A Corpus-based Study of Huawei's Image in British and American Mainstream Media (2015-2019)

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ABSTRACT
Based on Critical Discourse Analysis Theory and through corpus research methods, the current study has analyzed the images of Huawei shaped by 12 mainstream media in Britain and the United States from 2015 to 2019. Antconc 3.2.1 software was applied to analyze the keywords and collocations with "Huawei". Results show as follows: on one hand, with the rapid development of chip technology and 5G, Huawei has a positive image of a dynamic and innovative technology company. On the other hand, due to the trade disputes between China and the United States and the hegemony of the United States, Huawei has a negative image of a technology threat in the United States. By contrast, the UK has questioned Huawei's security even though it recognizes the company's technological and innovative capabilities. Hopefully, these findings will help readers better understand the characteristics of Huawei's images in the British and American media by exploring the reasons behind so as to provide insights for image construction for Chinese companies.

Keywords: Huawei, Corporate image, Critical discourse analysis.

1. INTRODUCTION
With the continuous development of economic globalization and China's increasing comprehensive national strength, more and more Chinese companies have become influential multinational companies, among which Huawei is one of the most representative ones as the global leader in 5G, with the world's leading information and communication technology. Consequently, Huawei has been portrayed many different images by oversea media. Considering the significance of the image on the development of a corporate, "corporate image" has been paid more and more attention by both researchers and the corporate. Actually, corporate image is not only a valuable asset of an enterprise, but also a symbol of soft power of an enterprise [1]. "Image" refers to "people's beliefs, concepts or impressions about an object" [2], it is the perceptions or opinions of an object rather than the object itself [3]. In addition, "image" can be divided into "self-shaping image" and "another-shaping image". In the contemporary world, as media plays an important role in shaping people's opinion, the image shaped by the media is virtually another-shaping image. Therefore, with the increasing media coverage of Huawei, research on the media image of Huawei has drawn close attention in recent years. However, most of the studies are dissertations [4], [5], [6], and they are mainly about the self-shaping image of Huawei. Only one of them involves the another-shaping image of Huawei (Pan, 2020) [6]. However, its data is comparatively insufficient, since it only collected users' comments on Huawei on Twitter through 3 months.

Hence, it is meaningful to explore the images of Huawei in western media from a new perspective, and the range of the media should be expanded to collect more data. Therefore, based on the Critical Discourse Analysis Theory, the corporate images of Huawei will be examined in 12 British and American mainstream media in current study. Meanwhile, the reasons behind will be explained, too.
2. PREVIOUS STUDIES ON CORPORATE IMAGE AND THEORETICAL BASIS

The research on corporate image began in the 1950s, and Martineau [7], who first systematized the concept of corporate image, argued that corporate image is composed of two attributes: emotional attributes and functional attributes, since then research on corporate image has prevailed. Generally speaking, the research history of corporate image falls into three categories. The first one is on the concepts of corporate image. Scholars believe that the corporate image is immediate mental picture that audience have of an organization, and it includes judgment, emotion and belief [8] [9]. The second category touches on the functions and effects of corporate image. It is agreed that positive corporate images help the company to open up the local market and promote its rapid development into a better enterprise [10]. The third one is research on the various elements that make up a corporate image as well as different ways of building up positive images [11].

In recent years, as a main force of Chinese enterprises to go global, Huawei has attracted much international media attention. Especially during the recent trade tension between China and U.S. since March, 2018, Huawei has long been the focus of international media. Therefore, scholars have made attempts to study the media image of Huawei. Nevertheless, as stated earlier, the previous studies focus more on self-shaping image of Huawei and the content analysis method is applied, few applied corpus-based method. Therefore, it is meaningful to combine quantitative and qualitative methods to examine the media image of Huawei shaped by western mainstream media.

In regard to the theoretical basis, the Critical Discourse Analysis (CDA) was first introduced by Fowler (1979), et. Al [12] in the book Language and Control. Since then, the theory has been regarded as an approach to reveal the hidden value and beliefs encoded in the discourse, especially to reveal the relationship between discourse and ideology. As news discourse is a typical ideological discourse, the media subjects are sure to express their social and political attitudes [13], the pattern of CDA is suitable to analyze the British and American news reports about Huawei in this study.

To be reckoned with the above-mentioned practical and theoretical reasons, the current research will compare the media images of Huawei in British and American mainstream media, attempting to complement some empirical studies in this field.

3. THE CORPUS AND PROCEDURE

Firstly, it is about the data collection of the study. Through LexisNexis database, we've downloaded news reports about Huawei from six well-known newspapers in the UK and the US respectively. We use "Huawei" as a search term, and the search scope is limited to UK, US from 2015 to 2019. Altogether, there are 12 representative newspapers of the two countries. Luckily, the size of the corpus is comparable, with a total of 1,514 reports and 673,617 tokens. It contains 457 special reports (the content is directly and mainly about Huawei) and 470 related reports (Huawei was only briefly mentioned) in the US corpus, with a total of 344,356 tokens. By comparison, there are 353 special reports and 234 related reports in the UK corpus, altogether 329,261 tokens.

Secondly, based on mutual reading, we divide the news reports in to special reports on Huawei and relative reports according to the standard whether the report is mainly about Huawei. Next, we used Antconc software to analyze the data. After analysis, we have obtained the keywords list, and lists of collocation before and after "Huawei". Finally, according to the theory of Critical Discourse Analysis, we analyze the top 30 of the key words list, and collocation with "Huawei". Therefore, it will reveal the attitudes of the mainstream media so as to depict the media images of Huawei.

4. RESULTS AND ANALYSES

4.1 Keywords and Huawei’s Images

"Table 1" shows the key words list of American and British news on Huawei. Due to the limited space, we selected the top 30 words in the list for analysis.

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1. Six British newspapers are: Mirror, Independent, Standard, Telegraph, Guardian, The observer; six American newspapers are: New York Times, Investors Business Daily, Los Angeles Times, Associated Press, Washington Post, UPI.
From the "Table 1", it can be seen that the nouns in American and British keyword list include two parts: proper noun and topic noun. Proper noun means a noun that designates a particular object, and it does not take a limiting modifier. And topic noun means a noun is related to a particular subject that you discuss, study or write about [14]. For the proper noun, we can see that in the US key words list the words "China", "Chinese", "United" "States", "American", "Canada" ranked 3th, 4th, 8th, 9th, 13th, and 21th respectively. And the keyness are 3702.290, 3483.613,1700.978, 1508.597, 1635.928, 736.306 respectively. From the UK key word list, we can see that the words "US", "Chinese", "China", and "UK" ranked 2th, 4th, 5th, 6th respectively. The keyness are 2402.671, 1958.156, 1758.052, 1752.335 respectively. It shows that the media in the UK and the US share a common concern about the relationship between Huawei and China, the UK and the US. And the media all regard Huawei as a representative of China and associate Huawei's corporate image with China's national image. From the example 1, we can see that Huawei is portrayed a positive image of a company with "industry-leading design and manufacturing expertise". However, the US media's reports on Huawei are biased and mixed with a lot of subjective malicious speculation. From Example 2 and 3, we found that the American media described Huawei as a negative image, that is either "susceptible to the control of Chinese intelligence services" or "working to advance Chinese global ambitions and undermine America's interests".
Example 1 With this landmark device, Huawei is demonstrating our industry-leading design and manufacturing expertise by bringing a beautifully crafted flagship product to market that is redefining the new style of business. (Mirror, February 21, 2016 Sunday)

Example 2 The U.S. intelligence community has long believed that Huawei is susceptible to the control of Chinese intelligence services. (The Washington Post, January 25, 2019 Friday)

Example 3 Officials have long suspected Huawei of working to advance Chinese global ambitions and undermine America’s interests. (The Washington Post, April 10, 2019 Wednesday)

For the topical noun, we can see that in the table 1 in the US key word list, "technology" "security" "network" "equipment" ranks 13th, 12th, 27th and 15th with a frequency of 1358, 1102, 453, 968, and a keyness of 1864.478, 1510.583, 614.122, 1325.382 respectively. In the UK key word list, "technology" "security" "network" "equipment" ranks 6th, 9th, 17th, 25th with a frequency of 574, 1102, 509, 411 and a keyness of 807.061, 1109.583, 714.396, 574.751. As we can see from the following examples, the media in both the UK and the US have recognized Huawei’s technology, products, and services. From example 4, we can see that Huawei has been portrayed as a positive image of a company with advanced technology, high quality products and excellent service. And in example 5, from the expression of "the top ranks of global technology providers" , we can see the image of Huawei as a giant technology company. However, from example 6, we learned that the U.S. media perceives Huawei’s advanced technology as a threat. Therefore, it portrays Huawei as a technology threat in a negative light.

Example 4 Huawei today is recognized for low prices, reliable equipment and engaging customer service. (Washington Post, April 10, 2019 Wednesday)

Example 5 Huawei, the first Chinese company to break into the top ranks of global technology providers (Associated Press, April 1, 2016 Friday)

Example 6 Huawei is a national security risk (The Washington Post, December 7, 2018 Friday)

Next, the adjectives of "national" and "global" in UK and US keywords list will be analyzed. They ranked 23th, 15th, with the keyness of 588.876 and 721.523 in the UK keyword list, while they ranked 24th, 26th, with the keyness of 714.858 and 622.4 in the US keyword list. As shown in example 4 and 5, Huawei is among the top companies in the world in terms of both product sales and product quality and have huge influences on global supply chains. However, the words in the keyword lists of the UK and US are not the same. The US list contains the word "official", while the British list does not. The word "new" is in the British keyword list but not in the American keyword list. This may imply that UK focus more on Huawei’s new technology or products, while US is inclined to perceive Huawei’s identity as official. Similarly, in example 7 and 8, the UK pays more attention to the products (new flagship smartphone, Huawei P30) and Huawei P30 pro of Huawei and its identity as a global supplier. It means that the British media has taken a neutral stance in portraying Huawei as a technology company. By contrast, while US admit Huawei's status in technology (a global powerhouse in smartphones and equipment), it always take a suspicious attitude towards Huawei as it believes that Huawei's development will undermine its interests (example 10).

Example 7 Huawei having farreaching and long-lasting impacts on global supply chains. (The Daily Telegraph, June 22, 2019 Saturday)

Example 8 Today, Huawei has launched its new flagship smartphone, the Huawei P30, alongside the P30 Pro. (Mirror, March 26, 2019 Tuesday)

Example 9 Huawei has become a global powerhouse in smartphones and equipment for the mobile networks. (The New York Times, December 7, 2018 Friday)

Example 10 Officials have long suspected Huawei of working to advance Beijing’s global ambitions and undermine America’s interests and have begun taking steps to curb its international presence. (The New York Times, January 29, 2019 Tuesday)

Finally, we’ll give a brief analysis on the verbs in the table 1. We found that the first three verbs in the UK and US key word list are "said, concern and ban", which ranked 3th, 16th, 21th and 2th, 17th, 30th respectively. Their frequencies are 1509, 503 432 and 3068, 721, 419 respectively. From the following examples, we can see that although both the UK and the US have shown concern about the rapid development of Huawei’s technology. Nevertheless, the two countries have taken very different approaches to Huawei. From the example 11 and 12, we know that the U.S. has banned Huawei’s 5G technology from the U.S. market.
altogether, while making false claims that Huawei’s 5G technology could steal state secrets and threaten national security. From the example 13, we learned that the U.K. has concerns about Huawei’s 5G technology, but still supports the development of Huawei’s 5G technology in the U.K.

Example 11 Washington has been concerned for years that telecommunication equipment sold by Huawei could be used by the Chinese government for hacking. (Los Angeles Times, June 8, 2019 Saturday)

Example 12 The U.S. has banned government use of Huawei technology in 5G. (Los Angeles Times, January 15, 2019 Thursday)

Example 13 The Prime Minister May would allow Huawei’s presence despite they concerns the national security. (The Daily Telegraph, May 28, 2019 Tuesday)

The verb with different tense has special meaning. For example, the word “said” is used not only to indicate the tense but also to refer to another person’s point of view. It indicates the reliability of the quoted news source, which is also a feature of news text. The present, past, perfect and future tenses are used very frequently in the reports from the UK and the US. This shows that the mainstream media in the UK and the US are not only concerned about the current stage of Huawei’s development, but also trace the history of Huawei’s development and make predictions and speculations about Huawei’s future. This shows not only the rapid growth of Huawei, but also the sense of anxiety in the UK and the US.

4.2 The Collocation and Huawei’s Images

Here, we choose the top 30 words in the collocation word list for analysis, and the results are shown in Table 2.

From “Table 2”, we can see that the frequencies of "equipment, technology and products" in the US collocation list are 171, 162 and 68, respectively, and they are ranked the 6th, 7th and 29th in the list. However, in UK list, they are ranked the 4th, 7th and 30th, with frequencies of 351, 299 and 123 respectively. As we can see from examples 14 and 15, the collocations with "big presence" "largest manufacturer" and "sense of safety", demonstrate Huawei’s responsible, trustworthy and powerful corporate image. And from examples 16 and 17, Huawei is "technology giant" with "the fastest and most reliable networks" and "edge technology".

The use of the highest level here shows that Huawei is technologically advanced in the world and the word "giant" shows that Huawei is a leading company in the Internet industry. From the example 18 we learn that the products of Huawei have left an impression of good quality and reasonable price.

To sum up, here Huawei is mainly portrayed a positive and trustworthy company with strong technology and cost-conscious products.

Example 14 Huawei has had a big presence in Europe’s mobile communications infrastructure and is now the largest telecom equipment manufacturer in the world. (Los Angeles Times, February 22, 2019 Friday)

Example 15 Customers will be able to use the equipment with a sense of safety (Telegraph, May 22, 2019 Wednesday)

Example 16 Huawei is the Chinese technology giant. (The New York Times, January 17, 2019 Thursday)

Example 17 UK consumers "will have access to the fastest and most reliable networks thanks to Huawei’s cutting edge technology." (Mirror, April 24, 2019 Wednesday)

Example 18 Huawei owes its success in Canada to making reasonably priced, good quality products consumers like to buy. (The New York Times, February 27, 2019 Wednesday)

However, both UK and US emphasize the close ties between Huawei and Chinese government considering the high frequency of "government" in "Table 2". Still, "ban", "concern" and "security" appear in Table 2, too. As stated earlier, they imply a threatening image of Huawei shaped by the two countries’ media.
Table 2. Collocations with "Huawei"

| UK Collocation Words List | US Collocation Words List |
|---------------------------|---------------------------|
| No. | Frequency | MI | Collocation Words | No. | Frequency | MI | Collocation Words |
| 1   | 321       | 3.92339  | US             | 1   | 6229      | 1.37108  | Huawei          |
| 2   | 308       | 4.15889  | Chinese        | 2   | 633       | 3.86053  | Chinese         |
| 3   | 247       | 4.00069  | UK             | 3   | 631       | 3.57037  | said            |
| 4   | 247       | 3.70105  | said           | 4   | 351       | 4.38842  | equipment       |
| 5   | 219       | 5.49066  | Mate           | 5   | 309       | 3.25306  | company         |
| 6   | 171       | 5.04692  | equipment      | 6   | 307       | 2.72873  | China           |
| 7   | 162       | 4.48701  | technology     | 7   | 299       | 3.66869  | technology      |
| 8   | 151       | 3.86923  | security       | 8   | 239       | 3.64692  | security        |
| 9   | 146       | 3.47536  | company        | 9   | 239       | 3.21112  | giant           |
| 10  | 139       | 4.50619  | smartphone     | 10  | 211       | 3.21112  | companies       |
| 11  | 130       | 3.06999  | China          | 11  | 206       | 4.39126  | against         |
| 12  | 125       | 5.40748  | ban            | 12  | 187       | 3.26957  | government      |
| 13  | 116       | 3.75219  | government     | 13  | 182       | 3.80517  | Meng            |
| 14  | 112       | 4.50471  | decision       | 14  | 177       | 4.39773  | tech            |
| 15  | 109       | 4.63316  | phones         | 15  | 175       | 3.0399   | US              |
| 16  | 94        | 4.39498  | use            | 16  | 172       | 3.18811  | UK              |
| 17  | 94        | 4.11177  | networks       | 17  | 164       | 3.0025   | States          |
| 18  | 89        | 4.07699  | Android        | 18  | 160       | 3.68003  | networks        |
| 19  | 84        | 4.0249   | Google         | 19  | 160       | 4.19661  | business        |
| 20  | 84        | 4.46121  | concerns       | 20  | 157       | 4.43577  | ban             |
| 21  | 79        | 3.76722  | Trump          | 21  | 144       | 5.74576  | Technologies    |
| 22  | 78        | 5.16284  | giant          | 22  | 139       | 4.67628  | chief           |
| 23  | 75        | 3.79605  | companies      | 23  | 136       | 4.3028   | sales           |
| 24  | 75        | 5.25548  | allow          | 24  | 136       | 5.24594  | officer         |
| 25  | 74        | 3.53     | network        | 25  | 134       | 2.75944  | Trump           |
| 26  | 73        | 3.94347  | Britain        | 26  | 132       | 4.51698  | says            |
| 27  | 69        | 5.52577  | involvement    | 27  | 127       | 3.68077  | world           |
| 28  | 68        | 3.73419  | world          | 28  | 125       | 4.25169  | use             |
| 29  | 68        | 5.2097   | products       | 29  | 125       | 4.42973  | executive       |
| 30  | 67        | 3.33376  | trade          | 30  | 123       | 4.30262  | products        |

5. REASONS FOR MEDIA IMAGES OF "HUAWEI" IN UK AND US

To sum up, in the mainstream media of the UK and the US, Huawei has both positive images as a "large multinational company", "innovative technology company" and "giant in the Internet industry", and negative images as a "technology threat" and a "spy company". The reasons why the mainstream media in Britain and the United States have shaped such a completely opposite image of Huawei is related to the political environment and economic system ideology of China, the United Kingdom and the United States.

In terms of political environment, for one thing, the contemporary international political structure is developing in the direction of diversification, and new economies are playing an increasingly important role in international affairs. In contemporary times, peace and development remain the theme of the times. In this friendly international political environment, China has proposed the "One Belt, One Road" Initiative, which brings more possibilities for Huawei to develop in overseas markets. At the same time, China's domestic political situation is stable. The country strongly supports the development of information technology and has proposed the "Network Power Strategy", which provides Huawei...
with great policy support for its development. This is a huge boost for Huawei to become a "giant in the Internet industry". For another, there are differences in the political system between China and the West. China takes the road of socialism while most western countries adopt the capitalist system. Led by the United States, western countries have been committed to fighting, suppressing and even eliminating communism. Western hostility to China's political system has been amplified by Huawei. This is the source of Huawei's deep "spy company" controversy.

Secondly, another reason lies in the situation of global economy. The international economy is relatively stable, regional economic integration is developing in depth, and bilateral and multilateral trade agreements are proceeding steadily. Such an economic environment provides the possibility for the implementation of Huawei's "joint innovation" strategy, which is conducive to Huawei's innovation and development. China is in the period of economic "new normal" and vigorously implementing the supply-side structural reform. Traditional industries are facing transformation and upgrading, while emerging industries are embracing an opportunity period. Therefore, the Internet finance industry develops rapidly. Huawei has been growing stronger and bigger in such an economic environment. This economic situation has helped Huawei become an "innovative technology company" and an "Internet industry giant".

Thirdly, the ideology factor may also account for the result. There are great differences between China and the West. In China, the "Wolf" of Huawei's corporate culture refers to a culture of striving forward without fear of failure and adversity. However, when Huawei entered the British and American market with the attitude of scientific and technological research and innovation, the "Wolf culture" was magnified and Huawei formed a threatening and aggressive image.

6. CONCLUSION

The study has used the corpus-based method to analyze the reports on Huawei of the mainstream media of UK and US from January 1, 2015 to August 31, 2019. It is concluded that Huawei's corporate images are mainly positive, as a "large technology company", "Internet industry giant", or "good product quality and cost-effective", but there are also negative images such as "spy company" and "threat company". This is resulted from complex political and economical factors between China and the western world. Moreover, one-sided narrative and rigid reporting mode of the Western media is responsible, too. The study aims to help more people know about the characteristics of media image of Huawei in the two countries and understand the reasons behind. Hopefully, it will shed some lights on the corporate image construction of other Chinese international corporations.

AUTHORS' CONTRIBUTIONS

This paper is independently completed by Xiaojuan Yin.

REFERENCES

[1] J. Y. Li, Effectiveness and Strategies of Chinese Enterprises' International Communication: A Case Study of Huawei in U.S. Beijing: Beijing Foreign Studies University, 2017.
[2] P. Kotler, Marketing Management: Analysis, Planning, Implementation and Control (9th ed). Upper Saddle River: Prentice-Hall International Inc, 1997.
[3] K. B. Hu, & X. Li, Corpus-based Study of Translation and China's Image: Connotations and Implications. Foreign Languages Research, 164 (4) (2017) 70-75. DOI: 10.13978/j.cnki.wyyj.2017.04.014
[4] Y. J. Xue, A Contrastive Study on Corporate Environment Responsibility Reports of "Huawei" and "Apple" from the Perspective of Critical Discourse Analysis. Xi'an: Xi'an International Studies University, 2019.
[5] T. H. Song, A Corpus-based Study of Corporate Image in the English Version of Business Discourse--with Reference to Huawei Corporation. Shanghai: Shanghai Jiao Tong University, 2019.
[6] Y. Pan, The Research of Huawei's International Brand Image on Twitter Social Media Forms. Shanghai: Shanghai International Studies University, 2020.
[7] P. Martineau, The Personality of the Retail Store. Harvard Business Review, 36 (1958) : 47-55.
[8] E. R. Gray, & J. M. T. Balmer, Managing Corporate Image and Corporate Reputation. Long Range Planning, 31 (5) (1998) 695-702. DOI:https://doi.org/10.1016/S0024-6301(98)000740

[9] K. L. Keller, & D. A. Aaker, The Impact of Corporate Marketing on a Company's Brand Extensions. Journal of Marketing Research, 1(4) (1998) 356-378. DOI:https://doi.org/10.1177/002224299005400102

[10] H.Y. Jiang, H. Z. Huang, Y. He, & L. Zhu, The Synergistic Effect between Corporate Image and Product's Superior Benefits: a Stereotype Content Model Approach. Acta Psychologic Sinico. 48 (1) (2016) 95-105. DOI:https://doi.org/10.3724/SP.J.1041.2016.00095

[11] B. Xiao, A Literature Review on Corporation Identity in China: Empirical Analysis Based on Research Paper from CNKI Publication. Advertising Panorama, 5 (2015) 82-88. DOI:CNKI:SUN:GGDL.0.2015-05-014

[12] R. Fowler, R. Hodge, G. Kress, G. & T. Trew, Language and Control. London: Routledge & Kegan Paul, 1979.

[13] N. Yang, & P. Wu, A Corpus-based News Discourse Analysis: A Case Study of Chinese Women in New York Times. 34 (9) (2012) 48-58.DOI:CNKI:SUN:GJXW.0.2012-09-017

[14] K. B. Hu, & X. J. Tian, A Corpus-based Study of the Image of Chinese Diplomacy in the English Translations of Chinese Discourse on Diplomacy. Foreign Languages in China. 15 (6) (2018) 79-88. DOI:CNKI:SUN:ZGWE.0.2018-06-013