

Research on Accurate Translation Methods of English Language through Language Analysis

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Keyword: Language analysis; language translation; Accuracy

Abstract: The issue of accuracy has always been the major issue in language translation and has plagued all the translators, the traditional Chinese-English translation method generally adopts the grammatical analysis-centered on the translation strategy, this translation strategy has ignores the knowledge layer and pragmatic layer of the language, which leads to the problem of translation distortion. In contrast, the semantic analysis method is based on the grammatical type qualifications, which enhances the qualification conditions for the substitution of variables during translation. Therefore, this paper believes that the accuracy of language translation can be maximized by adopting a semantic analysis templates, as the translation process includes word analysis, grammar analysis stage, semantic analysis stage as well as the tree diagram representation, which can be realizes as the comprehensive and representation of statement semantics to improve on the accuracy of language translation.

1. Introduction

Accuracy is the most important criterion for measuring translation, the traditional translation is centered on the grammar, which is prone to semantic distortion, and the inaccurate contact words, as well as the low translation accuracy. In contrast, the understanding and approach to using linguistic analysis is rooted, thus the semantics of statements and contexts resulting in greater accuracy.

2. The three levels of language analysis

According to the usual understanding of language, the sentence is composed of words, the words can be divided into object words and connected words. These words are arranged according to a certain grammatical structure to produce a different semantic structure.

This way of understanding treats language in isolation and as well treats language as a closed and complete system, if you only understand the language based on this perspective, you may encounter problems of one kind or another in language translation. Take “Where is the fire” as an example. The sentence contains three semantic units of “where”, “holding” and “fire”. If you simply translate it from the language layer, the translation program will perform the semantic unit, identify and thus arrange them grammatically.

However, if we further judge the semantics of the sentence, it will reveal the connotation of the pragmatic and knowledge layers of the sentence, thus making a dangerous warning.

In general, from the perspective of language analysis, the semantics of a sentence includes a language layer, knowledge layer, and a pragmatic layer, corresponding to the language layer, because the knowledge layer reveals the different meaning of the same semantic unit to a different subject perspective. Take “soccer” as an example. This is just a toy for children, it is a commodity for manufacturers, and for professional football players, this is a work tool. The pragmatic layer reveals the different uses of a statement or a semantic unit in different scenarios. Also Take “Do you eat?” as an example. In the scene of Chinese dialogue, its meaning is not revealed by the semantic unit “you” and “meal”. According to its use, it is likely to be greeting scenes.

At present, most translation tools adopt a grammar-centric translation strategy, which is very easy to cause distortion of language translation. For example, the phrase “the weather is good today” is different in different scenes. What he said is probably not a view of the weather, but a hint, such as suggesting that his friends are going out to play. Wait. If we simply select the three semantic units of “today”, “weather” and “very good” to arrange the grammar, then it is impossible to convey the true meaning of the statement.

3. The process of semantic analysis

The semantic analysis process can generally be divided into four steps:

The first step is to determine the semantic level through language analysis, and use this as a standard to compile the data. The second is to clarify the various elements of language analysis and to analyze the categories of each element. The third is to apply a specific parsing class to the statement object and parse it by manual coding. The fourth is to re-verify the parsed data to determine whether there is uniformity, thus completing the interpretation of the data expression.

In terms of technology implementation, there are also four steps to analyze the data content to determine the final meaning, which is corpus and dictionary, parsing, semantic analysis, and tree diagram representation, but the specific process is as follows:

In the corpus and dictionary stage, the main purpose is to analyze the words, and to analyze each semantic unit in the sentence according to the corpus and the vocabulary in the dictionary, this analysis includes part of speech analysis, word meaning analysis and word form analysis.

In the stage of grammar analysis, it mainly analyzes the grammatical structure of the sentence, analyzes the subject, predicate, object, attribute, adverbial and complement in the sentence, and provides the part of speech, meaning and part of speech in the corpus and lexical analysis stage. Parsing makes choices and matches them, resulting in grammatical and structural connections between the semantic units.

In the stage of semantic analysis, the program selects the appropriate semantic template for expression based on the semantic analysis mode included in the “semantic rules and templates” based on grammar analysis and lexical analysis.

In the tree diagram representation stage, the semantic units is related to the statement object that are enumerated mainly through a hierarchical and structured tree of the language diagram.

4. Semantic analysis templates and grammar translation templates

Language translation is based on the various templates. The conversion between the two languages can be realized through an established template. At present, the more common language translation template that is a translation template with grammatical variables, and the form is as follows: $Ta \leftrightarrow Tb$ if $X1Ta1 \leftrightarrow Y1Tb1$.

Ta1 and Tb1 represent two sets of semantic units, which are the descriptive variables in the grammar translation. Each description variable will have a set of grammatical categories corresponding to the, and after determining each of the description variables with their corresponding grammatical categories, we are able to derive a realistic grammatical order between the two sets of descriptive variables.

Taking $Xverb \leftrightarrow Yverb$ if $IX verb + Future \leftrightarrow my Yverb + future$ form grammar variable template as an example, after determining that Xverb and Yverb are mutually corresponding semantic units, which also determined that the two represent the corresponding levels of the state time, and thus, You can get the syntax structure of Xverb and Yverb after translation. Assuming that the Xverb here is go, then when I will go is translated, it is impossible to translate it into me, but it must be translated into when I want to go, because in Chinese, only the future tense is to be expressed. Going over shows the past tense.

However, as we pointed out above, the translation strategy is centered on the grammar translation which leads to a distorted translation of the sentence at the pragmatic level, so the grammatical variable template has certain limitations in contrast with the semantic analysis

templates which are more accurate.

The fundamental logic of semantic analysis template design is to define the semantic unit on the basis of semantic analysis, so as to constrain the substitution of the variables and reduce the distortion probability of translation. The following are the expression of the template for a semantic translation: $STa \leftrightarrow STb \text{ if } X_1STb_1 \text{ and } \dots \text{ and } X_nSTa_n \leftrightarrow Y_nSTb_n$. It can be seen that the semantic translation template has more restrictions on the selection of variables than the syntax translation template.

Take $IXV + \text{Past} \leftrightarrow Y \text{ Y} + \text{past tense}$ if $XV \leftrightarrow YV$ as an example. If X and Y correspond to each other, then “Y Y+ past tense” and “IXV+Past” also correspond to each other in the process of translation. Therefore, assuming that the description variable here is come, then the corresponding “come” is the semantic transformation, it should be noted that in the process of applying the semantic analysis template, the grammatical and semantic types of the words and variables that replace the variables must be consistent, otherwise the translation result is not established, and finally the high-precision translation result can be obtained.

5. Conclusion

Through the above discussion, we discovered that, the English language translation under language analysis has higher accuracy than the traditional grammar-centered translation, this is mainly because the former mainly considers the grammatical layer of the language, while the latter increases the definition of the pragmatic and knowledge layers, thus making the language translation more accurate. In practical application, the author compares the traditional grammar translation template and the semantic translation template respectively, for the translation of I have a book, the traditional grammar translation template translates it into a book I have, but In the form of this template we will find out that there is no precise limit to the use of quantifiers. In contrast, the result of the semantic analysis is that I have a book that clearly takes into account the defining characteristics of quantifiers. Therefore, we can determine that the semantic analysis method is a more accurate translation method than the grammar analysis, by using the semantic analysis template, the Chinese-English translation can be more precise and smooth.

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