

## Social Robots and Internet Opinion Rights

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**Abstract:** Against the background that the Internet social media ecosystem has formed a symbiotic state of "human+social robot", social robots play an important role in shaping media agendas and influencing online public opinion. In order for China to cope with a series of media agendas created by other countries using social robots to influence Chinese public opinion, this paper logically deconstructs the defense system and self-defense strategies, and argues that in order to effectively deal with media agendas guided by social robots, and we should take measures such as AI screening of public social accounts, introducing relevant regulations to standardize the behavior of the media, and preventing the interference of other countries' capital and social bots. We should also take measures to prevent social bots from interfering with Chinese public opinion. For example, in terms of self-defense strategy, we should actively deploy social robots overseas to grasp the public sentiment and public opinion of other countries, and realize the division of public opinion camps in other countries, so as to show China's great-power demeanor and create a more open and tolerant world public opinion space.

**Keywords:** Social Robot; Media Agenda Setting; Internet Public Opinion Right; Defense System; Self-defence Strategy

### 1. Social Robot and Media Agenda Setting

With the rapid progress of science and technology, the Internet has penetrated into every corner of our lives and become an indispensable part of our lives. At the same time, various mobile applications have sprung up, which have greatly enriched our way of life. In this context, the Internet has been closely integrated with the lives of the vast majority of people, forming a brand new lifestyle. In the past, traditional media such as books,

newspapers, magazines and radio were undoubtedly the main channels for people to get information and understand the world. However, with the continuous emergence of new forms of media, the position of traditional media has been gradually shaken. Nowadays, we can not only access news information anytime and anywhere through computers, mobile phones and other devices, but also interact with people around the world through social media platforms. This brand new media environment makes the dissemination of information more rapid and extensive, and also makes our world more colorful. In the age of information technology, social media platforms such as Facebook, Twitter, WhatsApp, TikTok, etc. have become an indispensable part of people's lives. These platforms not only provide a platform for people to share their lives and exchange ideas, but also, to a large extent, assume many functions of mass media. Through these platforms, people can learn about the news around the world, participate in the discussion of various social issues, and express their own views and opinions. The information on these social media platforms has an increasing influence on the public, and the direction of public opinion on these platforms has a huge impact on the real world [1].

Social robots, like ghosts lurking in the digital social space, silently carry out their commands. They are like zombies, endlessly wandering around the corners of the Internet, performing all kinds of operations. They are not only simple performers, but also imitators with strong learning ability. By constantly observing and learning the behavior patterns of real users, they gradually master the complexity of human nature, so that they can update their social status and automatically communicate with other users in a natural and smooth way. The power of social robots is mind-boggling. Not only are they able to send requests and accept invitations from friends,

but they are also able to participate in a variety of discussions, injecting new life into social media on the Internet. The wide application of these robots has profoundly changed the former Internet social media communication mode dominated by "anthropocentrism". They are no longer passive recipients, but have become active participants, and in some cases, their influence has surpassed that of real users. This change has had a dramatic impact on traditional issue setting. With the widespread use of social bots, agenda-setting is becoming more diverse and decentralized. Robots are able to quickly capture and disseminate all kinds of information, triggering widespread concern and discussion. A large number of studies have shown that social robots have become an important factor in intervening and influencing online public opinion [2].

As early as the beginning of the last century, when mass media was still dominant, the theory of media agenda-setting had already been proposed. The first thought on the relationship between the media agenda and the public agenda came in 1922 when Lippmann pointed out that the virtual environment created by newspapers was perceived as reality by readers and the public, thus influencing their imagination of the world. In 1948, Lazarsfeld and Merton proposed that mass media coverage can increase the visibility of things, people and events and give them a certain social status. In 1972, Donald Shaw and Maxwell McMuth formally put forward the theory of media agenda-setting through investigation and research, which refers to the transfer of the significance of the agenda between subjects [3]. According to the traditional agenda-setting theory, the more media reports, the more important an issue will be considered by the public, which can be summarized as the transmission of media agenda to public agenda. However, in 1997, Donald Shaw and Maxwell Mc Muth proposed a second meaning of agenda-setting, that is, the attribute agenda of media, which influences people's opinions by directing their attention to specific attributes of an issue [4]. In terms of attribute agenda, social robots can guide or subvert public opinion by amplifying or misleading certain attributes.

## **2. Defense System in the Face of Internet Public Opinion Power War of Social Robots**

The Internet has become an important platform for information transmission and public discussion, giving social communication and communication a new era of connotation. However, some countries have already begun to use social robots to wage wars for economic and improper interests. In the case of Twitter, studies have found that about 9 to 15 percent of active Twitter accounts belong to social bots [5]. And according to a study by the Massachusetts Institute of Technology, "false information is 70% more likely to be retweeted than true information," making it difficult for people to get real information from social media [6]. These social robots not only become an important content production and dissemination force in social media, but also their huge number enables them to create a variety of public opinion events and magnify them infinitely, thus directly affecting the real world [7].

In recent years, China issues have continued to attract wide attention on the Twitter platform. Previously, scholars studied discussions on China issues on Twitter, and the results showed that there are characteristics of automatic manipulation of China issues [8]. A study of more than 350,000 tweets about China and the Chinese government over a nine-day period found that more than 20 percent of the tweets were suspected to have been generated by social bots [9].

### **2.1 Social Bots Infiltrated by Hostile Forces on Domestic Media Platforms Should be Identified from a Technical Level**

Some countries have long used digital technology to create social robots to manipulate public opinion, which has been widely used in global political practice. These robots can quickly collect and analyze citizens' information, disrupt online political dialogue, manipulate the direction of public opinion, influence public relations, shape media images, and indirectly manipulate domestic political elections and international political affairs [10]. Social robots have become a technical force that cannot be ignored in the global political and public opinion space, and the penetration of China's Internet we-media platforms by those countries poses a major threat to the healthy development of China's public opinion environment [11].

From a functional point of view, social robots

can be roughly divided into four categories: 1) malicious botnets, which are a kind of robot network that supports remote manipulation, such as the common large-scale and highly organized "robot army" and cyber water army; 2) research robots, which can crawl data and information from China's cyberspace to analyze people's feelings and identify attack points; 3) editing robots, which can automatically copy edit and publish a hot topic on a forum or platform, and manipulate public opinion by amplifying or misleading a negative attribute in the event; [10] And 4) chatbots, which can respond to users' basic requests and are able to automatically analyze, observe and react in the social environment to convince the other party of their authenticity. The chat help of some self-directed and self-acting "victims" on some platforms is the "masterpiece" of this kind of social robot [12]. At present, China's Internet media platforms generally require users to register in order to ensure the security and authenticity of information. This regulation is not only a constraint on individual users, but also to maintain the order and stability of the entire Internet environment. In this context, the primary condition for social robots operating on Internet media platforms, such as categories 1, 3 and 4 mentioned earlier, is to complete user registration. However, the identification of these bot accounts has become an urgent problem to be solved.

The industry is already developing a number of technologies to address this problem. The crowdsourcing platform detection technology makes use of the wisdom and strength of the vast number of netizens to participate in the identification and reporting of robot accounts, forming a mechanism for national participation and joint supervision. Honey-pot detection technology, by constructing a false information environment, induces the robot account to actively expose its behavior pattern, and then carries out effective identification. Machine learning detection technology uses advanced artificial intelligence algorithms to automatically identify and filter robot accounts by analyzing user behavior, speech and other characteristics. Graph theory detection technology, by building a user relationship network, uses the principles and methods of graph theory to identify those robot accounts that are inconsistent with normal user behavior

patterns [13]. However, for the second class of political social bots, the situation is more complicated. These bots tend to be involved in more sensitive political issues, and their operations are more subtle and cunning. Therefore, in addition to the above-mentioned detection technology, anti-reptile technology is also needed. Through anti-crawling technology, it can effectively prevent hostile forces from collecting and analyzing information on a large scale through automated programs, and then manipulating public opinion.

However, it is worth noting that the current firewall blocking measures based only on overseas IP addresses have little effect. This is because hostile forces often have strong technical support, and they can bypass the IP firewall through various means to continue their activities on Chinese media platforms. Moreover, we cannot simply block all overseas IP addresses, which is not only unrealistic, but also easy to lead to the closure and isolation of the Internet [14].

Therefore, in order to effectively deal with this challenge, it is strongly recommended that national and local science and technology departments increase their support for the intelligent identification technology of social robot accounts. This includes the establishment of projects, the support of project funds, etc., to ensure that we have enough technical strength to deal with this increasingly severe problem. Only in this way can we effectively prevent foreign hostile forces from deploying a large number of political social robots on Chinese media platforms, and maintain the clarity and stability of cyberspace.

## **2.2. Compare and Identify Social Robots from the Management Level**

A large number of social robots flood into China's we-media platforms and register on these platforms. We-media platforms really need to take certain responsibility for this phenomenon. At present, China's we-media platforms generally use mobile phone number registration or WECHAT/ALIPAY login, which ensures the authenticity of users' identities to a certain extent. However, some platforms only require email registration for the convenience of users, which provides an opportunity for the influx of social robots. In order to effectively deal with this problem, it is suggested that relevant departments strengthen

the supervision of large we-media platforms. Supervision should not only stop at the mechanical screening of sensitive words in the content, but also trace their source deeply to cut off the root cause of the breeding of social robots [15].

Mobile phone numbers in China all require real-name registration, and WECHAT or ALIPAY are also tied to mobile phones or credit cards, which makes it technically easy for we-media platforms to identify virtual users. However, the reality is that there are a large number of water soldiers on many we-media platforms, and these non-real users are actually zombie social robots. The existence of zombie social robots not only involves the serious problem of citizen ID card number leakage, that is, individuals' identity information is maliciously used by others to register zombie accounts and carry out illegal activities without their knowledge. What is more serious is that there are also cases of we-media platforms deliberately manufacturing and selling "water numbers" in order to seek profits. Such behavior not only disturbs the normal order of the "we media" platform, but also seriously infringes on the legitimate rights and interests of users.

Therefore, it is suggested that the Internet regulatory authorities further strengthen the rectification efforts and put forward higher requirements for the we-media platforms. Platforms should conduct scientific and effective maintenance and supervision of accounts, and adopt advanced technical means, such as big data analysis and artificial intelligence identification, to accurately identify and clean up suspicious accounts. At the same time, the platform should also strengthen self-discipline, prevent its own violation of the law, effectively fulfill its social responsibilities, and provide users with a safe, healthy and orderly we-media environment [16].

### **2.3 Use Social Robots for Defense from the Strategic Level**

With its unique capabilities, social robots play a role that cannot be ignored in the process of disseminating information. Together with real human users, they build a complex and huge communication network, in which social robots not only play an important role, but also gain social status to a certain extent. As the

identity of automatic communication subjects, they deeply intervene in human society, forming a unique social placement. These social robots, through their powerful communication ability, enable the information to quickly and widely cover more social media users. They connect a large number of user accounts with virtual personality images, and accurately send information, thus realizing the rapid spread of information. This ability makes social robots occupy an important position in the communication of public opinion. They can quickly pass information to the target audience and influence people's views and attitudes. For China, social robots also have great application value. In the defense of public opinion, we can use social robots to guide the hot events, form a strong positive force through the number and local advantages, and resist the negative impact of hostile or bad social robots. In this way, we can not only maintain social stability and harmony, but also improve the public's cognition and understanding of events [17].

To achieve this goal, it is suggested that online regulatory authorities or other relevant agencies establish professional command centers for social robots. The center can track hot issues in real time, master the dominance of public opinion wars, and ensure the correctness of public opinion guidance. At the same time, it can also conduct unified management and scheduling of social robots to prevent them from being maliciously used or having adverse effects. By establishing the command center of social robots, we can make better use of the advantages of social robots and improve the effect of public opinion guidance. In this way, not only can the interests and image of the country be safeguarded, but also a more healthy and positive online environment can be provided to the public.

### **3. The Strategy of Overseas Counterattack Based on Social Robots and the Battle of Internet Public Opinion Power**

Social robot is an innovative automatic technology tool, which can simulate real human Internet operation on the computer, and is an important extension of digital robot in the field of computer Internet. These robots perform a variety of complex network tasks in a highly automated manner, which greatly

improves the efficiency of information processing and dissemination. According to reports on the relevant data, we are surprised to find that more than half of Internet traffic actually comes from these digital robots. This figure not only reveals the widespread presence of social bots in today's Internet environment, but also highlights their critical role in the flow of information. In social media networks, social robots play a pivotal role as the main body of digital automatic communication. They can automatically undertake the information dissemination work originally completed by humans, including but not limited to Posting updates, commenting on interactions, and sharing content. Through these automated operations, social robots effectively promote the wide dissemination of information, so that more users can quickly obtain and understand relevant information [18].

At the same time, social robots are not only automated tools, but also important objects to communicate emotions with humans in the virtual world. Through advanced algorithms and simulation technology, these robots have the ability to interact with humans emotionally, enabling people to establish a sincere emotional connection with them in the virtual space. Whether it is with real human users or other virtual characters, social robots can effectively establish real and effective social relationships. They can listen to people, understand the emotional needs of humans, and give people emotional support and companionship through intelligent responses and interactions. This kind of social interaction across the real and virtual not only enriches people's social experience, but also expands the space for the expression of human emotions.

### **3.1 The Battlefield is Pulled Overseas, Overseas Layout Protects the Social Robot Corps**

Due to the double standards of some national media and the malicious orientation of public opinion towards China, some people's cognition of China is generally one-side [19]. Some of the media's false reports and malicious distortions of China have had a very bad impact on public opinion. At the same time, in other countries, China's official mainstream media is limited in layout, and

many people pay little attention to China's official foreign language channels, newspapers and other official media. Most young people are immersed in Internet we-media platforms and various entertainment platforms.

These platforms, as one of the main battlefields for Chinese social robots overseas, carry important missions and responsibilities. In the sea of hot topics, social robots are like hard-working ships, always alert to possible winds and waves. They can not only quickly capture and analyze the global public opinion dynamics, but also automatically maintain the positive reality of China in the hot topics. When negative information or misunderstandings try to encirclement China, these robots will respond quickly and break the containment of overseas public opinion against China by issuing authoritative information and clarifying the truth, so as to win more understanding and support for China on the international stage. What is more worth mentioning is that social robots are also good at building Bridges of emotional communication in the virtual world. They interact naturally and affectionately with netizens around the world by simulating the behaviors of real users. These interactions are not just simple information exchanges, but also contain in-depth displays of Chinese culture, values and lifestyle. In this way, social robots have successfully built the commanding heights of China's public opinion overseas, allowing people around the world to more truly feel the charm and vitality of China. With the continuous development and improvement of social robots, they will gradually become an important tool to obtain the global public's cognition and recognition of China. With continued efforts and innovation, these robots will help China establish a more positive, open and inclusive image on the international stage and contribute Chinese wisdom and strength to promoting the building of a community with a shared future for mankind.

In today's complex and diverse communication community, social robots play an indispensable role, and they have become one of the important strategic tools embedded in the public opinion society. In the context of globalization, China's overseas social robot corps is gradually emerging. They are eager to be widely accepted by the international community, become equal communication

objects, and actively participate in the global social media communication. These social robots not only represent the voice of China, but also are important disseminators of Chinese culture and values. They interact deeply with communication subjects in other countries and build Bridges across national borders through intelligent dialogue, information sharing and cultural exchanges. This interaction not only enriches the information content in social media, but also promotes mutual understanding and respect among different cultures. The active participation of social robots will have a profound impact on the information dissemination environment in social media. They can quickly capture and disseminate hot topics, and promote the rapid circulation and wide dissemination of information. At the same time, they can also screen and integrate information, provide more accurate and valuable content, and bring users a richer reading experience. In the commercial market environment, social robots also play an important role. They can accurately target audiences, push personalized advertisements and product information, and facilitate business transactions. With the help of social robots, Chinese companies and brands can better expand overseas markets and enhance their international competitiveness. More importantly, social robots also play an irreplaceable role in the political and public opinion environment. They can actively participate in the discussion and guidance of international public opinion, disseminate China's political positions and propositions, and curb the blocking of other countries' media and malicious orientation toward China. Through the efforts of social robots, China's international image can be better shaped and the country's soft power can be enhanced.

### **3.2 Divide Enemies-- Use Social Robots to Climb Overseas Public Opinion Data and Hot Topics -- Seize the Initiative**

In the world Internet public opinion battlefield, "subdue the enemy without fighting" and disintegrate the other party's internal forces is one of the best strategies to master the initiative in the battlefield. There are also many hot topics in different countries every day, and various interest groups wrestle with each other on this public opinion battlefield.

They are not a monolith, and they are competing with each other on the Internet. China's overseas social robot corps needs to be flexible, not only sensitive to issues involving China, but also need to cooperate with a series of dynamic strategic deployments. In terms of public opinion, China should take multifaceted measures to disintegrate the enemy, create confusion, and tire the opponent [20].

The use of social robots to comprehensively grasp the public mood, public opinion and trends of hot topics in various countries. Through accurate analysis of massive data, social robots can quickly grasp the pulse of society and gain insight into subtle changes in public opinion. This not only provides valuable decision-making references for governments and enterprises, but also provides them with an opportunity to better intervene and influence public opinion. Social robots are able to acquire information on a global scale in real time and process it efficiently through algorithms. At the same time, they are also able to push personalized information according to users' interests and habits, so as to better meet users' needs. These characteristics make social robots play an important role in comprehensively grasping the public mood, public opinion and trends of hot topics in various countries.

Based on social robot AI+ big data technology, we can deeply analyze the trend of various hot events, and realize the public sentiment deduction under the guidance of different public opinions at the technical level. This process is like a complex chess game in the virtual world. We use advanced algorithms and models to simulate public reactions under different public opinion environments, so as to more accurately predict the future trend of public opinion. By digging deeply into the information behind the data, we can discover the deep-seated social problems and people's demands hidden beneath the surface. This information can not only help us better understand public opinion, but also provide strong support for us to formulate more accurate and effective strategies. At the same time, by simulating people's feelings under different public opinion orientations, we can also better grasp the strategic choices and action directions, and ensure that our decisions can achieve the best results in the complex public opinion environment.

Actively participate in the confrontation and collision of different public opinions. In this process, social robots empower the weak and divide the various forces within each country. Through precise information transmission and publicity strategies, they give voice to vulnerable groups and help them gain more attention and support. At the same time, create opposition and check the forces inside opponents, and achieve balance and opposition in public opinion through skillful public opinion guidance. This kind of strategic participation not only helps to influence the situation on the battlefield, but also promotes peace and cooperation among countries. Through the efforts of social robots, we can see a more pluralistic, inclusive and balanced public opinion environment gradually taking shape. In this environment, forces of all parties can check and balance each other, develop together, and contribute to building a more harmonious and stable world order.

### 3.3 A Robust Strategic Offensive

Social robots exist in the digital public space, which has become an important digital physical environment for capital production, circulation, exchange, and consumption. The invasion of capital into the digital public space has led to the process of privatization and commercialization under neoliberal influences, and the digital public space has been fully integrated into the capitalist production and circulation system. In China, it is crucial to be vigilant against the infiltration of capital, especially local capital with overseas background, into the digital public space. The controller of the digital space can easily produce a large number of tweets and influence the ecological environment of public opinion with the help of accurate and efficient social robots. At the same time, under the trend of AI and algorithmic communication, the content and process of communication are gradually humanized, and machines can gradually replace humans as the main body of communication. Therefore, it is necessary to be vigilant that capital in China will eventually become the value standard of algorithmic information communication [21].

In other countries, capital with Chinese genes also plays a pivotal role, especially in the process of commercialization of digital public space. These capitals are not only committed

to promoting the prosperity of local businesses, but also actively seeking to play a greater strategic role in the capitalist business operation mechanism of marketing automation and information commercialization. In this process, the deployment of overseas social robots has become a key move. These robots not only have a high degree of intelligence and automation, but also can accurately grasp the trend of media opinion. Through clever strategies and means, they can subtly guide the direction of public opinion, making it more conducive to China's international image and interests. At critical moments, these social robots can also react quickly to interfere with other countries' malicious public opinion direction and prevent false accusations and smears against China. At the same time, they can also keenly find out the weak environment of hot events and big events, providing strong support and guarantee for China's public opinion strategy. In this way, the capital with Chinese genes has played a huge role in the overseas digital public space, providing the possibility for the realization of public opinion strategies such as "encircling the Wei and saving the zhao" and "replacing the pillar by stealing the beam". This not only helps to enhance China's international influence and voice, but also contributes to the construction of a more harmonious and stable international public opinion environment.

### 4. Summary

The Internet social media ecology has become a symbiotic state of "people + social robots", and the research and strategy implementation of social robots in some countries has been nearly 20 years. Social robots have gradually eliminated the sole subject position of human users in social media, and become an important participant in information content production, concept dissemination and meaning expression. As more and more social robots are active in social media, their role playing will not only affect the ecology of public opinion in social media, but also have an impact on users' offline cognition and concept. Facing the legions of social robots from other countries, China needs to be able to not only defend itself effectively, but also to be able to attack forcefully.

In the complicated new media era, the communication status quo and media

environment faced by audiences and media are like a misty jungle, full of unknowns and challenges. Although seemingly diverse voices emerge one after another, few can really be effectively expressed and widely heard. In this context, the existence and activities of social robots have become an important issue that must be paid close attention to. From the point of view of defense, it is necessary to be vigilant at all times to prevent the disorderly penetration of social robots. By using advanced AI technology to carefully screen the social accounts of the masses, it is possible to effectively identify and block those potentially malicious bot activities. At the same time, the government and relevant agencies should also issue corresponding rules and regulations to regulate the behavior of the media and prevent the infiltration of capital from other countries and improper operation of social robots. However, it is not enough to just stop at the defense level. It also needs to be proactive, by deploying social bots in other countries to take a more proactive role in shaping global opinion. By accurately grasping public sentiment and public opinion in other countries, we can have a deeper understanding of local social dynamics and people's needs, thus providing strong support for strategic decision-making. More importantly, social robots can be used to divide the public opinion camps of other countries, and gain more peace time for China's peaceful development and great rejuvenation through the strategy of strengthening the weak. In this process, we should not only pay attention to the voice of big countries, but also listen to the demands of small countries, and through smart public opinion guidance, let the world see a more authentic and diversified image of China. Ultimately, we should create a more open and inclusive space for world public opinion. In this space, all voices can be equally expressed and respected, and exchanges and understanding between countries can be deepened. Through such efforts, we will not only create a more favorable external environment for China's peaceful development and great rejuvenation, but also contribute China's wisdom and strength to the improvement of the global governance system and the building of a community with a shared future for mankind.

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