

Analysis of agenda setting for short video news driven by algorithms

Dandan Liu

Institute of Journalism and Communication, Henan University of Technology, Zhengzhou, 45000, China
2824768008@qq.com

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Abstract: With the change of Internet environment and media technology, fragmentation and visual news models have received widespread attention. Traditional news media have gradually attached importance to and expanded short video communication channels, which has led to important changes in the structure and pattern of the whole news communication form. The agenda setting of short video news dissemination has gradually replaced the agenda setting of traditional mass media. This article analyzes the agenda setting of short video news dissemination driven by algorithms, examines the dissemination impact of agenda setting of short video news, explores its governance measures, and provides some constructive suggestions for the healthy development of short video news dissemination.

1. Introduction

In 1972, McCombs and Shaw published a paper titled "The Agenda Setting Function of Mass Media", officially proposing this theoretical hypothesis. This theory suggests that mass communication has a function of setting "agendas" for the public, and media news reporting and information dissemination activities influence people's judgments of the "big events" and their importance in the surrounding world by giving different degrees of salience to various "issues". The agenda setting theory focuses on the cognitive level of the audience, examining the medium - to long-term, macro -, and comprehensive social effects generated by the mass media in a series of reporting activities over a long period of time.^[1] It implies a media perspective that communication media is an institution that constructs operations from the environment. The agenda setting has played an important role in breaking away from the theory of limited effects, and at the same time, it has put the control issues behind the mass communication process in front of people. But it only emphasizes the aspect of media setting or forming issues, without involving the aspect of reflecting social issues.

In the current context of the prevalence of short video dissemination, the mode and role of news dissemination have undergone changes. The effectiveness of traditional mass communication agenda setting is gradually weakening, and the leaders of agenda setting have shifted from professional journalists to ordinary audiences. The dissemination phenomenon, impact, and governance measures caused by this have become the focus of research. The direct driving force behind the dissemination of short video news is the breakthrough of digital technology and artificial intelligence technology,

and its agenda setting is deeply influenced by big data analysis and intelligent algorithms. We conduct research on algorithm driven agenda setting for short video news to explore corresponding governance measures. The rise of short video news dissemination models has led to the restructuring of the media landscape and the innovation of information dissemination methods. The communication agenda of traditional media is gradually being replaced by personalized and fragmented information flows, and the audience is no longer passively receiving information, but has become participants and creators in information dissemination. This transformation is not only a change in technological means and forms of communication, but also a significant transformation in the role and agenda setting mechanism of communication.

The particularity of short video news dissemination lies in its rapid expansion of dissemination speed and scope, as well as the satisfaction of personalized user needs. This is thanks to the precise analysis and recommendation technology of intelligent algorithms, based on big data analysis and user behavior patterns, which can achieve precise matching between information content and users. However, this algorithm driven agenda setting has also sparked a lot of attention and controversy, including information cocoons, differentiation of public opinion values, and the challenge of information authenticity. Faced with the rapid development of short video news dissemination and algorithm driven agenda setting, we need to have a deeper understanding of the impact and challenges brought by this new communication model. In this context, exploring governance measures is crucial to ensure the effectiveness, fairness, and social value of information dissemination. Governance measures not only need to consider the improvement and standardization of technology itself, but also need to formulate systematic and feasible norms and control measures from multiple levels such as policy, ethics, and social responsibility.

2. The Mechanism of Setting the Agenda for Short Video News

Short video platforms, as an important part of today's social media landscape, exhibit unique agenda setting mechanisms in their commercial operations. This agenda setting mechanism mainly involves the commercial drivers of short video platforms, competition for news accounts, and personalized choices and preferences of audiences for news. By analyzing these mechanisms in depth, we can better understand how short video news quickly spreads on platforms and attracts public attention. ^[2]

2.1 Business Drivers of Short Video Platforms

The commercial operation of short video platforms aims to serve the growth of their commercial interests, and various accounts, including news and entertainment, are important components in achieving this goal. These platforms cleverly utilize "hot search" mechanisms and other means to attract audience attention, enhance user stickiness, and thus win the support of advertisers. For short video news, the key to agenda setting is to increase news popularity, allowing content to quickly spread and discuss in the short term. This strategy not only enhances the attention and traffic of news, but also enhances the platform's commercial monetization ability. Therefore, agenda setting can be seen as an invisible hand behind the scenes to promote "hot news", guiding audience attention and forming a vortex of public opinion through a series of push and dissemination strategies.

2.2 Competition for Short Video News Accounts

The decentralized nature of short video platforms provides equal opportunities for interaction between self-media and audiences, especially in the competitive landscape dominated by news content. Self-media relies on its advantages and unique content planning to attract audiences in this

competition. In the fiercely competitive news accounts, in order to stand out, their respective media news accounts not only need to carefully design the content and form of short video news, but also use unique background music, humorous text dubbing, and even create sensational headlines to attract audience clicks and comments. ^[3]This competitive mechanism is driving a new round of agenda setting, prompting content creators to pay more attention to creative and expressive techniques that attract the audience's attention when designing news.

2.3 Audience's personalized choices and preferences for news

In the environment of short video news dissemination, the audience's right to choose and participate in news content has been significantly enhanced, while also showing more personalized needs. Viewers may follow and bookmark their favorite news bloggers, comment and criticize unsatisfactory news videos, or share interesting news content with friends. This audience preference and personalized demand to a certain extent affects the dissemination effect and scope of news content, forming a reverse agenda setting. The audience participates in shaping the news agenda through interaction and feedback, ultimately influencing the overall topic setting of short video news.

3. Implementation methods for setting the agenda for short video news

In order to delve deeper into the implementation of short video news agenda setting, we need to pay attention to the role of big data and intelligent algorithms in this process. These two key factors together build an efficient and real-time agenda setting mechanism on short video platforms.

3.1 The role of big data in agenda setting

The efficient dissemination of short video news cannot be separated from the key role of big data technology in agenda setting. Big data can build detailed portraits of each audience by extensively collecting and analyzing user registration information, browsing behavior, and interactive data (such as comments, likes, shares, etc.). This includes information on time preferences for watching news, preferences for news types, and interactive habits. This refined user analysis enables the platform to gain a deeper understanding of the audience, thereby achieving more precise agenda setting. The catchphrase "Tiktok knows you better than you" describes not a groundless story, but a specific demonstration of big data technology in achieving audience insight. The advantage of big data technology lies in its ability to process and analyze large datasets, thereby revealing patterns and trends hidden behind the data. Through in-depth mining of user data, short video platforms can better understand user interests and behaviors, providing more accurate inputs for subsequent intelligent algorithms. Therefore, big data provides a necessary foundation for agenda setting and data support for the operation of intelligent algorithms.

3.2 The role of intelligent algorithms in content push

Based on big data analysis, intelligent algorithms have become a key means of executing agenda setting. These algorithms not only deeply understand user profiles and content profiles, but also evaluate the degree of matching between the two, thereby achieving more accurate content push. Intelligent algorithms will push content that each user may be interested in based on their preferences and habits, and sort these contents to ensure that the information received by users is consistent with the agenda set by the platform. Taking Tiktok platform as an example, its intelligent recommendation algorithm adopts a variety of strategies, such as "horse racing mechanism", "thousand people and thousand faces mechanism", "similar tag recommendation" and "local recommendation". These

strategies collaborate with each other and achieve precise implementation of agenda setting through in-depth analysis of user behavior and interests.^[4]

In the "horse racing mechanism", the algorithm uses interactive data as a filtering criterion based on initial recommendations for newly released videos, similar to horse racing, where content with excellent performance will receive more extensive recommendations. The "Thousand People, Thousand Faces Mechanism" provides personalized recommendations based on factors such as user historical preferences, types of news browsed, and search keywords. In addition, "similar tag recommendation" implements cross recommendation for different users with similar interests, while "same city recommendation" prioritizes recommending news videos related to the same city. The clever application of these intelligent algorithms enables agenda setting to more accurately meet the needs of different user groups, improving user satisfaction and platform activity.

4. The Impact of Setting the Agenda for Short Video News Communication

With the advent of the social media era, the setting of news dissemination agendas on short video platforms has become an important factor affecting information dissemination. Under this agenda setting mechanism, intelligent algorithms precisely adapt to the communication needs of the network era through "analysis+recommendation" technology, playing a bridging role between platforms, self-media, and audiences. Throughout the process of agenda setting, we can observe the impact of agenda setting on improving news dissemination efficiency, forming an "information cocoon" under algorithms, and the differentiation of public opinion values caused by the technological neutrality of algorithms.

4.1 Agenda setting improves news dissemination efficiency

The "analysis+recommendation" technology of intelligent algorithms has played a key role in short video platforms. By relying on big data to analyze user profiles, the system can accurately distribute news content and focus on hot events. This precise matching creates a closer connection between news content and the audience, accelerates the dissemination speed of news information, expands the scope of dissemination, and deepens the degree of dissemination. At the same time, intelligent algorithms can achieve personalized news push based on user interests and behaviors, meeting the diverse needs of the audience for news information.^[5] This makes short video news spread more efficiently on the platform, increasing the coverage and accessibility of information, and effectively promoting the overall efficiency of news dissemination.

4.2 Algorithm based agenda setting forms an "information cocoon"

Although algorithms accurately match user psychology, overly catering and regular recommendations gradually weaken the audience's attention to social issues related to news content. The scope of user access to specific news is limited to narrow algorithmic recommendation circles, forming their own "information cocoons". Taking Tiktok short video as an example, the intelligent algorithm recommends a large number of similar information by focusing on users' concerns, likes, searches and comments, resulting in a relatively single information for users. This not only limits the possibility of the audience obtaining diverse information, but may also lead to a certain degree of cognitive solidification. Intelligent algorithms focus on hot news events when they break out, creating a situation where the strong remain strong. Among numerous news interpretation self-media, self-media with high attention gain more opportunities for dissemination, while other self-media with different voices and perspectives may lose their space for dissemination, which may trigger a "spiral of silence" effect and form a social "information cocoon". The limitations of this information may

affect the audience's comprehensive understanding and thinking of social issues, leading to a single dependence on the source of information.

4.3 The technological neutrality of algorithms leads to the differentiation of public opinion values

The dissemination of news events on short video platforms is not an objective mapping, but presents inconsistent news public opinion based on the unique perspectives of various dissemination nodes (such as self-media, traditional media short video accounts, and audiences). On current short video platforms, the quality of various self-media accounts varies, and the same news event may present multiple interpretations or viewpoints, leading to public opinion opposition among the audience and affecting their news cognition and event value judgment. The algorithm cannot determine the value orientation and public opinion guidance control of a certain video when pushing or focusing on short video content. Instead, it selects content from a relatively neutral position without discrimination and targets it based on audience classification. The news viewpoints and content accepted by the audience under algorithmic recommendations may be biased or objective. When algorithms are unable to determine the authenticity and value orientation of news content, the agenda they set may bring some messy news information to the audience, thereby affecting audience judgment, triggering differentiation of audience values, and to some extent exacerbating the standardized governance and benign dissemination of short video news.

5. Standardization Measures for Setting the Agenda of 5 Short Video News

Short video news, as a form of news dissemination, its agenda setting not only enhances the efficiency of news dissemination, but also brings about problems of disorderly growth and lack of social responsibility. This type of media, as a hub for news information, should bear the social responsibility of content review and public opinion supervision. In the process of agenda setting, it is necessary to clearly define the boundary between economic interests and social responsibility, shape credibility, disseminate positive values, purify the online environment, and build a positive online culture. Therefore, it is particularly urgent to explore specific measures to standardize the agenda setting for short video news dissemination.^[6]

5.1 Guiding the platform to regulate agenda setting with social responsibility

In algorithm driven agenda setting, clicking and browsing data are key indicators, and the level of these data directly affects the recommendation and dissemination of news videos. Short video platforms generate commercial profits by producing popular videos, but have less consideration for the social impact of content, leading to agenda setting that may overlook mainstream values. From the perspective of higher social responsibility, the platform should balance economic and social benefits, put social responsibility before economic interests, and adjust intelligent algorithms to serve the overall social development; Cultivate humanistic care, practice socialist core values, incorporate positive values into algorithmic learning mechanisms, and ensure that beneficial news receives priority recommendations; Adhere to the legal bottom line, improve the review mechanism, resist inappropriate content, and standardize agenda setting. At the same time, relevant departments should establish communication standards to optimize the agenda setting of the platform through legal norms. The guidance of social responsibility is not only a moral responsibility for platforms, but also a key factor for their sustainable development. By establishing a social responsibility oriented agenda setting mechanism, the platform can better fulfill its social responsibilities, ensure the positive effects of information dissemination, and create a healthier and more positive news dissemination

environment for society.^[7]

5.2 Strengthen the agenda setting ability of mainstream media

The open and autonomous nature of short video news has given rise to numerous self-media accounts. These self-media, due to their uniqueness, control the dominant power of agenda setting, but at the same time, they also bring instability to information sources. To this end, mainstream media should strengthen the operation of short videos, spread positive social views, guide positive public opinion, win trust with high-quality content and authoritative views, refute rumors, clarify the online environment, crack down on false news, establish authoritative credibility, and control the dominant power of agenda setting. The role of mainstream media in agenda setting cannot be ignored. It has richer resources and higher professional level, and can provide audiences with more authoritative and credible information. By strengthening the agenda setting ability of mainstream media, we can effectively guide the direction of news dissemination, ensure that the public receives more objective, truthful, and comprehensive information, and reduce the negative impact of false information on society.

5.3 Improving audience news literacy and spreading positive energy

The freedom and equality of short video news give audiences the right to choose, but unlimited discourse power may also affect the health of the news ecosystem. Unreasonable audience interaction may lead to the formation of negative issues. Attention should be paid to cultivating the news literacy of the audience, creating a healthy communication atmosphere, filtering out negative information, promoting positive news viewpoints, enhancing the audience's information recognition ability, guiding reasonable interaction, and jointly building a positive short video news ecosystem. The literacy level of the audience is directly related to the effectiveness of information dissemination and the formation of social public opinion.^[8] By improving the audience's news literacy, it is possible to cultivate their ability to distinguish the authenticity of information and reduce the impact of false information. Emphasizing the dissemination of positive values and guiding the audience to actively participate in news dissemination can help build a positive and upward short video news ecosystem.

6. Conclusion

The short video news model is becoming increasingly popular in today's society, and its healthy agenda setting has a positive impact on the dissemination and development of news. However, we also need to be vigilant about potential negative impacts. Agenda setting is like a beacon of direction, and deviation in direction can lead to serious consequences. Although algorithmic technology itself has neutrality, entities utilizing algorithms must control the direction of agenda setting while being responsible and creating value, in order to jointly promote the orderly and civilized construction of the short video news environment. Agenda setting plays a crucial role in the field of short video news, determining the direction of display and dissemination of news content on the platform. Effective agenda setting helps to improve the efficiency of news dissemination, strengthen the aggregation and transmission of information, and meet the diverse needs of audiences. However, if the agenda is set out of control or deviates from the normal direction, it may lead to chaos in information dissemination, and even breed false, negative, or extreme views, damaging the public interest of society. Of particular concern is that although algorithmic technology itself has neutrality, its application is determined by human subjects. Therefore, the health of agenda setting depends on the entity using the algorithm's understanding and fulfillment of social responsibility behind it. Entities need to guide agenda setting with a responsible attitude while ensuring the fairness, authenticity, and

diversity of information dissemination. This involves the joint efforts of the platform, self-media, and other information dissemination entities to maintain a good order of information dissemination.

From an academic perspective, agenda setting should be seen as a complex task involving social ethics and values. In agenda setting, relevant entities need to balance the efficiency of information dissemination with social responsibility, ensuring that news dissemination is not only efficient but also positive. This means that when using algorithmic technology for agenda setting, it is necessary to fully consider the authenticity, objectivity, and positive impact on society of the information. In addition, transparency is also a key factor in agenda setting, and disclosing the operating principles and basis of algorithms can help establish trust and promote fairness in information dissemination.

In the short video news environment, the orderly agenda setting and civilized construction require the joint participation of all parties. In addition to the responsibility of the platform, self-media and content creators should also actively assume social responsibility, not creating false or extreme content for the purpose of seeking attention, but taking it as their own responsibility to convey useful information and guide positive thinking. In addition, various sectors of society can also promote the development of agenda setting towards a more fair and positive direction through supervision and participation.

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