Chinese Government, Weibo, Crisis Management

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ABSTRACT

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The thesis investigated how the Chinese government response to social crisis by participating in China’s micro-blogging (Weibo in Chinese). Wenzhou high-speed train crash in 2011 was proved to be one of the most influential social emergencies in China, and a total of 582 posts posted by government in two weeks after the crash were coded. The results of the content analysis showed that a variety of frames were used by government. A higher frequency of reposts or comments was found by posts with photos or delivered in formal tone. Meanwhile, followers were more interested in messages posted by Wenzhou city government, of which were more familiar with the case. On the other hand however, post contents did not significantly affect follower’s tendency of reposting or comment. The research helped to understand and clarify effective ways to handle crisis management and provided directions for future study.
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CHAPTER 1: INTRODUCTION

Micro-blogging has grown rapidly since 2006 when the first micro-blogging site, Twitter, was created in the U.S.\textsuperscript{1}. Because Twitter has at times been blocked in China, local micro-blogging, or \textit{Weibo}, was developed and has increased in numbers considerably since 2007\textsuperscript{2}. By 2011, about 250 million, approximately one in five Chinese citizens or one in two Chinese netizens, used Weibo\textsuperscript{3}. According to Chinese Academy of Social Science (CASS) research in 2009, Weibo has become the “most powerful medium in China” as its users and participants “link closely to social affairs”\textsuperscript{5}.

Meanwhile, the Chinese government has been concerned much more about public opinion, especially opinions online\textsuperscript{6}, and about 14,000 national and district administrations had created accounts on Sina Weibo (the most popular Weibo website in China) by 2011\textsuperscript{7}. Different levels of administration use Weibo to release statements, news and, communicate with the common people, and many social emergencies have been managed through Weibo in the past three years\textsuperscript{8}. Nevertheless whether the government has used Weibo in an effective way in dealing with social emergencies remains a question.

This study aims to find out how the Chinese government uses Weibo to handle social affairs, especially emergencies that attract the most public attention. I attempt to answer this question using framing and electronic word of mouth (eWOM) theories. Both

\textsuperscript{1} Yu Guoming\textsuperscript{1} (2011), \textit{New Perspectives on News and Communication}, Xinhua Publishing, 89
\textsuperscript{2} Fanfou was believed as the first micro-blogging created in China, Yu Guoming\textsuperscript{1}, 94
\textsuperscript{3} IRI Consulting Group, (2012, March 7), \textit{China Online Public Sentiment Report 2011}
\textsuperscript{4} China Internet Network Information Center (CNNIC) (2012, January 16), \textit{Statistical Report on Internet Development in China}
\textsuperscript{5} CASS, (2009), \textit{Blue Book of China’s Society 2009}, Social Science Academic Press
\textsuperscript{6} Wang Chen (2011, October 13), \textit{Encouraging Administrations and Officials to Actively Use Weibo}
\textsuperscript{7} IRI (2012, March 7), \textit{China Online Public Sentiment Report 2011}
\textsuperscript{8} Guo Liang (2010), \textit{What Weibo Bring to Us}, China Industry and Commerce Association Press, 71
theories are included in my study because framing theory shows “how frames become embedded within and make themselves manifest in a text”\(^9\), whereas micro-blogging, as a type of eWOM, can encourage more people to get involved in certain activities\(^{10}\). The study will answer what frames government posts use and what elements affect follower involvement. A content analysis will focus on a 2011 high speed train crash in China because the case has become the most socially influential incident in China by far. More than 9 million Weibo were posted within five days after the incident\(^{11}\).

The findings will be valuable for studies about government use of online communication as well as for media researchers who are interested in computer-mediated communication. This study will help to identify how governments can get more involved in the Internet era to communicate with the public about social emergencies. Furthermore, criteria that suggest how to engage will also be presented so that government administrators can make better use of online media and Weibo.


\(^{10}\) Thorson K. S., Rodgers S.(2006), Relationships between Blogs as eWOM and Interactivity, Perceived Interactivity, and Parasocial Interaction, 40

\(^{11}\) IRI\(^2\), (2011, July 28), Yongwen Railway Crash became the most influential incident
CHAPTER 2: LITERATURE REVIEW

An Overview of Micro-Blogging and Weibo in China

Twitter, as the prototype of micro-blogging, was launched in October 2006 and now has more than 3 million user accounts\textsuperscript{12}. It allows users to share short messages of up to 140 characters. Some extra elements such as pictures, URL links and hashtags can also be included in messages. Users can retweet or comment on any single tweet, or follow any account they are interested in. They can also create a list based on some commonality so that others who click the list will find a stream of tweets about common interests or topics. Tweets can be searched and shared by anyone with two exceptions: the user can either block the function or send private messages directly to specific individuals\textsuperscript{13}.

With Twitter in mind, Yu divided the core ideas of micro-blogging into three categories: instantaneity, publicness, and dynamic\textsuperscript{14}. When compared to lengthy and systematic information which requires a longer time to gather and arrange, fractional messages, such as those on Twitter, can be created and delivered instantly through micro blogs. Besides, as micro-blogging is more technically accessible than other media, information was much easier to update from anywhere and at anytime. As an open information sharing platform, almost all messages and interactions on Weibo can be seen by everyone. Consequently, users may set up personal and sustainable information access channels based on their interests. Moreover, as messages are continually updated,

\textsuperscript{13} Parmelee J. H., Bichard S. L.(2012), Politics and the Twitter Revolution: How Tweets Influence the Relationship between Political Leaders an the Public, Lexingto Books, p5
\textsuperscript{14} Yu Guoming et al. (2011), Micro-Blogging: Yi Zhong Xin Chuan Bo Xing Tai De Kao Cha. People Daily Press, p5-6
reflections and the influence of personal attitudes may change accordingly. In other words, the micro-blogging atmosphere is a complicated and unique system for spreading text and messages.

As Twitter is blocked in mainland China, local micro-blogging sites started in May 2007 when Fanfou launched. Compared to Twitter, Fanfou and other local micro-blogging sites (or Weibo in Chinese) offer a more convenient way to edit instant online messages in Chinese. Actually Fanfou saw considerable growth in user account numbers but unfortunately closed in late 2009 due to political taboos. The second wave of Weibo was ushered in by Sina, Tecent and other more powerful commercial website operations who managed to balance the users’ request of relatively free speech and the supervision of online expression in China. Consequently 2010 has been called “the first year of the Weibo era” when many commercial websites started participating in a Weibo service.

By 2011, nearly half (48.7%) of Chinese netizens had created their own Weibo accounts, and many more people had become familiar with the medium. Today many Chinese use the channel to present themselves as well as to keep pace with society, and Weibo had become the second largest news source by 2011. Weibo has the advantage of delivering messages faster than any other medium and thus, the service has started to play a considerable role in managing social emergencies.

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15 Fanfou presented an instant picture of disturbance in Urumqi, Xinjiang Province in July 2009 and suspended service because of “technical problems” afterwards and closed three month later. Guo Liang (2010), What Weibo Bring to Us, China Industry and Commerce Association Press, p6
16 Guo Liang, What Weibo Brings to Us (微博将带来什么), China Industry and Commerce Association Press, p8
18 IRI (2011, October 20), China Online Public Sentiment Report: Third Season of 2011
Popularity of Sina Weibo and Government Participation

As the first of several commercial websites that provided Weibo service\(^{19}\), Sina Weibo has the largest number (57%) of users in China since the first quarter of 2011\(^{20}\). In addition to personal accounts, 27,655 government accounts had been created on Sina by 2011, 5822 (21.05%) of which are police administrations. Others include transportation, medical care, legislation, and travel organizations.\(^{21}\)

Guo identified four government departments that take advantage of the ability to communicate with the public through Weibo\(^{22}\): statement release departments such as the news release office; social emergency handling departments such as the ministry of health; policy making departments and public service departments. It makes sense then that the largest percentages of administrative Weibo accounts fall into the police category, because it supports both emergency and public service functions.

Considering the general characteristics of micro-blogging, some aspects cannot be ignored when referring to government participation. For instance, rumors are more easily spread on Weibo, which in return increases the difficulty for the government to clarify the truth. Catharsis can be amplified and affect people’s judgment. Besides, opinion leaders such as scholars, journalists, and celebrities are more decentralized, and the government may lose control of public opinion under some circumstances. Furthermore,

\(^{19}\) Other commercial Weibo service basically include Tencent, Sohu, 163, Hexun etc.
\(^{20}\) Sina technology (2011, June 29), Investigation Shows that Sina Share 57% of all Weibo Users in China
\(^{21}\) IRI (2012), China Online Public Sentiment Report 2011
\(^{22}\) Guo Liang (2010), What Weibo Bring to Us, China Industry and Commerce Association Press, p71
line searches can also provide both the government and the public more sources about their concerns\textsuperscript{23}.

Prior studies have suggested that micro-blogs can be effective information distribution channels for the government and officials\textsuperscript{24}. Bivins suggested that micro-blogging posts reflect timely and often event-specific information\textsuperscript{25}. They are largely opportunistic, relating to a specific period of observance for a health issue, seasonal issues, emerging research, and in response to crises. The inclusion of event-specific and timely information reflects journalistic news values and is more likely to be engaging for audiences\textsuperscript{26}. US Congress members, for instance, use Twitter to disperse information, particularly links to news articles about themselves and to their blog posts, and to report on their daily activities\textsuperscript{27}. Cho and Park’ study also showed that one of South Korea’s government organizations, Ministry for Food, Agriculture, Forestry and Fisheries (MFAFF), use its Twitter account to interact with the public and release government statements\textsuperscript{28}.

Nevertheless limitations of governmental use of micro-blogging as a mutual communication channel exist, even though micro-blogging provides the platform to facilitate risk management. A study about the Romanian presidential campaign in 2009 indicates that lower frequency of posting and absence of linking to other sources through

\textsuperscript{23} Li Weining, Dou Hanzhang (2012), Wei Shidai Wei Chuli, The Central Party School Publishing House, p3-6
\textsuperscript{26} Golbeck J, Grimes M. J., Rogers A. (2010), Twitter Use by the U.S. Congress, Journal of the American Society for Information Science and Technology, vol61 issue8, pg1612-1621
\textsuperscript{27} Seong Eun Cho, Han Woo Park (2012), Government organizations' innovative use of the Internet: The case of the Twitter activity of South Korea's Ministry for Food, Agriculture, Forestry and Fisheries, Scientometrics, p9
hyperlinks can negatively affect public engagement\textsuperscript{29}. However, it was hard to figure out whether findings from the US and other capitalistic countries\textsuperscript{30} can also apply to Weibo in China because of the nation’s unique media-state relation.

Government and Media Relation in China: A Theoretical Approach

Both western and Chinese scholars have studied the relations between the state and the press. Four theories of the press were developed in the 1950s, for instance, to answer the question of “why does [the press] apparently serve different purposes and appear in widely different forms in different countries?”\textsuperscript{31} The Marxist theory explained what can happen when the presses is directed by large commercial corporations under a market economy\textsuperscript{32}, and when the press progressively covers issues more neutrally instead of with a palpable political stance\textsuperscript{33}\textsuperscript{34}. On the other hand, some Chinese scholars explained that the reform of Chinese media and state-press relations was the “mechanism of transformation”\textsuperscript{35}, and the press has cooperated to restructure expression under government restrictions. Although micro-blogging (Weibo) is not classified as traditional media, the theoretical studies of state-press relations can be briefly introduced to

\textsuperscript{31} Siebert F. B., Peterson T., Schramm W. (1956), \textit{Four Theories of the Press}, University of Illinois Press, p1
\textsuperscript{32} Herman E. S., Chomsky N. (1988), \textit{Manufacturing Consent: The Political Economy of the Mass Media}. Pantheon Books
\textsuperscript{33} Ryan C. (1991), \textit{Prime Time Activism}, South End Press
\textsuperscript{34} Soley L. C. (1992), \textit{The News Shapers: the Sources and the Movement for the Environmental Justice}. University of Minnesota Press
\textsuperscript{35} Pan Zhongdang, Chen Taowen (2004), Case Studies of Media’s Structural Transformation in China (从媒体范例评判看中国大陆新闻改革中的范式转变), \textit{Journalism Study}, vol. 78
understand how an ongoing Weibo, such as Sina, finds the balance between users’ request for relatively free speech and the supervision of online expression.

The four theories of the press include authoritarian, libertarian, social responsibility, and soviet Communist. As the last historical theory can only apply to states such as the Soviet Union where a planned rather than a market economy exists, it does not apply to the environment in China today. Of the other three approaches, the authoritarian theory states that the press is controlled in its function and operation by an organized society through government\textsuperscript{36}. The libertarian theory agrees that the prime function of society, as well as media, is to advance an individual’s interest, and the state should help to increase an individual’s awareness of his own potential\textsuperscript{37}. The social responsibility theory explains that the press, which “enjoys a privileged position under government”\textsuperscript{38}, was responsible to carry out certain moral functions for society.

The four theories, especially the first three, illustrate different possible models of state-media-society relations between “free and controlled media systems”\textsuperscript{39}, and may explain the phenomenon of Chinese media in some circumstances; however they fail to consider the influence of economic development from a dynamic approach. Marxism is the approach that may remedy this disparity. It claims that the market economy can drive the press away from a liberal and democratic marketplace of ideas. Media originations

\begin{thebibliography}{99}
\bibitem{36} Siebert F. B., Peterson T., Schramm W. (1956), \textit{Four Theories of the Press}, University of Illinois Press, p10
\bibitem{37} Siebert etc. p40
\bibitem{38} Siebert etc. p74
\bibitem{39} Nerone J. C. (1995), \textit{Last Rights: Revisiting Four Theories of the Press}, University of Illinois Press, p146
\end{thebibliography}
may cover more neutral news to maximize advertising profit\textsuperscript{40}, and thus limit the development of the party press\textsuperscript{41}.

On the other hand, Chinese scholars studied the state-press relation from a more descriptive approach. Zhongdang for instance, described media reform as a “mechanism of transformation”\textsuperscript{42}, because although the presses in China were driven by profit, they cooperate to try to transform social relations, namely state-society-media relations, in how they cover the news. They have created a new media environment that reflects public interest and at the same time meets state restrictions. Although Wen did not frame his conclusion into a theory, the statement may also apply to online and other media in China today.

Although the four theories of the press presume that only one out of the four systems exist in a state or society within a certain period of time, Zhang’s deep interviews with Chinese media policymakers indicate a more complex and combined media environment in China. Behind the “Great Firewall” which blocks many oversea websites and channels, the “information flow”\textsuperscript{43}, as Zhang stated, was encouraged with controls:

“China was no longer making media supervision such an intense political issue as it had been’. Instead, they carried it out in a purely administrative way. The media policy was taken out of the ‘darkroom’ and started to be handled in a transparent way, and became a regulatory issue”\textsuperscript{44}.

\begin{flushright}
\textsuperscript{40} Tuchman G. (1972), \textit{Objectivity as Strategic Ritual: an Examination of Newsmen’s Notions of Objectivity}, American Journal of Sociology, p77

\textsuperscript{41} Schiller H. (1996), \textit{Information Inequality: The Deepening Social Crisis in America}, NY: Routledge

\textsuperscript{42} Pan Zhongdang, Chen Taowen (2004)

\textsuperscript{43} Zhang L. L. (2006), Behind the ‘Great Firewall’: decoding China’s Internet Media Policies from the Inside, \textit{The International Journal of Research into New Media Technologies}, vol12 issue3, p279

\textsuperscript{44} Zhang L, L, (2006)
\end{flushright}
Meanwhile, Zhang also concludes that economic advance has become the main driving force for Chinese media. As a new technology, the Internet can provide considerable business opportunities in the country. Public interest and sensitive issues about the Party’s political and ideological concerns were the second and third motivations behind policy making, and this why government administrators control but at the same time participate in micro-blogging to handle social emergencies.

**Crisis Management**

As Chinese government play an active role in handling media, the increase number of disasters have made governments study crisis management systems more\textsuperscript{45}. Crisis management refers to the “rescue, preparedness, mitigation and resilience efforts”\textsuperscript{46} made by governments or other organizations to handle unexpected and uncontrollable events, which normally attract public and media attention and possibly threaten public trust\textsuperscript{47}. Meanwhile, emergency management, on a regional basis, can be also defined as the “capacity and capability for coordinated response efforts across broad geographic areas and across political jurisdictions by multiple governmental actors”\textsuperscript{48}.

Research about crisis management in different countries illustrates how governments or organizations behave during and after unexpected events precipitate

social consequences. From the centralized perspective, a study regarding Turkish crisis management systems, for instance\textsuperscript{49}, suggested that a centralized structure gave the government more control over resource allocation and coordination, while a local government can have more information and discretion. Moreover, an analysis of the American National Incident Management System (NIMS), a federal level of emergency response guidelines, also indicated that when NIMS did not include “a unified approach, a standard command and did not foster coordination”\textsuperscript{50}, limitations existed within the emergency response.

Meanwhile, from the localized perspective, Gerber and Robinson\textsuperscript{51} illustrated that participants affect broader areas from more diversified and localized administrations and can create a strong incentive for the development of interstate professional relationships and crisis response abilities.

Four types of regional coordination can improve response efficiency: intrastate regional coordination, specific geographic area within a state, interstate coordination in a regional sense, and local governments that lie along state boundaries\textsuperscript{52}. Crisis management, according to Chen and his fellows’ research, normally involves three phases: the pre-incident phase which includes task flow, resource, decision, response; the

\textsuperscript{52} Gerber J. B., Robinson E. S. (2009).
during incident phase which includes mini-second and many-second coordination cycles; and the recovery phase.

The first phase is defined as the level of operational capacity and overall response capability. The local agencies in this phase were involved in supporting extra response efforts, which typically required both spatial and temporal coordination with diversified functional organizations. The second phase, the main concern of my study, impacted both short-term and long-term outputs. The prior category, or the mini-second coordination cycle, tested response when the coordination time window was short. The many-second cycle defined the long-term reaction based on a more reflective and proactive posture. The last phase or the recovery phase, focuses on the return to normalcy, as well as response capability against new crises in the future.

The concept of the during incident phase, in my research refers to the central and local government reactions after the Wenzhou high-speed train crash, as it was concerned about coordination tasks, constraints, and outcome quality. Although the public consequences will not be presented in details as the content of followers’ comments are excluded, whether and how government framed the incident after the crisis may affect public concerns about how the information will be learned.

Framing Theory and Related Studies

Framing studies examine themes about media content. Themes influence how viewers interpret and are affected by the content. Framing theory explains that

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message senders create story lines or frames to organize large amounts of information into an effective package so that audiences can more easily understand and interpret it.\textsuperscript{57} This idea can help to explain “how messages in a political tweet are packaged, as well as reveal a bit about the leaders who send them”,\textsuperscript{58} and we may therefore assume that the message sender (Chinese government administration posts in this study) may rely on several themes to help construct the positive image the government wants.

Other studies have shown how frames are powerful. Entman once pointed out that frames can make the audience concentrate on certain issues and not on others.\textsuperscript{59} Tankard stated that “the power of framing comes from its ability to define the terms of a debate without the audience realizing it is taking place.”\textsuperscript{60} Experiments showed that how issues were framed can have an influence on people’s awareness of the issue.\textsuperscript{61} Therefore, analyzing the frames in social emergency administrative posts can provide an example of how the government perceives key issues and the political process.

Frames in messages, on the other hand, can bring positive or negative impressions through priming, a process in which a receiver’s perceptions are activated through visual

\textsuperscript{55} Parmelee J. H. (2003), \textit{Meet the candidate videos: Analyzing Presidential Primary Campaign Videocassettes}. Westport, CT: Praeger
\textsuperscript{59} Entman R. M. (1993)
\textsuperscript{60} Tankard J. W. (2001), The Empirical Approach to the Study of Media Framing. \textit{Framing Public Life} (p95-106), NJ: Lawrence Erlbaum, 97
\textsuperscript{61} De Vreese, C. (2004), The Effects of Frames in Political Television News on Issue Interpretation and Frame Salience. \textit{Journalism & Mass Communication Quarterly}, vol. 81 issue1, 36-52

13
or verbal stimulation. In addition, meanings delivered in a message’s frame can be highly symbolic. Symbols can be displayed visually or verbally and present layers of hidden meaning. Micro-blogging may also be framed with positive or negative words or emotions based on symbolism or other factors and thus deliver specific meanings to audiences.

Prior studies have created several framing categories for message content. Ghanem described the “picture frame” with four sub-categories: (1) topic which refers to the main content in the frame, (2) presentation which refers to size and placement, (3) cognitive attribute which refers to details included in the frame, and (4) affective attribute which refers to the tone of the message. Iyengar and Simon used episodic and thematic framing categories to explain news coverage. Episodic framing refers to a context of specific events or instances, while thematic framing indicates the placement of news issues in a more broad and general context.

Framing Theory in Politics and Public Relation Management

Media framing can have influential effects on the political decision-making processes. Shah separated political framing into two categories: value-framing and ethical framing. The former indicates that journalists construct a policy debate on public issues

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in the language of rights and morals, the language of economics and pragmatics, or simply news production and information. The latter indicates that message producers may consider the rights and morals of some citizens or their audience, and carry these standards to future events based on the previous evaluation.

Zoch and Molleda stated that frames serve four functions for public relations practitioners in terms of specific problems: to define the problem, to determine the source, to make judgments, and to propose remedies\(^67\). Bichard developed a model for conceptualizing frames within the context of blog communication. His is one of the few models that has explored frames within online and social media. His study of how social affairs were covered online includes the dimensions of time, space, tone, topic, and mechanisms\(^68\).

However, since micro-blogging is more limited in 140 characters per post, some frames may be not highlighted as strongly or as often. Also, micro-blog posts often direct readers to another source through links or reposts; therefore, it is worthwhile to find out what frames were used within that limited space.

Word of Mouth (WOM) and Electronic Word of Mouth (eWOM)

Word of Mouth (WOM) by definition simply means people pass along information to others through face-to-face conversations. Lazarsfeld and Katz\(^69\) studied

\(^{67}\) Framing Health through Government’s Use of Social Media: U.S. Centers for Disease Control and Prevention (2011), Conference Papers: International Communication Association, p1-31
how influential communication between people can be. Decades of studies have suggested that WOM can be more persuasive than advertising on a consumer’s purchasing decisions. Informal conversations, according to Lazarsfeld and Katz, between friends or relatives, often can affect a person’s subsequent purchases or voting choices.

Gladwell also found three types of people who were responsible for shaping other’s opinion namely connectors, mavens and salespeople\(^70\). Among these three groups, mavens, who I will later apply to governors and governments, are those who own large quantities of information, either about products or politics, and are eager to share it with others.

Even though WOM was originally designed to study purchasing behavior, many effects of WOM are found in politics. Kennamer pointed that WOM can increase political learning,\(^71\) and other scholars further developed that it can encourage more political participation\(^72\). Such communications among people helps them to learn more about diverse opinions. This, in turn, promotes civility\(^73\).

As WOM typically refers to face-to-face communications, electronic word of mouth (eWOM) focuses on the conversations that take place online and on mobile devices, according to Parmelee and Bichard\(^74\). Generally speaking, eWOM can be more powerful and influential than WOM because it allows asynchronous communication and

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\(^{73}\) Price V., Cappella J. N., Nir L. (2002), Does Disagreement Contribute to more Deliberative Opinion?, *Political Communication*, vol. 19 issue 1, 95-112

the people involved may not limit themselves to certain demographics or geographic regions. Therefore interpersonal influence can expand rapidly, messages may affect larger numbers of people in wider places, and people may participate in the conversation at any time they find convenient. Moreover, people may also actively engage in communication by searching for the key words they were interested in online\(^75\). Political micro-blogging, as a type of eWOM, may benefit from these characteristics and advantages.

### WOM and eWOM Use in Politics and Micro-blogging

In terms of WOM’s effect on political micro-blogging, its influence can be more powerful if followers repost opinion leaders’ (either governors or government administrations) messages regularly. Leaders’ posts may encourage followers to participate either by further searching for content such as websites or books mentioned in the message or by taking the actions requested in the message\(^76\).

Although eWOM can be more persuasive in encouraging people to get involved in communications than WOM, message receivers may also think about the locations and the credibility of a source when deciding whether to repost information to others\(^77\). Therefore administrative micro-blogging that is more credible or more relevant to the issue may have a higher possibility to gain public attention. At this point it is not clear how locations or relevancy can create these kinds of effects.

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\(^{76}\) Parmelee J. H., Bichard S. L. (2012)

CHAPTER 3: RESEARCH QUESTIONS

This study seeks to find out how governments use Weibo (local micro-blogging in China) to handle social emergencies. Therefore the study poses the following research questions:

*RQ1:* What frames were used in government posts when an incident attracts considerable public attention?

As mentioned in the literature review, the proper use of frames can help senders better promote messages to larger populations, while incorrect framing can have negative effects. Past analyses have investigated a variety of frames in the political area, but there have not been many studies that focused primarily on micro-blogging. Therefore the above research question, rather than a research hypothesis with a presumed trend, can provide context for examining how the Chinese government frames social emergencies in a new media atmosphere.

*RQ2:* To what degree do frames affect whether followers repost the information and engage in conversation about it?
As Weibo is an online interactive environment (eWOM), it will be also interesting to study how the frames used by government administrations can effectively encourage followers’ engagement. This research question is a further investigation of the first question, and can offer a broad exploration into framing practices and their effects on followers.
CHAPTER 4: METHODOLOGY

As mentioned in the earlier parts of literature review, more than half of Weibo users create their account on Sina, and it has become the most popular Weibo site in China. Actually Sina Weibo has played a considerable role in many social affairs since 2009. In 2011, topics about transportation attracted the most public attention, and more than half (61.4%) of those posts were critical of the government. One incident in particular generated a lot of online discussion. A high speed train crash that happened in Wenzhou, Zhejiang Province in July 23, 2011 will be the focus of this study.

The crash is by far the most serious involving a high speed train in China. The crash, according to the investigation report, was caused by controlling program problems. Forty people died, and another about 200 travelers were injured. About 300 million Weibo posts appeared on SinaWeibo in the first week after the crash. The first Weibo about the crash was posted four minutes after the accident happened at 20:34, which was also the first relevant message audiences saw before news reports emerged in other media two hours later. In the following days, Weibo users posted mainly about the causes of the crash, what procedures emergency personal took to save lives, the feedback they had for transportation officials, compensation, and the safety of high speed trains. On the other hand, government sources did not fully reply to online concerns in the beginning. Consequently, this led to more public criticism.

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78 2011 Online Public Opinion Report in China (2012), IRI Consulting Group, section 6
To study how the government handled this social emergency, government administration posts were collected from a total of 186 government Sina Weibo accounts from July 23 to August 6 in 2011. The duration was decided based on the flow chart (Figure 1) of Weibo posts since the train crash happened at 20:23 on July 23.

![Figure 1: Verified Posts by Date](image)

Tens of thousands of posts by verified users (including government administrations, public officials, media, commercial companies and other public figures) were seen each day from July 23 to July 31, and another approximately 1,000 posts were created during the following days until Aug. 4. Since then, the number decreased significantly and only about three to four hundred posts were seen from Aug. 5 to Aug. 12. Most of them were non-government verified users such as celebrities, officials from
the media and commercial companies. Despite the decrease, the days between Aug. 3 and 6 were still involved as part of the sample for the study.

The 186 government Weibo accounts include both national and district administrators who published messages about the crash. District administrators include provincial, city, town or village departments of police, transportation, medical care, travel and other mechanisms. A total of 581 posts involving key words such as “high speed train”, “crash” or “accident” were collected. The post frequency ranged from 6 (Ping’an Tielu) to dozens of posts each day, and the number of followers of each government account varied from several thousand to millions.

Content Analysis

A content analysis was conducted to answers the research questions. This method is frequently used in communication research and offers a systemic quantitative technique for describing messages and developing inferences concerning the relationship between messages and their context.\(^{81}\)

A variety of variables were coded for each of the posts in the sample. The unit of analysis was the individual post. None of them exceeded 140 characters including URL links and hashtags.

For the content analysis, assessments were made of each post alone without following hyperlinks or watching video content. Each post was categorized based on the level of the administrative source, its geographical location, function, and date posted.

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Specific administrators were not identified by their names as the name can be confusing in statistical analysis, and it was unnecessary to investigate the characteristics of each administration account for the purpose of this study.

The data collected also involved an assessment of what frames were used by the government. Trammell, Williams, Postelnicu, and Landreville studied how campaign candidates communicate with their audience online or encourage supporters to take action. Sub-categories of what they called the interactivity dimension include the absence or presence of hashtags, reposts, direct quotes, URL links, photos, and videos. As mentioned above, photos and videos were not accessed; therefore, content was coded only when mentioned explicitly. The number of Weibo account followers and the number of reposts of each short message were also recorded to reflect followers’ tendency of involvement.

Capella and Jamieson looked at issue frames, which stress specific content, during the political election process. Chyi and McCombs as well as Ghanem also studied both tone and topic dimensions of candidate’s campaign blog messages. They found that most messages focused on individuals, and incumbent candidates’ content was more positive than challengers’. Several representations of topic frames, as shown below, were used.

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The *topic dimension* included seven levels. If a variety of topics were included in the post, only the single most important frame was coded:

1. **Case trail.** Posts about specific event and government daily actions.
2. **Personal.** Posts covering common people involved such as victims, rescuers, or blood donors. These posts were primarily nonpolitical in nature.
3. **Opinion.** Posts that present attitudes or comments about policies or specific events.
4. **Call to Action.** Posts directly calling for specific supportive actions, such as reposting, blood donation or searching for people.
5. **Endorsements.** Posts offering official endorsement or supportive testimonials.
6. **Questions/ Inquires.** Posts that include questions or inquires about the crash situation, victims, or other related people.
7. **Unsure/ Others.** Additional topics that emerge that were worthy of analysis.

The *tone dimension* includes both the emotional and formal nature of tweets. Subcategories of the dominant affective tone include three dimensions: (1) **Positive.** The post was enthusiastic and offered non-inflammatory language, stressing government effectiveness, warm-hearted citizens, responsible rescuers and governors, and fairness of investigation. (2) **Negative.** The post contained negative, aggressive or critical words about the crash. (3) **Neither positive nor negative.** The post was identified as a fair comment, and neither positive nor negative words were used.
The tone of each post was sub-identified in four ways: (1) *Formal*. The post was delivered in an impersonal tone, in neutral press-release style or mass-journalistic-delivery style; (2) *Conversational while unemotional*, the post was casual, as if spoken face-to-face, without presenting positive or negative emotions or opinions; (3) *Conversational and emotional*, the post was casual, with a personal quality, as if spoken face-to-face with emotions; and (4) *Others*, posts will fall into this category if they seem not formal, conversational, or emotional, or it was hard to figure out where they fall.

Two trained coders coded half of the sample each and overlapped tested the inter-coder reliability by both coding a total of 65 posts (11.19 percent of the population). The Scoot’s Pi result of “date”, “administration levels”, and “frequency of reposts and comments” were 2, which indicated both coders agreed on all samples regarding these categories. The lowest Scoot’s Pi result related to “content” (0.99), while this can still be viewed as acceptable in content analysis.

An Example of Post

To illustrate, an example of Weibo posted by *Ping’an Wenzhou* is given to show how the study applies the methods discussed. *Ping’an Wenzhou* is the account of Wenzhou Police Station, the city-level police station in Zhejiang Province in China, and 24 posts related to the crash were uploaded from July 23 to Aug. 6, 2011.
Figure 2: An Example of the Post

The example post shown here was uploaded on July 25 at 09:43. The post, written in Chinese, introduced what the police were doing to save lives in the tone of mass-journalistic-delivery style. The URL link to Wenzhou Police Station news release was included and a set of pictures of police efforts at the scene were attached at the end of the post. The post begins with a hashtag (highlighted in red with “##”), indicating that more posts can be searched under the category. 83 Weibo users reposted it. This post that was the most often reposted during the time.

This post includes the following dimensions of framing: topic (case trail), tone (positive and formal), and interactivity (hashtag, URL link, and photos). It was posted by the Wenzhou Police Station (a city administration) two days after the crash and led to a higher audience involvement. Although I cannot indicate whether these frames lead to a

86 http://www.weibo.com/1663933725/xgm200wvK
higher engagement, or whether frames presented in this particular post can generalize to others, it can help describe the process and help suggest implications of theory.

This study aims to find out what frames are used in government posts when an incident attracts considerable public attention, and to what degree frames affect whether followers repost the information and engage in conversations. Framing theory suggests how systematic messages influence people’s decisions, and eWOM is also concerned with ways that information can affect people’s minds. Therefore these theories will be helpful to answer my two research questions, and consequently help to better understand how the Chinese government incorporates Internet technologies to handle social emergencies online.
CHAPTER 5: RESULTS

A total of 581 posts posted by 186 administrative accounts were coded, of which 21 were posted by central governments, 18 by local departments in Wenzhou city, 120 by other Zhejiang provincial departments, and 421 posted by all the other local administrations. The results of chi-square and one-way ANOVA test indicated that a variety of frames were used by different levels of administrations to present the crash. Although posts were limited to 140 characters, governments managed to deliver the message in numerous ways.

About half of all 581 posts related to the case trail, including content about specific events after the crash and government daily actions. The second most frequent topic was supportive actions such as reposting, blood donations, and people search. Most posts showed no opinions and had a formal tone. Police stations, which occupied the most out of all counted administrations, basically followed the general trends of attitude and tone. In addition, around one in three posts involved more than one content features, and reposts were more popular if governments used only one feature.

Nevertheless, not all frames affected the public tendency of involvement. Tone and content features found statistical significance upon the frequency of reposting and comment, whereas levels and functions of the administration also had effects on people’s tendency to participate. The following paragraphs present details regarding research questions with respect to interactivity, topic, and tone dimensions of framing, as well as elements that affected audience involvement.
RQ1: What frames were used in government posts when an incident attracted considerable public attention?

Results showed that interactivity dimension, topic dimension, and tone dimension of frames were used by government administrations. Details are presented as below:

Interactivity Dimension of Frame

As interpreted in the literature review, the interactivity dimension refers to content features including hashtags, reposts, direct quotes, URL links, photos, and videos. 29.43 percent of all posts (Figure 3) used more than one features, while another 26.85 percent had been reposted at least once. The least used content features were videos (1.04 percent) and direct quotes (3.96 percent).
Some differences were found when looking at the interactivity dimension of frames and levels of government ($X^2_{(21)}=57.70$, $p<0.05$). A chi-square test is meant to study the difference between observed distribution of frequencies and expected results, thus I compared “level of administrations” group and “content feature” group to test the interactivity dimension. National administration was the most likely to directly quote media or official statements, as well as reposts other posts. Governments of Wenzhou city, the most relevant level of government, preferred to attach photos and quoted from other sources directly. Comparatively, other local administrations in Zhejiang province (Wenzhou is one city in Zhejiang province) either included no interactivity or added a hashtag somewhere in the post, and local ones out of Zhejiang province mostly used more than one feature.

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Topic Dimension of Frame

The overall samples indicated that case trail was the most talked about topic, as about 46.47 percent of the posts fell into this category (Figure 4). Governments also made calls to action (20.48 percent), shared personal stories (14.80 percent) and opinions (12.22 percent), whereas only two posts (0.34 percent) featured questions and 2.41 percent of posts counted as endorsements. One of the questions was posted by Jindong Communist Youth League (Go Qing Tuan Jindong Qu Wei) on July 24 and asked why the train wreck coverage was buried so soon. Posts, such as this one, which praised police and medical care efforts in saving the injured were counted as endorsement.

Figure 4: Topic Dimension Used to Frame Train Crash

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88 Example may refer to the Weibo posted by Ping'an Cheng Guan on July 24, http://e.weibo.com/u/2100490080?ref=http://e.weibo.com/u/1963933563?ref&topsug=1&key_word=%E5%8A%A8%E8%BD%A6%E6%B8%A9&is_search=1
For the topic dimension, “content” group and “level of administration” group, and similarly I found a statistically significant difference between them ($X^2_{(18)}=38.97$, $p<0.05$). National departments mostly showed opinions, while they presented the case trail less often than others. Wenzhou governments on the other hand, introduced more case trails and personal stories, and other Zhejiang governments delivered more endorsements and inquiries. Meanwhile, all the other local administrations introduced more case trails than other topics and relatively focused least on opinion expressions.

Tone Dimension of Frame

The tone dimension includes two sub-categories: emotion and formality. For the emotion category (Figure 5) which interpreted the attitude indicated by the post, 80.21 percent showed no emotions and another 9.12 percent were neutral. Although the train crash was determined to be a man-made accident according to the official investigation report, 6.88 percent were positive and only 25 out of 581 posts (4.30 percent) were negative.
On the other hand, the posts tested were much more likely to use a formal tone than a conversational one (Figure 6).
Both level ($X^2_{(9)}=25.91$, $p<0.05$) and function ($X^2_{(24)}=50.92$, $p<0.05$) of governments found statistically significant differences in the formality category, whereas only function ($X^2_{(24)}=51.40$, $p<0.05$) had such a relation to the emotion category. Results indicated that police stations basically followed the overall emotion and formality trend, while they were less likely to post in a “conversational while unemotional” tone.

**RQ2: To what degree do frames affect whether followers repost the information and engage in conversation about it?**

Weibo can show users’ tendency of involvement by allowing them to repost or comment on each post. Administrations in the sample used different ways to deliver messages, and some of the frames attempted to encourage more involvement.

The analysis suggests the interactivity dimension of the frame was an effective way to increase public involvement. Chi-square tests indicated only whether relations exist between two variables, but one-way ANOVAs compared the means between variables and was able to interpret relations in much more detail. As the population of repost and comment was normally distributed, the one-way ANOVA instead of Chi-square test was taken to study the interactivity frame. The analysis suggested that the average reposting and commenting tendency was significantly higher (Table 1) for posts with photos ($F(7,569) = 2.73$, $p<0.05$). A one-way ANOVA analysis also indicate that
formal tone can cause higher tendency to repost and comment than any other three tones (F(3,573) = 7.59, p<0.05).

<table>
<thead>
<tr>
<th>Table 1: Interactivity Framing Dimension affected Tendency of Involvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hashtag     Repos      Direct      URL      Photo     Video     Mixture     None</td>
</tr>
<tr>
<td>Minimum          0            0          0            0          0          0          0          0</td>
</tr>
<tr>
<td>Maximum          90           170         154          40         410         27          484         300</td>
</tr>
<tr>
<td>Mean             11.23        5.37       19.55        5.81       32.78      9.20        16.26       16.21</td>
</tr>
<tr>
<td>Post Count       57           155         22           37         41          5           170         94</td>
</tr>
</tbody>
</table>

Meanwhile, although analysis indicated that people were more eager to repost or comment on posts that related to personal stories, inquires and call to actions, the one-way ANOVA result (F(6,570) = 1.93, p=0.074) was not significant enough to decide whether these relations were caused by chance.

Moreover, levels and functions of administrations also had an effect on reposting and commenting frequency. The one-way ANOVA analysis illustrated that Wenzhou governments attracted much reposts and comments than the other three levels did (F(3,573) = 2.88, p<0.05). Posts from transportation agencies got more reposts and comments (F(8,568) = 3.33, p<0.05) than others.
CHAPTER 6: DISCUSSION

This research explored how different levels of Chinese government framed one of the most influential social emergencies in recent years, and the effectiveness of these frames in encouraging more reposts and comment tendencies. In the discussion section I will interpret results presented above and their importance, followed by practical implications about how the governmental framing method can be effective in upcoming social emergencies.

Outliers and Measurement Interpretation

Although a total of 581 posts were included in my research, extreme statistics of some specific variables were quoted as outliers and excluded from analysis in order to ensure accuracy.

First, the first four highest repost and comment numbers were eliminated when interpreting relations with other variables. Because these four figures (35,248, 11,706, 1,874, 982) were relatively extreme comparing to the majorities (starting from 0 to 484), results can be affected considerably if outliers were involved. Second, under the “content feature” variable, only about one percent of all samples were quoted as “video”. Since the population was too small to accurately figure out its relations with other variables, it may automatically regarded as outliers, and outcomes regarding “video” can hardly concluded or generalized to general population. The similar situation appeared also when counting “inquiry” under content variable. As only two out of 581 posts were

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89 For instance, the average of repost and comment frequency was 99.04 including the four extreme figures, while 13.40 if outliers were expelled.
inquiries, any relation results regarding this category cannot be significant or valuable for this study.

In spite of outliers, different measurements were considered when interpreting relations among variables. A chi-square test was the mean to determine whether there were significant differences between expected frequency and observed outcome among one or more variables. Nevertheless, as the “repost and comment frequency” variable was counted by the actual number of posts, analysis involving a continuous variable can be better understood by a one-way ANOVA test. Therefore we may find both chi-square and one-way ANOVA test results based on characters of different categories.

Theories and Results Interpretation

As discussed in the literature review, framing theory, crisis management and eWOM were explicit to explain what I found in my research. Although eWOM primarily interpreted online purchasing behavior and how consumers were affected by their surroundings or product messages, it can also fit for online political interactions. This can be further explained by government crisis management studies. Findings both from my research and prior studies showed that central government may be rich in collecting and managing large quantities of information, but local governments are more influential in crisis management and attract more public attention as they were more flexible in reactions and cleared about the situation there.

Both first and second research questions were directly supported by framing theory, which said message senders tended to frame the information in diversified ways
so that receivers could successfully accepted it. Results suggested that framing dimensions including interactivity (measured by “content feature” variable), topic (measured by “content” variable), tone (measured by “attitude” and “tone” variables), and geographical distribution (measured by “administration level” and “administration function” variables) were mostly used to cover a post. These frame methods, even though they did not meet all expected outcomes, can affect audience involvement, when that is defined as the number of reposts and comments related to each post.

The first research question expected to answer what frames were used by government to modify social emergencies. Results showed that government used diversified framing ways including interactivity, topic, and tone dimensions, while no evidence proved any unified framing preference among different parts of local administrations. Although government tended to take diversified features except videos to cover the message, many of the posts involved more than one feature. Later we found that posts with multiple features have similar ability to attract reposts and comments than posts with no features did; therefore, it was predictable that governments were not clear about the influence of features. Besides, some URL links, though not conducted in more detail in this study, were directed to outsource videos. In addition, attached videos under the post may cause downloading problems because of the file size, and this might help explain why usage of video feature was infrequent.

While the feature use was divided by government levels, results showed no evidence on usage preference of different local administrations. As local ones contributed most of the posts regarding the train crash, I may agree that they have realized the
importance of crisis management, whereas central took smaller steps in emergency reflections online. Meanwhile, as prior studies have pointed that local departments were more flexible in crisis reactions and central ones were advanced in collecting and processing massive resources, we can understand why the post with most repost and comment was posted by central department and the second and third highest belonged to the posts by the local administration in Wenzhou city.

Moreover, what I found in framing behavior distributions were in some way affected by the framing preference of police stations, which occupied nearly half of all counted accounts if divided by function. According to the national report, police departments also held nearly half of all government Weibo accounts, followed by councils, other departments, and travelling by 2011. The second and third largest function groups in my research were travelling and medical care agencies, which partly followed the national distribution. We can see the train crash character partly affected participation motivation based on government functions. Nevertheless, findings about frame use in this specific case can still be meaningful.

Considering the second research question which stressed framing impacts on reposting and comment tendency, results indicated no relation between the frequency of the interactivity frame used and reposting and comment numbers, while posts with formal tone, attached with photos, or posted by Wenzhou city governments were more attractive to the public.

As presented earlier, the posts which received the most reposts and comments were respectively posted by national and Wenzhou local governments. After eliminating the first four posts as outliers, the most viewed account regarding the train crash fell to Wenzhou local governments, whereas local governments out of Zhejiang Province got the least attention. Although the geographical location of the account cannot directly frame a post, the impact of the locations can be interpreted by eWOM, which stated that receivers preferred messages which were relevant to either the issue or the receivers themselves. As my research did not examine the distance between people who comment or repost and the government geographical location, the relevance between the Wenzhou government and the train crash which happened near the city can answer why the most local governments’ post got most attraction.

Beside geographical location, different sub-categories of the interactivity frame dimension found significant relationships with reposting and comment frequency. Reposts cannot positively influence people’s involvement, while direct quote can. Meanwhile, photos seemed more eye-catching. Dismissing the interactivity frame had a similar impact because the involvement tendency was not positively connected to the frequency of the interactivity dimension. The results were reasonable because research about framing pointed that framing is both verbal and visual, and the framed message can be highly symbolic. In my research, photos about the crash visually framed the issue, and injured people or wreckages had a strong vision wallop to audience. On the other hand, direct quotes from news or officials were verbally framed and can be an indicator of
source credibility. However, framing theory did presume whether the combination of frames could improve impact, which in return is supported by my study results, too.

Interestingly I found that topic framing, measured by the content variable in my research, did not show a significant effect on people’s involvement. This can be explained by two possible reasons. First, as the public could also learn about the crash from other media or daily news, case trails, which occupied nearly half of all posts and thus can considerably affect the result, may not necessarily attract public interest. Besides, other identified Weibo accounts including media, nongovernmental organizations and opinion leaders also posted similar content, such as call to actions and anecdotes, as government posts. The impact of the limited number of administration posts can be watered down by thousands of other identified posts.

Last but not the least, although the tone dimension included both emotional and formal nature, measured by “attitude” and “tone” variables respectively, the latter one was more influential in affecting the audience tendency of involvement. Posts in a formal rather than a conversational tone attracted more reposts and comments. Conversational posts, we assumed, were more interesting to read or bought more interactions, but the result indicated that posts formed in a neutral press-release or mass-journalistic-delivery style may increase persuasion and credibility, and consequently got more reposts and comments.
CHAPTER 7: CONTRIBUTION

This research contributed to framing as well as government crisis management studies in several aspects. First and foremost, the analyses help us understand how the Chinese government behaved on Weibo in regards to social emergency management. Second, findings clarified misunderstandings about some framing impacts and figured out dimensions that managed to improve public involvement. Third, as the content framing dimension, of which effect has been proved by other studies, did not find significant relations with reposts and comment frequency, some factors such as content similarities with other media or posts could be predictable through further research. Moreover, the research supported Wei Zhongdang’s assumption that Chinese government have actively participated in social media, such as Weibo, because of its transparency. Last but not the least, as the Wenzhou high-speed train crash is by far the most influential social emergency in China, findings from this research contribute valuable insight for future government crisis management behavior.

As stated by crisis management as well as supported by this research, local departments were more aware of the crisis situations, and their crisis reactions were more flexible, while national government was better at collecting and processing information and other resources. Local administrations, especially the ones that were most relevant to the issue, can actively participate in online crisis management through providing updated information or calling for timely actions such as people search and donations. Meanwhile, national departments may release more general information or national statements, so that rumors can be controlled effectively.
Secondly, posts in a formal tone can be considered to improve persuasion and the credibility level of messages. Even though conversational posts seemed more interesting to read, casual talks did not necessarily lead to higher reposts and comment frequency. Because reposting behavior can spread the message to a larger population, forming posts with a formal tone can be helpful in improving message impact.

Thirdly, because many other channels also said much about the emergency, delivering case trails may not necessarily be the primary function of government posts. Content framing could be effective on people’s mind, while its impact can be merged with factors other than government posts. Therefore administrations also need to consider the online characteristics or even the overall media environment when deciding what to frame on Weibo.

Last but not the least, this research has suggested that overuse of interactivity framing cannot encourage higher public involvement. Therefore, in order to increase the number of reposts and comments, government may attach images that help to understand the crisis instead of taking a set of interactivity framing such as hashtags, or direct quotes. Otherwise going beyond the limit was as bad as falling short.
CHAPTER 8: LIMITATION AND DIRECTION TO FUTURE RESEARCH

This research provides several significant insights for the Chinese government Weibo crisis management, while limitations exist because of the methodology and some unexpected outcomes.

First of all, some outliers may affect accuracy. For instance, as the populations of video under the interactivity frame dimension was too small to support statistical significance; whether attaching videos may get similar effects as photos can hardly be proved. Meanwhile, the null hypothesis regarding relations between outliers and other variable cannot be denied. Therefore results observed from outliers can only be treated as occasional phenomena.

Besides, the findings of this research did not indicate whether a positive relation exists between reposts and comment frequency and public supportive actions. People may react to a message with different purposes and attitudes. As details of each repost or comments were not conducted in my research, whether government managed the train crash crisis successfully cannot be concluded.

Moreover, content analysis can hardly answer myths regarding the motivations of specific actions, or the reasons why some frames rather than others improved the public involvement tendency. These questions are valuable to answer to understand the effect micro-blog framing can have on government online crisis management.

Future research may examine the topic in two dimensions. Firstly, more qualitative studies are recommended to figure out audience motivation and how frames that observed in this research can affect people’s mind. Methodologies such as
questionnaires, focus groups, or deep interviews can be considered to explore motivations behind the phenomena. In addition, textual analysis is needed for interpreting word use. Meanwhile, other quantitative research is needed to identify how other identified posts such as opinion leaders and press affect the effectiveness of government posts. Besides, quantitative studies about reposts and comments on the original post cannot be dismissed, as these findings will help to explain if different frames positively influence people’s minds.
CHAPTER 9: CONCLUSION

As a snapshot into government online crisis management, this study highlighted how Chinese government responded to a social emergency with the help of micro-blogs. Findings suggested that posts in conversational while unemotional tone and attached with related pictures may attract more public attention. For government administrations, findings in this research can recommend more efficient message framing ways and help them avoid some paradoxes. Both central and local government need to be aware of the importance of cooperation and, act accordingly. While governments also need to be reminded that micro-blogging is a public platform, content coincidence with other posts can affect their own leadership. For researchers on the other hand, this study described a framework of China’s governmental crisis management since Weibo has played an important role in spreading news and other information. While understanding Chinese government and their attitudes about micro-blogging, this research can set an example and model for future studies.

All in all, the findings from the study are meaningful to interpret how the Chinese government handled a social emergency with Weibo. Both officials and researchers can benefit from the study and thereafter improve crisis management abilities.
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APPENDIX: CODING SHEET AND SCOTT’S PI VALUE

(The sheet adapted from John Parmelee & Shannon Bichard’s researches about politics and the Twitter revolution in U.S.)

1. Case ID

2. Date Posted

Including both hour and date posted

i.e.: “115, 14” indicates the post posted from 14:00-14:59 on Jan. 15, 2011

3. Level of the administration

1= National,
2= Local administration in Wenzhou City
3= Other local administration in Zhejiang Province
   (administrations coded in #2 are excluded)
4= Local administration out of Zhejiang Province

4. Function of the administration

1= police
2= transportation
3= medical care and hospital
4= provincial government
5= legislation
6= industry and commerce
7= traveling
8= municipal administration

9= others

(According to Sina Weibo Government Categories)

5. Content Features

Scott’s Pi value: 1.05

1= Hashtags,  
2= Repost,  
3= Direct quotes,  
4= URL links,  
5= Photo,  
6= Video,  
7= Mix (two or more features are involved),  
8= None

6. Content

Scott’s Pi value: 0.99

1= Case trail

*Posts about specific event and government daily actions*

2= Personal

*Posts covering common people involved (i.e. victims, rescuers, blood donator), primarily nonpolitical in nature*

3= Opinion

*Posts that present policy/issue positions*

4= Call to action
Posts directly calling for specific supportive action, such as reposting, blood donation, people search

5 = Endorsements

Posts offering official endorsement or supporter testimonials

6 = Questions which expect responses

7 = Unsure/Other

Additional topic emerged worthy of analysis

7. Attitude of Opinion  
Scott’s Pi value: 1.15

1 = Positive,

The post was enthusiastic and offered non-inflammatory language, stressing government effectiveness, warm-hearted citizens, responsive rescuers and officers, and fairness of investigation

2 = Negative,

The post contained negative, aggressive, critical language

3 = Mix/Neutral (neither positive nor negative)

Fair comment that neither positive nor negative words were used

4 = No opinion

The post was void of judgment and only facts were stated in the post. It gave a nonevaluative description of event

8. Tone (Word of Use)  
Scott’s Pi value: 1.21

1 = Formal,
The post was delivered in an impersonal tone, in neutral press-release style or mass-journalistic-delivery style

2= Conversational while unemotional,

The post was casual, as if spoken face-to-face, without presenting positive or negative emotions or opinions

3= Conversational and emotional,

The post was casual, with a personal quality, as if spoken face-to-face with emotions and opinions

4= Others (neither formal nor conversational)

9. Frequency of repost and follow of each post (in scale)  Scott’s Pi value: 2

Repost number+ follow number of each post