

A Study on Mystification Strategies of China's Carbon Neutrality Initiative in American Mainstream Newspaper

Junfang Mu^{1*}, Lixin Zhang¹, Rui Ma¹, Qingqing Zhang¹, Zihan Chen¹, Guang Yang²

¹School of Foreign Studies, Hebei University, Baoding, China

²The State Key Laboratory of Alternate Electrical Power System with Renewable Energy Sources, North China Electric Power University, Baoding, China

Email: *Junfangmu@163.com

How to cite this paper: Mu, J.F., Zhang, L.X., Ma, R., Zhang, Q.Q., Chen, Z.H. and Yang, G. (2022) A Study on Mystification Strategies of China's Carbon Neutrality Initiative in American Mainstream Newspaper. *Open Access Library Journal*, **9**: e8786.

https://doi.org/10.4236/oalib.1108786

Received: April 25, 2022 **Accepted:** May 20, 2022 **Published:** May 23, 2022

Copyright © 2022 by author(s) and Open Access Library Inc. This work is licensed under the Creative Commons Attribution International License (CC BY 4.0). http://creativecommons.org/licenses/by/4.0/

CC O Open Access

Abstract

Newspaper is an important carrier of mass communication, which plays the role of orientating values and guiding public opinions. The content in the mainstream news coverage can mirror, steer and even mystify public consciousness, values and behaviors. This paper, based on critical cognitive linguistics, in particular, the discursive strategies proposed by Hart, aims to examine how news on Chinese's carbon neutrality initiative is constructed and how news discourse mystifies text-consumers in three American newspapers from 22 September 2020 to 31 December 2021. In addition, a detailed account of high-frequency words in American coverage and a high-frequency visualized network guide readers to probe into particular themes of news. Via an array of illustrations, the study shows that employment of Hart's discursive strategies reveals the ideological mystification or bias implied in news discourse through specific construction means, thus shaping China as an irresponsible country, a nation that ignores public environmental interests and seeks political right to gain global climate governance.

Subject Areas

Linguistics

Keywords

Critical Cognitive Linguistics, Carbon Neutrality, Mystification Strategies, Discursive Construction

1. Introduction

News is not only written but also public discourse and ideological discourse, and

news is constructed through the reconstruction of ideology, dominant opinion, or belief of elite groups in society ([1], p. 74). To be more specific, news, on the one hand, through intentional selection, record, transformation even distortion, suggests only a partial and an incomplete version of the world; on the other hand, different news presses indicate peculiar pictures of an extra-linguistic world and sell "final products" from members of one class to another fellows ([2], pp. 157-158).

Ideology and power are expressed through a flurry of linguistic tactics, as one of the most frequently used discursive strategies in news production, and mystification is deployed neatly by mainstream media for safeguarding national interests, boosting the country's image across the world as well as discrediting other country's international profile. Meantime, mystification does justice to hallmarks of news, that is, through being wrapped with "truth", "fact" and "wordplay" it conveys political ideology and steers public consciousness [3]. On September 22, 2020, Chinese President Xi Jinping declared that China would improve the intended nationally determined contributions and adopt more rigorous measures to peak carbon dioxide emissions before 2030 and achieve carbon neutrality before 2060 at the general debate of the UN General Assembly. China's carbon neutrality initiative (CCNI) arises as the dynamic era has witnessed how global climate, environmental pollution and ecological destruction deteriorate and become worse than ever before. In line with the trend of green recovery, new development philosophy as well as low-carbon modes of production and life, CCNI serves as a catalyst for optimizing the economic, political, cultural and social advances and contributing to the construction and transformation of China's ecological civilization [4].

As the heated and promising environmental governance approach proposed by China, widespread concerns by the foreign media response to this initiative, such as *The New York Times, The Washington Post, The Australian, The Age, The Guardian,* and *The Independent* give primacy to this proposal. For some time, CCNI gains stream in the coverage of international news, while the growing interest in this initiative has also come with a surge of criticism about the reliability of the proposal, missing main participation body, lack of resolute determination and so on. Namely, mention the commitment to climate change endorsed by China, no other proposal has received more praise and abuse than CCNI and the news in foreign media is weighted towards the inaccessibility of this "unstable, uncertain and grandiose" promise.

To a certain extent, the overall image of carbon reduction in China, constructed by foreign media, implicit discourse strategies embedded in the news as well as ideology mirrored in the news discourse deeply sway the reader's cognition and attitudes towards China. Reasons abound for recasting China's international image successfully, one of which is foreign countries, represented by Britain and America, are in the leading position in international discourse power. Meanwhile, their affiliate media act as an impressive reminder that their voices can exert huge influence in shaping, telling, reconstructing along with re-contextualizing the facts.

In the post-pandemic era, with the progress of China, some foreign countries' worries about China's burgeoning influence in the world remain exaggerated. Therefore, justifying the discursive strategy rooted in foreign news critically and proactively is the best available way to wrestle with the ongoing ideological conflicts. Discourse, as a form of social practice, allows the agents in institution context and community context (e.g., the government, company, news press, school context) to use a flurry of "techniques" consciously, from the syntactic structure and text arrangement to discourse strategy to achieve their own participation in social practice and ideological representation of social reality [5].

Based on the above-mentioned aspects, the present study retrieves news on CCNI from 2020.9.22 to 2021.12.31 in the Factiva database, and to be more specific, the paper will analyze how three American mainstream newspapers, namely, *The New York Times, The Wall Street* and *The Washington Post* construct the image of China and what strategies they harness to mystify or induce readers wittingly from the viewpoint of Critical Cognitive Linguistics (CCL), apart from that, giving a detailed account of keywords and co-occurrence network of high-frequency words by employing content analysis software KH Coder to build a peculiar corpus.

Specifically, the study consists of five sections. Following the introductory section that focuses on the research background of the present study, Section 2 mainly probes into what has been analyzed on China's environment discourse (CED) in previous literature. In Section 3, the research method, retrieved data, as well as research design, are demonstrated; the subsequent Section 4 employs the software KH Coder to explore what themes are addressed in the news reports via high-frequency words and co-occurrence network, what's more, discursive strategies used to construct mystification in news discourse are justified elaborately. Finally, Section 5 aims to summarize the present study on the whole.

2. Literal Review

CCNI as one type of environmental discourse, in fact, interest in its effects on climate change and environment change has witnessed a spurt of progress over recent times, in particular, in foreign mainstream media. In this regard, it's necessary to review what have been investigated in previous studies of CED from different standpoints, so as to enhance and sharpen our consciousness for following discussion.

2.1. Previous Studies of News on China's Environmental Discourse in Linguistics

In view of existing studies of media coverage on CED, the study focuses on the combination of quantitative and qualitative methods to illustrate how coverage construct China's image, examples of which include the integration of critical

discourse studies (CDS) and corpus-assisted discourse analysis (CADS). In a study of media reports on China's air pollution pressed by China Daily, Wang (2018) [6] employs CADS to further expound how *China Daily* discursively reconstructs air pollution news from 2008 to 2015, and the study reflects a powerful, strong and highly responsible image of China's central government. Admittedly, as the study suggests, the international socio-political events, for example, Olympics games also exert huge influence in enhancing administration's governance consciousness and public's environment awareness. Meanwhile, several researchers, with an emphasis on illuminating the otherness of culture and ideology, are apt to adopt the comparative study to highlight similarity and difference on representations of environmental coverage in Chinese and foreign mainstream media. For example, Liu and Li (2017) [7] compare China Daily's report on China's smog pollution and three Anglo-American newspapers through application of CADS from 2011 to 2014, thus exposing the nature of social-political factors. In addition to the description of official news reports, non-official coverage also draw scholar's attention, Li and Yang (2018) [8] compare Chinese media's along with American five media's representations of Under the Dome, a smog documentary shot by a former CCTV reporter Chai Jing, and the study notes the particular implication among discourse, culture and politics far beyond superficial linguistic forms. Noticeably, previous studies on CED within the domain of linguistics aim to unveil the impacts of ideology on varied media reports, thus the perception of differences and resemblances could be perceived by readers.

2.2. Previous Studies of News on China's Environmental Discourse in Non-Linguistics

As for the pertinent media studies of CED in non-linguistics, scholars have observed CED from the point of framing theory. Framing analysis, as a strikingly common-used research method in news report, aims to delineate how to construct and interpret particular issues or events [9], for example, Tong (2014) [10] selects 10 China's newspapers from 2008 to 2011, for investigating and justifying how coverage portray China's environmental problems by combining inductive and deductive approach within framing analysis, thus giving an integrated account of existing media frames. Admittedly, several academics strain to influence foreign media's attitude towards Chinese characteristic concept, such as Chen and Zhao (2022) [11] elucidate the overall framing of ecological civilization in foreign media and show that three redefinition storylines taken by media matters in news framing. Except for a specific research foci or phasic study of news on CED, the diachronic framing analysis of which are also worth noticing, Pan et al. (2021) [12] have attempted to indicate the shifts of climate discourse in the news of People's Daily during 1995-2018 with regard to the ideas of development and framing analysis, which promotes readers to perceive better the ongoing shake-up of climate change discourse.

In sum, the previous studies give readers a comprehensive overview on what

have been focused, what methods have been adopted and how scholars conduct an array of studies. On the other side, however, we can find that existing focus on CADS and framing analysis obscure an essential phenomenon hidden in news coverage—mystification. Some studies illustrate how ideology or social politics exert huge influence on news discourse, yet, they pay less attention on modest discourse strategies embedded in coverage. In views of this, the study contributes to related research on CED by giving an account of American news coverage of CCNI from the view of CCL and elaborating the mystification in media coverage. In addition, the study enables readers to perceive better the themes and keywords in total new reports via KH Coder.

3. Methodology

Inspired by CDS, CCL, also called Cognitive Linguistic CDS (CL-CDS), is seen as one of the latest research foci of CDS [13]. What is noteworthy in this research domain is the way in which it underlines, in particular, the conceptual nature of meaning construction, conceptual process as well as the ideological perception arose from illustrated events [14].

3.1. Research Method

More recently, CDS has made significant progress in analyzing how power and ideology reshape and reconstruct "discourse" in communicative practices, especially the cognitive turn to Cognitive Linguistics. As Zhang and Jiang have discussed (2008) [15], Cognitive linguistics and CDS enjoy high feasibility to integrate within the research profile of metaphor and conceptual integration. Additionally, as a research paradigm of CDS, the rise of CCL reflects the social turn of Cognitive Linguistics with the cognitive transformation of CDS [13]. On the account presented above, it has been indicated that CCL complement to the inadequacies of two disciplines.

More specifically, CCL emerged in the late 20th century, with construction of meaning and legitimation of action as the core. The focus of the CCL has shifted from the linguistic structure to the discursive construction in reader's mind to formulate ideologised understanding of events, and CCL aims to investigate the conceptual structures and processes embedded in meaning-making and unveil the specific patterns from belief-bound, value-ridden or ideology-stuffed discourse [13]. In order to identify the social or political goals behind, Hart (2010) [16] advocates using strategies, that is, referential strategy, prediction strategy, along with legitimizing strategy to show how aforementioned discursive strategies function in constructing news discourse on immigration and asylum within UK press.

3.2. Data and Research Design

Data for present research are selected from Factiva news database for obtaining authoritative and trustworthy news covered by American mainstream media, in particular, *The New York Times, The Wall Street* and *The Washington Post* from 2020.09.22 to 2021.12.31. Notably, the day 9.22 in 2020 was when President Xi Jinping first proposed "dual carbon" initiative, and the year 2021 has witnessed China's efforts to achieve its goal in post-pandemic era, examples of which include concrete policies-making, implements as well as adjustments of energy structure. As for reasons for choosing aforesaid three media, two aspects stand out. The first is media's influence, three newspapers enjoy higher credibility, quality, authority and validity in media industry in providing news at home and abroad, thus to a considerable degree, indicating main viewpoints towards CCNI. The second accentuates media's appeal for broad audience, as their respective features have suggested, three newspapers attract diverse readers for distinct political orientations, stances of party plus philosophies of reading.

Meanwhile, the study chooses "carbon neutrality and China" as keywords, then, based on extracted news report, we read each coverage carefully to investigate whether the news concentrate on "carbon neutrality" in China. Next, through meticulous selection, 90 investigative reports on CCNI are compiled in a corpus dataset under the guidance of KH Coder.

According to Professor Higuchi (2016) [17], KH Coder is designed for quantitative text analysis and text mining, therefore through network to visualize high-frequency words and specific topic of study.

To ascertain and identify how high-frequency words associate with the theme, the study builds a specific corpus on CCNI, then after the design of stop-words such as propositions, adverbs of degree, and elimination of irrelevant information, the corpus consists of 90 news coverage (8601 word types, 68,792 word tokens). To give readers a clear sense of how to probe into keywords and news content, procedures of data process in KH Coder are given in **Figure 1**.

4. An Analysis of American News about Carbon Neutrality in China Based on CCL

This section will elaborate on high-frequency words and co-occurrence network, thus delineating the newspapers' reporting foci on CCNI. Meanwhile, it's particularly crucial to offer a fuller account of discursive strategies used in news report, specifically, then we will show how referential strategy, predication strategy along with legitimizing strategy developed by Hart (2010) [16] are used to conduct the discursive construction.

4.1. Keywords Analysis

As Ryan and Bernard point out (2003) [18], by deploying content analysis software to process corpus and generate high-frequency words is of vital significance to identify topics as well as exemplify American media's attitudes towards CCNI. As the smallest unit of news discourse, we will examine how different words, to illustrate, nouns, proper nouns, adjectives are established to represent three media's stance, value orientation as well as explicit perception of CCNI.

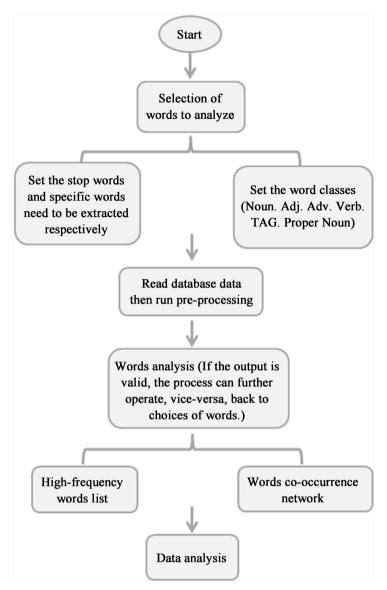


Figure 1. Data processing procedures in KH coder.

Table 1 shows the 20 strongest noun, proper noun and adjective keywords in corpus as obtained by counting and ranking relative term frequencies.

As shown in **Table 1**, the keywords in American mainstream newspapers concentrate on "climate change", "carbon neutrality" and "responsibility for different states". Overall, three aspects are worth noting. As the focus of expression, first of all, nouns, to a considerate degree, can indicate the ontological information of objects and promote reporting efficiency, thus making the news more objective and authentic. The salient noun keywords "climate" (559 times) and "emission" (553 times) reflect the proposal of CCNI is acutely influenced by climate change and over-extensive carbon output, while the words "coal" (338 times), "energy" (226 times) and "gas" (145 times) highlight more on the necessity of optimizing energy structure, thus spurring further effectual steps to lower carbon emissions. Also of great note is that American media seek to emphasize

Noun	Frequency	Proper Noun	Frequency	Adjective	Frequency
climate	559	China	1275	global	292
emission	553	U.S.	318	Chinese	290
country	474	Biden	292	economic	141
coal	338	Xi	221	international	95
carbon	243	Beijing	185	environmental	87
power	237	Trump	148	largest	70
energy	226	Kerry	135	biggest	65
leader	219	Paris	83	domestic	57
goal	188	U.N.	81	national	57
government	185	Energy	72	political	57
company	181	Japan	71	solar	57
target	178	India	66	ambitious	56
policy	169	GLASGOW	62	big	55
economy	152	Russia	56	green	55
plan	152	House	55	coal-fired	50
gas	145	University	52	good	50
official	128	Alibaba	47	American	48
administration	126	Party	46	financial	45
summit	124	Celsius	45	significant	44
nation	120	European	45	senior	43

Table 1. Top 20 keywords derived from nouns, proper nouns and adjectives.

the authority's leading-role in controlling carbon outputs and achieving phasic goal of carbon neutrality, which is characterized by high-frequency words, such as "government" (185 times), "official" (128 times), "administration" (126 times) and "nation" (120 times). However, such responsibilities stretch far beyond government, and enterprises also need to show consideration for the big picture. For example, and the keyword "company" (181 times) suggests that the company is playing an increasingly significant role in implementing specific policies.

The second is concerned with hallmarks of proper nouns. Proper nouns always have glaring effects, particularly with respect to construction of identity, role or status of participants in news coverage. Unlike the common nouns, proper nouns put weight on person references and place references related to CCNI. For example, the frequency of "China" (1275 times) is more than four times that of "U.S." (318 times), which attaches great importance to China's predominant role in launching carbon neutrality and the interwoven relationship between the two countries. With the particular designation of climate agreement, place words such as "Paris" (83 times) and "Glasgow" (62 times) showcase international climate summit's facilitation of the emergence of CCNI. Further, person references, such as President "Biden" (292 times), President "Xi" (221 times), Climate envoy "Kerry" (135 times), are clearly connected with CCNI via three-dimensional display of spectator, decision-maker, and executor viewpoints regarding China's proposal. Furthermore, based on the above-mentioned point, at a macro level, American mainstream media also eye the implement of carbon neutrality in other remarkable countries, such as, "Japan" (71 times), "India" (66 times) and "Russia" (56 times).

With an emphasis on implicit means of expressing views, American media pay special attention to adjectives. Positive and neutral adjectives, such as "significant" (44 times), "global" (292 times) and "economic" (141 times), on the one hand, represent CCNI's effectual influences are acknowledged by American media. The negative adjectives, however, on the other hand, could aggregate even distort China's carbon-reduction practices, thus at a more specific level, mystifying readers to misinterpret CCNI and forming misleading analysis and identification. For example, text-producers use "largest" (70 times), "biggest" (65 times) and "political" (57 times) to turn reader's focus to serious pollution brought by China and China's ambitious political demands behind CCNI.

4.2. Co-Occurrence Network of High-Frequency Words

The identification of keywords can boost readers' understanding of news foci, and KH Coder's co-occurrence network of high-frequency words, specifically, an array of interrelated homogeneous words signifying certain concepts through visualized network, enables readers to get a better perception of themes [17].

Regarding KH Coder, the minimum words by term frequency are set 60 and filter words selected by word class, and then co-occurrence network is constructed (see Figure 2). As Higuchi suggests (2016) [17], the frequency words are indicated by the size of circle and the closer the circles are, the more likely words are to appear together and the stronger correlation between words are linked.

Given the different clusters shown in **Figure 2**, we group them into two categories, one revolves around "Biden and Kerry" (represented by subgroup 02 and 05) and the other pays closer attention to "CCNI" (reflected by subgroup 01, 03, 04, 06 and 07). In the first category, two clusters tend to focus on President Biden's attitudes towards CCNI, besides, "summit in Glasgow" with former American "President Trump" comprise part of Biden's judgments and bearings on CCNI. Moreover, cluster 05 connects with cluster 02 through "climate change", also of note that American climate envoy "John Kerry" links "Chinese government" through an official meeting held in Tianjin, China, showing two countries shared goals in moving forward with cooperation on climate change.

The second category underscores China's resolution and pledge in achieving carbon neutrality. As the coverage mentioned, CCNI corresponds to the initiative of "Paris agreement", and in order to meet target or commitment of reducing carbon emissions, accordingly, China's industry, in particular, those who

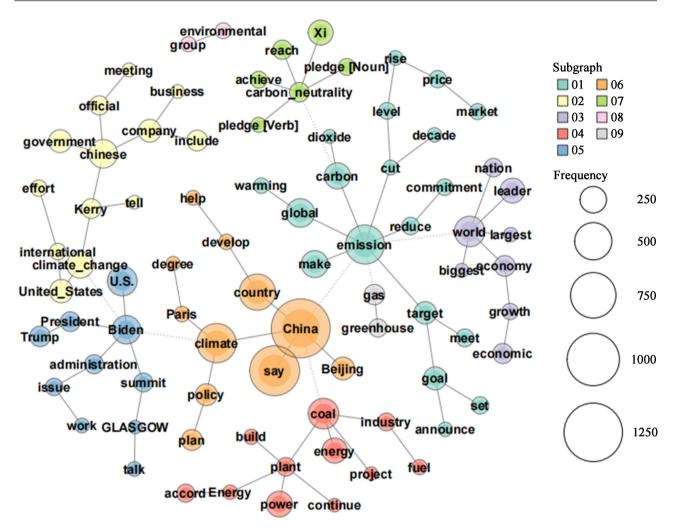


Figure 2. Co-occurrence network of high-frequency words on CCNI.

depends on traditional fossil energies should ride the ship before climate change reach the tipping point. However, as cluster 03 points out, American's media see China as the "biggest" or "largest" emitter considering the amount of China's carbon output, which amplifies and stigmatizes China's influence on other countries.

4.3. Discursive Strategies

This section will conduct an analysis of news on CCNI with Hart's three discursive strategies, in particular, demystifying the real intentions in the self-built media discourse.

4.3.1. Referential Strategy

As Resigl and Wodak (2001) [19] argue, referential strategy is quite commonplace in communication of prejudice. Then, Hart ([16], p. 49) describes the employment of referential strategy can enhance individual's ability for "categorizing coalitional groups with regard to in-group and out-group". In terms of linguistic practices used for covering particular topics, referential strategy is characterized by explicit and deictic noun phrases to sketch the identity through nationalization, de-spatialisation and collectivization.

Start with the nationalization, this is based on the idea that nationality provides us available assess to differentiate in-group and out-group by analyzing nationyms. Considering the given example (1):

(1) That's not to say that <u>China</u> has a perfect climate record. And while not unexpected—since <u>Beijing</u> historically hasn't been one to jump on bandwagons—<u>China</u>'s failure to join more than <u>40 other countries</u> last week in pledging to phase out domestic coal does not set a great example (<u>The U.S.</u> and <u>India</u> also abstained). Nor does it answer the persistent questions about when <u>Beijing</u> will eliminate coal. (*The New York Times*, 2021-11-10)

The underlined parts suggest the use of nationyms in media's coverage on CCNI, and also more important than identifying what are the words of nationality is to illuminate how they are used to construct news discourse. On the one hand, the explicit proper nouns, such as "China", "Beijing", "The U.S." and "India" stand for three countries respectively who all are responsible for the deteriorated environment and the worsened climate, indicating that joint effort, cooperation and mutual assistance have a profound influence in tackling with current climate dilemmas and environmental changes. In addition, "Beijing" has been multiply used by media, which, to some extent, puts public's attention at China's every move in conducting the carbon neutrality proposal. Furthermore, inspired by Hart, deictic noun phrase "40 other countries", however, separates China from other countries that have committed to eliminating the coal-fired power generation, thus making comparisons between "China" and "40 other countries" purposely.

The second focus on de-spatialisation strategy, Hart ([16], p. 57) has exemplified it based on five linguistic means, one of which is metaphor of spatiality that lays emphasis on binary opposition of "internal" and "external" relations. An example is given in (2):

(2) In the eyes of Beijing, these policies are meant to fix deep structural problems in the economy and lay more solid foundations for future growth. To many **outsiders**, they represent a dispiriting retreat from the market-oriented reforms of the past and signal the end of China's long economic boom. (*The New York Times*, 2021-10-20)

In example (2), metaphor of spatiality is represented by "outsiders", and "outsiders" is used to refer to those people who oppose Chinese government's policy which is likely to be detrimental regarding its far-reaching influences on economy. Through the appearance of "outsiders", mainstream media divide public into two sub-groups, one is "insiders", such as policymaker, authority or government, and the other is ordinary "outsiders", shifting the angle of news to a new subject and expressing their discrepancies consciously. As Hart argues (2010) [16], "referential strategies are intrinsically ideological", which provides news media chances to report what they hope to be known by text-consumers. The third referential strategy is concerned with collectivization embedded in news coverage, and collectivization pays closer attention on personal deixis, in particular, the third person pronouns (Hart, 2010) [16].

(3) President Biden and China's President Xi Jinping had <u>their</u> first substantive meeting on Monday evening, with the U.S. leader talking virtually with <u>his</u> Chinese <u>counterpart</u>, who has not left <u>his</u> country throughout the pandemic. (*The Washington Pos*t, 2021-11-16)

As example (3) shows, the third singular pronoun "his" reveals two constructed groups which distinguish China and U.S., thus extending the effects of outgroupness. And the third plural pronoun "their" builds an in-group comprising two countries with regard to discourse receivers, to some extent, highlighting two countries' willingness to jointly advance climate change and environmental governance. Besides that, "counterpart" also stresses that America strives to strengthen partnerships with China in shouldering the responsibility to find a path dealing with carbon consumption and climate challenge.

4.3.2. Predication Strategy

Apart from referential strategy, prediction strategy also gives readers a roadmap to examine the implicit linguistic means used to construct news discourse. In his monograph, enlightened by Resigl and Wodak's thought of predication strategies, in particular, the representative topos, Hart (2010) [16] summarizes a string of syntactic, semantic and pragmatic features in contributing to the use of predication strategy and proposes four types of topos of disadvantage, burden, finance and displacement. Four examples are given on how to reveal text-producer's implicit political intentions:

(4) My response to them was, "Hey look, climate is not **ideological**, not **par-<u>tisan</u>**, it's not a **geostrategic** weapon or tool, and it's certainly not day-to-day politics. It's a **global**, not **bilateral**, challenge," he said on a call with reporters. (*The New York Times*, 2021-09-03)

In example (4), firstly, text-producer uses salient adjectives to show John Kerry's response to the discussion with Chinese officials and further ascribe to China specifically negative qualities. A chain of adjectives such as "ideological", "partisan", "geostrategic", "bilateral" and "global" are presented to put on accent on political nature of CCNI, expressing America's blame, criticism as well as dissatisfaction on China's initiative, thus shaping China as a country filled with political ambitions and seeing the dialogue with China as a campaign composed of political games. Adversely, different from China, America is represented as a nation who has big picture ahead of nation's common environmental interest. Apart from that, through rhetoric uses of "weapon" and "tool", media portray the matter as a war without gunpowder, by using the topos of blame, inducing readers to form false perceptions on CCNI and also revealing the political hegemony implied in American mainstream newspapers.

(5) With China as <u>the world's largest</u> carbon emitter, home to 1.4 billion people and a still-expanding economy, the nation's strategy for cutting emissions could be **the most important** factor in whether countries are able to prevent **irreversible** and **catastrophic** damage to the Earth. (*The Washington Post*, 2021-09-24)

In example (5), China is depicted as "the world's largest" carbon emitter and also China's efforts on carbon reduction are "the most important" move in changing worsening environment challenge, the above description reveals that text-producers use superlative degree words to strengthen the severity of environment problems caused by the biggest "culprit", thus guiding and steering reader's attitudes towards China. In addition, "irreversible" and "catastrophic" maximize China's leading-role in carbon-reduction movements. Thus, the prediction strategy is presented through employing adjectives to place a huge burden on China, meanwhile, putting China at a disadvantage in taking ecological initiatives into practice.

(6) U.S. officials said they have been <u>frustrated</u> by China's unwillingness to offer up deeper cuts and Beijing's suggestion that climate talks be <u>broadened</u> to focus on other issues. That has <u>emboldened</u> Mr. Biden to <u>criticize</u> both rivals in recent days and signal the U.S. <u>is unified with</u> a majority of the rest of the world in addressing climate change, U.S. officials said. (*The Wall Street Journal*, 2021-11-03)

(7) The U.S. and Europe are **pushing** China, India and other big developing economies to **commit** to earlier reductions. Developing countries **counter** that wealthy nations should do more and are **demanding** a big increase in financial support from the developed world. (*The Wall Street Journal*, 2021-11-01)

As the underlined part in example (6) and (7) indicate, prediction strategy also adopts verbs to suggest "particular qualities and quantities ascribe to people" ([16], p. 66). In former case, American officials show their disapproving and opposed stances for China's hesitation and unwillingness to take deeper steps tackling with environmental problems, and in particular, "frustrated", "emboldened", "criticize" are presented to accuse Chinese government shifting public's view to other issues when mentioning the specific steps in addressing climate change. For news readers, they will also be misled by naked accusations and consider China as a country that are used to switching conversation for covering up the truth. Meanwhile, referential strategy is also reflected in news through the deictic noun phrase "majority of the rest of the world".

As for latter case, the conflicts between "developing countries and developed countries" are described through the common responsibilities in global climate governance. As for developed countries, they abound in financing, technology and experience in climate change, therefore, following their criteria, developing countries should endeavor to make promising commitments for achieving earlier reductions. Unavoidably, such claims construct "developed countries" as in-group members, and by contrast, "developing countries" such as China, India and other rising developing countries belong to out-group.

4.3.3. Legitimizing Strategy

Hart (2010) [16] points out that legitimizing strategy concentrates more on the

continuity, truth and semantic categories within propositions and outside the propositions. More specifically, in Hart's introduction, internal and external coherence shed new light on how to deconstruct the text-producer's ideology.

With regard to internal coherence, the focus moves to Halliday and Hasan's (1976) [20] five grammatical cohesion forms, to illustrate, additive, adversative, temporal and causal conjunctions.

Consider (8) and (9) as the example:

(8) China began blocking coal shipments from Australia fall last year <u>as</u> bilateral relations soured <u>after</u> Canberra's call for an independent probe into the origins of Covid-19. (*The Wall Street Journal*, 2021-10-20)

(9) The Biden administration has made a concerted push to work with China on combating climate change, **despite** diplomatic clashes between the two countries on numerous other issues, including trade disagreements and a crackdown on pro-democracy activists in Hong Kong. (*The Washington Post*, 2021-12-04)

Based on the causal and temporal conjunctions shown in (8), text-consumers are much easier to be mystified unconsciously. On the one hand, "as" highlights the causality between deteriorated diplomatic relation and Austria's appeal to explore epidemic's source. On the other hand, "after" connects two unrelated events intentionally, the reason for blocking coal shipments is owing to CCNI for adjusting energy structure, rather than being influenced by Austria's appeal to investigate pandemic. By employing conjunctions "as" and "after", text-producer regards the two events have implicit links and states that the soured bilateral relation is strongly influenced by the political factor.

Example (9) centers on America's contribution to enhance cooperation, build consensus and speed up green international cooperation with China. Specifically speaking, the adversative conjunction is manifested through "despite" to indicate shared responsibility between China and America. More importantly, in text-producer's viewpoint, Biden's administration has already been laying the solid foundation for addressing climate challenge, and yet, without their substantial resolution and policy action, China will face great challenges in carbon-reduction campaign. It's not hard to find the employment of "despite" implies ideological mystification, bias and news nature.

The essence of external coherence is reflected through evidentiality and epistemic modality, in other words, the former highlights text-producer's indication of force of claims and truths of assertions, while the latter is more concerned about text-producer's attitudes towards certain proposition ([16], p. 94). Consider the following examples (10) and (11):

(10) "The contrast between Xi's speech and Trump's speech is stark," <u>said</u> Joanna Lewis, a Georgetown University professor who follows China's cli-<u>mate policies.</u> "While Trump's speech blames China for the world's problems, Xi's speech calls for global response and highlights China's contributions." <u>But</u> his remarks were less than precise on how and how quickly China would ratchet up its climate policies. (*The New York Times*, 2020-09-23) (11) China's 14th Five-Year Plan, released in March, includes relatively conservative climate targets, **probably** due to its failure to meet previous energy intensity targets and the push for reinvigorated economic growth coming out of the pandemic. (*The Washington Post*, 2021-04-22)

As example (10) shows, the news media employ the professional's attitudes to add credibility and authenticity of news, thus showing the difference between President Xi and former President Trump in appealing people to make joint efforts for building a green community. At first, Professor Lewis's speech elaborates his praise and admiration for China's ecological philosophy frankly, however, the text-producer, via adversative conjunction "but", conveys the criticism towards China's general climate policies.

Epistemic modality is described through cognitive-factive word "probably" in example (11), which to some extent presents text-producer's uncertainty and prediction towards China's 14th Five-year plan, in particular, the transformations in climate targets. Furthermore, epistemic modality provides text-consumers chances to make inference or presuppose whether the proposition is valid, deceived or mystified.

5. Conclusions

Through an in-depth analysis of three American mainstream newspapers on Chinese's carbon neutrality initiative from 22 September 2020 to 31 December 2021, and also with the guidance of critical cognitive linguistics, in particular, Hart's discursive strategy, the study gives an account of how to probe into and deconstruct the implied ideological mystification in news discourse. Furthermore, in order to better perceive the report's foci in three media, *The New York Times, The Washington Post*, and *The Wall Street Journal*, a specific corpus has been built in KH Coder to investigate the detailed high-frequency words and co-concurrence network. Overall, by employing qualitative and quantitative methods, three points stand out in the present study.

Starting with the high-frequency words retrieved in KH Coder, nouns, proper nouns, and adjectives are established to represent the media's stance, and value orientation as well as the explicit perception of CCNI. Nouns and proper nouns focus on the ecological background, energy structure and various countries' shared responsibility relevant to CCNI, and adjectives, especially the negative adjectives established by text-producers shift the text consumer's focus to serious pollution brought by China and China's ambitious political demands behind CCNI.

Secondly, according to the co-occurrence network of high-frequency words, the visualized bubble graph provides readers with a better perception of news themes, and an array of interrelated homogeneous words are divided into 9 groups. Basically, we group them into two categories, and in the first category, two clusters tend to focus on American President Biden's and former American President Trump's attitudes towards CCNI. Besides, the sharing goals of the two countries in moving forward with cooperation on climate change are also underlined via clusters. The second category underscores China's resolution and pledges in achieving carbon neutrality.

Thirdly, in order to analyze how the three American media construct the image of China and what strategies they harness to mystify or induce readers based on CCL, Hart's discursive strategies, in particular, referential strategy, prediction strategy as well as legitimizing strategy are used. Referential strategy is characterized by explicit and deictic noun phrases to sketch the identity through nationalization, de-spatialisation, and collectivization, so as to categorize coalitional groups with regard to in-group and out-group.

Prediction strategy highlights an array of linguistic features, including illustrate, adjectives, prepositional phrases, and verbs, and proposes various types of topos to reveal the text-producer's implicit political intentions, thus inducing text-consumers to form false perceptions of CCNI and also revealing the political hegemony implied in American media. The legitimizing strategy stresses more internal and external coherence to deconstruct the text-producer's ideology, for example, the use of adversative, temporal conjunctions, evidentiality and epistemic modality, thus revealing ideological mystification and bias implied in news reporting.

Theoretically speaking, this paper conducts an in-depth critical cognitive analysis of CCNI on American glowing news coverage, which broadens the research scope of this approach in environmental discourse and makes critical cognitive analysis more epoch-making. As for pragmatic significance, under the guidance on how to probe into the interconnection between discourse, power and ideology, the study contributes to mirroring the hidden discursive strategies used to reconstruct CCNI and aiming to enhance the reader's critical awareness, in particular, in justifying the reliability of multilateral news on CCNI.

However, there are some limitations in the present study. Firstly, the study selects three American media's coverage of CCNI, which is perhaps not sufficient in understanding how discursive mystification or ideological construction is studied in news discourse. Therefore, future studies may consider a comparative discourse study based on CCL to investigate representations of CCNI by other foreign media, thus critically revealing the salient discursive mystification and giving readers an account of the mainstream media's shared generality and peculiar difference toward CCNI. Secondly, the study mainly explores how CCNI is discursively constructed by American media from 22 September 2020 to 31 December 2021, and then a diachronic investigation of CCNI in different periods could mirror how the media's attitudinal stance shifts and changes over time.

Acknowledgements

The authors would like to thank the Social Science Fund of Hebei Province (HB18YY005) for the support in this research.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- [1] van Dijk, T.A. (1988) News as Discourse. Lawrence Erlbaum Associates, London.
- [2] Fowler, R., Hodge, B., Kress, G. and Trew, T. (1979) Language and Control. Routledge, London.
- [3] Mu, J.F. and Lu, S.Y. (2016) A Study on the Application of De-Mystification Strategy in Selected Readings of British and American Newspapers. *Journal of Inner Mongolia Normal University (Educational Science Edition)*, 29, 155-157.
- [4] Zhuang, G.Y., Dou, X.M. and Dou, M.X. (2022) Theoretical Interpretation and Path Analysis of "Peak Carbon Dioxide Emission and "Carbon Neutrality". *Journal of Lanzhou University (Social Sciences)*, 50, 57-68.
- [5] Tian, H.L. (2014) Critical Discourse Analysis: Interpretations, Reflections, and Applications. Nankai University Press, Tianjin.
- [6] Wang, G.F. (2018) A Corpus-Assisted Critical Discourse Analysis of News Reporting on China's Air Pollution in the Official Chinese-English Language Press. *Discourse & Communication*, 12, 645-662. <u>https://doi.org/10.1177/1750481318771431</u>
- [7] Liu, M. and Li, C.Y. (2017) Competing Discursive Constructions of China's Smog in Chinese and Anglo-American English-Language Newspapers: A Corpus-Assisted Discourse Study. *Discourse & Communication*, 11, 386-403. <u>https://doi.org/10.1177/1750481317707379</u>
- [8] Li, Q.Y. and Yang, Y. (2018) A Comparative Study of Discursive Constructions of Chinese Smog Documentary in Chinese and American News Coverage. *Círculo de Lingüística Aplicada a la Comunicación*, 75, 205-228. https://doi.org/10.5209/CLAC.61353
- [9] Vreese, C., Peter, J. and Semetko, H. (2001) Framing Politics at the Launch of the Euro: A Cross-National Comparative Study of Frames in the News. *Political Communication*, 18, 107-122. <u>https://doi.org/10.1080/105846001750322934</u>
- [10] Tong, J.R. (2014) Environmental Risks in Newspaper Coverage: A Framing Analysis of Investigative Reports on Environmental Problems in 10 Chinese Newspapers. *Environmental Communication*, 8, 345-367. https://doi.org/10.1080/17524032.2014.898675
- [11] Chen, S.B. and Zhao, Y.Z. (2022) Ecological Civilization: A Blindspot in Global Media Coverage of China's Environmental Governance. *Environmental Communication*, 16, 195-208. <u>https://doi.org/10.1080/17524032.2021.1981419</u>
- [12] Pan, Y.H., Opgenhaffen, M. and Gorp, B.W. (2021) China's Pathway to Climate Sustainability: A Diachronic Framing Analysis of *People's Daily*'s Coverage of Climate Change (1995-2018). *Environmental Communication*, 15, 189-202. https://doi.org/10.1080/17524032.2020.1817766
- [13] Hart, C. (2017) Cognitive Linguistic Critical Discourse Studies. In: Flowerdew, J. and Richardson, J.E., Eds., *The Routledge Handbook of Critical Discourse Studies*, Routledge, London. <u>https://doi.org/10.4324/9781315739342-6</u>
- [14] Zhang, H. (2021) Critical Cognitive Linguistics: An Analytical Perspective from Language Comprehension and Reception—Revisiting the Theoretical Construction of Critical Cognitive Linguistics. *Foreign Languages and Their Teaching*, 3, 31-43+147-148.

- [15] Zhang, H. and Jiang, L. (2008) Integration of Cognitive Linguistics and Critical Discourse Analysis. *Foreign Language Research*, **5**, 12-19.
- [16] Hart, C. (2010) Critical Discourse Analysis and Cognitive Science: New Perspectives on Immigration Discourse. Palgrave Macmillan, London. <u>https://doi.org/10.1057/9780230299009</u>
- [17] Higuchi, K. (2016) A Two-Step Approach to Quantitative Content Analysis: KH Coder Tutorial using Anne of Green Gables (Part 1). *Ritsumeikan Social Sciences Review*, **52**, 77-91.
- [18] Ryan, W. and Bernard, H. (2003) Techniques to Identify Themes. *Field Methods*, 15, 85-109. <u>https://doi.org/10.1177/1525822X02239569</u>
- [19] Reisigl, M. and Wodak, R. (2001) Discourse and Discrimination: Rhetorics of Racism and Anti-Semitism. Routledge, London.
- [20] Halliday, M.A.K. and Hasan, R. (1976) Cohesion in English. In: *English Language Series*, Longman, London.