Discursive Construction of Chinese Literary Classics Based on Big Data Analysis in Global Communication

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Abstract. Recent studies illustrate that big data analysis now plays a growing importance on business, politics, technology, academic researches, discursive construction of a nation, etc. Big data analysis was applied in broad fields, including translating Chinese literary classics. By using a qualitative method, this article focuses on current studies on big data analysis and Chinese literary classics, impact of big data on discursive construction of Chinese literary classics, and strategies for discursive construction of Chinese literary classics in global communication, so as to better translating Chinese literary classics, transmitting Chinese voices, and constructing discursive power of Chinese literature in the western world. The research finds that big data analysis is a significant method to construct discursive power of Chinese literary classics and there’s still a long way to go before it is finally constructed.

1.Introduction

Discursive construction of “major-country diplomacy with Chinese characteristics [1]”, “national governing competency of language[2]”, “discourse for global communication[3]”, “the discourse construction of Chinese literary theory[4]” etc. has been discussed in recent years, which shows that to have the discourse right is indispensable for a country and many scholars have realized the deficiency of discursive construction in all aspects, and literature is no exception.

Big data analysis was widely applied in various fields and studied by scholars who are in different majors. With a barrage of data and pre-installed algorithm, big data analysis could provide satisfactory consequences.

Chinese literary classics, including poetry (verses, ditties, odes and songs), novels, legends etc. are part of Chinese culture. For instance, The Book of Songs presents us life of the people in Western Chou Dynasty (c.11th century-771 B.C.); The Analects of Confucius recorded what Confucius had said, in which Confucius taught his students with “ren, yi, li, zhi, xin (benevolence, righteousness, courtesy, wisdom and trust)”. Chinese literary classics are also an indispensable part of Chinese soft power, which illustrates the ancestors’ philosophical views, like “yin, yang, jin, mu, shui, huo, tu”, etc. However, all these colourful literary classics can’t be transmitted to the outside world owing to the language barriers.

Since the Belt and Road Initiative policy was proposed, China has spared no efforts to build a community with a shared future for mankind and spread Chinese voices to the outside world. However,
there still exist many deficiencies of publicizing English-version Chinese literary classics to the outside world. For example, no authoritative translation standard or translation theories with Chinese characters were proposed; no prominent publications could take the responsibilities to publish those literary masterpieces for this can’t help to make money; some Chinese philosophical ideas are different from western ones so that western readers can hardly understand. Some scholars revealed “the marginal position of Chinese classics in Western studies[5]” and “some of the hidden ideological and patronage[5]” mattered. As a result, Chinese literary classics which contained profound historical and cultural deposits spoke little in the western countries, so it’s time to do more publicizing works to construct discursive power of Chinese literary classics.

In this paper, big data analysis is connected with literature so as to find a new way to translate more naturally and natively, which will be easier for the western audiences to accept. Moreover, other available countermeasures are also put forward. In the long run, the discursive construction of Chinese literary classics will be realized.

2. Current studies on big data analysis and Chinese literary classics

Big data analysis has huge power to select, memorize, compare, and analyze, which is a good method to help translate Chinese literary classics in a more natural way so as to construct the discursive power. Scholars from different fields are doing researches on big data and apply big data to cope with various problems (see Figure 1). Fang Jing[6] reviewed big data-based condition monitoring of power apparatus, and listed five remarkable characters of big data analysis (see Figure 2). Chengqi gave an overview of the application of big data analysis technology in new energy vehicle industry[7], which listed some systems, such as MPI, Hadoop MapReduce, Spark, Flink, Graphlab[7]. Moreover, big data analysis was used in economics and finance[8], geo-hazard prevention and control[9], ecological environment[10], social security[11], materials research[12-13], Food Industry[14].

![Figure 1 Application of Big Data Analysis in Various Fields](image1.png)

![Figure 2 Characters of Big Data Analysis (“5V”)](image2.png)

Xu Chao applied big data analysis on the situation and trend of Chinese network literature[15]. Yu Cai[16] illustrated the development of Chinese literature in the global environment from the perspective of big data. Peng Zheng[17] presented the influence of the theory of subject description on American modern literature based on big data analysis. However, in their articles, there were no explicit analysis on literature from the perspective of big data analysis.

Big data analysis is used in a broad scope yet literary is an exception. In fact, big data should be properly used in translating Chinese literature. For example, we can research on using big data analysis in machine translation. And scholars can also use big data to set up some corpus (like parallel corpus of the E-C/ C-E translation) so as to do quantitative researches. Currently, there exist some scholars who have the awareness of taking advantage of big data analysis in literature, yet they can’t properly illustrate how to use this method. Thus, “it is of great practical value to study the development of Chinese literature in the global environment based on big data [16]”. And it’s time for
us scholars to deepen the research of big data analysis in discursive construction of translating Chinese literary classics.

3. Influences of big data analysis on translating Chinese literary classics

3.1. Choices of the source texts

Big data analysis, with its five dominant characters, will firstly influence the choice of source texts (see Figure 3). “Volume” stands for a huge amount of information which was pre-installed in the corpus/devices; “Velocity” refers to the speed to address the searching problems; “Variety” means the possible usage of a word/expression in current corpus; “Veracity” is correctness of the usage in the corpus; and “Value” stands for practical value of the translation action.

As is seen in Figure 3, big data analysis helps set up the E-C translation corpus which covers various situations where the same word is used. With a large volume of reference, translators learns the relatively native and fluent ways to translate. Owing to the limitation of the corpus available, translators tends to choose those sources texts which is easier to find the equivalent target words. So that they will translate more correctly and their target texts will be easily accepted by the target audiences in the western world.

3.2. Language corpus for translation

Currently, there exist some language corpuses, such as BNC, BOE, ANC, BASE, Parallel Corpus of *A Dream of Red Mansions*, etc. to which translators can refer. Meanwhile, new materials like pictures, figures, tables spring up, which could also be included in the corpus. Therefore, big data analysis will enlarge the current corpus and form a better one. (see Figure 4).
Eugene A• Nida proposed a translation principle, called “theory of readers’ response”, which means the target texts should be assessed by the target readers and translators should translate as good as possible so that the target readers will have the same senses as the source readers. In 1964, Nida came up with “dynamic equivalence” in Toward a Science of Translating, where he pointed out that translators should use the closest and the most natural languages. With the updating data on the corpus, more Chinese literary classics will be welcomed by the target readers.

3.3. Veracity of language
Chinese literature, as the domestic society and economy developed, “has been seriously affected and impacted[16]”. One of the reason is that there are no authoritative English versions or popular publisher. In Chinese literary classics, there are some culture-loaded words which are hard for the target readers to understand, so translator should refer to the language corpus so as to translate more naturally and precisely.

With language corpus and big data analysis, translators can refer to the most frequently used ways and authoritative expressions quickly and correctly since a huge amount of information or data were covered in the corpus and the special algorithm was pre-installed in the computer. Thus, the English version could be translated more natural and easier to be accepted by the target readers.

4.Strategies for discursive construction of Chinese literary classics
4.1. Proposing systematic translation theories and translation principles
In the long history of development, the wise attempted to distinguish “wen” and “zhi” when they were translating Buddhist sutras in the Three Kingdoms Period. In the following stages, Dao An, Zhi Qian, Jiu Moluoshi, Xuan Zang etc. proposed their understandings of translation. In the modern times, Yan Fu came up with “xin, da, ya (faithfulness, expressiveness and elegance)”. Other scholars like Lin Shu, Zhou Shuren, Fu Lei, Qian Zhongshu etc. illustrated their own opinions on translation. However, no systematic translation theory or principles were proposed.

Currently, the western translation theories are applied to analyze Chinese texts. Although most of the theories could explain the C-E problems, some special situations cannot be dissected. Therefore, it’s necessary and urgent to set up systematic translation theories with Chinese characteristics, with which C-E translation practice could be well directed by proper theories. For instance, some culture-loaded words like “jin, mu, shui, huo, tu (metal, wood, water, fire, earth)” and Chinese key words could be better translated. To propose such kind of translation theory, scholars should analyze data, figures and pictures etc. based on big data analysis which should cover authoritative usages at home and abroad.

4.2. Setting up a large authoritative corpus
To construct discursive power of Chinese literary classics, a natural and native translation is essential. With big data analysis, scholars could set up a large authoritative corpus for translators to refer. Setting up a corpus is a hard work, thus it should be supported by the central government and subdivisions. In addition, Qing Xueming, in the paper, illustrated that translation technology could to some degree reduce the heavy burden of translation and improve the veracity and efficiency[18].

Moreover, a team consisting of authoritative translators and technological experts in computers should be invited to cooperate together. Translators proofread the C-E versions while computational technological experts do research on better systems to set up the language corpus.

With the authoritative corpus, a translation standard will be put forward. Thus in the following translation practice, translators could consult the corpus and obey the standard. In consequence, more of the magnificent Chinese literary works will be introduced to the outside world and gradually the discursive power will be set up.

There are more of the methods to construct discursive power of Chinese literary classics, such as finding predominant foreign publications and patronages, illustrating ideologies objectively to the
target readers, improve translators’ capability and shape their national identities. Moreover, pay more attention to liberal education, which means to translate in a straight way so that more of the target readers will read the target texts.

5. Conclusion
In this paper, it illustrated the current research on big data, problems of translating Chinese literary classics, influences of big data analysis on publicizing Chinese literary classics and countermeasures to construct discursive power of Chinese literary classics. But there is still a long way to go before successfully construct the discursive power of Chinese literary classics. Du Runde, a sinologist, pointed out that most western readers of Chinese literary classics were college students, experts instead of the ordinary people[5], but internet could help to connect the readers with the same interest and we were moving towards “a truly international sinological community[5]”. With bid data analysis, more natural target texts will be presented and more target readers will be covered.

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References
[1] Xiao, K.R. (2020). Construction of Chinese International Discourse: Lin Shu’s “International Discourse” as a Reference, Journal of Southwest University (Social Science Edition). 46: 180-190, 214.
[2] Wen, Q.F. (2019). National governing competency of language in the past 70 years in China: Looking back and ahead. Journal of Yunnan Normal University (Humanities and Social Sciences Edition), 51:30-40.
[3] Guo, Y.D. (2020). Discourse for Global Communication in the New Era: Development, Key issues, Research Approach. Foreign Language World, 12-18.
[4] Mao, X.G., Zhou, Y.X. (2017). The Discourse Construction of Chinese Literary Theory Based on Rhetoric Criticism. Research of Chinese Literature, 69-75, 90.
[5] Wei, H. (2019). On the Translations and Studies of Chinese Classics in the Western World——An Interview with the American Sinologist Stephen W. Durrant, Journal of Foreign Languages, 42: 94-101.
[6] Fang, J., Peng, X.S., Liu, T.W., etc. (2020). Development trend and application prospects of big data -based condition monitoring of power apparatus, Power System Protection and Control, 48, 176-186.
[7] She, C.Q., Zhang, Z.S., Liu, P. etc. (2019). Overview of the Application of Big Data Analysis Technology in New Energy Vehicle Industry: Based on Operating Big Data of New Energy Vehicle. Journal of Mechanical Engineering, 55: 3-16.
[8] Shen, Y., Chen, Y., Huang, Z. (2020). A Literature Review of Textual Analysis in Economic and Financial Research. China Economic Quarterly, 18: 1153-1185.
[9] Liu, H.L., Ma, Y.B., etc. (2021). State-of-the-art Review of Big Data Application in Geo-hazard Prevention and Control. Journal of Disaster Prevention and Mitigation Engineering, 41:1-13.
[10] Xiong, L.J. (2019). Application of Big Data Technology in Ecological Environment: A Review, Ecology and Environmental Sciences, 28:2454-2463.
[11] Xiang, Y.H. (2019). The Application of Big Data in Social Security: A Literature Review, Social Security Studies, 95-104.
[12] Zhou, T. (2019). Big Data Creates New Opportunities for Materials Research: A Review on Methods and Applications of Machine Learning for Materials Design, Engineering, 1017–1026.
[13] Niu, C.C., Li S.B., HU J.J. (2020). etc. Application of Machine Learning in Material Informatics: a Survey, Material Reports, 34: 23100-23108.

[14] Tao, Qi, LI, W., Ding, W.H. etc. (2020). A Review of Big Data Application in Food Industry, Journal of Food Science and Biotechnology, 39:1-5.

[15] Xu, C. (2020). The Situation and Trend of Chinese Network Literature Based on the Analysis of the Big Data. Journal of Physics: Conference Series, 1-4.

[16] Yu, C. (2020). The Development of Chinese Literature in the Global Environment Based on Big Data. Journal of Physics: Conference Series, 1-5.

[17] Peng, Z. (2020). The Influence of the Theory of Subject Description on American Modern Literature Based on Big Data Analysis, Journal of Physics: Conference Series, 1-5.

[18] Qing, X.M. (2020). On Translation of Systematic Party and Government Documents— An example of translating documents of The 19th National Congress of the CPC, Chinese Translators' Journal, 42-44.