

# Analysis of the Influence of “Cultural Confidence” and “Big Data” on Translation

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## ABSTRACT

The development of the new era has obvious requirements for the translation industry. In the context of “cultural confidence” and “big data” as the characteristics of the times, this paper analyzes the reasons for the mutual symbiosis between “cultural confidence” and translation strategies, reconstruct translation concepts and models with “big data”, which has become an efficient carrier of “cultural confidence”, and brought us a cultural phenomenon that provides high-energy support for the great rejuvenation of the country and the nation. Through the analysis of the influence of era characteristics on translation, it provides beneficial exploration and practice for improving the technical and artistic quality of translation work in the new era.

**Keywords:** cultural self-confidence, big data, domestication and alienation, realm and strategy, mutual plasticity and symbiosis, reconstruction

## 1. INTRODUCTION

The “cultural self-confidence” in the “four self-confidences” proposed by the 19th National Congress of the Communist Party of China <sup>[1]</sup> marks that the self-identification and worldwide promotion of Chinese culture has become one of the important features of Chinese socialism in the new era. Translation has become one of the most important channels to promote Chinese culture to the world and realize national rejuvenation. At the same time, the prosperous, complex and high-speed international exchanges, as well as the massive information derived from new things, have brought intricate “big data” to translation work. In the context of “big data”, it is a study of great political significance and social value on how to adhere to the concept of cultural self-confidence, intelligently optimize translation strategies, create authoritative and elegant translations, disseminate Chinese culture, enhance international discourse power, and achieve national cultural revival.

## 2. REALM AND STRATEGY OF TRANSLATION

Throughout the history of Translation in China, it has been nearly three thousand years, and there have been large-scale literary translation for more than one hundred years <sup>[2]</sup>. Translators have come out in large numbers, and

translation theories have been constantly updated, all of which are unswervingly pursuing the highest realm of translation. Early experts believed that the highest artistic conception in translation practice was “translation”, that is, the transformation of one type of writing into another type of writing, which should not be blunt and far-fetched due to cultural differences and differences in language learning, but also completely preserve the flavor of the original work. Even so it reaches or is considered as the “Transformation Realm”.

For example, in the 17th century, the translation theory of “the transmigration of souls” prevailed among British poets, which pointed out that translation is the transformation of language carriers, but the information, style and implication of the original text cannot be lost <sup>[3]</sup>. A perfect translation can drive the communication between different cultures, and it also acts as a “media” and “induction”, which can mobilize people’s curiosity and make people fascinated by the original work. No matter how perfect the translation, compared with the original, there is inevitably a gap of cultural transition. Any translated text is essentially just an interpretation.

For example, when translating a sentence from ancient Chinese cultural classics such as Laozi and The Analects into English, the translator always explains its meaning according to his own understanding. The translation can express only one meaning, while other

possible levels of meaning in the original are lost. The original text is of a suggestive nature, and it pays attention to different opinions, but the translation cannot do that. As a result, the multi-dimensional rich meaning of the original text is lost in the process of translation. Kumarajiva, the Buddhist monk in the fifth century was a translator who translated Buddhist classics into Chinese. He once likened the translation work to “chewing food to feed people”. It means those who can’t read the original works but can only read the translated texts are like eating others’ spits without eating himself, without the aroma and umami taste of the original food <sup>[4]</sup>. The translation is not as sincere as reading the original work, so it urges some people to learn foreign languages and read the original work to promote the depth of cultural integration, and then it can promote the “cultural marriage”.

Therefore, Goethe compared translators to professional matchmakers (Uebersetzer sind alsgeschäftige Kuppler anzusehen) <sup>[5]</sup>. On the contrary, the translation works with poor technology and obscure language will make readers taste like wax, without artistic appreciation or desire to pursue, and form prejudice against the original work and the author, mercilessly digging a cultural divide between the author and the reader. For example, the prolific French priest L’Abbe de Marolles in the 17th century was ridiculed as “the disaster of the French language” <sup>[6]</sup>.

Translation requires translators not only to have a deep understanding and grasp of two or more different cultures, but also to be proficient in the skills and art of translation. The final translation effect depends on the combined effect of many subjective and objective factors. Among them, the translation strategies of “domestication” and “foreignization” proposed by Lawrence Venuti in 1995 have the greatest influence <sup>[7]</sup>. The core idea of the “domestication” strategy is to weaken the cultural characteristics of the source language and strengthen the localized oblique translation of the local cultural characteristics. The core idea of the “foreignization” strategy is to preserve the cultural characteristics of the source language and weaken the local cultural characteristics of the foreign-oriented oblique translation.

During the May Fourth Movement period, Chinese scholars translated foreign works into Chinese and European versions respectively <sup>[8]</sup>. As for the selection of translation strategies, according to different texts, scholars have done a lot of analysis and research on the subjective and objective factors affecting translation, creatively dealt with cultural differences and even the expression of scientific and technological terms, and achieved fruitful results <sup>[9][10]</sup>. Comprehensive analysis shows that the imprint of the time dimension in most translation works and translation theory studies is not obvious enough, that is, the characteristics of the times have not received due attention. The language itself also keeps pace with the times, such as: Internet terms, words

derived from new things, etc. Even if it is the translation of classic pure literature in different times, the translation versions of different eras should reflect the characteristics of the times, otherwise, the intention of “faithfulness, expressiveness and elegance” will be weakened.

At the same time, different political systems regulate the premise of “translating for whom”. Therefore, the premise of translation in different eras is to first establish translation ideas. Under this framework, optimizing and selecting different texts does have “better” domestication and foreignization to complete the translation work with existing translation technologies (such as artificial intelligence, expert modification, etc.) and make the translation more authoritative and classic.

### **3. THE FORMATION OF MUTUAL SYMBIOSIS BETWEEN “CULTURAL CONFIDENCE” AND TRANSLATION STRATEGY**

Translation is a kind of cultural and political behavior in essence. Through the shaping of cultural identity, translation has a lasting and far-reaching influence on society and will strengthen the alliance, confrontation and hegemony between countries in geopolitical relations <sup>[11]</sup>. At present, China is in a special period of rapid promotion of “cultural soft power” and strengthening of “cultural confidence” of large-scale cultural output. Under this grand strategic background, translation has undoubtedly become the most effective carrier and approach, and also reflects the cultural attributes and political mission of translation.

With the rapid development of China, Chinese language is being promoted rapidly all over the world. The language statistics of the top ten websites in 2021 show that Chinese is on the way to be the world’s largest language with 1.43 billion users, the proportion of users is as high as 33.6%, and the global distribution ratio is 22.9% <sup>[12]</sup>. At the same time, the rapid development of the Internet, more open and frequent worldwide communication, huge translation data, even gave birth to machine translation based on artificial intelligence. China’s “cultural self-confidence” is based on cultural self-identification. At the same time, it is necessary to promote Chinese culture to the world, so that the international community and foreign readers can understand China, identify with China, and love China. Therefore, translation work should first establish a cultural standpoint, that is, the question of “translate for whom”, and then optimize the selection and dialectical unity of translation strategies. Here is an example:

Example 1. The international translation of the mascot “福娃” of the 2008 Beijing Olympic Games was changed from “Friendlies” to “Fuwa”, and the process of transformation from domestication to foreignization illustrates the influence of cultural self-confidence.

Example 2. In the translation of 289 words with Chinese characteristics in the report of the 19th National Congress of the Communist Party of China in 2017, the domestication strategy was mostly adopted for 22 four-character idioms, and the deep meaning of the original language was interpreted in a free translation manner. For example: “海晏河清、朗朗乾坤”, translated as “seas becoming calm and yellow river running clear, be clean and free of corruption”, which expresses our party’s determination and confidence in combating corruption succinctly and clearly. The strategy of combining alienation and domestication was adopted for 252 culturally loaded words, such as “人类命运共同体” is translated into “a community with a shared future for mankind”, which highlights the image of Chinese culture. Literal translation plus interpretation and free translation are mainly adopted for the 15 digital abbreviations, such as “十三五规划” is translated as “the 13th Five-Year Plan”, “四个自信” as “have full confidence in the path, theory, system, and culture of socialism with Chinese characteristics”, which clearly expresses the deep connotation.

Example 3. Traditional Chinese cultural classics, such as 功夫, 阴阳, 西湖龙井 are respectively translated as kung fu, yin-yang, and Xihu Longjing. These foreignized translations retain Chinese characteristics, demonstrate China’s cultural confidence, and increase the Oxford Dictionaries vocabulary.

There are many similar examples. Comprehensive analysis shows that based on cultural confidence, foreignization translation is preferred for words that can reflect Chinese characteristics, and the remaining words and sentences can be optimized according to specific conditions. Thus, it is obvious that based on political characteristics, the cultural characteristics of the era of “cultural confidence” have an impact on translation strategies, which have made appropriate adjustments and trade-offs in the face of the characteristics of the era of “cultural confidence”, and reflect the mutuality and symbiosis between “cultural confidence” and translation strategies on the whole.

#### 4. ANALYSIS AND RECONSTRUCTION OF TRANSLATION BY “BIG DATA”

The emergence of the phenomenon of “big data” is the common result of the progress of the natural sciences

and the humanities and social sciences. The influence of contemporary translation work is essentially the integration of science and technology on the humanities. The concept, mode, efficiency and industry of translation all have undergone significant changes. Modern scientific and technological translation, represented by Google and others based on artificial intelligence technology, is developing at a rate of doubling every year, and the relevant data processing technology is becoming increasingly perfect. Traditional translation work has inevitably faced the great impact of modern scientific and technological translation<sup>[13]</sup>. Idealists believe that translation needs to be redefined and scientific and technological connotations should be absorbed<sup>[14]</sup>. Others believe that the influence of the characteristics of eras should not affect the definition of translation<sup>[15]</sup>. Functionalist have actively accepted the emerging software and hardware platforms of language services and translation<sup>[16]</sup>. Modelists focus on the asymmetric advantages brought by modern scientific translation methods such as machine intelligence translation, network translation and crowdsourcing translation, as well as the irreplaceability of human factors<sup>[17]</sup>.

During the tortuous development of machine translation research in the past 50 years, whether it brings people hope or disappointment, the objective situation clearly shows that machine translation, as a scientific issue, is being studied in depth by the academic community, while entrepreneurs have gained corresponding profits from the market. It is more realistic and practical to realize human-machine symbiosis and human-machine mutual assistance in machine translation research than to pursue fully automatic high-quality translation.

Comprehensive analysis of relevant data shows that translation mode in the era of “big data” has the greatest impact on traditional translation. There are two fundamental reasons for the transformation of translation from humanist subjectivity to scientific objectivity based on “big data”. First, modern scientific translation itself is one of the inevitable results generated by the cultural attributes of “big data”. Second, modern science and technology translation is also the inevitable result of the optimization of the internationalization and marketization of “big data”. The evolution of translation modes has led to significant changes in translation efficiency. Here, the efficiency comparison of the three typical translation modes is shown in Table 1:

**Table 1.** Efficiency comparison of human, online and crowdsourcing translation

	Human translation	Online translation	Crowdsourced translation
Translation method	individual or workshop	automatic online of web platform	crowdsourcing-based web platform
Translation quality	relatively high	relatively low	Relatively centered
Translation speed	very slow	very fast	faster
Translation cost	very high	very low	higher
Translation range	High quality original text	popularization and learning	business requirements

It can be seen that the new translation mode has important and extensive social needs, and the dynamic coexistence of multiple translation modes is an inevitable trend of development. Driven by the development of translation models, various new translation technologies have been continuously derived and have become the

focus of social attention. China's Linguistic Data Alliance was established in 2016, marking that translation technology in the era of "big data" has become a hot and core issue <sup>[18]</sup>. The statistics of hot topics in translation technology development in the last five years are shown in Table 2:

**Table 2.** Statistical table of new technologies in translation in the past 5 years

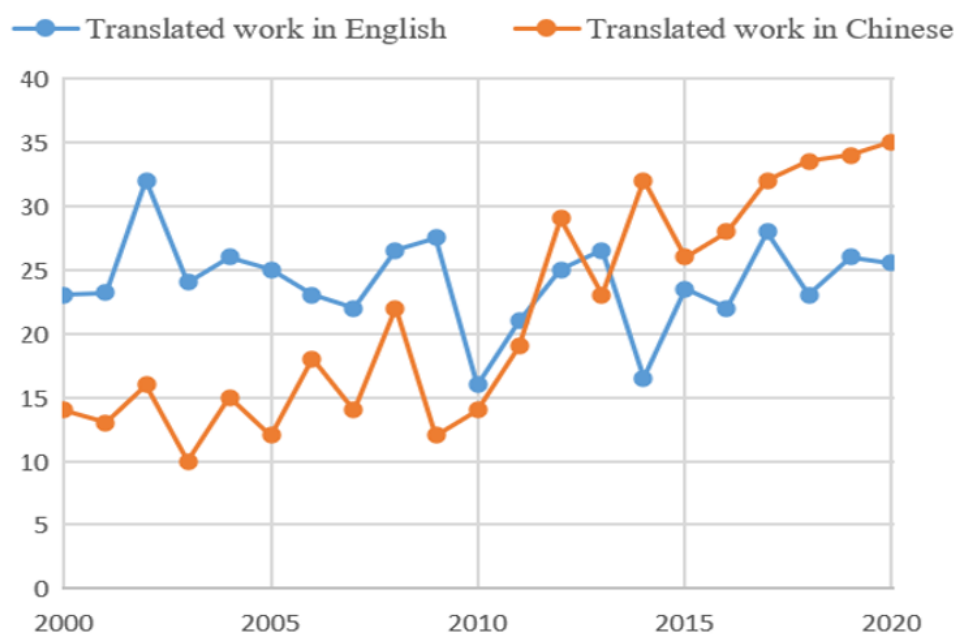
In 2016	New in 2017	New in 20178	New in 2019	New in 2020
Crowdsourced translation				
Internet of Things	smarting	mobile terminal	Chinese culture	platform design
Crowdsource	cloud translation	Internet	Internet+	Translation teaching
Translating mode			artificial intelligence	translator competence
Crowdfunding	computer aided translation	crowdsourced translation	Crowdsourced translation platform	Language service talents
Connotation	Translation Horse Network	development mode		
Puzzle	Cat network platform	Dilemma	crowdsourcing	
Digital publishing	google	foreign translation	complex adaptive system	
Translation ethics	Web2.0	Strategy	Japanese-Chinese translation	
Vocational colleges	crowdsourced translation	translation mode	Building the theme	

As can be seen from the above table, translation technology in the past five years has shown a trend of rapid increase on the basis of the previous year. By 2020, the mode seems to be increasingly decreasing. Through the investigation, it is found that the translation mode is still in a state of rapid increase due to the integration of larger-scale platforms. Facing big data, traditional translation has been unable to compete in terms of speed and quantity. The original state has been broken, and objective needs have changed or revised many elements of translation. In fact, it is “big data” that fundamentally affects translation. Analysis and reconstruction to meet the big data market demand for translation is also an inevitable stage for the diversification of translation methods. This state will continue to exist, and the cultural attributes of data information will become more and more obvious.

## 5. THE BEARING OF “BIG DATA” TRANSLATION ON “CULTURAL CONFIDENCE”

Free communication at any time, in any place and in any language is changing people’s way of thinking and

lifestyle all the time. Language is the carrier of thinking and the most natural, direct and convenient tool for human beings to exchange ideas and express emotions. The knowledge recorded and spread in the form of written language and words accounts for 80% of the total knowledge in human history. At present, there are more than 1,900 languages in use in the world. The promotion of Chinese culture will inevitably generate massive amounts of data in translation. Liu Hu, a scholar, conducted a quantitative analysis of translated articles from “Chinese Translation” since the beginning of this century, and analyzed the evolution process and development prospects of Chinese and Western cultural translation in the past 20 years <sup>[19]</sup>. The results show that: the advantages of Western cultural translation have slowed down since 2009, and the downward trend is obvious; the foreign translation of Chinese culture has risen rapidly since 2010, and has become a hot spot in the world with the rapid emergence of translation “big data” with Chinese characteristics. These big data will be delivered to various industries and regions in the world with the help of efficient communication media. The development trend of Chinese and English translation in the past 20 years is shown in Figure 1.



**Figure 1** A chart of the development trend of English-Chinese translation in the past 20 years

Big data, based on the development of computer and network technology, represents the progress of modern science and technology. The development and progress of Chinese culture represented by “cultural self-confidence” is at the right time, and the translation of “big data” as a carrier of “cultural self-confidence” is obligatory and logical. “Big data” translation will transcend the differences in time, region, culture, politics, etc. to

promote Chinese culture to the world in a high-speed, large-scale, extensive and refined manner, and become a broad platform and strong support for the great rejuvenation of the Chinese nation. At the same time, China’s “cultural self-confidence” has also become the world’s unique “big data” with Chinese characteristics, showing China to the world, calling for peace, conveying love, and building a community with a shared future. The

translation of “big data” has also been endowed with a special mission of The Times.

## 6. CONCLUSION

“Cultural confidence” represents the cultural development and progress of contemporary China, and “big data” is the result of the development of science and technology in the contemporary world. This characteristic of The Times brings translation work in China with a new mission and exerts a significant and far-reaching influence on translation.

The political thought of the new era represented by “cultural self-confidence” has put forward new requirements for the translation work of cultural stance. The translation work must be done under the establishment of correct translation ideas. Foreignization should be favored for language translation with strong Chinese characteristics to make sure “Chinese culture” internationalized gradually and China’s voice and cultural soft power enhanced. “Cultural self-confidence” and translation work have formed a state of mutual interaction and symbiosis.

The modern scientific and technological progress represented by “big data” has brought new technologies to the translation work, and meanwhile, has had a significant impact on the translation itself, causing the repositioning of the translation itself, and promoting the analysis and reconstruction of the translation model. At the same time, “big data” has become an efficient carrier of “cultural confidence”. At the same time, “big data” has become an efficient carrier of “cultural confidence”. This state of integrating technology into humanities and promoting human development will exist dynamically and lastingly.

## AUTHORS’ CONTRIBUTIONS

Hongxia Zhou conceived the idea of the study and finished into a paper. Xia Peng and Shicheng Zheng collected and analyzed the data. Professor Congbing Wu is Corresponding the author.

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