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Research on the mechanism of national image construction on social media platforms under the perspective of NAS theory

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Abstract:
Against the backdrop of the rise of anti-globalization rhetoric and the rise of the "Global South", China, as an integral part of the "All-Bull South" has seen its international communication power increase dramatically. However, on social media platforms, other countries can still influence people's perception of China's national image. This paper takes Network Agenda Setting Theory(NAS) as a perspective, adopts the observation method and content analysis method to analyse the topic-led traffic pushing mechanism of Weibo, as well as to analyse the content of Twitter posts on the topic of "China's carbon emissions". Through the study, this paper argues that country stereotypes, emotional tendencies of posts, and major social structural issues are all factors that influence the co-occurrence of online issues, and thus affect the construction of national image. Moreover, this paper also provides further thoughts and outlooks on the current situation of China facing the algorithmic black box in social media platforms.

Keywords:
NAS theory, Online agenda setting, National image construction, Social Media platforms, Algorithms

1 Introduction

With the rise of anti-globalization rhetoric and the accelerated evolution of the great changes that have not been seen in a century, the global rising in the east and falling in the west, and the "global South" is on the rise. As an integral part of the "Global South", China is in need of a good national image in the world as its comprehensive national power continues to grow. Against the backdrop of the rapid development of the Internet and social media platforms, China has continued to promote media convergence and the construction of an all-media matrix for international communication, which has significantly increased its international communication power. However, we observe that other countries are still able to guide foreign people through social media platforms and influence their perceptions of China's national image. We can't help but wonder: how do social media platforms in various countries manage to construct a national image in the context of platform-based empowerment? What are their specific mechanisms?

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2 Literature review

2.1 NAS Theory

Networked Agenda Setting (NAS) is a theory of agenda setting further deepened and expanded by McCombs and his Chinese student Lei Guo in the context of the Internet, i.e. the third level of agenda setting theory. The core idea is that what affects the public is not a single issue or attribute, but a cognitive network composed of a series of issues; the news media not only tell us "what to think" or "how to think", but also determine how we "co-exist" with different pieces of information. The news media not only tell us "what" or "how" to think, but also determine how we "co-occur" with different pieces of information, so as to construct a perception and judgement of social reality. At present, the empirical analysis of traditional agenda setting theory validation and application is the mainstream of domestic research, attribute agenda setting research is relatively weak, and network agenda setting theory and method research is still in its infancy. However, with the development of the Internet and social media, in recent years, scholars in China have also increased their attention to network agenda setting theory.

Ruijing Zhang , in Analysis of Communication Effect Evaluation Indicators of New Mainstream Media in the Perspective of Network Agenda Setting Theory, proposes that in recent years, in the agenda setting research with new media as the object of analysis, communication researchers have began to gradually correct the tendency of "media-centric theory" and started to pay attention to audience agenda, especially produced more and more research results on social media audience user agenda, which is in line with the trend of foreign research.In addition,Yipeng Xi, in his study on The network correlation between media agenda and public explicit agenda - based on the third-level agenda-setting theory, distinguishes and analyses the implicit and explicit correlation in the structure of public cognitive network from the perspective of cognitive psychology, and points out that the media agenda is more closely correlated with the implicit agenda of the public.

However, the above indicated research on the theory does not address the use of algorithms by social media platforms, where personal interests are also utilized by algorithms to influence personal agendas. Therefore, degree centrality does not fully explain the process mechanism of agenda setting, let alone the agenda setting role played by social media platforms in it. The algorithm-driven behaviour of the platforms should be taken into account in order to accurately analyse how the country's image is "co-represented".

2.2 Research on the mechanism of national image construction on social media platforms under the perspective of NAS theory

Since the creation of agenda-setting theory, political-related issues have been the focus of agenda-setting research. Anbin Shi and Peinan Wang analysed agenda-setting research since 2013, and found that political issues still occupy the highest proportion, while the specific research of online agenda-setting theory presents the characteristics of focusing on international political issues and cross-country comparative analysis. Nowadays, with the rise of anti-globalization arguments, countries need to build a good international image in order to seek a higher international status, so the research on the mechanism of national image construction on social media platforms is of great practical significance. Although previous studies have focused on international issues, they have not studied issues related to the construction of national image based on social

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media platforms as a media subject, so they cannot answer how social media platforms of various countries can construct national image, which makes this study irreplaceable.

2.3 National image

Concerning the connotation of "national image", there are different interpretations in the academic circles. Xiaoyan Liu mentioned in "Reflections on the Shaping of National Image by Media" that "national image refers to the projection of the objective state of the country in the public opinion, that is, the comprehensive reflection of the public's impression, view, attitude and evaluation of the country, which is the sum of the public's emotion and will towards the country"; Manli Cheng in "Mass Communication and the Shaping of National Image" thinks that national image is not only an external "image", but also a unity of content and form. It is first and foremost a kind of subjective consciousness, and a shining point in the spiritual temperament of a country or a nation. According to Xiaoge Xu, "a country's image is not only formed by the news and speech reports of the media, but also by entertainment media, advertisement and public relations, among which the international news flow plays a very important role in the process of forming a country's image".

In short, what scholars have said about "national image" can yield the following insights: first, the news media (including social media platforms) play an important role in shaping a country's image; second, the so-called national image refers to the public's overall impression of a country, which is a subjective view of the objective. Third, national image cannot be separated from the support of comprehensive national power. However, the enhancement of comprehensive national power does not mean the natural improvement of national image. National image needs to be moulded and can be moulded.

2.4 Issues raised

This paper will start from the Network Agenda Setting Theory (NAS Theory) and try to answer the following questions: how do the social media platforms of each country manage to construct the image of the country in the context of empowerment through platformisation? What are their specific mechanisms?

3 Research methodology

3.1 Observation

3.1.1 Building hypothesis

Based on the above questions, the corresponding hypothesis is proposed here: social media platforms will actively push messages to users through the algorithmic black box and algorithmic degree centrality for the construction of the country's image.

Since we cannot directly understand the internal operation mechanism of social media platforms, in order to prove the hypotheses, this study adopts an observational method to obtain data by observing the behaviour of social media platforms (Weibo as an example) that promote hotspots to become hot searches between February and March 2024 and conducting interviews. And as this study is not only concerned with the construction of China's national image by the West, but also how China constructs the image of the West, it chooses to

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use Weibo as an example for the study.

3.2 Content analysis method

3.2.1 Building hypothesis

Based on the questions above, the corresponding hypothesis is proposed here: social media platforms (take Twitter as an example) will construct China's national image by mixing in negative news related to China in the hot topics about China.

In order to prove the hypothesis, this study used content analysis to sample the overall population and code it.

3.2.2 Sampling methods

The object of this hypothesis is the posts about "China's carbon emissions" on social media platforms (the former Twitter now X). "Carbon emissions" is an important issue in global environmental protection, which is widely concerned by users from all over the world on social media platforms, and China, as a large carbon emitting country, its related policies and behaviors are of great significance to global climate change. Considering that Twitter, as one of the largest social media platforms in the world, has the largest number of Internet visitors in the world and has strong representativeness, it was chosen as a specific social media platform target.

A random sample of 162 posts on the topic of "China's Carbon Emissions" posted on the Twitter platform from 20 August 2009 to 10 January 2025 was taken as the scope.

4 From algorithmic black box to algorithmic degree centrality: event ratings and blogger participation

It was found that degree centrality is influenced by personal social relationships but also by algorithms. Algorithmic pushing starts based on personal interests and hobbies while at the same time there is an algorithmic black box, i.e., actively pushing popular information to network users. When an important event in China breaks out in Western social media platforms, algorithmic push will be based on interests and algorithmic black box, actively pushed on the whole platform, and even given priority in the ranking of the hot search list. Similarly, when a Western event breaks out in China, media platforms will actively push and boost the index of hot searches.

Media platforms actively rate events, thereby directing attention. Taking Weibo as an example, it rates hot news that occurs on a daily basis. For example, on 27 February 2024, after measuring and evaluating the heat level through algorithms, Weibo designated "2024 Postgraduate Examination Results Announcement" "Zong Qinghou's death" as S-ranked key selections of pan-social hotspots on that day, and positioned "the official notification of female entrepreneurs arrested for demanding project payments" and "Nanjing Residential Building Fire and Electric Vehicle Parking Remediation" as the next level of quasi-S-ranked key selections and took measures to direct the attention of the audience to such hotspots. In addition to daily public opinion

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monitoring and data analysis of daily hot searches through algorithms, Weibo also directs audience attention to specific topics at specific time nodes, such as during the Chinese New Year every year, we can see a large number of topics related to the traditional holiday, such as “Show us your New Year's Eve dinner” and “Chinese New Year Photo Contest”. For example, during the Spring Festival every year, we can see a large number of tweets and hot searches related to this traditional festival, in order to strengthen the discussion and popularisation of the national traditional culture.

The media platform invites various types of bloggers to participate in topic discussions according to their ratings. According to the rating results of the media platform, Weibo takes the initiative to contact big V bloggers in related fields, encouraging them to post different forms of content such as text, pictures and videos to participate in related topics and play their role as opinion leaders. For example, during the exam season every year, the person in charge of Weibo will contact education bloggers such as @X Brother Exam English @ LawStudentXXX and invite them to publish pictures or videos of their exam preparation experience on hot topics such as “Postgraduate Exam National Line” and “Postgraduate Exam Re-test”, so as to provide relevant information for candidates of all classes and focus on recommending this kind of content to the audience with the support of traffic. From this we can find that in addition to mainstream media, the participation of opinion leaders is also very important. Cultivating opinion leaders and creating an agenda network supported by multiple subjects also constitutes a concrete mechanism for social media platforms to construct a national image.

5 Stereotypes between countries: differential co-occurrence of news topics

In the past, news framing theory explained that we can construct the issue object in the same media content, and frame the “how to say” at the same time as the “what to say or not to say”. Nowadays, based on the theory of degree centrality and co-occurrence proposed by NAS theory, we can achieve the “co-occurrence” of the same issue in different media content.

The theory of network agenda setting follows the trend of the Internet and social media development, which is mainly reflected in three aspects: firstly, the concept of “co-occurrence” is introduced, and the relationship-centred agenda setting mode is emphasized. Secondly, the concept of “degree centrality” replaces “frequency” as the main criterion for measuring the prominence of elements. “Degree centrality” in network analysis portrays the sum of the number of relationships of a node, and the higher the value of degree centrality, the closer the node is connected to other elements in the whole network. Finally, in the first two stages of agenda setting, the object (agenda) and the agenda attributes are considered as two isolated elements. However, the NAS theory provides a framework with a unifying nature that enables the object and attributes to be analyzed in an integrative manner.

We coded Twitter posts on the topic of “carbon emissions in China”. The results show that the terms “China” and “carbon emissions” are more common in most years and have the highest degree of centrality, suggesting that “China” and “carbon emissions” are also very important and prominent in the public discussion of environmental issues. This suggests that the issues of “China” and “carbon emissions” are also very important and prominent in the public discussion of environmental issues. The high degree of centrality indicates that these

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issues are not only important in media reports, but also occupy a central position in the discussion of the general audience. This reflects the high level of public attention and discussion on the topic of "China's carbon emissions". This suggests that China's carbon emissions have been a key topic of discussion throughout the years. The increased frequency and variety of English keywords over time may reflect the increased internationalisation of the data sources or the internationalisation of the discussion. The following figure shows the overall word cloud of the sample.

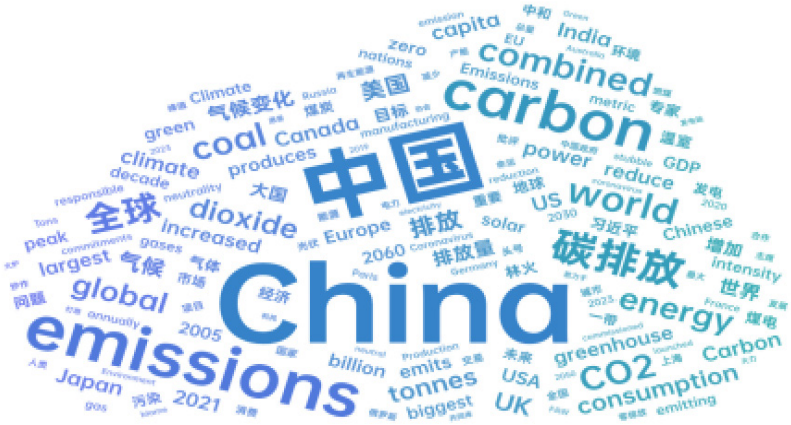


Figure 1 Sample word cloud map

This study examines the co-occurring issues and comments on "China's carbon emissions" in the media on Twitter. On the whole, when the media construct China's national image on Twitter, they often discuss both official and private issues. Among them, the official issues are mainly international climate policies, official reports and data on international carbon emissions, and the carbon trading market, while the private issues are a collection of comments on China's carbon emissions and carbon policies from the media and users. In terms of the difference between English and Chinese usage, when expressing positive sentiments, Chinese comments may focus more on the description of policies and official actions, and emphasise more on its efforts and achievements in reducing carbon emissions and improving air pollution, while a small number of English comments also cite international reports or data to emphasise China's role in global environmental governance. In terms of expressing negative sentiments, both Chinese and English commentaries tend to use more direct and emotional language, but English content may more frequently co-opt China's carbon emissions rankings for the topic.

According to the concept of "co-occurrence", if two concepts keep appearing in the text at the same time, then people will usually think that they are related in the cognitive process. For example, foreign media often mention "China is the world's largest carbon emitter" when reporting carbon emissions, accompanied by the use of strong directional words such as "biggest" and "largest". The audience will easily attribute the main cause of global temperature rise to China. But the reality is that China is only the 20th largest emitter of carbon per capita in the world, and is playing a constructive role in global atmospheric governance by promoting carbon markets and new energy technologies. The media has constructed such a linkage, which has led to a

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discrepancy between the public's perception network and the objective truth. In the era of social media, this bias has been further amplified and spread, leading to the prevalence of all kinds of "post-truths" and further deepening the stereotypes of foreigners towards China.

The Chinese media, on the other hand, while never denying the fact that China's carbon emissions are the highest in the world, have made it clear that China's per capita carbon emissions are only the twentieth highest in the world, and have relied more on the official media to tweet about new developments in environmental protection policies, such as carbon trading, carbon neutrality, and the use of new energy sources, in order to emphasise China's contribution to energy conservation and emissions reduction. Chinese and Western media do not share the same attitude towards "China's carbon emissions", and the distribution of content in the English posts suggests that the Western media's one-sided and non-objective approach is not conducive to an objective construction of China's national image.

6 Emotional tendencies have an impact on the construction of national image

"Public opinion is always a great force in any age", Hegel said, reflecting the importance of the audience. In the age of social media, the emotional disposition of the audience also plays an important role in the construction of national image.

From the data collected in this study, it can be learnt that the international public holds a high level of negative perceptions of China's national image. This may reflect a certain amount of negative views within the context of this data source. At the same time, according to the data of the study, the number of positive influences is also relatively significant, indicating that there are also a number of positive voices. The relatively low number of neutral impressions may indicate that the content tends to express more tendentious views.

People's interactive behaviour towards the post means that the content of the post has triggered the audience's attention, in which the content with negative emotional tendency is more likely to stimulate the audience's interactive behaviour. On the one hand, this is because negative information tends to be more topical and stimulating, which can stimulate users' emotions and motivate them to retweet, like, and comment; on the other hand, this is because the audience's attitudes towards the issue itself are consistent with this kind of negative information, which suggests that the co-occurrence of negative content in the issue of "China's carbon emissions" is strongly impacting China's national image. On the other hand, it is because the audience's attitude towards the issue is consistent with such negative information, which indicates that the co-occurrence of negative content in the issue of "China's carbon emissions" is strongly affecting China's image.

The theory of emotional contagion provides theoretical support for the phenomenon that media emotions influence audience emotions. In the network environment, emotional contagion is mediated by the media, which is manifested in the fact that the emotions of the message receivers become more like the emotions of the message publishers. Numerous studies have shown that the "emotionally suggestive factors" carried by online information can cause emotional changes in audience groups, and the direction of emotional changes usually remains the same as that of the majority of people in online public opinion. Regardless of whether the source of information is acquaintance or non-acquaintance, mainstream media, opinion leaders or self-media,

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it may mobilise individual emotions and form emotional contagion. In this study, we found that the most popular English-language content on Twitter under the topic of "China carbon emissions" was negative content denouncing China's carbon dioxide emissions as more than the total emissions of the entire developed world, and it was also the most popular content with other content that unilaterally emphasised China's status as the "biggest polluter". The most popular content in English under the topic was negative content denouncing China for emitting more carbon dioxide than the entire developed world and forming an agenda network with other content that emphasised China as the "biggest polluter", and the content subsequently posted by users was also mostly negative comments around this topic. This implies that the sentiment of users' tweets is closely influenced by the sentiment of media coverage, and that the direction of sentiment change is synchronised.

It can be seen that foreign media publish a lot of content with negative sentiment towards "China's carbon emissions", which constitutes an agenda network with negative sentiment with other media, and the negative sentiment spreads rapidly among foreign users through the media, leading to a sharp increase in the number of negative comments on Twitter about the issue of "China's carbon emissions". The rapid spread of negative emotions among foreign users through media transmission has led to a sharp increase in the number of negative comments on Twitter on the topic of "China's carbon emissions". The Chinese media's comprehensive and objective description of facts was overwhelmed by a large amount of one-sided and smearing content, making the Chinese media "unable to express themselves" and "having to be expressed by others", seriously affecting the cognitive network of foreign users, and creating bias in their understanding of China's national image. This has seriously affected the cognitive network of foreign users, causing their understanding of China's national image to be skewed.

Table 1 Interaction indicators for posts with different emotional orientations

Emotional tendency	Repost volume	Number of likes	Number of comments
Neutral	83.50	259.59	31.03
Positive	38.31	176.42	19.07
Negative	408.66	1022.79	69.58

"No media no social, no social no news" With the deepening of the interactive function of the Internet and the development of social platforms, the reach of media information is not a one-way communication, but a social communication based on content. China's media is further optimising its communication methods or content forms to guide users correctly, vigorously promoting the construction of international communication matrix, using mainstream media accounts on overseas social platforms to set the agenda network, and playing a role in guiding the public opinion of overseas opinion leaders; deepening the content construction of mainstream media on international social platforms, and increasing user stickiness through the establishment of social relationships through the content, in order to better play the role of "national image building power". The "power of national image construction" can be better utilized to construct an objective and positive national image.

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7 The role of networks of major social structural issues in their encompassment

7.1 Major structural social issues provide direction for the co-occurrence of online issues

The network of topics discussed by the audience and reported by the media on Twitter is subconsciously aligned with the network of major social structural issues. According to the statistics of high-frequency keywords by year (table below), it is worth noting that the high-frequency keyword "Belt and Road" appeared in 2018, indicating that the carbon emission issue related to "Belt and Road" has been paid attention to in that year, which is partly due to the discussion on the environmental impact of the "Belt and Road" project. The high-frequency keywords "Belt and Road" appear in 2009-2015, suggesting that carbon emission issues related to "Belt and Road" have received attention in that year, partly because the promotion of the "Belt and Road" project has triggered the discussion of its environmental impacts. It can be seen that the occurrence of major social structural events greatly influences the selection of topics on social platforms, ultimately realising the co-occurrence of real topics and media topics.

Table 2 High-frequency keyword statistics by year

Vintage	High Frequency Keywords (Top 10) and Word Frequency
2009	[('Blair ', 1), (' New pact favours China's low-carbon economy ', 1), (' Former UK Prime Minister Tony Blair says ', 1), (' One ', 1), (' Pragmatic ', 1), (' New climate change pact will help China speed up its low-carbon emission economy ', 1)]
2010	[('Newsletter', 1), ('China's investment in cutting emissions ', 1), (' Far exceeds US ', 1), ('Report says ', 1), (' China's investment in cutting carbon emissions from electricity is 14', 1), ('$20 per tonne far higher than the $5 per tonne in the United States that followed', 1), ('$10 per tonne', 1)]
2015	[('iea', 1), (' China and OECD take credit for stagnant carbon emissions growth ', 1), (' IEA says ', 1), (' Global carbon emissions growth stagnated last year ', 1), (' Thanks largely to China and OECD member countries changing their energy consumption patterns ', 1)]
2017	[('the', 1), ('numbers', 1), ('are', 1), ('in', 1), ('last', 1), ('year', 1), ('china', 1), ('s', 1), ('carbon', 1), ('emissions', 1)]
2018	[(' One Belt and One Road ', 3), (' In response to ', 1), (' How China will hedge against ', 1), (' Possible carbon pollution caused by the project ', 1), (' This issue ', 1), (' China's Special Representative for Climate Change Xie Zhenhua responded on the 26th of March ', 1), (' All construction projects will adopt the most advanced technology ', 1), (' Conserve resources as much as possible ', 1), ('Energy conservation ', 1), ('Achieving the best energy conservation and emission reduction results ', 1)]
2019	[('the', 7), ('and', 4), ('china', 3), ('of', 3), ('as', 2), ('world', 2), ('an', 2), ('paris', 2), ('to', 2), ('in', 2)]
2020	[('the', 7), ('emissions', 7), ('s', 6), ('china', 5), ('by', 5), ('carbon', 4), ('in', 4), ('of', 4), ('about', 3), ('to', 3)]

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Vintage	High Frequency Keywords (Top 10) and Word Frequency
2021	[('the', 16), ('of', 11), ('china', 10), ('and', 8), ('is', 8), ('in', 6), ('s', 6), ('their', 5), ('to', 5), ('carbon', 5)]
2022	[('china', 4), ('the', 3), ('of', 3), ('in', 3), ('emissions', 3), ('CO2', 2), ('western', 2), ('hemisphere', 2), ('a', 2), ('carbon', 2)]
2023	[('the', 16), ('s', 14), ('china', 10), ('in', 9), ('emissions', 7), ('more', 7), ('co2', 5), ('than', 5), ('to', 5), ('is', 5)]
2024	[('the', 31), ('china', 25), ('of', 22), ('s', 16), ('emissions', 15), ('than', 14), ('and', 14), ('more', 13), ('carbon', 12), ('a', 11)]
2025	[('china', 11), ('emissions', 11), ('the', 11), ('of', 10), ('carbon', 9), ('in', 6), ('and', 5), ('is', 5), ('for', 4), ('a', 4)]

In addition, when pushing news about other countries, media platforms will instantly push other negative news related to other countries. For example, in 2020, a large number of posts on Twitter about "China's carbon emissions" linked carbon emissions to the epidemic and further discredited China. The fact that these news events are not directly related to the events searched for, but appear in the tweets at the same time, stems from the "Anglo-Saxon consciousness" behind social media platforms.

The Western countries advocate the principle of "free flow of information" on the surface, but rely on their strong control of communication to control global discourse. International social media platforms, which are backed by capitalist forces, have injected capitalist ideology into their algorithms and have demonstrated their distinct commercial nature for the purpose of making profits. This shows that international social media platforms are not "free and equal communication platforms" as claimed by Western countries, but "tools for capitalist countries to control discourse". Nicholas Kellar, a scholar of computational communication, reveals how algorithmic companies such as Twitter have expanded the stigmatisation of the Xinguan epidemic and China's carbon emissions into the global information network through the black box of algorithms, while avoiding China's contribution to carbon trading and carbon neutrality, and the fact that the US's per capita carbon emissions are greater than those of China. Data companies, as global controllers of algorithmic power, trap users in an information cocoon constructed by algorithms, affecting the construction of China's national image and biasing users' perceptions.

7.2 Major structural social events affect public attitudes towards online issues

As can be seen from these data, in the early years (2009 - 2019) the amount of content, whether positive, negative or neutral, is low. From 2020 onwards, the number of posts of all types of influence and their interaction metrics increase to varying degrees. This may imply that the heat of discussion about China's national image on social media platforms is gradually increasing over time. Among them, negative comments have a more significant increase in 2021 and 2024. The reason for this is not unrelated to the outbreak of the new Crown Pneumonia epidemic.

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Table 3 Emotional tendency statistics of the sample by year

Vintage	Neutral	Positive	Negative
2009	0	1	0
2010	0	1	0
2015	0	1	0
2017	0	1	0
2018	0	1	1
2019	0	0	2
2020	2	3	1
2021	3	3	6
2022	4	4	0
2023	4	8	6
2024	6	13	12
2025	2	3	4

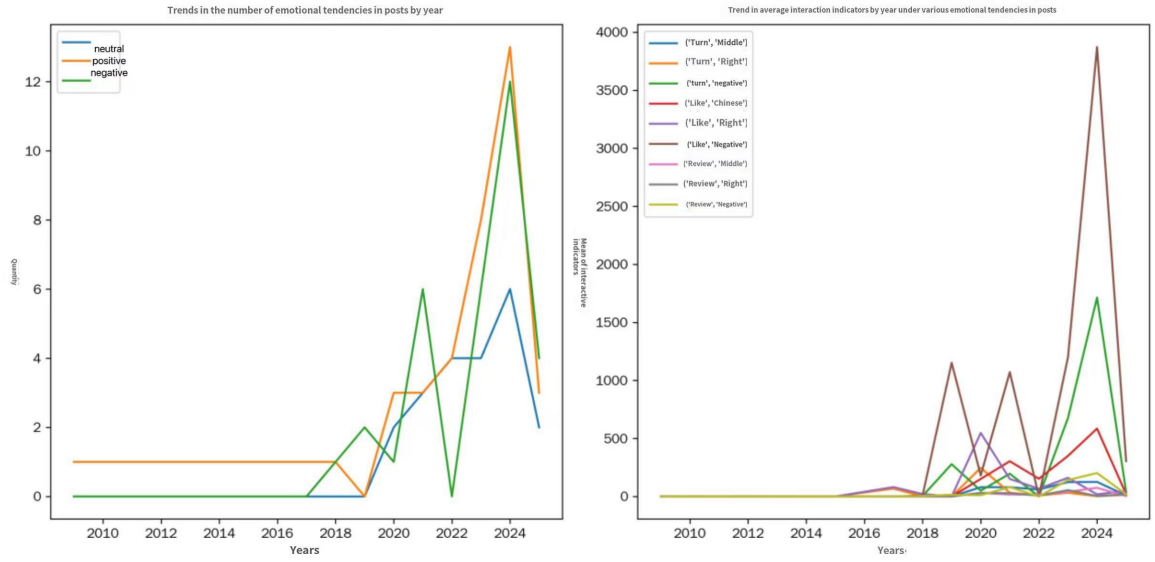


Figure 2 Trends in emotional tendencies of posts by year

Samuel Huntington put forward the so-called “clash of civilizations” theory, showing people the terrible prospect of a future clash of civilizations and exacerbating the conflicts and contradictions between different civilizations. Along with the “rise” of China since the reform and opening up, the strong momentum of China's development has demonstrated a certain potential for development, and the West has been forced by the pressure brought by China's development to advocate the “China Threat Theory” in order to stigmatise and construct China’s national image. The outbreak of the Xinguan epidemic has led to the development of the Chinese national image of China, which has been stigmatised. The outbreak of the Xin Guan epidemic has given the West an opportunity to construct a stigmatised image of the Chinese state, which has led to a sharp rise in negative comments on the Internet.

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In the face of questions and rumours from overseas public opinion, mainstream media responded at the first time. Xinhua News Agency actively exerted its news agency's global distribution and rapid release ability to report the spread of the epidemic and China's latest anti-epidemic initiatives to the outside world in a timely manner, with many articles, such as "The People's Liberation Army's medical team in support of Hubei Province arrives in Wuhan", "The Ministry of Industry and Information Technology: 14,000 pieces of protective suits and 110,000 pairs of medical gloves have been urgently called to Wuhan", etc., being the first to report on this. China's anti-epidemic initiatives have been quoted by the Associated Press and other overseas mainstream media, showing the world China's firm conviction and determination to deal with the epidemic. The foreign propaganda media also made full use of overseas social media platforms, adopting popular short videos, live broadcasts, vlogs and other means of video communication to directly show China's anti-epidemic measures and the work of frontline medical and nursing staff, enriching the way of content presentation, and forcefully refuting and counteracting the inaccurate reports of some foreign media.The main account of CGTN's YouTube platform released a video titled "Time-lapse Photography: Construction of Wuhan's Vulcan Hospital Completed",which comprehensively showed the construction of Vulcan Hospital,which comprehensively shows the whole process of Vulcan Mountain Hospital from construction to completion. Up to now, the broadcast volume has exceeded one million times, and a large number of messages have affirmed China's speed. The effective publicity of Chinese mainstream media on China's "effective treatment of the epidemic"has also enabled some Westerners to see a "real China" and thus make positive comments. The overall upward trend in positive ratings also suggests that the positive publicity of China's national image may be gradually achieving some success, but still needs to be further strengthened to cope with the increase in negative ratings.

8 Cold thinking: Be wary of the creep of algorithmic bias

It is worth noting that the global mainstream social media platforms have shown an obvious anti-China sentiment in their overall tendency, and Twitter, as an international social media platform dominated by the United States, is naturally biased in favour of the Western countries led by the United States. This position and ideology have long been deeply implanted in the platform's algorithmic recommendation mechanism, and the U.S. has used its technological discourse advantage to unite with Western forces to implement algorithmic hegemony, and carry out targeted blocking and distortion of "China's Carbon Emissions" issue. Its main tactics include setting up sensitive word banks on China-related issues, using a combination of technical and manual filtering to curb the dissemination of content favourable to China, and increasing the flow of one-sided interpretations of China's carbon emissions. Such tactics aim to weaken the voices of Chinese media and citizens in the arena of international public opinion by manipulating the flow of information, thereby safeguarding their own interests and discourse power.

In the face of this situation, Chinese media need to be more proactive in adapting to the international communication environment and enhancing their influence and discourse power in the arena of international public opinion. At the same time, the government and all sectors of society should also strengthen their co-operation to deal with the information blockade and distortion by western forces and safeguard national interests and image.

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