COVID-19 в Азии / COVID-19 in Asia

Coronavirus rumors in China: content, spread and control policy

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Abstract. Since the explosive outbreak of a novel coronavirus (now known as 2019-nCoV) in China's Hubei province, a large quantity of information on epidemic prevention and control has been disseminate rapidly. The extensive spread of fake Internet news has an extremely negative psychological impact on individuals and society, and slows down the fight against the epidemic. The concern about proliferation of misleading information, rumors and myths has caused governments across the world to institute various interventionist steps to stem their flow.

The article explores the rumor phenomenon, including the definition of the rumors and famous rumor spread models. The author uses Chinese "Jiazhen" platform (official online platform for releasing rumors) as a data resource to collect popular Chinese rumors on corona-virus epidemic, analyzes the main content, characteristics and reasons of rumor spread. In addition to it, the censorship policy of the Chinese government is discussed. China has one of the world's most restrictive media environments, relying on censorship to control information in the news, online, and on social media. China, with its authoritarian political system and stricter information control, has effectively restricted the circulation of fake news/rumors during COVID-19 outbreak.

During the crisis period, the authoritarian regime emphasizes 'social responsibility', 'public security' and 'social order' as rationale for censoring the information on social media platforms and the Chinese citizens are ready to cooperate. The articles explores the main mechanisms that were used to control the spreading of rumors, identifies their problems and opportunities.

Keywords: China, COVID-19, novel coronavirus, Internet rumors, rumor spread, rumor policy

Слухи о коронавирусе в Китае: содержание, распространение и политика сдерживания

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Резюме. После вспышки нового коронавируса борьба со слухами стала одной из основных проблем во всем мире. В статье исследуется феномен слухов, приводится научное определение термина, а также классические модели распространения слухов. Автор использует китайскую платформу «Цзячжэнь» (официальная онлайн-платформа для публикации слухов) в качестве информационного ресурса для сбора популярных китайских слухов, проводит анализ их содержания, а также причин распространения. Кроме того, исследуется цензурная политика правительства, которая позволила Китаю в короткие сроки решить проблему распространения фальшивых новостей/слухов.

Ключевые слова: Китай, COVID-19, новый коронавирус, интернет-слухи, распространение слухов, политика по контролю слухов

INTRODUCTION

In recent years, rumors are closely related to social networks. However, rumors have a history as long as human civilization. In Russia and Europe, rumors used to be called "canard". This statement comes from an article published in a French newspaper in 1776.

RUMOR DEFINITION AND RESEARCH BACKGROUND

The article suggested readers trying a new way of catching ducks: before hunting, you boil an acorn in the laxative medicine, tie a rope, and use it as a bait for ducks. The duck immediately begins to have diarrhea after

swallowing the bait. The acorn leaves the intestine with the duck's excreta, and is immediately eaten by another duck. In this way, 20 ducks can be caught on the rope.

Another theory holds that in the 18th century, some published humorous stories carried the letters N.T. (Latin *non testatum* -"unsubstantiated information"), and that in German N.T. was pronounced the same as "canard" (German *ente*).

Rumor is defined as "deliberately creating or spreading false information in social media in order to obtain financial or political benefits". For example, in 1835, the New York Sun newspaper published a series of articles on life on the moon in order to increase its circulation and "sink" competitors' publications. When deception was discovered, the newspaper managed to keep it's readers, as many competitors were no longer in the market. The event is known as the great Moon Hoax [3].

Rumors scientific studies have started in the 1940s. American psychologist and educator W.Allport is described as "father of rumors". In his book "The Psychology of Rumor", he defines rumor as "a kind of special statement which is usually spread among people in oral form, and there is no reliable proof standard at present" [1]. In addition, he and L.Postman, Psychology Instructor, both at Harvard University, put forward the formula of rumor spread, that is, R (Rumor) $= I$ (important) $* A$ (ambiguous). They think that the spread of rumors is directly proportional to the importance of the rumor related events and the fuzziness of the events. Later, the formula was supplemented : $R= I * A / C$, C is the critical ability of the public, which indicates that the spreading ability of rumors also depends on the critical ability of people. The more scientific knowledge the public has and the stronger the critical ability is, the less likely the rumor will be generated and spread, and vice versa [1].

NOVEL CORONAVIRUS RUMORS IN CHINA: MAIN CONTENT AND REASONS OF SPREAD

Since December 2019, a new type of coronavirus called novel coronavirus (2019-nCoV, or COVID-19) was identified in Wuhan, China. The COVID-19 has then rapidly spread to all over China and the world. It causes symptoms including fever, difficulty in breathing, cough, and invasive lesions on both lungs of the patients. According to the surveillance statistics reported by the Chinese government, by December 21, 2020, the number of confirmed infection cases increased to 50340 for Wuhan and 95901 for whole China, with 3869 and 4771 deaths respectively [5].

The novel coronavirus has changed the living habits of the world. China's 1.4 billion people were isolated at home, and real-world activities were suspended. The epidemic had stimulated a large number of new netizens. China has the world's largest Internet population, reaching 904 million with the Internet penetration of 64.5% by March 2020, up by 75.08 million and 4.9% higher than that at the end of 2018. There are 731 million online news consumers in China, with 726 million accessing news on their mobile devices [2]. Weibo (micro-blog) with 550 million and WeChat with 983 million users dominate the social media landscape in China, Tiktok, Kwai, QQ, etc. are popular as well [8].

In addition to causing human suffering, the current coronavirus outbreak has sparked rumors and conspiracy theories, mainly involving the outbreak situation, the source of disease infection, the isolation and management of epidemic situation, the methods of epidemic prevention, and the management of anti epidemic materials. In addition to informing citizens about how to minimize the risk of novel coronavirus, Chinese governments has been busy debunking false and misleading information distributed on private and public social networks in relation to COVID-19.

We use Chinese official "Jiazhen" platform (official online platform for releasing rumors) as a data resource to collect popular Chinese rumors on corona-virus epidemic, 537 rumors included life rumors, work and study rumors, entertainment rumors, medical rumors etc. [6].

During the epidemic period, the number of rumors about "preventive measures" reached 166, accounting for 31% of all rumors. Secondly, there were 59 rumors about "prevention and control measures", accounting for 11%. In addition, there were 53 cases of "infection risk" and "foreign rumors", accounting for 10% respectively. Finally, "experts/celebrities rumors", "epidemic progress", "life impact" and "epidemic truth" rumors also accounted for 9%, 7%, 5% and 4% respectively [6].

It can be seen that the rumors during the epidemic mainly focus on the prevention methods, prevention and control measures and infection risks, and these factors are related to the protection of life safety, which are the most concerned information of the people. Therefore, rumors have more room to spread in the areas that we are most concerned about.

According to the time axis of the rumors released, in the early stage of the epidemic (20.01.2020 - 29.01.2020), the key word of the rumors was "closing the city"; in the early stage (30.01.2020 - 18.02.2020), the key words of the rumor changed to "diagnosis, prevention, mask, disinfection, etc."; in the medium stage (19.03.2020 - 09.03.2020) the key words of the rumors were "opening school, diagnosis, overseas, etc."; in the middle and late stage (10.03.2020 - 31.03.2020), the key words of rumors were "opening school, diagnosis, overseas, etc."; in the middle

and late stage (10.03.2020 - present day), the key words of the rumors were the United States, Trump, overseas turmoil, and the delay of school start, etc.

Through the analysis, we found that the number of rumors is the most in the early and peak period of the epidemic. The daily average number of rumors in the early stage of the epidemic is 7.93, in the outbreak stage it is 9.77 messages per day, in the global pandemic stage is 2.67 messages per day.

Through the analysis of the rumors, it can be concluded that the reasons for the spread of the new coronavirus rumors in China and many other countries are the same. They are as follows:

a) The public's critical thinking is not strong. One of the reasons of epidemic rumors is that the public's critical ability is not strong enough. The weaker the public's critical ability is, the more difficult it is to identify the true and false information. People are more likely to blindly believe false information. There are two factors that affect the public critical ability. On the one hand, it is the scientific and cultural literacy. Sudden epidemic events involve professional knowledge. People who have some medical knowledge often have a higher level of judgment on the authenticity of relevant information. The other is the psychological factor. In the face of danger and uncertainty, it is difficult for an individual to make a correct judgment on the information received.

For example, after infectious disease expert Dr Li Lanjuan (Chinese infectious disease expert, academician from Zhejiang province) said on Chinese state television that pets should be quarantined if they have been in contact with suspected patients infected with the novel coronavirus [6]. Chinese social media has been awash with untrue claims about disposing pets in order to prevent infection. While the World Health Organization (WHO) has attempted to quash the false claims that animals can transmit the novel coronavirus, Chinese citizens in multiple cities have already begun to dispose of dogs and cats, and cull other other house pets. The fear of getting the disease was strong enough to make Chinese people believe this rumor and spread it around, causing irreversible consequences.

b) The government's credibility is insufficient. The credibility of the government reflects the public satisfaction. The higher the public's satisfaction with the government, the greater the appeal and influence of the government, the more actively the public will cooperate with the government's work. On the contrary, the weaker the credibility of the government is, the more distrustful the public will be. As a result, whether the government tells the truth or lies, it will be criticized by the public. The lack of government credibility will not only accelerate the spread of rumors, but it can affect the effect of rumor governance. Even if the government announces the truth through the official media in time, the public will be skeptical. For example, many Chinese were skeptical of government coronavirus figures, they assumed authorities were trying to conceal the extent of the threat. It created a number of rumors on shutting down such cities as Shanghai, Guangzhou, Shengzhen, Chengdu etc. due to coronavirus epidemic.

c) Government information disclosure is not timely. In the era of mass media, the spread of Internet rumors has become rapid and uncontrollable. Once a rumor appears, if it is not dealt with and clarified in time, it is very easy to have a significant impact. Only when the government publicizes the information in time, the rumors can be eliminated quickly. The untimely disclosure of government information provides an opportunity for rumors to spread.

d) Business interest. At present, rumors are more and more closely related to economic activities. In order to expand market share and satisfy their own interests, some rumor makers ignored social morality and even violated the law. For example, some distributors spread the rumor that taking such Chinese traditional remedies as agilawood, ginger, fevervine (Paederia) etc. can prevent people from getting coronavirus infection.

e) People's curiosity. People tend to be interested in some uncertain new information or unconfirmed information related to their life, and unconsciously spread it widely.

NOVEL CORONAVIRUS RUMOR CONTROL POLICY IN CHINA

China has one of the world's most restrictive media environments, relying on censorship to control information in the news, online, and on social media. According to the 2020 World Press Freedom Index, compiled by Reporters Without Borders, China is the world's biggest jailer of journalists, holding around 100 in detention [7].

The Chinese government has taken a number of 'anti-online-rumor' measures during COVID-19. The national and local rumor-refuting platforms have set-up dedicated rumor-refuting sections. For example, the local rumor-refuting platforms in Beijing had exposed 600 rumors about COVID-19 by 24 May and also clarified corresponding truth for all misinformation [9].

Since late January 2020, popular social media platforms, such as WeChat and Tiktok, have initiated special rectification campaigns against COVID-19-related rumors. Fake news has been swiftly removed and accounts that spread misinformation shut down. Major news apps such as Xinhua News, Tencent News and WeChat public accounts of the Communist Youth League Central Committee as well as Sina Weibo provide dedicated sections for rumor detection and fact checking.

Various local governments, with the support of propaganda department, health commission and police bureau, have initiated anti-rumor campaign to combat locally relevant fake news [8].

Rumor-mongers, who spread fake news on social media, have been detained by local police in accordance with the Security Administration Punishment Law. In the beginning of February 2020 more than 250 people have been punished in China for spreading rumors related to the novel coronavirus, and its undermining trust in official sources [10].

The news of punishing rumor-mongers has been widely circulated on social media to deter others. Propaganda banners, 'Do not produce, circulate or believe rumors and be law-abiding citizens', have been plastered all over the cities and villages. Last but not the least, the central and various local governments along with state media proactively use social media to feed the public with timely and authoritative official news information. The censorship policy of the Chinese government and the methods used to control the spreading of new coronavirus rumors are shown in *Table*.

Table. **Novel coronavirus rumor control mechanisms in China**

N	Mechanisms	Explanation
1	Government agencies involved in Internet Governance	The Ministry of Public Security (MPS) of the People's Republic of China carries out cybersecurity supervision and inspections by the police. The Cybersecurity Law requires network operators to provide technical support and assistance to public security organs (the police) and national security organs that are safeguarding national security and investigating criminal activities in accordance with the Law. The Regulation contains specific measures the police may take in the network security inspections, including physically entering the business sites, machine rooms, and offices; requiring managers or network safety personnel to explain items that are under inspection; reviewing and copying relevant information; and checking how technical measures to safeguard network and information security are running.
2	Civil liability	The Cybersecurity Law of the People's Republic of China states that whoever creates or spreads rumors shall be detained for not less than 5 days but not more than 10 days and may also be fined not more than 500 yuan (approximately $76.5); if the circumstances are relatively minor, he shall be detained for not more than 5 days or fined not more than 500 yuan.
3	Criminal responsibility	The Law states that, if a post is tagged as a rumor and it is retweeted more than 500 times and/or viewed/clicked more than 5000 times, the originator of the post can be charged and sentenced to imprisonment for up to 3 years. If serious consequences are caused, originator of the post can be sentenced to fixed-term imprisonment of not less than 3 years but not more than 7 years. The penalty also includes limiting access to the website.
4	Limit website access	The government blocks website content and monitors Internet access. Methods used to block websites and pages include DNS spoofing, blocking access to IP addresses, analyzing and filtering URLs, packet inspection, and resetting connections.
5	Practice of network real name system	All the old users who registered before should submit their real name ID information (national identity number or passport number). Otherwise, they might not be possible to post, comment, and retweet. All the new users would be required to submit their real name ID information when registered. Otherwise, they could not register successfully. This users' real name information will not be published on their profile but saved in the system.
6	Official information release mechanism	Most official media and government departments launched official micro-blogs, websites or created official accounts in network; an official platform for releasing rumors was launched as well (较真查证平台).
7	Automatic rumor detection systems	Many efforts have been taken to defeat online rumors automatically by mining the rich content provided on the open network with machine learning techniques. Most rumor detection methods can be categorized in three paradigms: the hand-crafted features based classification approaches, the propagation-based approaches and the neural networks approaches.
8	Community restriction and supervision	Based on the community reporting and monitoring system, many platforms introduced a community Code of Practice (CoP) and developed its own official rumor-busting service platform to punish users who violate its rules. The people's police is in the supervision of public information network security as well.
9	The national platform of rumor refutation	Chinese Ministry of Public Security jointly launched the online platform for rumor refutation (辟谣平台). It observes the online rumors' related issues and releases reports about the work on verifying and refuting rumors. The platform allows netizens to provide links or upload screen-shots with the location of the alleged false information on any social media platforms.
10	Propaganda	'Do not produce, circulate or believe rumors and be law-abiding citizens'

Source: compiled by the author.

Due to China's strong control and complicated censorship of the Internet and social media, it is ranked 177th out of 180 countries in the World Press Freedom index [7]. However, China, with its authoritarian political system and stricter information control, has effectively restricted the circulation of fake news/rumors during COVID-19 outbreak.

According to the number of rumors released by "Jiaozhen" platform, January 21, 2020 the number of rumors, information released increased to 7. Since then, the amount of rumors information has been on the rise (7 messages per day). It can be seen that January 21 was a turning point for the sudden increase in the number of epidemic rumors. Then, with the gradual deepening of the public's understanding of the new coronavirus, the number of rumors received from various channels gradually decreased to 1-2 messages per day.

Nevertheless, Chinese government still have some problems in dealing with rumor spread and Internet security. The problems of Chinese rumor control policy are as follows:

a) The dilemma of legal system. Chinese relevant legislation on Internet rumors is still in the exploratory stage, the legal regulation is still to be improved, and the legislative level is low. The laws and regulations for Internet rumors are too general and conceptualized, and are not practical. Laws and regulations on Internet rumors are not detailed enough, and need to be further improved in the future.

b) The supervision system of network platform. With the advent of AI Artificial Intelligence era, it may even be difficult to determine whether the user at the other end of the app is a real person or an intelligent robot. Internet rumor makers make up and spread rumors under the identity of others. Take Wechat and Weibo as an example. Although the platform requires users to provide mobile phone number for account binding to obtain the user's real information when registering Wechat and Weibo, there are still situations, when some users steal other people's social accounts, and at the same time, there are also cases of buying and selling social accounts. This kind of behavior makes its difficult for the public security to confirm the identity of the rumor. Internet rumor makers hide their personal identity and location.

In order to protect the flow of information, China controls the information on the Internet and restricts the access to some websites. This policy is not effective, because VPN (Virtual Private Network) users can break the restrictions, and the more restricted the website is, the higher it's popularity.

CONCLUSION

After the outbreak of the epidemic, the public all over the world panic and fear. If the official media is silent, rumors surely enter. The rampant rumors during the epidemic situation do not only hinder the process of epidemic prevention and control, but also cause social disorder and bring immeasurable consequences.

There are many kinds of online rumors in China during the epidemic period. The main contents include the outbreak situation of the epidemic situation, the source of disease infection, the isolation and management of epidemic situation, the methods of epidemic prevention, and the management of anti- epidemic materials. In order to let the rumors get better governance, we must rely on the joint efforts of the government and the people.

Nowadays, the Chinese government has improved the transparency of information, launched a website to fight the misinformation, improved the legal system, etc. China, with its authoritarian political system and stricter information control, has effectively restricted the circulation of fake news/rumors during COVID-19 outbreak, however, there are still some problems, that slow down the governance of rumors. Nevertheless, China appears to have gained the upper hand in its struggle against COVID-19. China's experience in containing the spread of the new coronavirus and rumors could serve as a lesson for other countries now facing the COVID-19 pandemic.

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