



Research on the Process of Informatization Education in Publicity and Translation on Government Website

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Abstract. Under the guidance of information education, this paper discusses the process of publicity translation of government websites by using the research approach of information theory. It is found that in the process of publicity translation of government websites, the translator directly interprets the full clarity of the original text and clarifies the implied context of the text in the process of cognitive interpretation. In the process of the generation of the target language, the translator dynamically chooses the language that conforms to the social and cultural context, language context and aesthetic level of the target readers.

Keywords: Informatization · Government website publicity · Translation process

1 Introduction

As an important channel for the government to translate and introduce China, the importance of government website translation is self-evident, because it directly affects the construction of China's foreign image. At present, many scholars pay attention to the translation strategies, translation status and interdisciplinary theoretical guidance of government website publicity. Mao Donghui found that the quality of English translation of many government websites is not satisfactory, and there are many mistakes in the language level alone. Based on the theory of translation norms, Yao Yanbo, analyzes the problems and causes of Zhoushan government's English website, and puts forward that the English version of the government website should meet the standard expectations of the target language readers [1]. From the perspective of relevance adaptation in cognitive pragmatics, this paper will explore the whole process from reading the original text to the output of the translated text with the English website texts of local governments in Hebei Province as the corpus, so as to provide a new theoretical perspective for the English translation and introduction of government websites.

2 Data Mining Algorithm

At present, data mining algorithms are mainly divided into two categories: one is supervised algorithm, the other is unsupervised algorithm. Supervised algorithm mainly

includes support regression, BP neural network, decision tree random forest, etc.; unsupervised algorithm mainly includes clustering analysis and association rule analysis. Unsupervised algorithm is a kind of machine learning based on specific rules. It uses some data evaluation indexes to judge some rules existing in the database, that is to find specific rules in the known database, but it does not play a predictive role. Therefore, this paper selects three data mining algorithms including regression, BP neural network and decision tree to predict the transformer hot spot temperature.

2.1 Support Vector Regression

Support vector regression (SVR) is widely used in power load forecasting because of its good measurement accuracy. For a specific historical data set $\{(x_i, y_i), i = 1, 2, \dots, N\}$ Where x is an input vector and Y is its class label (output value). The support vector regression algorithm uses the nonlinear mapping $\varphi : x_i \leftarrow \varphi(x_i)$ to map the data to the multidimensional feature space. The general regression equation of the feature space is expressed as:

$$f(x) = \omega^T \phi(x) + b \tag{1}$$

In order to calculate ω and b in the regression equation and minimize the error between prediction and reality, the following objective functions are established:

$$\min_{\frac{1}{2}} \|\omega\|^2 + C \frac{1}{N} \sum_{i=1}^N (\zeta_i + \zeta_i^*) \tag{2}$$

2.2 Decision Tree

The decision tree algorithm spreads big data from the root node to the leaf node in turn by imitating the tree shape results, forming different types as the basis for making decisions [2–4]. Among them, the decision tree computing model is one of the most widely used models at present. It can not only deal with the logical data set, but also solve the incomplete problem in big data. For the regression problem in this paper, we define the calculation rules of each branch node of the decision tree to minimize the quadratic variance of the node:

$$\min RE(d) = \sum_{l=0}^L (y_l + y_L)^2 + \sum_{r=0}^R (y_r + y_R)^2 \tag{3}$$

Where y_r and y_l are the left and right branches of the decision tree node respectively; y_L and y_R represent the sample size of the left and right branches respectively; y_L and y_R are the average output values of the left and right branches. For all the values, the minimum value of quadratic variance is set as the parent node, and the recursive method is used to establish multiple child nodes. Each child node uses the variance size relationship to generate the parent node again, and so on, until no new node is generated in the model.

2.3 Innovate the Way of Propaganda and Improve the New Ability of Propaganda Work

The emergence of emerging media has changed the way for the masses to obtain information. Social media such as forum and post bar have gathered a large number of users, and deep interaction among users has formed a wide and profound influence. Compared with traditional media, the pervasive communication power of this social network has brought innovative inspiration for our propaganda work. Mobile Internet has changed people’s daily reading habits. Traditional print media and TV broadcasting need deliberate and focused audition space. On the contrary, the “fragmented” shallow reading mode of wechat, microblog, micro video and client is more suitable for people’s fast-food reading habits. In this case, relying entirely on traditional media publicity will be far less than the expected effect [5]. Only to cater to the public taste, the content is humorous, the text is short and concise, the comprehensive use of pictures and short videos, the mainstream ideas and core values into it, make it both entertaining and knowledge, teaching in fun. Make full use of the social function of “three micro terminals”, strengthen the interaction with Internet users, and pay attention to and guide the network public opinion while disseminating and publicizing.

3 Theoretical Review

3.1 Relevance Adaptation Theory

Relevance adaptation theory is an organic combination of Sperber and Wilson’s relevance theory and Verschueren’s adaptation theory to explain language communication and translation. According to relevance theory, language communication, including translation, is a process of ostensive reasoning between the two sides of communication. The speaker expresses the information intention to be conveyed, and the listener infers

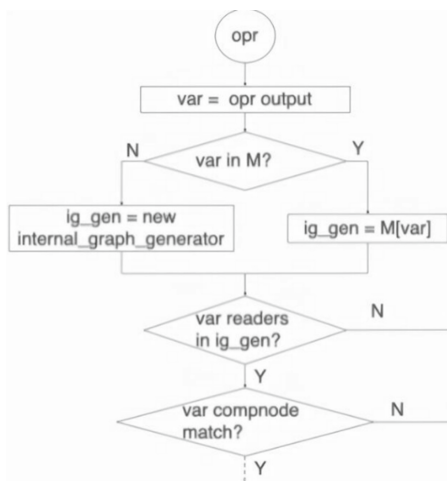


Fig. 1. The algorithm flow chart

the implied meaning of the speaker, that is, communicative intention [3]. Only when the hearer makes unnecessary cognitive efforts to infer the speaker's communicative intention, the maximum contextual effect can be achieved [6–8]. As shown in Fig. 1. According to adaptation theory, the process of language use is a continuous process of language selection, because language has the characteristics of variability, negotiability and adaptability. Li Zhanxi, a scholar, suggests that the two should be combined organically to explain and describe the translation process from the perspective of relevance adaptation, thus providing a new theoretical framework for the study of translation process. The algorithm flow chart is following:

3.2 The Specific Requirements of Government Propaganda in the New Media Era

The arrival of the new media era not only brings convenience to the publicity of school archives, but also brings new challenges to the management of school archives. First of all, the use of new media to promote school archives requires file managers to have higher quality. The traditional methods of file publicity and management are not applicable in the new media era. School archives managers must master the use of new media, ways of communication, use the Internet and other information platforms to publicize school archives, change the original way of work, actively and seriously learn the relevant knowledge of new media, keep pace with the times, and enhance their own ability, so as to keep up with the pace of the information age and make new media more convenient for school archives publicity service. Secondly, the new media era requires the publicity of school archives to be more interactive [9–12]. Although the traditional forms of propaganda such as news, newspaper and radio are convenient, they lack the interaction with the information recipients, so the propaganda effect is not ideal. In the new media era, archives publicity can actively mobilize the enthusiasm of the participants, let the information users participate in the archives publicity work in the form of message, discussion and voting, or make the school's development information files into videos and put them on the Internet to publicize the school, which greatly promotes the development of the school's archives publicity work and makes it more vitality and vitality, It is also more conducive to people's acceptance.

3.3 The Current Situation and Improvement Measures of School Case Publicity in the New Media Era

In the new media era, if the school's archives publicity work wants to be effectively carried out, it is necessary to give play to the advantages of new media and traditional media, and combine the two to learn from each other, so as to achieve the best publicity effect. At present, the school's archives publicity work has not played the best effect in the new media era [13]. The utilization rate of new media is still low. Generally affected by the traditional concept, the school's archives demanders get the archives information in the traditional way of looking up materials and reading newspapers. Some demanders go directly to the school's archives to look up the relevant information, this not only results in the low efficiency of file management, sometimes due to poor data management, information users may not get relevant information. Therefore, the archives

propaganda work of the university must combine the traditional propaganda media and give full play to the advantages of the new media. The school should strengthen the training of archives management personnel, master the information transmission channels in the new media era, follow the way of government microblog, actively do a good job in archives publicity, learn more advanced multimedia related knowledge at home and abroad, learn from each other, and enrich their knowledge and ability. In the new media era, information operations such as website operation and microblog operation have to have backstage maintenance and need to constantly update the content, which need special information management personnel to operate [14]. This part of the cost needs special budget investment from the school to ensure the normal operation of the website and microblog. In short, the arrival of the new media era represented by the rapid popularization of the Internet and mobile phones and the popularization of information and communication technology have broadened the communication channels and forms for the school's archives publicity work, and also brought convenience for the popularization of archives information. School archives managers should make full use of the communication advantages of new media to maximize the resource sharing of school archives information, We should create characteristic archives resources, better publicize the school, serve the school, and improve the level of propaganda and management of school archives.

4 Analysis on the Current Situation and Problems of Propaganda Work Under the Condition of Informatization

4.1 The Cadres do not Grasp the Change of the Current Concept of Information Dissemination

The traditional way of communication belongs to "mass communication", which refers to the one-way communication of the media or other propaganda departments for the broadest masses of the people. One content is for all different types of audiences, and there is only one voice in the whole society. However, with the progress of science and technology and the continuous transformation of information society, a single way of Ideological and cultural propaganda has been marginalized by the rich and colorful cultural life of the people. "Does mass communication no longer monopolize the way of information dissemination? In the information age when ordinary people are constantly seeking the right to speak, can the government better use high-tech in Ideological and cultural propaganda, whether we can publicize the party's principles and policies in a way that people like to hear and see, so as to grasp the right to speak and guide the mainstream public opinion, has become one of the criteria to measure the quality of propaganda work under the condition of informatization [15, 16]. This requires the propaganda department to accurately grasp the new changes of the current information communication phenomenon, change the old communication concept, establish a more scientific and more advanced working idea, and adapt to the new requirements of the information age.

4.2 Under the Condition of Informatization, the Function of Public Opinion Supervision of Traditional Propaganda Methods is Gradually Weakening

Under the condition of information technology, the function of public opinion supervision of traditional propaganda methods is gradually weakening. To do a good job in Ideological and cultural propaganda, we must focus on consolidating and strengthening the mainstream ideological and public opinion, and enhance the ability of public opinion guidance. In a country, the government usually dominates the discourse power, and establishes a set of systematic core value system. In recent years, traditional media has been gradually integrated and replaced by new media, and “three micro - end” has become the new focus of public opinion in China, replacing traditional paper media and radio and television, Gradually weakened the government’s use of the traditional way of public opinion supervision function [17]. Mobile Internet has the characteristics of openness and virtuality, which makes the environment for netizens to express various voices more relaxed. The timeliness and portability of traditional newspapers, magazines, television and even the traditional Internet are far behind the mobile Internet, which gradually leads to the weakening of the traditional propaganda mode in the function of public opinion supervision.

4.3 The Unidirectional Communication of Traditional Propaganda Lags Behind the Development of the Times

The traditional ideological and cultural propaganda is a kind of one-way information transmission mode, which spreads from top to bottom. In the era of mobile Internet, everyone is “We Media”. More and more people no longer accept it passively, but talk and express it actively. The openness and inclusiveness of mobile information network provide a new platform for netizens. In the past, the self talk of government agencies has not adapted to the current complex Internet format. Ideological and cultural propaganda is a highly operational work. In order to achieve a new breakthrough in Ideological and cultural propaganda, we must start with the reform of propaganda methods and the use of high-tech means.

5 Two Stages in the Process of Government Publicity Translation

5.1 The Process of Interpretative Communication

According to relevance theory, there are both explicit and implicit utterances. Explicit speaking is the speaker’s information intention which can be easily obtained by the hearer, while implicit is to convey a communicative intention, that is, to let the listener understand that the speaker has an intention to transmit information. The listener should not only understand the utterance according to the semantic representation of the utterance, but also infer the implied meaning according to the speaker’s contextual hypothesis.

When the author of the original text delivers completely explicit utterance, the translator can obtain the maximum contextual effect at the cost of the least cognitive effort

in the process of reasoning. There are many completely explicit words in the translated texts of the website. For example, Changli has a long history and rich cultural heritage. There are 45 intangible cultural heritage projects at or above the county level, including 3 national intangible cultural heritage projects, 9 provincial intangible cultural heritage projects, 11 municipal intangible cultural heritage projects and 37 county-level intangible cultural heritage projects.

5.2 The Process of Discourse Productive Communication

The process of discourse production and communication from the pragmatic perspective is a process in which the translator dynamically chooses and adapts to the cognitive context of the target language. The translator infers the information intention and communicative intention of the original text in the process of text interpretative communication. Then, the translator will choose the language from different language levels to convey the intention of the original text [18–20]. According to the three major attributes of language in the theory of adaptation, translators will consider both internal and external factors when making language choices in the process of discourse communication. They should not only flexibly choose the language form of the translation, but also choose pragmatic strategies. In the process of translation and translation, the translator should take into account both the reader's and the reader's communicative competence.

As a cross-cultural communication activity, translation in accordance with social and cultural context often encounters cultural differences or cultural conflicts. It is these differences that pose great obstacles or challenges to translators in translation communication, because they will directly affect or determine the translator's Choice of translation in the process of translation.

In the process of discourse production and communication, translators need to judge whether the contextual assumptions that the original author is trying to convey exist in the cognitive context of the target readers [21]. If there is, the translator should consider the aesthetic expectation and acceptance ability of the target language readers when choosing the language, so as to achieve the maximum harmony between the real world presented by the original text and the horizon of the target culture.

6 Simulation Analysis

All the government online translation process is not only a process of information transmission, but also a process of external publicity, so no matter which language, whether it is English, French or other languages, mutual translation is actually a process of mutual understanding. In fact, sometimes the expression is not very accurate in translation. But just convey the basic meaning correctly. Figure 2 shows that the accuracy of various languages can be used as a basic reference for translation.

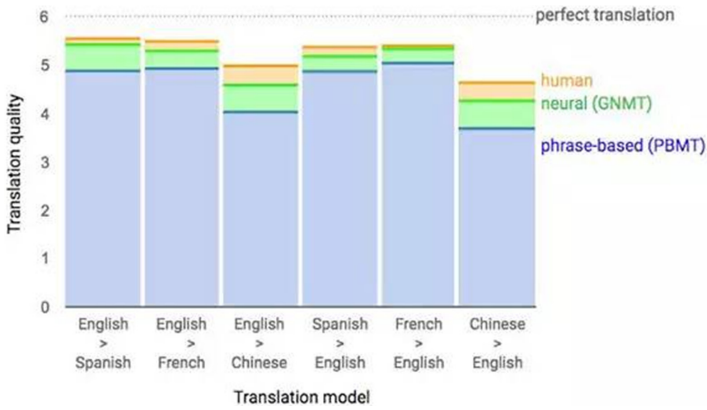


Fig. 2. Translation model

After the emergence of government translation, when it was just launched, people’s attention rate was relatively high due to its complexity. However, with the passage of time, people’s attention rate decreased year by year [22–24]. Therefore, if we want to obtain a relatively high attention rate, we should simplify it in the process of translation, as shown in Fig. 3.

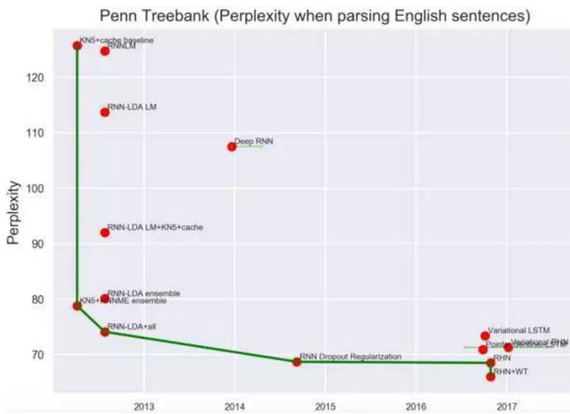


Fig. 3. Time translation comparison chart

7 Conclusion

The publicity translation of government websites is a complex cross-cultural communication activity. The whole process is a process in which the translator interprets the original text and re produces the original text information and communicative intention in the target text. In this process, the translator is not only the reader and researcher of

the original text, but also the creator and negotiator of the target language. Based on the research results of relevance adaptation theory, this paper argues that the process of government website translation from the pragmatic perspective is such a process: in the process of seeking the best relevance of the original text's communicative intention, the translator interprets the explicit meaning of the original text and clarifies the implied context of the original text, so as to fully appreciate the artistic conception effect of the original text. Then, under the condition of confirming the cognitive harmony of the target language readers, the translator can give full play to the subjective consciousness and make a dynamic choice of language so as to realize the adaptation in the social and cultural context, language context and the aesthetic level of the target readers.

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