



The Mechanism and Phenomenon Analysis of the Public Opinion Fermentation of Social Events in Weibo Under the Echo Effect

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Abstract. With the rapid development of network media, Weibo and other social platforms have become the mainstream social software for most people. More and more people tend to express their opinions wantonly on Weibo, and their opinions tend to be irrational, which leads to cyber violence. More and more netizens begin to step into the trap of “echo cavity effect” unintentionally, ignoring and resisting different opinions, and holding together with those who share the same opinions, thus evolving into the phenomenon of group polarization. The “Tangshan Beating” incident in June 2022 triggered many netizens’ denunciation and discussion of the perpetrators, and at the same time led to deeper social problems.

Keywords: Social media · Echo cavity effect · Group polarization effect · Opinion Leaders · Weibo platform

1 Basic Introduction

1.1 Echo Cavity Effect

1.1.1 Basic Concepts

The echo chamber effect was proposed by psychologist Cass Sunstein. In a relatively closed environment, some voices with similar opinions are constantly repeated and repeated in exaggerated or other distorted forms, which makes most people in a relatively closed environment think that these distorted stories are the whole truth [1].

While network technology brings convenience, it also invisibly creates a closed and highly homogeneous “echo chamber” for people. When netizens presuppose a certain point of view and topic to interact in the network, netizens tend to choose the information field that they identify with and enjoy, and eventually form a small network group with the consistency of the internal environment, which is constantly repeated and strengthened by the same information, thus making the network group cognitive complacency and even paranoid polarization [2]. In the social media platform, the structure of community and circle makes the echo cavity effect more obvious.

1.1.2 Formation and Characteristics of Echo Cavity Effect

Isolation, while the audience selectively contacts information and the platform provides personalized information recommendation, the information screening behavior actually leads to audience stratification, accelerates the fragmentation of the audience, and forms a relatively closed “echo cavity”.

Polarization of opinions and convergence of views, “echo cavity” is mainly the repetition of similar views and homogeneous information, which solidifies members’ cognition and leads to the decline of diversity of internal discussions. The tendency of excessive homogenization is accompanied by exclusive group identity, resulting in polarization and emotionality of opinions, while under the influence of strong group identity, members of echo cavity will have convergence of views in discussing related issues.

1.2 Public Opinion

1.2.1 Basic Concepts

Public opinion is the sum of people’s views, opinions and emotional expressions on society and various phenomena and problems. Its consistency, intensity and persistence have a certain impact on the development of society and related events. Public opinion has the characteristics of publicity, openness, urgency, scope and evaluation. Public opinion supervises and restricts state power and government behavior, encourages and restrains people’s behavior. However, with the advent of the new media era, public opinion and the dissemination and collection of public opinion are becoming easier and easier. At the same time, there are also some problems caused by the uncontrolled supervision of public opinion [3].

1.2.2 Characteristics of Public Opinion

The speed of production, fermentation and change is relatively slow, with hysteresis; The event information caused by the crisis is relatively more concentrated and accurate; Due to slow transmission and information lag, the effect of communication is not timely, resulting in relatively small impact and harm; It is difficult to form two-way communication among the people [4]. On the other hand, it is also difficult for other social organizations such as the government to understand public opinion.

1.2.3 The Trend of Excessive Homogenization

With the continuous development of society, the problem of homogenization has gradually become a mainstream trend, especially in the news media industry. With the development of news media and the increasingly fierce competition, the homogenization of news has become a common problem. Fundamentally speaking, the homogenization of news is a large number of copies and processing of news in the process of dissemination, resulting in duplication and singleness of news content. With the intensification of competition, the reduction of market share, especially the advent of the Internet age, news reports show a high degree of identity. Homogenization is a necessity, which has a

great impact on the quality of news communication. This not only brings damage to the media itself and the audience, but also brings adverse effects to the healthy development of the news media.

1.2.4 Echo Cavity Effect

Echo cavity effect was first proposed by Hu Yong in *Business Weekly* in 2008, but at that time he did not apply the concept of echo cavity to the field of communication, but as a theory of management. He pointed out that the echo cavity effect is the expansion and development of the silent spiral theory. The vortex of silence is believed to be due to “ignorance, indifference, unwillingness to confront groups and fear of rejection”, which can be avoided by the Internet, but it can not prevent the formation of silence. In the field of news communication, the echo cavity effect means that in a relatively closed space, people with the same views will appear repeatedly in exaggerated or other distorted ways, so that most people who are locked in a relatively closed environment will feel that those distorted stories are true. In the era of “everyone is a communicator”, the equality of expressing opinions has never come. When people express their views, they tend to communicate with similar people, and these people who share the same views form a group. Therefore, the Internet is not a shortcut for all kinds of opinions to collide with each other and eventually lead to the truth. Even in the Internet world, people will get into trouble. This is the echo chamber effect.

2 Tangshan Beating Incident

At about 2:40 on June 10, 2022, when Chen Mouzhi, Ma Mouqi, Liu Mou1, Chen Mouliang, Li Mou1, Shen Moujun, Li Mourui and Liu Mou2, Jiang Mouping (two people were not prosecuted) were eating at a barbecue restaurant in Lubei District of Tangshan City, Chen Mouzhi harassed Wang Moumou, who was eating with three colleagues in the restaurant, and was rejected and reprimanded by Wang Moumou. Chen Mouzhi then beat him, the latter two resisted, and the latter perpetrators jointly hit or kicked four victims with chairs and bottles in the barbecue shop, on the sidewalk outside the shop and in the small alley beside the shop. After the incident, four victims were sent to the hospital by 120 ambulances. Among them, Li Mou and yuan Mou left on their own after the hospital examination without staying in hospital for treatment; Wang Mou and Liu Mou were hospitalized in the general ward for treatment and discharged on July 1. According to forensic identification, the victims Wang Mou-mou and Liu Mou-mou constituted the second grade of minor injury, while Li Mou-mo and yuan Mou-mo constituted minor injury. The incident had a very bad social impact [5].

3 Follow-Up Interviews and Progress

3.1 Ms. Zhou (No. 116 of Weibo’s Hot Talk List)

When the incident happened, Ms. Zhou ate in the store, and she was in the east corner table. She personally witnessed the first half of the incident and the process.

Ms. Zhou said: After the man entered the hot pot restaurant door, he insulted and offended the woman in terms of words, and went to his friend's side to say two sentences. He went to the woman to touch her back and said more disgusting words. After being stopped and strictly refused by the woman, there was a beating scene. Ms. Zhou didn't know what contradiction there was between the man and the woman, just like looking for trouble on purpose. The inexplicable action triggered the whole incident.

3.2 Victim Lady (No. 2 of Weibo's Hot Talk List)

The victim claimed that she was not interviewed at first because the man told the victim lady not to call the police before he left after beating her violently. There was someone behind him who would kill her at any time if anything happened, so the victim lady was scared on the one hand and beaten on the other, and didn't have the courage to stand up to the public opinion on the Internet and the evaluation of all kinds of people.

What happened was that she was having dinner with three friends in a hot pot restaurant. Although the man came in to harass her, she was picked up and beaten by the man after he refused and pushed her away. The beating process was almost consistent with the videos and comments that people watched on the Internet. The victim woman stressed that she did not know this violent man before, and she did not understand why the man harassed her, let alone why she was beaten. Even her three friends were injured to varying degrees. While other companions didn't choose to speak out, but hid silently. They were afraid that they would be pointed by their friends around them because of such things, which would make their elders lift their heads. They were also afraid that they would be subjected to cyber violence by some abnormal people in the network, thus receiving secondary injuries.

Through these two, we can see that the victims are forced by public opinion to stand up and speak out, they clearly know the power of public opinion and the irreparable consequences it may bring to themselves, which also corresponds to the characteristics of public opinion evaluation. This paper is based on the echo cavity effect, through the analysis of Tangshan beating time on the fermentation mechanism of public opinion, to explore the various factors that affect public opinion in the beating event, so as to play a reference role for the control and guidance of public opinion in the future.

4 Analysis and Coding Operation of Tangshan Beating Incident

4.1 The Process of Case Analysis

First, according to Table 1, using the open coding form, this process will re-code the collected information and materials, and determine the concept and category of each item, among which the determination comes from many aspects, including previous literature, original texts discussed in online communities such as Weibo Forum, and some results summarized by some researchers are shown in the Table 1.

Second, spindle coding, which associates some categories and concepts obtained in open coding to obtain the relevant parts, is conducive to grasping the whole thing and preparing for the next step. The process is shown in Table 2.

4.2 Analysis on the Fermentation Mechanism of Public Opinion Evolution

4.2.1 The Official Information Release Has an Impact on the Fermentation of Network Public Opinion with Sudden Factors

The government not only plays a role in reporting the complete truth of the event and safeguarding the public rights and social life order, but also acts as a “gatekeeper” to control and grasp public opinion. In the period of rapid development and dissemination of public opinion, the government’s official information plays a very strong guiding role in the change of public opinion. In the early days after the official release of information, many media, parties and ordinary netizens will express their opinions on the Internet or in the communication community, often with their own special attitudes. Most of the official information is neutral, so there are some differences between the two sides, which may enhance the fermentation speed and development direction of public opinion more or less.

4.2.2 The Change of Public Opinion Caused by the Motivation of Behavior

From the perspective of the government, when public opinion events gradually become uncontrollable, in order to control the overall trend of the event and not to think of the direction of deterioration, the government often uses some special ways to stop the overall public opinion, including deleting some hot comments, deleting some provocative

Table 1. Open coding table

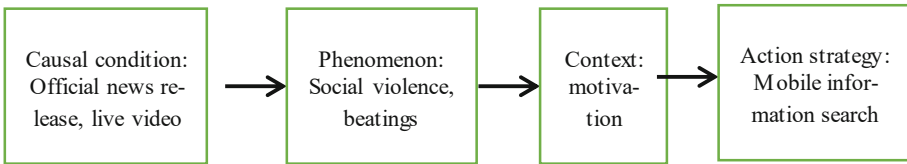
Original text of Weibo	conceptualize	Categorization	Category property	Dimension of category
The girl who was beaten in Tangshan was seriously injured, and her scalp had been knocked off a large piece. Maybe her brain nerve had been damaged, and her face and mouth had been stitched, almost reaching the point of disfigurement! Being hit by a girl on the market ## Tangshan Beating Event ## Tangshan Barbecue Shop Beating People #	visual impact	Live scene	Severity	Serious Generally serious not serious

(continued)

Table 1. (continued)

Original text of Weibo	conceptualize	Categorization	Category property	Dimension of category
Imagine if # Tangshan Beating Incident # had a complete ending. Will there be fewer such things? A few months have passed # The latest situation of the girl who was beaten in Tangshan BBQ # and there is no official notification. Instead of minimizing the treatment of this vicious social incident, it is better to publicly deal with the perpetrators and see who dares to do so in the future.	Anger	Emotional state of mind	attitude	Negative positive

Table 2. Main axis coding



answers, making some neutral statements, etc. Reasonably avoid some rumors or excited statements, and pass more positive content.

From the perspective of network media, it can be divided into traditional media organizations or generated by relying on the network, such as various newspapers and news organizations, and some personal ones, such as freelance editors and video bloggers. Many of them have strong credibility. What they often want is to attract the public's attention and gain more popularity. Therefore, in the Tangshan incident, many opinion leaders came out to speak and strongly attacked from the perspective of most people.

Some words such as “scum” and “scum” are used to enhance people’s attention [6]. In some cases, it is also called for the intense language such as “scum” and “scum” to attract the attention of some Internet users with unstable emotions. In most cases, many people will not experience or see the social events like “Tangshan beating incident”. However, in this sudden situation, people tend to take the discussion of this incident as an opportunity to express their own views, reflect their personal values and safeguard their rights and interests. They will also express their views because of empathy and some sympathy. Of course, some people will express their inner dissatisfaction and emotions through the Internet, and some netizens will also publish some emotional remarks and rumors to try to change the minds of the rest of the followers for the so-called innovative speech.

4.2.3 The Change of Weibo Public Opinion Brought by Information Cocoon Room

The phenomenon of intra group polarization in public social software like Weibo is often caused by psychological means and factors, and the relevant connection is generally the irrationality of individuals and the common self-esteem of groups.

The information cocoon room characteristics of Weibo itself will lead to the whole incident of beating people in Tangshan. Many people, including some professional professors and experts, only explain the problems and negative effects of these perpetrators from the perspective of the criminal law. They are more likely to do a legal science popularization, Many of the so-called opinion leaders will post a certain section of the criminal law at the bottom of the post to confirm their profession. In addition, these violent personnel will face legal responsibility and punishment measures to arouse people’s resonance, and doubt and aggravate the impact of the judgment of the law.

But most of the time, we don’t observe from an onlooker’s point of view. It is not enough to do a simple qualitative research, and a part of quantitative part should be needed. Most people tend to link theory with reality to draw relevant conclusions simply, but this lacks the content of empirical part.

Due to the information cocoon room and echo cavity effect, people’s speech is relatively more concentrated, which is called assimilation. At this time, a small part of other voices and opinions will be swallowed up by the information cocoon room, while the public, that is, the netizens in the echo cavity effect, will refute views that are contrary to their own positions and information and opinion leaders.

5 Conclusion

Under the shadow of information cocoon and echo cavity effect, people often lose the right to control and accept the evolution and fermentation of these large-scale public opinions. The public, that is, the netizens in the echo cavity effect, will indiscriminately refute the views that are contrary to their own positions and information and opinion leaders. In the Tangshan beating incident, people have lost their normal and rational judgment of things under the echo cavity effect, thus blindly following the trend without knowing the course and results of the incident, such as the false statement that the victim thought he had died because he did not speak out at that time, which will further contribute to the event. Let people lose the ability to judge and let the whole event into an

uncontrollable state. It is hoped that through the analysis and exploration of this paper, people can keep rational in the face of such time, put an end to the occurrence of echo cavity effect, and make a correct judgment on the event itself. At the same time, it can also provide reference for the correct guidance of the media in public opinion.

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