. It can also increase the content of communicative information.

4. Computer recognition of fuzzy information is the basis of fuzzy word interpretation
Before the interpretation work, the object and environment of the interpretation work are first understood, so that the interpretation tone and implication can be grasped through the scene and atmosphere in the interpretation process [5]. As a bridge between different languages, translation should fully grasp the attitude and tone of communication and conversation, and accurately express the opinions to be expressed by both sides. In artificial interpretation, translators can judge the deep meaning of fuzzy language in communication according to their experience and cultural background and their feelings on the spot. In the application of computer technology in interpretation, because the computer lacks emotion and comprehensive control of the situation and scene atmosphere, the processing flexibility of fuzzy information is not the same as that of manual interpretation. The fuzzy information in oral communication mainly comes from the ambiguity of semantics and some syntactic structures. This does not only refer to individual vague words, but sometimes to the overall meaning of language. At the same time, translators should learn to recognize the vague meaning of words and sentences quickly in normal training and interpretation practice. Fuzzy restrictive language is the most common and typical fuzzy language in language, which can be divided into two categories: variable fuzzy language and moderate fuzzy language [6]. The former can change the original meaning of the discourse structure, or modify the original discourse semantics to some extent according to the actual situation, or define the scope of the original discourse change. With the wide promotion and breakthrough of intelligent technology, the ability of computer to identify and judge fuzzy information is increasing day by day. Figure 1 is a schematic diagram of the identification process of fuzzy information ontology.

![Figure 1. Schematic illustration of the identification process of fuzzy information ontology](image)

5. Traditional methods of interpreting fuzzy information translation
At present, the application of computer technology in fuzzy information processing and analysis of English interpretation is based on the principles and methods of artificial fuzzy information
5.1. The principle of expressing the original meaning
When the original meaning of the original text is not modified without authorization, some semantic fuzzy words can be omitted selectively in the process of translation, but indirectly expressed by scene, mood, and sentence structure and so on. Sometimes, some things are lengthy and astringent by verbal description, but both sides of the communication can know and cannot be translated. In short, interpretation is to let both sides in different languages understand each other's meaning.

5.2. Complete interpretation through language, culture and custom amendments
Many times, many seemingly incompatible things can be transformed into each other, and in the process of transformation harmonious, do not make people feel conflict. This is true of precision and ambiguity in language, especially in different languages. Because the difference of language culture and traditional background is accurate in one language and vague expression in another language, we must pay attention to flexible conversion in the process of interpretation, and also transform the position of sentences in sentences to adapt to the corresponding situation, mood and grammar and expression habits of the corresponding language.

5.3. Use the analogy of sentences in the same language to interpret
In the work of interpretation, most sentences still have strong equivalence in language, that is, what kind of reference and usage some sentences have in their own language be replaced directly when there is a corresponding sentence translation in other languages. The fuzz of one language is used to translate the fuzz of another language, so as to retain fuzzy information, also known as literal translation. In most cases, the translator retains the vague information in the original text after correctly understanding the true meaning of the original speaker. In the case of fuzzy sentences in interpretation, it is the priority to find the same alternative sentences in the target language directly.

6. Application of computer technology in fuzzy information processing analysis of English interpretation
The application of computer technology in interpretation teaching practice is taken as an example. Figure 2 is the main frame of computer aided interpretation teaching and evaluation system based on experiential teaching theory.
Figure 2. Main frame of computer aided interpretation teaching and evaluation system based on experiential teaching theory

6.1. Computer interpretation practice training module
Interpretation activities are rapid, direct and on-site and cannot tolerate too many errors. The ideal training mechanism of interpretation should be that the computer has rich experience and good professional accomplishment before taking on the interpretation work. Through the remote interpretation training platform of the computer-aided interpretation teaching and evaluation system to be developed, many interpretation students can "enter" the same interpretation and "act as interpreters" at the same time through remote practice. Let students practice, experience interpretation, accumulate experience, cultivate professional quality, and lay a good foundation for the natural transition to formal interpreters in the future. At the same time, we should cultivate high-quality interpreting professionals.

6.2. Design of calculation of in-depth learning and evaluation of import translation
The teaching outline, teaching method and test evaluation principle of interpretation course based on computer technology experiential teaching method should be formulated; the interpretation syllabus based on computer aided technology and the interpretation syllabus based on traditional paper based on traditional paper textbook, such as teaching content, students should be more independent learning; Teaching methods mainly adopt student-centered experiential teaching method. The test evaluation method based on experiential teaching method is not only teacher evaluation, but also self-evaluation, peer evaluation and computer-aided evaluation based on speech recognition technology and artificial intelligence.

6.3. Computer corpus of interpretation fuzzy information
Interpretation teaching is very practical, which determines that interpretation teaching cannot be confined to the classroom. Interpreter students need a large number of interpretation materials to carry out a large number of targeted exercises. There are three main sources of interpretation corpus :(1) interpretation scene, which refers to meetings, talks, interviews, speeches, etc., which are equipped
with interpretation ;(2) meetings, talks, interviews, speech scenes ;(3) interpretation class. The interpretation corpus should be marked and arranged according to the parameters such as theme, occasion, source language style, professional difficulty, speed of speech and standard degree of speech. In addition, some corpus materials should be analyzed and sorted to make them suitable for single skill training.

6.4. Network sharing of high quality interpreting fuzzy information resources under computer condition

Through the remote classroom and remote practice module of computer aided interpretation training and testing system, the space limitation of classroom is eliminated, and the resources of excellent interpretation teachers and high quality interpretation practice are optimized in the whole country. Greatly reduce the cost of resources at the same time achieve much greater benefits than the original.

6.5. Construction of computer technology in the framework of interpretation teaching and evaluation system

The design of computer aided interpretation teaching and training system should be based on experiential teaching theory, take the cultivation of students" practical operation ability of interpretation "as the main goal, and consider the various uses of classroom teaching, autonomous learning, distance practice, interpretation evaluation and so on. In order to meet the needs of experiential teaching, the system has five distinct features: active subjectivity, interactive practicality, intelligent feedback, scene authenticity and open integration.

7. Conclusion

Interpretation activities are full of unpredictability and zero time. This requires interpreters to flexibly adopt translation strategies to translate according to the current situation, to ensure the accuracy of the information, to convey the information smoothly and quickly, and from the perspective of the pragmatic realization of fuzzy language. The fuzzy processing strategy of computer technology is one of the preferred methods for translators to complete translation tasks and meet translation quality standards.

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