

A Comparative Study of Chinese and Japanese News Reports on Sino-Japanese Agreement on Fukushima Nuclear-Contaminated Water Discharge —A Critical Discourse Analysis

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Abstract

This study explored narratives of cooperation in international environmental governance through a Critical Discourse Analysis of Chinese and Japanese media reports on the agreement reached between the two countries regarding the oceanic discharge of Fukushima nuclear-contaminated water. This qualitative study combined Fairclough's three-dimensional model with van Dijk's socio-cognitive approach to analyze the linguistic devices, narrative structures, and ideological stances of relevant reports in China Daily and The Japan News. The comparative study revealed that China Daily emphasizes environmental security and multilateral cooperation through the narrative of China as a "responsible power," while The Japan News embeds this agreement within geopolitical contexts and focuses more heavily on the economic and diplomatic implications behind the agreement. These findings suggest that, even when constructing discourses of cooperation, media outlets adopt complex discursive strategies that reflect national socio-political priorities and serve national interests. This study provided a multidimensional perspective for discourse analysis of environmental governance.

Keywords: critical discourse analysis, Fairclough's three-dimensional model, van Dijk's socio-cognitive approach, nuclear-contaminated water discharge

1. Introduction

1.1 Research Background

Oceans cover seventy-one percent of the Earth's surface. Known as the "cradle of life," they are of undeniable importance to human survival and development. Therefore, the increasing human exploitation of marine resources has led to unprecedented challenges for ocean ecosystems, such as overfishing and Marine pollution. The discharge of nuclear-contaminated water in Fukushima, Japan, is closely related to Marine pollution. Looking back fourteen years, many people recall that on March 11, 2011, a serious nuclear leak occurred at the Fukushima Daiichi Nuclear Power Plant in Japan as a result of the earthquake and tsunami. This nuclear accident generated large quantities of contaminated water. Ten years later, on April 13, 2021, the Japanese government officially decided to filter, dilute, and discharge it into the ocean. The contaminated water contains radioactive substances that can persist in the environment for extended periods, creating long-term impacts on human health and marine ecosystems. Due to geopolitical tensions and ocean current patterns, Asia-Pacific countries-being the most directly affected stakeholders-strongly protested the decision. Media in various countries maintained a high level of attention to this incident. However, the Government of Japan forcibly launched its radioactive water discharge plan on August 24, 2023, despite the doubts and objections from international parties. This means that the radioactive wastewater will be officially discharged into the Pacific Ocean, seriously affecting global marine ecology and human health. It is reported that after August 22, 2023, the major Chinese news media had reported this incident overwhelmingly, and the Chinese people's online attention to Japan's contaminated water discharge into the sea exploded (Wu & Chu, 2024). In response to Japan's launch of the Fukushima contaminated water discharge plan, the Chinese government announced a comprehensive suspension of imports of Japanese aquatic products on the same day. This issue has undoubtedly challenged Japan's international standing, though recent developments have created opportunities for resolution. The sixth session of the United Nations Environment Assembly in February 2024 called on the world to take stronger action to tackle the "triple planetary crisis" of climate change, natural loss and

pollution. There is a growing awareness that environmental problems are not only scientific, but also political and social, requiring global cooperation and urgent action. After years of tension and more than a dozen rounds of intensive negotiations and consultations, China and Japan made significant progress in their discussions on the controversial issue. On September 20 last year, China and Japan reached an agreement on the discharge. This important diplomatic development not only reflects the responsible attitude and cooperative spirit of the two sides on environmental protection and public health issues, but also provides a model for the international community to jointly tackle the challenge of environmental pollution.

Language functions as a material form of ideology, with media discourse serving as a particularly salient manifestation of this relationship. Media discourse is an important field of ideological struggle (Fairclough, 1995). The media has played a key role in shaping public opinion and the newly formed agreement on the issue. As one of the classic premises of American journalism scholar Bernard C. Cohen's (1956) Agenda-setting theory shows, the media may not be able to directly influence people's attitudes or opinions about an event, but they can be very effective in determining which issues come into the public eye and get people thinking and talking about them. News media reports reflect their national priorities and perspectives by choosing specific language expressions, constructing narratives, and embedding ideological positions. Critical discourse analysis can reveal how language constructs power and legitimizes ideology, and explain how news reports can spread or challenge mainstream ideology through news discourse. Therefore, this study will apply some theories of Critical Discourse Analysis to make a comparative study on the reports of Japanese and Chinese media on the agreement on ocean discharge of Fukushima nuclear-contaminated water, so as to reveal how news discourse subtly serves national interests, especially on controversial issues such as the ocean discharge of Fukushima's radioactive effluent.

1.2 Research Significance

This study has the following significance. First of all, this study combines two well-known frameworks in the field of Critical Discourse Analysis: Fairclough's three-dimensional model and van Dijk's socio-cognitive method. The combination of these two frameworks can provide researchers with a more comprehensive way to understand news discourse. This study can expand the explanatory power of this theory by using it to explore this public discourse with dual attributes of environment and diplomacy. In addition to its theoretical significance, this study also has certain practical significance. This study emphasizes the role of the media in shaping narratives and influencing international relations, which can help people read the news critically and correctly understand the harm of radioactive wastewater. The agreement reached by China and Japan on the oceanic discharge of radioactive wastewater was the latest progress in the Fukushima discharge issue. The study compares the news discourses of China and Japan at that time, which helps to grasp the latest developments, promote mutual understanding, and reduce communication misunderstandings in cross-cultural and international contexts. It is worth noting that the complex issue of Fukushima radioactive water reflects the challenges of solving global environmental problems in a strong political atmosphere. This study emphasizes the importance of accurate and responsible media reporting in this context to promote international communication and cooperation on environmental issues.

1.3 Structure of the Thesis

This thesis consists of five chapters. Chapter One is a brief introduction to the background events and news discourse, including the significance of the research and the structure of the thesis. Chapter Two is a comprehensive review of the development and main theories of Critical Discourse Analysis of news report discourse and Critical Discourse Analysis of nuclear-contaminated water reports by previous researchers to find research gaps. Chapter Three is an introduction to the theoretical framework and research methods, the former of which includes Fairclough's three-dimensional model and van Dijk's Socio-Cognitive Approach. Chapter Four is the focus of this thesis, showing the research analysis after applying the above theoretical framework. The final chapter, Chapter 5, concludes the thesis by summarizing the findings and discussion of the study, limitations and suggestions for future research.

2. Literature Review

2.1 Previous Studies on News Discourse with Critical Discourse Analysis (CDA)

Critical Discourse Analysis, which was proposed in 1979, is a discourse analysis method that can be carried out across disciplines. The three basic concepts of CDA are language, ideology and power, which are mainly used by researchers to analyze how ideology influences discourse through linguistic means and social practice. Since its inception, CDA has been widely adopted by researchers, including in recent years. Notably, CDA is increasingly used to study how news media construct, maintain, and challenge ideologies, show complex power relations, and reveal deep social inequalities. Global issues involving politics, economy, environment and so on are the focus of news discourse researchers.

As one of the most influential frameworks for critical discourse analysis, Fairclough's three-dimensional model is favored by the majority of discourse analysis experts and is widely used in the study of critical discourse analysis. One of the key objects of attention for these news discourse researchers is the core global crisis event that the media focuses on. The COVID-19 epidemic is one of the most important global health crises in recent years, and its scope and power are rarely witnessed in human history. Yan (2023) mainly focused on this model as a theoretical framework and analyzed 40 New York Times reports on COVID-19 in China from early April to the end of July 2020. Her research pointed out that the New York Times had portrayed news coverage of the outbreak in China in a negative, incomprehensible, and damning way. This is unsurprising, given that countries hold differing views on how to view the COVID-19 pandemic as a global public health event. In her research, she warns against the subjective ideologies of media and news producers mixed in with news reports. The formation of these subjective ideologies is often influenced by national political and economic situations and deep-rooted national culture. In addition, researchers are passionate about examining how the news media construct important events concerning international relations. Conflict and cooperation are the most important aspects of international relations. In terms of international cooperation, China's Belt and Road Initiative is an important case in the eyes of researchers. The study of Ge (2021) was conducted under the guidance of Fairclough's three-dimensional model and Halliday's systematic functional grammar. She selected the news reports about BRI from the Guardian and Xinhua Daily within a fixed period of time, and established a small-scale corpus to carry out critical discourse analysis. The study pointed out that the Guardian was biased against the initiative, and the related reports used various linguistic means to create a negative image of the BRI and mislead readers. Increasingly, scholars and readers recognize the importance of applying critical thinking when interpreting news reporting. Rahman and Shehab (2023), when studying the reports of Bangladeshi media on the Belt and Road Initiative, criticized that some mainstream media often failed to set the agenda but directly echoed the government's views when describing the BRI, thus losing people's interest. Mainstream media is increasingly challenged by the critical discourse emerging from social media platforms.

Van Dijk's socio-cognitive approach is also widely used in the study of news discourse. Several studies have used it to examine how news media framed major events through an ideological lens. Tareen et al. (2021) also conducted research on news coverage of COVID-19. Studying the headlines of two news articles on COVID-19 from Dawn and The News, they found that the biological issue of the COVID-19 epidemic has been politicized by world leaders. The researchers firmly believe that readers, especially the repressed and marginalized in society, must read the headlines critically to understand the implications of authority and avoid the social oppression of news reporting. In addition, discourse researchers also use van Dijk's socio-cognitive approach to study how media construct conflict or cooperative narratives. Safi et al.'s (2020) study involved two countries with a long history of friction and on the brink of war, India and Pakistan. Using the CDA framework of Teun van Dijk, they analyzed the editorials of the two mainstream largely circulated Indian English newspapers on the Pulwama incident in Kashmir, proving that people can realize that the media of both countries are mouthpieces of their respective governments and advance their respective agendas against each other with full enthusiasm. On the other hand, research by Anjum and Manzoor (2020) focuses on the coverage of CPEC by three English-language dailies in Pakistan, The "Dawn News", "The Express Tribune" and "The Business Recorder". They apply the discourse micro and macro strategy analysis proposed by van Dijk to derive Pakistan's complex attitude towards the acceptance of CPDC as a mega project and the concerns of stakeholders and politicians.

Most of the existing studies use Fairclough's three-dimensional model or van Dijk's socio-cognitive approach to conduct critical discourse analysis of news discourse alone or in combination with other theories. However, some studies combine Fairclough's and van Dijk's models. Pribadi and Riady (2022) did so in an analysis of the article Evaluation of Evaluasi Pemilu Serentak Mendesak from Tempo newspaper. This research led them to discover the difference between Fairclough's and van Dijk's models, Fairclough's model is more concerned with how discourse reflects and reproduces social reality, while van Dijk's model emphasizes how journalists' perspectives affect audiences' understanding of political events.

2.2 Previous Discourse Studies Related to Nuclear-Contaminated Water in Japan

The issue of Fukushima nuclear-contaminated water is one of the most concerning environmental issues in the world in recent years. When the Japanese government officially decided to discharge the contaminated water into the Pacific Ocean on April 13, 2021, more and more discourse researchers paid attention to this issue, which had gained media attention. Many researchers have explored the distribution pattern and implementation methods of attitude resources in news reports to help people effectively understand and express attitudes and positions in discourse. Lu (2023) focused on the news reports in China Daily regarding the Fukushima discharge plan, and believed that the newspaper tended to take a negative and concerned attitude towards the plan. After analyzing 10

reports in China Daily on Japan's contaminated water discharge, Huang (2024) called on all mankind to jointly protect the earth's home, maintain the marine ecosystem, and protect the environment on which we depend for survival. Some researchers focus more on the underlying social cognition reflected in the news discourse of Japan's contaminated water discharge. Wang (2024) chose China's official discourse on Japan's radioactive water discharge as a case study to conduct a corpus-based analysis of the proximization theory and its derivative theory of distanciation. This research analysis shows that the change in China's discourse strategy on this issue before and after the water discharge reflects the impact of the discharge on China's core interests. Sun et al. (2024) used the method of critical cognitive linguistics to study the Asahi Shimbun editorial on the Fukushima discharge. Their research mainly explains how the discourse producers of environmental risk discourse use complex image schemas to shape, define discourse space and legitimize their positions on this controversial issue. This reminds people to pay attention to the broad social influence and the power of discourse in shaping environmental risk cognition. A considerable number of researchers have taken cross-cultural comparisons into consideration in their research. Gong et al. (2024) studied the news discourse of Fukushima discharge and focused on major English newspapers in China, South Korea and Japan in the initial stage. Their research reveals the strong relationship between the handling of uncertainty and transparency in risk communication, as well as the close link between the social amplification of risks and potential manipulation. Chen & Liu (2024) used corpus-based analysis and discursive news values analysis to compare and analyze the descriptions of Japan's radioactive water discharge in media reports in China and the United States. Their analysis in terms of social cognition shows that different views on marine security and interests between countries led to differences in media reporting methods. There is no doubt that news reports are socially, politically and culturally constructed. However, numerous studies also examine the Fukushima contaminated water discourse from the perspective of ecological discourse analysis, focusing on how language reflects ecological concerns and environmental issues. In order to improve readers' critical thinking and environmental awareness, Pan (2024) conducted an analysis of Chinese and American media reports on Fukushima discharge from the perspective of ecolinguistics. This study is based on Fairclough's three-dimensional analysis framework, comparing and analyzing the respective positions and ideological differences behind Chinese and American nuclear-contaminated water reports in terms of titles, vocabulary selection, and themes.

There are already quite a lot of existing news discourse analyses on the issue of Fukushima radioactive water. However, there is still a clear gap in the research on the agreement reached between China and Japan on the Fukushima discharge. It is worth noting that the existing research is basically from domestic Chinese scholars, and the research content mainly focuses on conflict narratives, environmental risks and ideological criticism. It tends to describe the discharge as the root cause of international tensions, and especially emphasizes the impact of Japan's behavior on the environment, politics and economy. After many diplomatic discussions and cooperative efforts between China and Japan, the two countries reached a preliminary agreement on the treatment of Fukushima radioactive water. This is undoubtedly a major diplomatic achievement. At present, few studies have explored how this environmental and diplomatic agreement is expressed in the media of the two countries. CDA, or the combination of Fairclough's three-dimensional model and van Dijk's socio-cognitive approach, can more comprehensively reveal how the media of the two countries construct a discourse that promotes both national interests and regional stability and environmental responsibility under potential tensions. This study will fill this research gap by analyzing how China Daily and The Japan News construct a common narrative around the Fukushima discharge issue.

3. Theoretical Framework and Methodology

3.1 Theoretical Framework

Critical discourse analysis (CDA) focuses on the relationship between discourse, power and ideology. CDA has a variety of theories and analytical approaches, but the theories of Fairclough and van Dijk are the most comprehensive and widely adopted models for uncovering hidden ideologies and relations with power, dominance and control of language (Al-Mas'udi & Al-A'mery, 2021). This study decided to combine Fairclough's three-dimensional model and van Dijk's Socio-Cognitive Approach as the theoretical framework. By combining Fairclough's three-dimensional framework with van Dijk's Socio-Cognitive Approach, the study enables a comprehensive analysis from micro-linguistic phenomena to macro-social structures. In other words, at the micro level, language features such as vocabulary choice, syntactic structure, and rhetoric can be examined; at the midlevel, news production processes, discourse practice patterns, and communication strategies can be analyzed; and finally, at the macro level, social power relations, ideological influences and cultural value orientations can be explored. This multi-level analytical framework can reveal the inner connection between language use and social structure, and show the complexity and multidimensionality of news discourse. In addition to describing the surface differences, the framework for systematic comparative research developed by applying the two theoretical

frameworks to cross-cultural comparative studies can also reveal the social mechanisms and cultural logic behind these differences. Furthermore, van Dijk's approach focuses on examining how discourse reflects and upholds social power relations, whereas Fairclough's model specifically highlights the connection between discourse and power. People can thus have a better understanding of how news discourse serves national interests by combining the two theories. The relationship between the two theoretical frameworks is seen in Figure 1.



Figure 1. The Relationship Between the Two Theoretical Frameworks

3.1.1 Fairclough's Three-dimensional Model

Fairclough's three-dimensional model is mainly developed from three dimensions: text, discourse practice and social practice, and is a systematic approach to studying power and ideology in text. The first dimension, "text", focuses on the linguistic features in the text, which are mainly vocabulary, grammar, sentence structure and rhetoric. The textual analysis in this study pays special attention to word choice, modality, and metaphor, which may indicate the underlying ideological position of Chinese and Japanese media. The second dimension is "discourse practice", which focuses on how texts are produced, transmitted and received in a particular social context. This involves examining the journalistic practices involved in the creation of news content, the role of media organizations such as China Daily and The Japan News, and the construction of a framework for how these practices affect issues such as the Sino-Japanese agreement on the discharge of Fukushima nuclear-contaminated water. The study will consider how selected news texts affect public opinion and national identity, particularly in environmental policy and Sino-Japanese diplomatic relations. The third dimension of the model is "social practice". This dimension relates discourse to broader social, political, and cultural practices to reveal how discourse reflects or challenges specific power relations and ideologies. This study examines how the news discourse on the Sino-Japanese agreement on the discharge from Fukushima reflects issues of national sovereignty, environmental management, and regional cooperation, as well as how the media constructs narratives that reflect the political and environmental priorities of their respective countries.

3.1.2 Van Dijk's Socio-Cognitive Approach

Van Dijk's socio-cognitive approach (SCA) is an important theoretical tool in the field of CDA, which aims to reveal the complex relationship between language, cognition and social structure. This approach, which is grounded in Social Cognitive Theory, highlights the mediating role of social cognition between language practice and social structure. By combining the perspectives of linguistics, sociology and psychology, van Dijk's socio-cognitive approach proposes a three-level analysis framework: micro-linguistic analysis, macro-structural analysis, and social cognitive analysis. The micro-linguistic analysis focuses on specific linguistic features in discourse, examining how language choices reflect and maintain social power relations. This dimension includes: lexical analysis (mainly involving vocabulary choice), syntactic structure (including active/passive voice choice, transitivity patterns and sentence complexity) and rhetorical strategies. The macro-structural analysis examines

the overall organization and thematic framework of discourse. Key components include: thematic structure (mainly involving the hierarchical organization of news topics and their ordering), semantic macro-structure (including how information selection and organization construct a specific narrative framework) and discursive strategies (involving information salience and contextualization, positive self-presentation and negative other-presentation, etc.). The last analytical method, social cognitive analysis is the most distinctive part of van Dijk's theoretical framework, focusing on the interactive relationship between discourse, cognition and society. It includes Mental Models used to analyze how cognitive models shared by social groups affect the production and understanding of discourse, Knowledge Construction used to study how news discourse constructs and discourse social knowledge through specific expressions, and Ideological Functions that examine how discourse serves specific ideological purposes by influencing cognition. Among them, the Ideological Functions are the focus of this study. The study needs to analyze how discourse strategy has a specific ideological orientation; whether the cognitive model constructed by the discourse presents a particular value orientation, whether these cognitive models tend to maintain or challenge certain social relations; and whether the influence of discourse is beneficial to the interests of specific groups.

3.2 Research Questions

This study employs two central analytical concepts that require a clear definition. The narrative framework refers to the structured way in which news media organize information. In this study, the analysis of narrative framework includes: thematic structure, source attribution pattern, information organization and sequencing strategy. The news production methods contain the practical and institutional processes involved in creating news content, mainly including information selection and prioritization, framing strategy and perspective choices, editorial emphasis and focus determination. These concepts are particularly significant in cross-cultural media analysis, as they help reveal how different media outlets construct distinct representations of the same event based on their sociocultural contexts and ideological positions.

Based on these conceptual foundations, this study sought to address the following questions:

(1) What are the differences in the linguistic devices used by Chinese and Japanese media when reporting the agreement?

(2) What are the similarities and differences in the narrative frameworks and news production methods constructed by Chinese and Japanese media when reporting the agreement?

(3) What different ideologies are reflected in Chinese and Japanese reports and how do they serve national interests respectively?

3.3 Methodology

3.3.1 Data Collection

This study focused on the reports of the agreement on the discharge of nuclear-contaminated water in the Chinese and Japanese media. China Daily is China's official English-language newspaper, representing the government's stance and mainstream domestic values (Mody, 2010). The Japan News is Japan's mainstream media and one of the two largest newspaper media in Japan, with strong persuasive power (Liu, 2020). This study used China Daily and The Japan News, two authoritative media representing the national narrative and ideological characteristics of the two countries, as samples, focusing on reports from September 21 to 23, 2024. The selection of this period was based on the following considerations: On September 21, 2024, China and Japan officially announced that they had reached an agreement on the ocean discharge of Fukushima nuclear-contaminated water. This event has important international public opinion value, and this short but intensive reporting window represents the peak of media attention and focuses on how the two countries construct narratives. At the same time, the choice of this period facilitates an in-depth analysis of the initial media reaction. The information dissemination and discourse construction in the early stages of reporting best reflect the media's ideological bias and national image-building strategies. By searching the search bars of the official websites of China Daily and The Japan News with the keywords "nuclear-contaminated water" and "nuclear treated water", four suitable news articles were found in the selected period, two from China Daily and two from The Japan News. The two articles from China Daily were titled "China, Japan reach deal on discharge monitoring" and "Wastewater calls for caution", while the two articles from The Japan News were titled "China Agrees to Resume Imports of Japanese Marine Products; Decision is Expected to Improve Worsening Bilateral Relations" and "Resumption of Imports of Marine Products: Will It Lead to Improvement of Japan-China Relations?". However, both "Wastewater calls for caution" and "Resumption of Imports of Marine Products: Will It Lead to Improvement of Japan-China Relations?" are editorial articles, which have clearly stated their positions and opinions, making them less sui

table for analyzing implicit ideological expressions. However, "China, Japan reach deal on discharge monitoring" and "China Agrees to Resume Imports of Japanese Marine Products; Decision is Expected to Improve Worsening Bilateral Relations" are both major reports in their respective media, and both offer richer linguistic material and more nuanced ideological expressions, which makes them more suitable for critical discourse analysis. Therefore, these two news articles were selected, and their basic information is shown in Table 1.

	Sample 1	Sample 2
Source	China Daily	The Japan News
Title	China, Japan reach deal on discharge monitoring	China Agrees to Resume Imports of Japanese Marine Products; Decision is Expected to Improve Worsening Bilateral Relations
Release time	07:20 BJT, September 21, 2024	20:00 JST, September 21, 2024
Author	Zhou Jin	Shinsuke Uemura and Keiichiro Azuma
Structural features	Contains the main body of the news, comments from all parties	background information, quotations and
Word count	718 words	706 words
Original link	https://www.chinadaily.com.cn/a/202409 /21/WS66ee0340a3103711928a8fda.htm l	https://japannews.yomiuri.co.jp/politics/ politics-government/20240921-212560/

Table 1. Basic information about the samples

3.3.2 Data Analysis

The analysis of news texts in this study follows a systematic process combining Fairclough's three-dimensional model and van Dijk's socio-cognitive approach, using a qualitative approach. The analysis process proceeded as follows. First, each text was read several times to ensure a thorough understanding of its content and context. Second, based on the theoretical framework, this study combined the categories of Fairclough's three-dimensional model and van Dijk's socio-cognitive approach to classify the sample texts. The final scheme includes three main categories: text features (including vocabulary choices, grammatical structure and rhetorical devices), discourse practices (covering source selection, information organization and framing strategies) and social practices (examining the representation of national interests, the construction of authority and ideological implications). It is worth noting that the comparative analysis of Chinese and Japanese news texts is an important part of this study. This comparison examines the similarities and differences in language choices, discourse strategies and ideological positions. The study paid special attention to how each media constructed and maintained its national narrative while participating in agreement discourse. The analysis focuses especially on how language means, narrative frames and ideological implications serve their respective national interests while promoting bilateral understanding. Throughout the analysis process, the research results are constantly linked to the research questions and theoretical framework. The results from each level of analysis were combined to provide a comprehensive understanding of how news discourse shapes representations of agreement on nuclear-contaminated water releases.

4. Discussion

4.1 Linguistic Devices

The analysis began with an examination of the texts, combining Fairclough's three-dimensional model and van Dijk's socio-cognitive approach at the micro level to analyze the language devices in the two selected news reports. The analysis found that Chinese and Japanese media had used different linguistic devices in constructing narratives around the agreement. And those differences are mainly reflected in the language dimensions such as vocabulary selection, syntactic structure, modality and rhetorical strategies.

Language users often unconsciously select specific lexical items when describing events or expressing viewpoints. Most lexical choices inherently conveyed support for or opposition to particular positions, attitudes, or opinions. Media definitions of this controversial issue through specific lexical choices significantly influence tone, emotional connotation, and implicit ideological stance. The most significant difference in words was reflected in the description of "water discharged from Fukushima to the sea" by China Daily and The Japan News. China Daily consistently employed the term "nuclear-contaminated water" throughout: in the introduction, import ban discussion, China's opposition statement, and agreement description. This terminology aligns consistently with language traditionally employed by Chinese officials. The Japan News used the term "treated water" when referring to the Fukushima discharge and the views of other countries. Comparing these two different adjectives, the compound adjective structure of "nuclear-contaminated" combines the concepts of "nuclear" and "contaminated", which are threatening to humans, and easily lead to strong negative associations; while the premodifier "treated" in "treated water" reflects the completion of the treatment process, which makes people feel safe. These contrasting terms—"nuclear-contaminated" (implying danger) versus "treated" (suggesting safety)— created opposing impressions of the same substance, influencing readers' perceptions of the bilateral agreement. China Daily was likely to make readers agree that the monitoring system was necessary, while The Japan News may lead readers to think that the monitoring system is unnecessary.

Both reports focused on the Sino-Japanese agreement, with key differences emerging in verb selection when describing negotiation dynamics. China Daily used more positive verbs to position China as an equal partner in the negotiations when describing China's actions. The report employed variations of the verb "reach" to emphasize mutual agency, "China, Japan reach deal" and "China and Japan have reached an agreement", used "pledged" when referring to Japan's commitment, and used "conduct" twice when discussing monitoring activities. The Japan News cleverly used the "agrees/agreed" variant in the title ("China Agrees to Resume Imports") and the text to imply that China was the concessionary party in the negotiations. This difference actually reflects the different views of the two sides' media on the agreement. China maintains its usual attitude of equality between the two parties to the agreement, while Japan implies that China is the compromising party in order to demonstrate its diplomatic initiative.

The syntactic structures adopted in the two reports reflect differences in emphasis when reporting. The results of the syntactic analysis showed that complex sentences were more frequently used in China Daily when describing or involving technical aspects and policy statements. For example, "Based on scientific evidence, China will gradually resume imports of Japanese aquatic products that meet regulatory requirements and standards after China's substantive participation in the international monitoring system and the conducting of independent sampling and other monitoring activities by participating countries." This complex structure better highlights the comprehensiveness of the monitoring system and China's role in it. In contrast, The Japan News used phrases like "With its expansion of the monitoring" to simply describe the monitoring system, but uses more complex structures when discussing the broader bilateral relationship. Here's an example, "However, there remains a mountain of pending problems between the two countries, including the intrusion into Japan's territorial waters near the Senkaku Islands by vessels of the China Coast Guard; the detention of a Japanese national by Chinese authorities on suspicion of espionage; and the installation by China of buoys in Japan's exclusive economic zone (EEZ)." This comparison demonstrated the difference in the focus of the media reports. China Daily is undoubtedly more concerned with monitoring after the agreement is reached, while The Japan News is more focused on the overall bilateral relations between China and Japan.

Different modal verbs express different tones, attitudes and emotions of the speaker. Modal verbs that express a clear attitude convey the speaker's determination and certainty, just as China Daily used "will gradually resume imports" and "need to further refine monitoring arrangements" to convey to readers a firm attitude towards action. The Japan News, on the other hand, used conditional phrases such as "is likely to improve" and "could be one of the reasons" to indicate a more cautious attitude toward future developments.

Moreover, both media outlets reinforced their narratives through metaphorical language. China Daily employed metaphors emphasizing protection and infrastructure— "safeguard the lives" and "laid a foundation for the international community"—highlighting China's commitment to health and cooperation. The Japan News emphasizes the complex relationship between China and Japan by using metaphors that imply conflict resolution and unresolved challenges, such as "lower the fist that it had raised", "a mountain of pending problems" and "the road to better relations will be a rocky one".

4.2 Narrative Construction

In order to analyze the similarities and differences in the narrative structure and news production methods constructed by China Daily and The Japan News in reporting on the agreement between China and Japan on the discharge, it is necessary to analyze the news reports at the level of discourse practice. This study mainly focuses on the similarities and differences between the two media in information selection, organization and presentation

strategies.

China Daily and The Japan News employed distinct information sources and attribution patterns in their reports, demonstrating divergent narrative strategies between these two media outlets. China Daily relied primarily on official Chinese sources, creating a narrative endorsed by designated experts and diplomats. The newspaper quoted extensively the words of Foreign Ministry spokeswoman Mao Ning in important parts of the relevant reports, forming attributions from government agencies. It also quoted detailed comments by Xiang Haovu, a research fellow in the Department for Asia-Pacific Studies at the China Institute of International Studies, and Yang Duanjie, deputy chief engineer at the Nuclear and Radiation Safety Center of the Ministry of Ecology and Environment, to support the narrative. At the same time, the report also presents Japanese data through indirect attribution, "reports quoted statistics from the Japanese side", helping to construct a narrative of authoritative expertise and transparent governance. In contrast to China's attribution model, which focuses on emphasizing the country's official position, The Japan News adopted a more diversified attribution strategy. On the one hand, the report mainly constitutes the official position by citing statements by Prime Minister Fumio Kishida, and provides technical details by mentioning the International Atomic Energy Agency (IAEA). On the other hand, the report provided background through "a source in China's state media" and then provides perspectives through multiple unnamed government officials, making the sources of information on regional diplomacy more extensive. This approach successfully created a narrative that suggested insider knowledge while maintaining diplomatic flexibility, particularly through statements like "As one government official pointed out, 'the road to better relations will be a rocky one.""

The thematic emphasis in the reports of the two media outlets shows that there are obvious differences in their narrative emphasis, which can be easily seen from the titles of the two articles. The headline of the China Daily report, "China, Japan reach deal on discharge monitoring", emphasizes the bilateral nature of the agreement and focuses on the monitoring aspect. This is emphasized again in the introductory paragraph by mentioning "effective long-term international monitoring arrangement" before discussing seafood trade impacts. In contrast, the headline of the Japan News report, "China Agrees to Resume Imports of Japanese Marine Products; Decision is Expected to Improve Worsening Bilateral Relations," suggests that it prioritizes economic impact and positions China as the main actor in making concessions. Its lead paragraph focuses primarily on China's decision to lift the import ban, positioning the monitoring agreement as a secondary consideration.

Analysis of the complete report revealed that China Daily primarily employed an inverted pyramid narrative structure, emphasizing the conclusion first and then the details to emphasize the process. The introductory paragraph goes straight to the point and shows the conclusion of the incident, that is, China and Japan reached a monitoring agreement and resumed trade. Paragraphs 2-5 of the report begin to introduce the content of the agreement and the negotiation process, involving China's independent monitoring rights, Japan's commitments, and the scientific dialogue mechanism. The following paragraphs 6-7 and 10-13 introduce China's position and measures taken. It is noteworthy that a reference to Japanese data is inserted in the middle of this section (paragraph 8), using the sharp drop in Japan's export data ("a decrease in seafood exports of 92.3 percent") to illustrate the effectiveness of the ban and highlight the necessity of the agreement. Paragraph 14 is the official initiative to clarify irrelevant events to prevent the public from misunderstanding the motives of the agreement. The following paragraphs 15-20 are experts' interpretations of restrictions on Japanese emissions, diplomatic games, and detailed monitoring technologies. The concluding paragraph puts forward the outlook that if the agreement is implemented, it can promote the scientific solution to the nuclear sewage issue. The report progresses from "the content of the agreement" to "how to implement it" and then to "future impact", with a tight logic, shaping China's image as a "problem solver" and "rule maker", highlighting China's responsible attitude and international leadership.

The narrative structure of The Japan News report is closer to a problem-oriented linear progressive structure. The report starts with an incident, and proposes the superficial progress of China's resumption of Japanese seafood imports, but also implies the problem of the limited improvement of Sino-Japanese relations. Then, it began to deeply analyze the multi-dimensional contradictions behind this incident around this implicit problem. First, through the transition of the word "but", it reveals the core conflict of "lifting the embargo \neq comprehensive easing of relations", and in paragraphs 6-7, the specific case of the murder of a Japanese student in Shenzhen, China, strengthens the "unclear" of the contradiction layer. The report then conveys uncertainty by elaborating on the details of the international organization IAEA's involvement and negotiations, the economic and diplomatic motivations for China's change in position, and the unresolved conflict issues between China and Japan such as territory and espionage cases, guiding readers to be wary of the false easing of Sino-Japanese relations. The report ends with an official's pessimistic expectation of "a rocky road" to echo the limitations of the "lifting the embargo" at the beginning, forming a closed-loop narrative of "event – contradiction – no solution". This chain of "event – contradiction – extension" reveals the diplomatic game behind the "lifting of the embargo" and the fragility of

Sino-Japanese relations, guiding readers to gradually understand the deep-seated conflict of the incident.

4.3 Ideological Stances

News reports serve not merely as tools for objective fact presentation but inevitably convey the ideology of their country of origin, reflecting the country's attitude, interests and political priorities in international affairs. This study aims to analyze the different ideological positions of the Chinese and Japanese media in the narrative construction of the discharge agreement, and how the media serve their respective national interests in different ways that are consistent with their respective sociopolitical contexts.

China Daily's report consistently positions China as a responsible major country and the guardian of environmental security in the Asia-Pacific region. This positioning becomes evident throughout multiple sections of the report. The report opens by emphasizing China's role in establishing "effective long-term international monitoring" and ensuring Japan meets its "obligations under international law." In other words, China Daily positioned China as the main driving force for establishing "effective long-term international monitoring" and an active defender of global marine environmental interests, rather than just being a participant in the China-Japan bilateral negotiations. When discussing the Sino-Japanese negotiations, the report consistently described China's actions as responsible actions for "the ecosystem, the environment, and human life and health". China's leadership in global environmental regulation is reinforced by this narrative construction, which also demonstrates that China's opposition to the discharge of radioactive water is consistent with its interests as a nation. As the report highlights, China's "firm opposition" to the discharge also shows its willingness to reach an agreement, reflecting China's pragmatic and principled approach to international relations. This dual positioning helps maintain China's position against the discharge of contaminated water while demonstrating diplomatic maturity. In addition, expert comments at the end of the report also reinforced China's image as a responsible global power. Xiang Haoyu, a research fellow in the Department for Asia-Pacific Studies at the China Institute of International Studies, is a typical example. He emphasized that "China has no selfish interests but only aims to safeguard the lives, health and ecological environment of the people from Pacific countries."

The Japan News report, on the other hand, represents an ideology focused on economic pragmatism and national diplomatic autonomy. The report starts with the conflict between China and Japan, and then emphasizes Japan's ideological stance of maintaining its sovereignty despite international pressure by quoting a Japanese Foreign Ministry official's statement that independent monitoring has a "serious bearing upon our sovereignty". This statement links the conclusion of the monitoring agreement with Japan's diplomatic autonomy, while emphasizing that the expansion of monitoring is "essentially an initiative taken by the IAEA". The media used this to show that the agreement was an extension of existing international cooperation, rather than a concession to China's demands, in order to safeguard Japan's national interests. As the report specifically pointed out, the agreement not only meant that Japan "won't be seen as making concessions", but also that China could "save face", reflecting that while Japan was paying attention to international cooperation and cooperating to improve international relations, it also placed greater emphasis on maintaining its own independent foreign policy decisions and domestic authority. The Japan News also analyzed China's economic motivations behind the agreement in its report, which is, "Beijing's desire to improve relations with Japan, in the hope that it will invest more in China." The media believes that this economic reality ultimately proves that Japan's position is correct and regards the agreement as a proof of Japan's diplomatic strategy. In addition, the report also noted the "gradually softened their stances" of Pacific island nations, suggesting that political rather than environmental factors are the primary cause of these nations' objections to the discharge. This discourse construction implies that the international community will eventually accept the ideology of Japan's actions.

This comparative study shows that China Daily and The Japan News focus on different aspects in the broader socio-political context. China Daily argued that protecting the environment and human health is the most important background for the agreement. Its emphasis on international monitoring and scientific verification in the report is consistent with China's long-standing position of advocating a multilateral approach to global challenges and attaching importance to ecological civilization and environmental protection. The report's emphasis on environmental rather than economic issues was a defense of China's position as a leading advocate of regional environmental interests. The Japan News linked the agreement to other issues such as territorial disputes and economic cooperation, while emphasizing that the discharge is basically a technical issue rather than an environmental issue. This narrative approach downplays environmental issues and emphasizes diplomatic and economic aspects, focusing on maintaining national sovereignty. This actually reflects Japan's careful balance between domestic interests and international obligations.

5. Conclusion

5.1 Major Findings and Discussions

This study conducted a critical discourse analysis of media reports on the agreement reached by China and Japan on ocean discharge of nuclear-contaminated water by the two representative Chinese and Japanese media, China Daily and The Japan News. Building upon previous research employing critical discourse analysis of environmental and diplomatic news reports, this research further contributes to understanding how news discourse influences international relations and environmental governance.

The combination of Fairclough's three-dimensional model and van Dijk's socio-cognitive approach was inspired by the work of Pribadi and Riady (2022). They chose to use these two theoretical frameworks to analyze complex political discourse. This investigation extended its application to the field of environment and diplomacy. By examining how the media described and constructed narratives surrounding the discharge agreement, this study demonstrates the effectiveness of this integrated framework in capturing the multiple layers of meaning in environmental diplomatic discourse.

Through the analysis of the study, it could be seen that the linguistic devices used by Chinese and Japanese media were quite different, mainly distinguished in the selective description of subject words, the choice of verbs, as well as syntactic structure, modal expression and metaphorical rhetoric, which is a similar pattern to that found by Pan (2024) in his analysis of Chinese and American nuclear-contaminated water news reports from the perspective of ecocritical discourse analysis. However, these comparative approaches operate in the broader context of bilateral relations and environmental diplomacy, helping not only to articulate national positions but also to construct legitimate authority for environmental governance. In the comparative study, it can be found that the Chinese side tends to emphasize that this is bilateral cooperation concerning environmental safety, while the Japanese side tends to indicate that this is a national economic and diplomatic achievement in the geopolitical conflict between the two sides. This finding revealed the choices and changes in news discourse when reporting diplomatic progress and agreement building, expanding the earlier research of Gong et al. (2024) and other scholars on news discourse on the Fukushima issue, which mainly focused on conflict narratives and environmental risks.

Differences in narrative frameworks and news production methods between the two media further deepened the different views between China and Japan on the importance of the agreement. Whether in terms of source attribution, narrative context, thematic focus, or information structure, China Daily constructs the narrative primarily from the perspective of the environment and public health, while The Japan News places the agreement within a complex network of bilateral challenges in order to construct a broader geopolitical narrative. This finding confirms Pan's (2024) and Huang's (2024) research on Chinese news discourse on Japan's contaminated water discharge into the sea, and also supports Sun et al. (2024) analysis of compound image schemas in news discourse, which is, narrative frames influence public understanding of environmental risks and international relations.

It is also worth noting that the ideological positions reflected in the reports clearly serve the respective national interests. The above analysis shows that the China Daily's report supports China's position as a defender of regional environmental interests, while the report in The Japan News reflects Japan's careful balance between domestic political, economic and diplomatic interests and international obligations. This finding supports Rahman and Shihab's (2023) observation of how the mainstream media constructs narratives that serve the economic and political interests of the nation. What's more, as Chen and Liu (2024) point out in their cross-cultural analysis of media coverage, environmental issues are often proxies for broader diplomatic and political negotiations. This study expands the understanding of maintaining state positions, promoting diplomatic progress, and shaping public perceptions of environmental governance by demonstrating how news discourse performs multiple functions simultaneously.

Therefore, these findings can help policymakers understand the discourse strategies adopted by media in different countries, predict the reactions of the international public, and design more effective communication strategies. As for media organizations, they can draw from this research to reflect critically on their framing strategies, strive to conduct more balanced coverage, reduce the politicization of environmental discourse, and thus create a more informed and cooperative public sphere.

These findings suggest that media discussions of environmental diplomacy agreements involve a complex interaction between linguistic devices, narrative frameworks, and ideological stances. Even when talking about cooperation, they still manage to maintain their position by adopting very complex discursive strategies.

5.2 Limitations and Suggestions for Future Study

Like any scholarly work, this study has certain limitations, primarily due to objective constraints. The news reports

selected for analysis in our analysis focused on a specific moment and a limited article by a specific media outlet, and therefore cannot reveal the complete evolution of the narrative of this event in various media outlets. Future research could build a corpus covering relevant reports from a wider range of media outlets and over a longer period of time, and conduct a long-term study of discourse change over time. Comparative studies could also be conducted to assess how media in other countries in the Asia-Pacific region and around the world construct narratives on similar environmental issues, thereby broadening the perspective on how environmental discourse plays a role in multilateral relations. However, it is important to note that linguistic expression varies significantly across languages. Since all selected reports in the research were limited to the news reports in English, it was also impossible to fully take into account the nuances of Chinese and Japanese reports. Thus, parallel corpus analysis can be employed to compare how the same event is reported in different languages, thereby reducing the limitations imposed by language barriers and translation bias. Furthermore, as Rahman and Shehab (2023) illustrate in their study of BRI media representations, digital platforms often have different discursive patterns and ideological stances than traditional media, and it will be interesting to observe how these digital media and other news platforms report on such environmental diplomacy issues.

All in all, this comparative study shows how the media in China and Japan, represented by China Daily and The Japan News, construct unique narratives around the same environmental diplomacy event in connection with national interests and ideology. The growing trend of international cooperation in multiple fields also requires people to understand this discourse model in order to better conduct effective cross-cultural communication and environmental governance.

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