

Analysis on the Image of China's Poverty Alleviation Stories Reported by American Mainstream Media Based on Big Data

Critical Discourse Research from The Washington Post

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Abstract—The period from 2020 to 2021 is a crucial transition period for poverty alleviation stories. During this period, the image of China's poverty alleviation stories in the eyes of American mainstream media has immovability and change. This study uses big data and database technology to obtain the reports of The Washington Post on China's poverty alleviation stories, and uses the three-dimensional framework of CDA as a tool to carry out text analysis, discourse practice analysis and social practice analysis. The study found that the Washington Post's coverage of Poverty alleviation stories in 2020-2021 continued its preference for grammar, text structure, direct speech and indirect speech, and deepened its sentiment in vocabulary.

Keywords-China; Poverty alleviation stories; Big data; The Washington Post; Critical discourse analysis; corpus

1 INTRODUCTION

From 2020 to 2021, China overcame difficulties to declaring victory in poverty alleviation. According to the government work report in 2020, China would resolutely win the battle against poverty and strive to achieve the goal of building a moderately prosperous society in all respects. On February 21 of 2021, President Xi Jinping declared a comprehensive victory in China's battle against poverty.

The period 2020-2021 is not only a period of change for China to win the battle against poverty, but also a period of change for the leadership and administration of the United States. In 2020, with Donald Trump in office, China's fight against poverty came at a difficult time. Biden took office as PRESIDENT of the United States on January 20, 2021, in the final moments of China's victory against poverty.

Based on previous studies, this paper makes a comparative analysis of the changes in China's poverty alleviation story and international image through the changes in mainstream media coverage in the United States from 2020 to 2021.

2 THE THREE-DIMENSIONAL FRAMEWORK OF CDA AND FAIRCLOUGH'S DISCOURSE ANALYSIS

2.1 Theoretical basis

According to Cheng Xueqi, of the Institute of Computing Technology of the Chinese Academy of Sciences, the rise of big data technology is overturning traditional fields, helping users better understand and analyze data objects and discover and insight into their internal laws. [1] Huang Yongqin believes that relevant applications of "big data application" have opened new explorations in politics, economy, social management, military activities and scientific research. [2] Tong Dezhi proposed that computer-aided big data political discourse analysis is an interdisciplinary research that combines qualitative and quantitative analysis. [3]

President Xi stressed that it is an important task to strengthen China's capacity for international communication to tell China's stories well, convey China's voice well, and present a true, three-dimensional and comprehensive China. Since the 1990s, critical discourse analysis has often been used to study China's international image. As a well-known scholar of critical discourse analysis, Fairclough proposed the socio-cultural analysis method, believing that discourse practice needs to include the three-dimensional framework of language text, discourse practice and social practice. [4] On this basis, Xin Bin proposed that critical discourse analysis should be combined with corpus linguistics to better play the role of revealing ideology. [5]

As far as different international images of China are concerned, the academic research covers a wide range. Xu Jian analyzed the international image of Beijing, the capital of China, through *Der Spiegel* [6], and Lin Wei studied the views of western media on "The Belt and Road" by analyzing western media reports [7]. In terms of telling a good poverty alleviation story in China, Yang Fengjiao made an empirical analysis of China Daily reports on Twitter. [8]

However, previous studies were mainly based on in-depth studies of the same media or comparative studies of different media on China's poverty alleviation stories, ignoring the key victory stage of poverty alleviation stories, namely the comparison of China's international image from 2020 to 2021. Based on previous studies, discourse analysis in a certain period of time can reveal the changes and invariance of ideology and social existence in a deeper level. In addition, the number of previous studies is insufficient. This study is an interdisciplinary attempt to apply the big data crawler technology of artificial intelligence to the existing critical discourse analysis.

2.2 Research methods

Critical discourse analysis based on big data and corpus is a social analysis method from the perspectives of artificial intelligence technology, journalism and linguistics.

Using ProQuest database and big data crawler technology, this paper selects "China", "poverty" and "poverty alleviation" as the key words. It has built a thematic corpus of "China's Poverty Alleviation Story" reported by The Washington Post. In 2020, the token of the corpus is 545,095 words, and in 2021, the total number of symbols in the corpus is 355,023 words, totaling 900,118 words. In the two corpora, there are 2074 words and 1034 words related to "China" and "poverty" in total.

2.3 Research object

The Washington Post is the largest and oldest newspaper in Washington, and is considered to be one of the most prestigious newspaper in the United States, having great influence. The Washington Post, which is headquartered in Washington D.C., the capital of the United States, has coverage of foreign political developments, so it can represent the U.S. public and government to a considerable extent. The study of the mainstream media in the United States can reflect the attitude of the United States to the story of Poverty alleviation in China and reflect the international image of China.

3 THE THREE-DIMENSIONAL FRAMEWORK AND COMPARATIVE ANALYSIS OF THE WASHINGTON POST TEXT

Based on the three-dimensional framework and the theme of "China's poverty alleviation Story", this paper compares the international image of China's poverty alleviation story reflected by The Washington Post from 2020 to 2021, and looks for the change and invariability of its attitude.

3.1 Text analysis

The "text" content of the Washington Post includes the title of the report, the main body of the report, and the time of publication. According to Fairclough's theory of three-dimensional critical analysis, textual analysis of discourse should be carried out from bottom to top from these levels: vocabulary, grammar and text structure.

1) The Word: In The Washington Post in 2020, the negative words used were "against" 324 times, "control" 195 times, "bad/worse" 133 times, "forced" 125 times, "threat" 107 times, "anti" 95 times, and "challenge" 74 times. At the same time, the Washington Post also used some positive words in the story of Poverty alleviation in China, but the frequency and types of words were significantly lower than those of negative words, such as "progress" 68 times and "success" 54 times. In addition, the use of lexical accumulation is often used in reports, such as an article on December 4, "Congress has a chance to strike a blow against Chinese forced labor," arguing that, banning factories in other parts of China from producing goods related to so-called poverty alleviation and pairing assistance projects. In the article, words with similar meanings, such as "against Humanity", "highly questionable" and "cultural genocide", are continuously used to emphasize the infringement of China's poverty alleviation story on Xinjiang, which is actually a disguised intervention in China's internal affairs and a huge slander against China's poverty alleviation achievements.

The Washington Post in 2021 used negative words such as "against" 288 times, "control" 126 times, "bad/worse" 75 times, "forced" 46 times, "threat" 82 times, "anti" 88 times, and "challenge" 69 times, "tension" 12 times. For positive words, "progress" was 49 times, "success" was 36 times, which was significantly lower than the frequency of negative words.

TABLE 1. FREQUENCY CHANGES OF NEGATIVE WORDS IN "CHINA'S POVERTY ALLEVIATION STORY" FROM 2020 TO 2021

Words	Frequen- -cy in 2020	Percentage	Frequen- -cy in 2021	Percentage	Changes
Against	324	0.0594%	288	0.0811%	up
Control	195	0.0358%	126	0.0355%	down
Bad/ worse	133	0.0244%	75	0.0211%	down
Forced	125	0.0229%	46	0.0130%	down
Threat	107	0.0196%	82	0.0231%	up
Anti	95	0.0174%	88	0.0248%	up
Challen- -ge	74	0.0136%	69	0.0194%	up
Tension	5	0.0009%	12	0.0034%	down
Sum	1058	0.1941%	786	0.2214%	up

As shown in Table 1. , by comparing the reports in 2020 and 2021, it can be seen that the Washington Post usually uses negative, heavy words with similar meanings to highlight, so as to strengthen the negative and discredit sentiment, and arouse the aversion and dislike of the American people to the "China's poverty alleviation story". In terms of the change in the number of negative words, the number of negative words in 2021 decreased from that in 2020. However, its proportion to the total number of words has actually increased, and the frequency of negative words has also increased in general, reflecting the deepening of America's hostile attitude and its degree tends to be strengthened.

2) *Grammar*: Functional grammar holds that language is the product of human social activities, and the reflection of reality and inner world can be represented by transitivity. The active voice and passive voice are of great significance to reveal the ideology behind it.

By analyzing corpus, the Washington Post often puts "China's poverty alleviation story" in a proactive position and describes the objective process. For example, in the report of 2020, "China has" was 47 times, "China is" was 49 times, and other relevant active collocations such as "China was/had/would" appeared 39 times, while the word "has" appeared 2,000 times in total. Similarly, in the 2021 report, "China has" is 15 times, "China is" is 18 times, for a total of 1,426 times for the word "has".

In terms of the content of the report, The Washington Post described the material process with the main language of "China's poverty alleviation Story" (see Table 2.). In the Washington Post's report, China's poverty alleviation story is related to foreign loans, Xinjiang problems, and policy implementation, and shows a clear negative bias. By reinforcing the objectivity and authenticity of such results to readers, the mainstream Media in the United States conveys a broader sense of hostility.

TABLE 2. ACTORS AND PROCESS NATURE OF "CHINA'S POVERTY ALLEVIATION STORY" REPORT

Actuators	Event Description	Process Nature
The People's Republic	has recycled its huge export earnings, and purchased political influence	Material processes

China	has opened a new front in its criminal war against Muslims	Material processes
One of his flagship policies	was to eradicate extreme poverty from China	Material processes
China	is also a harsh autocracy	Material processes
Beijing	has "lifted hundreds of millions of people out of poverty" is like saying "all lives matter"	Material processes

In addition, the Washington Post also emphasized the United States' control over China's affairs, and placed the United States in the position of superior. As reported on November 4, 2020, "And it has done so without the transparency Western banks, Multilateral institutions", which considers that China lacks transparency in its poverty alleviation and China is not as good as the US. As reported on April 29, 2021, "America is rising anew, choosing hope over fear, truth over lies, and light over darkness." The report also clearly shows "America First" and the US's sense of superiority in global affairs.

3) *Text structure*: Text structure is a way of organizing and presenting text reflected by text writers and publishers, and can reflect the attitudes and preferences, by means of emphasizing or ignoring.

For example, an article in the Washington Post dated February 25, 2021 entitled "China Claims to Have eliminated Poverty, but the figures mask harsh challenges." The report's title obviously downplays the success of China's poverty alleviation story, but emphasizes that China's poverty situation is still bad. The story uses a transitional paragraph, "Yet the announcement, delivered with much bombast but few details, "also underlines China's looming demographic crisis. In this passage, "yet" "but" "crisis" was used to intensify doubts and negation and make them more promising. At the same time, not mentioning the Chinese poverty alleviation story actually solved the poverty problem of 800 million people, it contextualizes it. The reports used "but" four times in total, so that the media audience could only receive the false information that "China's poverty alleviation stories" were incomplete.

In fact, such reports that blurred the achievements of China's poverty alleviation story appeared in 2020 and 2021. For example, "but" appeared 2083 times in 2020 and 1346 times in 2021 in the self-built corpus. It can be seen that the Washington Post often discredits China's poverty alleviation stories by highlighting mistakes and ignoring facts.

3.2 Discourse practice analysis

Intertextuality means that any language is the absorption and utilization of other languages, which can further reflect the emotional characteristics behind it.

In the self-built corpus, the corresponding times of using direct and indirect speech can be obtained by searching the representative words of relevant direct and indirect speech (see Table 3). It can be seen from the table that from 2020 to 2021, the frequency of direct speech and indirect speech used in reports is similar, which is sufficient to prove that the Washington Post has always used quotations to express its feelings about "China's poverty alleviation story".

TABLE 3. THE NUMBER OF REPRESENTATIVE WORDS IN DIRECT AND INDIRECT SPEECH

	Direct quotation	Indirect quotation
In 2020	"Say/said" (2668). "Point out" (7) "Note/noted" (114). "The present/presented" (56) "Introduce" (21) "Express/expressed" (48) "Think/thought" (421). "Believe" (167). "The view" (68).	"Ask/asked" (285). "Indicate/indicated" (33) "Means/meant" (168). "Consider" (101). "Prove/proved" (41) "Suggest/suggested" (83). "Imply" (2) "Conclude" (23) "Worry" (45)
Sum	3570 (0.65%)	781 (0.14%)
In 2021	"Say/said" (1678). "Point out" (10) "Note/noted" (64). "The present/presented" (29) "Introduce" (28) "Express/expressed" (39) "Think/thought" (278). "Believe" (84). "The view/viewed" (69).	"Ask/asked" (105). "Indicate/indicated" (15) "Means/meant" (138). "Consider" (48) "Prove/proved" (28) "Suggest/suggested" (51) (3) "imply" "Conclude" (15) "Worry" (30)
Sum	2279 (0.64%)	433 (0.12%)

3.2.1 Direct speech

Quotation marks appeared 4,471 times in 2020 and 2,850 times in 2021, indicating that the Washington Post is accustomed to using direct quotation to enhance emotions.

Direct speech is used to strengthen the suppression and punishment of the Chinese government, such as Fang Said, “When the government needs to find someone to crack down on, to punish, they are more easily targeted.” In fact, the report will focus on strengthening the audience's distrust of the Chinese government, denying the achievements of China's poverty alleviation stories, and seemingly reflecting China's poverty alleviation situation by directly showing others' words. In most of the reports, some of the direct quotes are deliberately chosen to tarnish the Chinese government's image abroad.

3.2.2 Indirect speech

It can be found that when Washington Post uses indirect speech. It often indicates the source of the opinion, especially the obvious persuasive identity words. For example, The times of “analysts” are 63 times in 2020 and 47 times in 2021, “critics” are 50 times in 2020 and 54 times in 2021, “Scholars” are 41 times in 2020 and 17 times in 2021, “experts” are 209 times in 2020 and 129 times in 2021, “reports” are 498 times in 2020 and 491 times in 2021.

In the June 30, 2021, the opinion of Katheryn Russ, “China and other developing economies continue using the subsidies that helped them escape hunger, now distort global markets and cause hunger elsewhere.” The article also identifies the author as the senior economist for international trade and finance of the White House Council to strengthen the audience's recognition and acceptance of this view and deny the legitimacy of China's poverty alleviation

story. China's poverty alleviation story is an effective experience in helping other developing countries out of poverty.

3.3 Analysis of social practice

The text of The Washington Post reveals the main ideology of the mainstream American society, namely suppression and distrust of China. There are three reasons for this.

First of all, America's hegemonic policy and its idea of global centrality make it difficult to acknowledge the rise of China's international influence. The Washington Post mainly serves for the domestic politics and national interests of the United States. America still thinks of itself as the center of the world. The Washington Post also reported that the Congress voted on China's issues. The US shows its superiority in international affairs, which is actually a great intervention in China's internal affairs.

Secondly, the occurrence of domestic conflicts in the United States, as well as the status quo of poverty, has caused strong dissatisfaction in America. Particularly, in 2021, the year of the victory, the US needs to reduce China's contribution and antagonize China's image to divert domestic conflicts. The Washington Post reported the poverty problem in America, "Nearly 4 in 10 African American children are living in Poverty", which can reflect that itself also has a poverty problem that cannot be ignored. In addition, the Washington Post reported on poverty in other countries, as it did on April 19, 2020, "India, Lebanon, Iraq and elsewhere as fears of hunger", so the United States often used poverty of other countries to cover up its own problems.

Thirdly, the differences and misunderstandings between the political systems and values of China and the United States have led to the long-term smearing of China's poverty alleviation story by the mainstream media in the United States. The Washington Post is full of smears and accusations against the Chinese government and leaders in the poverty alleviation story. Behind this lies the United States' praise for its own regime and its ignorance and contempt for other regimes. China's socialist system has long been regarded by the United States and other Western countries as the opposite of democratic system, so China's poverty alleviation story will inevitably be suppressed and misunderstood by the United States.

4 CONCLUSIONS

Through the analysis of The Washington Post, this paper draws the conclusion that the image of China's poverty alleviation story in the view of American mainstream media is denied and smeared. In the period from 2020 to 2021, the negative attitude always exists and tends to deepen. Behind it, the United States has long formed the concept of American hegemony and global center, the cover of domestic poverty problem contradiction, and ideological superiority.

For China, on the one hand, it should pay more attention to the international image of the poverty alleviation story, and be able to clearly and correctly understand the attitude of the United States towards China's poverty alleviation story. China needs to actively speak out to the outside world, strive to reverse the current situation of unequal international discourse, and make a representative voice to clarify China's poverty alleviation policies and achievements. On the other hand, China should participate in international poverty alleviation with greater

enthusiasm and pass on its poverty alleviation experience. Actions speak louder than words. China can spread the message of poverty alleviation to more countries and form a greater force for communication.

China should spread China's story through friendly countries and developing countries. Pakistani and the majority of developing countries have shown great affirmation and praise for China's poverty alleviation efforts, which to a certain extent laterally clarifies China's international image, spreads China's poverty alleviation deeds.

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