

Chinese Governmental Post-Crisis Management of 2003 SARS Epidemic:
Evaluation of Governmental Communication Strategies and Frame
Correlation between Government and Mass Media

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Abstract

This study used a content analysis and a rhetorical analysis to examine the strategies the Chinese government utilized for handling post-crisis issues of the 2003 SARS epidemic. The content of several media outlets – Chinese Version of Xinhua News Agency, English Version of Xinhua News Agency, *The Toronto Star*, *The New York Times*, *The Times* (London) – were examined on the same issue in the post-crisis period from June 25, 2003 to September 9, 2003. Chinese media and Western media were examined to test the frame correlation between media and Chinese government discourses. The use of Chinese government as information sources in media coverage was explored. Chinese post-crisis management performance was evaluated through analysis of the use of Chinese government frames by mass media and the use of the Chinese government as a trusted information source. The results showed that the Chinese government used a renewal post-crisis communication theme through communication strategies of bolstering and transcendence. The content of Chinese media had a substantial relationship with frames of Chinese government. Chinese government was used as a believable source for Chinese media. The content of Western media had no relationship with frames of Chinese government. Chinese government was employed as a skeptical information source in coverage of Western media.

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Chapter 1 – Introduction

The SARS epidemic (Severe Acute Respiratory Syndrome) first hit Guangdong Province, Mainland China, in November 2002 and began to spread to the rest of the world by February 2003. This epidemic infected 8,069 people and left 775 dead. Mainland China, as the hardest hit country, had 5,327 SARS cases and 349 deaths. Chinese Hong Kong Special Administrative Region was ranked second as the hardest hit country and region in the world (website of the World Health Organization: SARS, <http://www.who.int/topics/sars/en/>).

On a medical level, SARS caused significant suffering and death across a broad geographical area for more than six months. It attracted attention from all levels of medical care professionals, mass media, and policy makers, and invited international cooperation to fight the disease. The World Health Organization led the medical fight by issuing a global alert, assigning expert teams to epidemic areas, initiating lab research and sending information reports and guidelines to all countries.

All countries experiencing the epidemic faced more than the immediate medical crisis, however. Citizens turned to their government health officials for direction and protection from additional exposures. Business monitored the potential impact of travel restrictions for tourism and international trade. Political leaders curtailed meetings until the disease was under control. China, as the country first affected and with the highest rates of infection, faced a multi-faceted crisis.

Communication is an essential part of any crisis. When a crisis occurs, rumors move quickly through interpersonal channels. Media coverage extends knowledge of the crisis, sometimes without full or accurate information. Communication may make the situation worse and increase the difficulty of controlling and ending a crisis. Effective communication also can be a key means to end a crisis. Accurate, timely, and appropriate crisis messages can offer reassurance, direct behavior, and increase public safety. Given the need for knowledge and certainty, the organization that faces a crisis should create its own effective communication system and send out messages to address the public's concerns, both during and after the crisis (Millar & Heath, 2004; Benoit, 1995; Coombs, 1999).

Governmental communication was the main crisis communication mechanism in the People's Republic of China during the SARS epidemic. Information flowed from government agencies to mass media and then was shared with the public. As the leader of post-SARS crisis management, Chinese government agencies encouraged the media and public to perceive the crisis in the government's terms and to accept its preferred solution to the crisis through its framing of the crisis. Framing involves the selective portrayal of a situation, emphasizing some elements of a situation and excluding others and thereby constructing a social reality (Goffman, 1974). To accept a frame is to accept a way of thinking about an issue or a situation. Social elites attempt to persuade people to accept their framing of a situation to establish their authority and control. Thus, the use of governmental frames by media and the public to construct their perceptions of the SARS crisis and solutions would indicate the effectiveness of governmental control of the crisis.

The main purpose of this study is to examine the crisis communication strategies the Chinese government utilized to deal with the SARS epidemic crisis, and the effectiveness of them. Specifically, the study will focus on the post-crisis period to explore the Chinese government's attempts to rectify deeper systemic problems raised by the SARS crisis and to return stakeholders to a normal societal life. Given the lack of a clear model of post-crisis communication management in crisis communication research, this paper will first propose a definition of the post-crisis period and an operational framework of communication strategies in post-crisis management for the 2003 SARS epidemic crisis in China. Post-crisis communication management themes are explored by analyzing Chinese governmental discourses downloaded from the website of the Ministry of Health, People's Republic of China (PRC), and the government's use of mass media. Frames and information sources employed by several media outlets in China – the Chinese Version and the English Version of Xinhua News Agency (hereafter called Xinhua Chinese and Xinhua English, respectively) – and in the rest of the world – *The Toronto Star*, *The New York Times* and *The Times* (London) – are examined to test the Chinese government's performance of post-crisis management.

The first chapter of this thesis introduces the purpose of this research, and the rationale of exploring the 2003 SARS epidemic in China from a post-crisis management perspective using framing theory. The second chapter presents a literature review

exploring the definition of crisis, models of crisis management, framing theory, applications of framing analysis and previous studies dealing with the 2003 SARS epidemic in China. Chapter Two ends with an operational typology of post-crisis communication agendas and specific frames possibly used in the Chinese government's dealing with the 2003 SARS epidemic. The third chapter of the thesis outlines research questions and hypothesis. It also explains methods utilized in this study, including content analysis and an additional rhetorical analysis. In the fourth chapter, results for each research question are presented. They include communication themes and strategies of the Chinese government in the post-crisis period, individual frames of the Chinese government, Chinese media and Western media, correlations among frames by different government and media sources, and information sources preferred by each mass media. The fifth chapter of the thesis compares frames and information sources employed by the Chinese government, Chinese media and Western media. It explains the similarity and difference, and then concludes with evaluation of the performance of Chinese government communication in the post-crisis period. In the final conclusion chapter, limitations of this study are addressed and suggestions for future research are proposed.

Chapter 2 – Literature Review

Current crisis communication literature is wide-ranging and fails to fully account for the role of framing in crisis communication in the post-crisis period. This literature review offers a synthesis of the two literatures as the theoretical basis for this study. The 2003 SARS epidemic is introduced with a summary of previous studies on the SARS epidemic that provide the foundation of this study.

Crisis Management Theory

Crisis definition

Scholars define crisis through different perspectives and terms. But several characteristics of crisis are shared by most definitions. First, most crisis literature identifies a threat or damage as a necessary element of crisis. Weick (1988) states “crises are characterized by low probability of high consequence events that threaten the most fundamental goal of an organization” (p. 305). Fearn-Banks suggests “a crisis is a major occurrence with a potentially negative outcome affecting an organization, company, industry, as well as its publics, products, services, or good name” (p. 1). Coombs (1999) regards threat as one of the two common traits of crises. He asserts that crises have or have the potential to create negative or undesirable outcomes for an organization, its stakeholders, and/or an industry. The SARS epidemic brought obvious threat to the Chinese people and Chinese government. As a highly infectious disease, SARS threatened people’s health and even survival, killing every 6.55 persons within 100 patients. The spread of the disease and passive governmental actions made people anxious about the apparent inability to control spread of the disease. Some became uncertain about the Chinese government’s will and ability to control the epidemic.

Another characteristic of crisis is its unpredictability or sudden nature. Coombs (1999) considers this a second necessary element of crises and concludes that crises are unpredictable but not unexpected because “wise organizations know crises will befall them; they just do not know when” (p.2-3). Paschall (1992) believes “a critical incident or a crisis is simply a sudden, unexpected event that poses an institutional threat suggesting the need for rapid, high level decision making” (p.4). Similarly, Hermann (1963) identifies three characteristics of crisis: organization’s high priority values are

threatened, the amount of time in which a response can be made is restricted, and the organization has not anticipated the event. In the SARS case, the disease occurred without any warning signs. The early cases were suspected as flu or typical pneumonia. As an unknown disease, the symptoms, infectious channels, virus, and sources of virus were all confirmed by continuous research in the months after the first outbreak and even after the ending of the 2003 outbreak. On March 12, 2003, four months after China's first SARS case and one month later than the global transmission, the World Health Organization sent out the first alert about SARS in the world to offer an official name and brief description of the disease (website of the World Health Organization: SARS, <http://www.who.int/topics/sars/en/>).

A third crisis characteristic prominent in multiple definitions is that crisis disrupts an organization's normal operations. Barton (1993) defines crisis as "a situation faced by an individual, group or organization which they are unable to cope with by the use of normal routine procedures and in which stress is created by sudden change" (p. 86). Stanley (1985) states that crisis is a strain on the reward-cost balance between an organization and key stakeholders. Irvine and Millar (1998) emphasize that a crisis is a major business (organization) disruption that generates intense media interest and public scrutiny. Coombs (1999) notes the degree of disruption is what distinguishes an incident from a crisis. He says that the damage of an incident will not harm the larger organizational routine, while a crisis does or has the potential to disrupt or affect the entire organization. During the SARS epidemic, a normal social state within which people lived and worked under direction by the government was disturbed. People were asked to avoid public gathering. No one showed up in restaurants, malls, and other public places. To protect social security, schools were closed and children were left at home. College students were confined to campus without permission to go out and move. Many common life activities were blocked. Therefore, the SARS epidemic with its threat, its unpredictable occurrence, and its interruption of normal social order clearly fit the definition of a crisis.

Levels of crisis

Given the potential damage caused by a crisis, scholars have focused a great deal of attention on developing models of crisis to direct crisis responses. One dominant

approach is the separation of triggering events and broader or deeper issues raised by a crisis, which closely contributes to further research on separation of crisis phases. For instance, Seeger (1986) analyzes “The Challenger Tragedy” crisis at two levels. The first level is the triggering event, which is the explosion of the Challenger in this case. All astronauts died in the shuttle explosion, as did public confidence in technologies of American space exploration. According to Billings, Milburn and Schaalman (1980), the triggering event is the discrepancy between a desired state and an existing state. At the second level, the explosion of the Challenger Shuttle resulted in a deeper crisis for NASA (National Aeronautics and Space Administration). This deeper crisis was the loss of legitimacy of NASA; people doubted NASA’s goal of space exploration especially its involvement with governmental activities, such as military activities and social spending.

Scholars point out that a triggering event results in recognition of threat, feeling of surprise and short response time. And the resulting deeper crisis of legitimacy evokes a spiral process of contraction of authority, conflict and reduction of communication channels (Hermann, 1963; Seeger, 1986).

Sometimes, the detection of a triggering event can successfully prevent the occurrence of a real crisis. Mitroff’s (1994) phase of probing and prevention, and Coomb’s (1999) phase of crisis preparedness and responses are both designed to discover a potential crisis and extinguish it before it happens. But once a crisis occurs, the triggering event and the deeper crisis it creates happen simultaneously. They are related but are not exactly the same. For example, the crash of airplanes into the World Trade Center was the triggering event of the September 11 crisis. The immediate responses to human suffering, infrastructure damage, and economic consequences all responded to the triggering event. The deeper crisis was the demonstrated vulnerability of American national security and uncertainty surrounding U.S. foreign policy, which became the focus of President Bush’s crisis response (e.g. Bostdoff, 2003).

In this study, the SARS epidemic’s spread within and outside Mainland China and the loss of so many lives was a triggering event. The deeper crisis it evoked was the apparent dysfunction of the public health system and lag in response due to political governance in Mainland China. The government was faulted for failing to report disease incidents quickly enough and for inaccurate reporting of disease incidence (Lai, 2004).

Others argued the general lack of health care due to high medical care fees and the commercialization of the public health system prevented infected individuals from receiving care (Gu, 2004). The nature of the crisis might also include the distrust of the government's ability to protect citizens' lives, and a resulting lack of confidence in the nation's protection against future epidemics. The reputation of the Chinese government was challenged internationally due to a failure to share epidemic information with the international community in the early period of the crisis, and the resulting actual damage to other countries due to the epidemic transmission (Huang & Leung, 2005).

The two dimensions of crisis, the different needs to respond to the initial triggering event and to the deeper issues of organizational legitimacy, require crisis managers to recognize the stages in any crisis and the appropriate communication responses for each stage. The resolution of a triggering event rarely means the end of the crisis.

Crisis Stages and Response

Scholars realize the importance of separating a whole crisis into different phases for convenience and effectiveness of management. The stage model of crisis management is a dominant trend in crisis management literature. Existing stage models of crisis management include Fink's (1986) four-staged model, Mitroff's (1994) five-staged model and a prevalent three-staged model (e.g., Coombs, 1999). As stated by Mitroff, the most prominent advantage of a staged approach to crisis management is that crisis managers can develop "distinct, identifiable mechanisms that accompany each of the different phases" (Mitroff, 1994, p. 105).

This study will employ the popular three-staged crisis management model, and specifically explore the characteristics and corresponding strategies for the post-crisis period. Without an identified creator but recommended by multiple scholars (e.g. Birch, 1994; Guth, 1995; Woodcock, 1994), the three-staged crisis management model, including pre-crisis, crisis, and post-crisis phases, is promoted by Coombs systematically (1999).

In Coombs' three-staged model, the pre-crisis stage refers to people's proactive efforts to prevent the real occurrence of a crisis. It includes (1) signal detection: the scan and analysis of information covering past issue management, risk assessment, and

relationship maintaining; (2) prevention: actions for new issue management, risk aversion, and favorable organization-stakeholder relationship building, and evaluations on these actions; and (3) crisis preparation: including diagnosing crisis vulnerabilities, arranging crisis management teams, having a detailed and usable crisis management plan at hand, and preparing the communication system ready for a crisis (Coombs, 1999).

The crisis stage obviously begins when a real crisis happens. According to Coombs (1999), a crisis begins with a triggering event and ends when the crisis is considered to be resolved (p. 16). During this period, the responding strategies fall in two broad fields: (1) crisis recognition and (2) crisis containment and recovery. Crisis recognition is a symbolic process of framing a crisis and promoting understanding of the crisis to a dominant coalition to direct crisis control actions. Crisis containment and recovery is when the dominant coalition of the organization takes real actions to stop the crisis based on information gathered by the crisis management team. These actions include initial quick crisis response, reputation management, communicating the contingency plan, and follow-up communication for updating and answering new inquiries from stakeholders.

For the post-crisis stage, the stage most relevant to this study, Coombs recommends three areas of communication management: (1) crisis evaluation; (2) formation of institutional memory; and (3) post-crisis actions such as follow-up communication of recovery. Coombs (1999) defines the beginning of the post-crisis period as the end of the crisis phase. In other words, the post-crisis period begins when the crisis comes to an end, and “the end means that the immediate effects of the crisis are past, and the organization returns to business as usual” (p. 135). In the SARS epidemic, immediate effects were the direct public health damage caused by the disease. When people were no longer suffering and dying from SARS, the crisis could be considered ended.

As noted earlier, SARS was an unexpected and unprecedented crisis for the Chinese government. No pre-crisis planning or prevention took place. During the crisis stage, the Chinese government’s response occurred in two phases, a passive management phase and an active management phase. The crisis response set the stage for the challenges posed in the post-crisis period that this thesis project explores.

The first phase, from November 2000 to April 19, 2003, was a passive management period that began with the occurrence of the first SARS case and ended the day the Chinese government made a dramatic change in its management attitude. The second phase was from April 20, 2003 to June 24, 2003. On April 20, 2003, the Chinese government held “an unusual nationally televised live news conference” (Eckholm, 2003, p. NA). In this conference, the vice president of the Ministry of Health admitted that there were some problems in governmental control of this epidemic in past months, and apologized for the government’s mistakes. This was the first time a central governmental department head-level leader in Mainland China had apologized in public in the previous 10 years (Li & Guo, 2003). During the conference, Gao Qiang, the vice president, reported 1,435 infected cases in Mainland China as well as 339 confirmed cases and 402 suspected cases in Beijing, an increase of more than 100 cases over a report released one day earlier. In the afternoon on the same day, the previous President of the Ministry of Health and the Beijing Mayor were dismissed for their incorrect information reports and inappropriate management of the epidemic. From this point forward, the Chinese government showed a more active attitude in SARS management. During this period, the government gradually gained control and extinguished the epidemic.

The third phase of the SARS epidemic in China, the post-crisis period as defined by Coombs (1999), started on June 25, 2003 and ended on September 9, 2003. On June 24, 2003, the World Health Organization removed Beijing from their advisory travel list, the last remaining location of Mainland China on the WHO’s advisory list. This indicated the end of local transmission of SARS in Mainland China. According to the cumulative number of reported probable cases of SARS by the World Health Organization, the date of the last probable SARS case reported in Mainland China was June 25, 2003. On September 10, the World Health Organization sent the official alert about a new SARS case discovered in Singapore (website of the World Health Organization: SARS, <http://www.who.int/topics/sars/en/>). It signaled a reoccurrence of SARS epidemic, and the end of the post-crisis period for the first run of 2003 SARS epidemic.

According to Coombs (1999), there are three main steps an organization should take in post-crisis management. The first is evaluation, including evaluation of organization management performance in the past crisis and the impact of crisis.

Evaluation of the organizational crisis management performance typically refers to the test of efficacy of the crisis management plan and the implementation of the plan. The evaluation of crisis impact should compare the actual impact and expected impact. If the actual impact is less serious than the expected impact, it indicates the capability of organizational crisis management. The second step is creating institutional memory. At this step, lessons and experiences from the crisis are identified and incorporated as a part of institutional memory in an effort to prevent repeated mistakes and to promote success in the future. The third step is continued post-crisis actions to fulfill crisis-related obligations, including cooperation with continuous investigations on crisis causes by other organizations and agencies, follow-up communication for updating and answering new inquiries, and crisis tracking for prevention.

In the 2003 Chinese epidemic, the Chinese government, as the dominant crisis management agency, could exert management on multiple areas in the post-crisis period. They could evaluate their management performance to find out who should take primary responsibility for the crisis. They could summarize the experiences and lessons learned from their crisis management. They could conduct analyses of past crisis to anticipate the consequences and direction of the ongoing crisis. They could urge continuous learning upon many levels like epidemiology to investigate epidemic origin and transmission. All these management themes and strategies, based on Coombs' post-crisis map, are developed into frames for examination of government discourses and media coverage in this study.

Strategies Approach

The third trend emerging in crisis management research is an emphasis on strategies. In crisis management, popular strategies are apologia (e.g. Ware & Linkugel, 1973); image restoration (e.g. Benoit, 1995; Coombs, 1999) and organizational renewal (Seeger & Ulmer, 2002). While many studies of organizational crisis address issues of guilt, locus of control, responsibility in an immediate crisis and responses to mitigate blame (e.g., Scott & Lyman, 1968; Benoit, 1995), a focus on the deeper crisis of governance legitimacy the Chinese government faced in the post-crisis period of the SARS epidemic is more consistent with Seeger and Ulmer's (2002) attention to organizational renewal in crisis.

Hurst (1995) emphasizes the role renewal may play in crisis management. He defines renewal as the efforts of restoring and revitalizing. He describes renewal as the activity connecting with the organization's core values "to reconnect the past to the present, to rediscover the old in the new" (Hurst, 1995, p.3).

Ulmer and Sellnow (2002) argue that renewal efforts should be one area that theorists and practitioners examine instead of debating guilt and responsibility. They observe this strategy when taking a look at the September 11 crisis and state that renewal based on stakeholder commitment, commitment to correction and core values were effective in this case. The use of renewal in the case of September 11 involved "a rebuilding of confidence," and was accomplished through "corrective action." Such discourse can "quiet public alarm" (Ulmer & Sellnow, 2002).

These elements also help to analyze the use of the renewal strategy in Chinese governmental discourse responding to the SARS epidemic in the post-crisis period. Renewal is the post-crisis strategy assumed in this study which might include three elements: (1) continual commitment to stakeholders, which may include providing relief to key stakeholders, sacrifice of organizational interest to key stakeholders, and bolstering the stakeholders; (2) commitments to corrections, which show evidence of the Chinese government's appropriate release of information, and transparent and cooperative policy alternatives for prevention of new threats in post-crisis period; and (3) commitments to strengthening core values through discourse focusing on national history or cultural identity.

Besides the three elements, renewal may also have two characteristics. First, renewal calls for people to view a crisis as an opportunity. Seeger and Ulmer (2002) review crisis from a more positive and dynamic perspective by analyzing renewal strategies of two successful cases of post-crisis discourse management. Hurst (1995) asserts renewal is the discourse for innovation. He describes two types of strategies exist in the process of an organizational renewal, R-strategies and K-strategies. R-strategies are the diverse experimental strategies an organization has tried, and K-strategies are the patterned strategies that always work to deal with organizational operation successfully. With the growth of the organization and the establishment of a normal order, the diverse operational choices are replaced by fixed patterns, through which organizational profits

are always earned. At the same time, fixed patterns increase the vulnerability of an organization. When the crisis comes, the whole operational system breaks down to fragmented and unorganized units. The renewal process, for Hurt, is the reorganization of those units into a loose creative network. Thus, renewal might be closely tied to the rhetorical strategy, bolstering, which involves the magnification of the positive aspect of a fact, object, or relationship in Ware and Linkugel's model of self-defense. As they stated, "when he bolsters, a speaker attempts to identify himself with something viewed favorably by the audience" (Ware & Linkugel, 1973, p. 277).

Second, renewal emphasizes values spanning the life of an organization. Ulmer and Sellnow (2002) state that the power of an organization's rhetoric of renewal after a crisis depends on the organization's prior crisis actions and reputations. Hurst (1995) defines renewal as the efforts of restoring and revitalizing. It is a key strategy an organization uses for proceeding by "remembering the favorable meanings, experiences, and values the organization shared in the past" (p. 3 – 4). A fundamental idea of renewal is bridging the past with organizational innovation. Thus, a communication strategy of transcendence is characteristic of renewal. Transcendence describes communication strategies that transform context through levels of abstraction (Ware & Linkugel, 1973).

These two characteristics and their potential ties with bolstering and transcendence communication strategies were also used to identify the use of renewal theme in the discourses of Chinese government in the post-crisis period of the SARS epidemic.

Any crisis communication response is effective only if it reaches the intended stakeholders. In the case of the SARS epidemic post-crisis communication, the government's attempts to address underlying public health issues and to rebuild confidence in the public health system had to reach the Chinese people. Thus, the ways in which the media framed the SARS epidemic after the initial crisis are central to an evaluation of the government's crisis communication.

Framing Theory

Framing theory is helpful for this study because framing is viewed as the activity through which people organize social reality (Goffman, 1974; Tuchman, 1978; Gamson & Modigliani, 1989). The organizing process involves active cognition through selection,

emphasizing, and exclusion (Gitlin, 1980; Entman, 1993; Tankard; 2001). Thus, the framing process creates the salience of the social reality people perceive. In analyzing the Chinese government's strategies dealing with the 2003 SARS epidemic in the post-crisis period, an exploration of frames of the Chinese government on this issue during this particular period can reveal the Chinese government's viewpoint of this event and thereby disclose their strategies.

Another reason that framing theory supports this study well is the emphasis of power in framing studies. Scholars believe that framing reveals interests and influence of those who participate in the construction of social meaning (Scheufele, 1999; Carragee & Roefs, 2004). For example, the media framing process cannot escape the influence of ideological or political orientations of journalists (Tuchman, 1978; Shoemaker & Reese, 1996). As Gitlin (1980) states, gatekeepers of mass media create ideological hegemony through their framing of issues. Meanwhile, several studies that connect mass media content frame analysis and experiments of public opinion show that audience framing processes are affected by mass media (e.g. De Vreese, 2004). Entman (1991) asserts that a mass-mediated frame "makes opposing information more difficult for the typical, inexpert audience member to discern and employ in developing an independent interpretation" (p.8.).

Framing offers a theoretical means to explore the relationship between Chinese government and mass media in this study. The mass media struggle between journalistic professionalism and hegemonic influence. The comparison between Chinese government and mass media on framing post-SARS issues can indicate the performance of Chinese government in post-crisis management and its credibility.

Overview of framing theory

The term, "frame," was first used by Goffman (1974) to label the "schemata of interpretation" people used to make sense of their outside world. Multiple scholars adopt the frames as cognitive structures guiding people's perception and representation of social reality (e.g. Tuchman, 1978; Gamson & Modigliani, 1989; Entman, 1993). Tuchman (1978) identifies the most important effect of the framing process is its ability to organize everyday reality. Gamson and Modigliani (1989) define frames as "interpretive packages" that characterize discourse.

Entman (1993) synthesized the special manifest nature of frames in text and their function of cognitive influence in defining framing. He asserts “framing essentially involves selection and salience. To frame is to select some aspects of a perceived reality and make them more salient in a communication text...” (p. 52).

Many scholars focus on selection and salience transfer in their definitions of framing. As Entman explained in his 1991 study on analyzing US frames on the KAL and Iran Air Incidents: “the essence of framing is sizing – magnifying or shrinking elements of the depicted reality to make them more or less salient” (p. 9). In the similar way, Gitlin (1980) defines framing as “selection, emphasis, and exclusion” (p.7). Tankard (2001) uses the metaphor of a picture frame to define the framing process. A picture frame can isolate one particular slice from a whole view but exclude the others, and draw people’s attention on the small view encompassed by the picture frame. The function of the picture frame is equal to the purpose of the framing process through selection and exclusion.

The operational definition of frame in this study is that of Tankard and his colleagues: “A frame is a central organizing idea for news content that supplies a context and suggests what the issue is through the use of selection, emphasis, exclusion, and elaboration” (Tankard, 2001, p. 101; Tankard, Hendrickson, Silberman, Bliss, & Ghanem, 1991).

Operational dimensions to identify frames

A large volume of framing literature discusses the problem of identifying frames in texts, and offers hints to identify them. For example, Gamson and Modigliani (1989) provide the composition of their “interpretive packages,” which include “metaphors, catchphrases, visual images, moral appeals, and other symbolic devices” (p.2). Tankard and his colleagues also offer a list of framing mechanisms, as stated as “focal points for identifying framing”: (1) Headlines and kickers, (2) subheads, (3) photographs, (4) photo captions, (5) leads, (6) selections of sources or affiliations, (7) selection of quotes, (8) pull quotes, (9) logos, (10) statistics, charts, and graphs, (11) concluding statements or paragraphs of articles (Tankard, 2001, p.101; Tankard, Hendrickson, Silberman, Bliss, & Ghanem, 1991). Pan and Kosicki (1993) propose that scholars can rely on syntactical, script, thematic and rhetorical structures to conceptualize frames of news texts.

In this study, three operational dimensions are used to help identify frames. The first is the combination of generic frames and issue-specific frames. The second is the use of quotes and information sources to extend understandings of framing. The third is the valence of frames.

Generic versus Issue-specific Frames. Scholars debate methods for determining whether frames should be broad or abstract (Reese, 2001; Entman, 1991). Reese (2001) believes that frames should be the “organizing principles that are socially shared and persistent over time” (p. 11). Frames and texts differ, according to Entman (1991), since frames are those that are “politically important” in the issue coverage, which can “likeliest... promote a common, majority response... as measured in public opinion polls” (p. 8). Generally, frames are those that “cohere with an established discursive domain, a series of associated idea clusters that form a way of reasoning about a matter that is familiar to audiences from other cultural experiences” (p. 11). In this study dealing with the Chinese government’s post-crisis management of the 2003 SARS epidemic, the frames can include themes ranging from the general post-crisis management agendas and strategies to national and international crisis shared in different countries, or coverage patterns of epidemic crisis all over the world.

De Vreese (2001) distinguishes two different types of frames, issue-specific frames and generic frames, by the level of abstraction. De Vreese defines issue-specific frames as “specific topics or news events” that are special in coverage of one event, whereas generic frames are the broadly applicable patterns that fit the coverage of different news events over time and in different culture contexts (p. 108). Both issue-specific frames and generic frames are applied in this study. During the development of the frame list in the code sheet, several frames were generic frames that would be appropriate to appear in any code sheet dealing with post-crisis management issues, such as outcomes evaluation of the past crisis, view towards the past crisis and government’s management performance in the past crisis, and post-crisis learning from previous crisis. These frames were directed by the general tasks for the organization in post-crisis management in crisis literature. Meanwhile, some particular frames that only deal with the SARS crisis for Chinese management were also developed, such as reassurance related to the Chinese political system, statements supporting collective spirit and

community responses, celebration and commemoration, praising and so on. These frames were specific statements the Chinese government might use to make commitments to all social members to relieve their panic and reinforce social stability and development. They also stood for some special activities that emerged to celebrate the final victory over SARS and to restore the culture that functioned positively in this battle.

Quotes and Information Source. Quotes and information sources are frequently mentioned in Tankard's 11 framing mechanism list. The examination of quotes and information source used in media coverage was helpful in this study to investigate the level of trust mass media offered to the Chinese government.

In crisis communication literature, scholars believe media coverage is an important source to check an organization's crisis management performance. Media coverage analysis can reveal how accurately the media covered the crisis and whether the media supported the organization's crisis interpretation when reporting the crisis (Coombs, 1999). Thus, if national and international mass media were willing to frequently employ Chinese government agencies and officials as believable information sources when reporting China's handling of the 2003 post-SARS epidemic issues, it indicates that the Chinese government had credibility in post-crisis management.

Valence of Frames. Studies show that frames that are associated with inherent valences have stronger and more visible impacts on audience perceptions and retrievals (Shah, Domke, & Wackman, 2001; De Vreese & Boomgaarden, 2003). In political campaigns, frame designers may deliberately design some advantageous and disadvantageous frames to mobilize public support. Similarly, this study aims to detect government crisis strategies and media coverage through comparison of frame discourses. Several value frames were designed because they can indicate the government's crisis management strategies. For example, "the view towards the SARS epidemic and Chinese epidemic control" is a frame that offers positive or negative valence choice. If the government mainly framed the past crisis through a pessimistic view to emphasize the mistakes and loss that cannot be compensated, it cannot indicate any positive management strategies of the government. But if the government and the media it directed framed the past disaster positively by emphasizing the opportunity for change, it can demonstrate the government's active attitude for correction and renewal.

Framing studies of epidemic crisis

Several news framing studies on wide-scale epidemic crises such as the worldwide HIV/AIDS crisis, and Britain's Bovine Spongiform Encephalopathy/Creutzfeldt-Jakob disease (BSE/CJD) crisis were reviewed. These studies contributed several generic frames for frame analysis of an epidemic crisis.

Mercado-Martinez, Robles-Silva, Moreno-Leal and Franco-Almazan (2001) conducted a study to explore if media were effective in conveying health information and education to the public in a developing country – Mexico. The authors categorize six main themes in health reports: “(1) causes of disease or condition, (2) magnitude of the condition, (3) complications, (4) medical care, (5) management, and (6) other-including type, prevention, rehabilitation and so on” (p. 241).

In Brookes' study of British press' coverage on BSE/CJD crisis, the author found several patterns of coverage emerged: rhetoric of quantification, emotional stories focusing on the traumatic effects of the disease on the victims and their families, the advice from experts, special and unfamiliar medical and scientific terms to describe the crisis as unique and unprecedented danger, the risk of losing social logic thinking, a threat to the nation's health in general, and skillful mobilization of national effort involved with national identity (Brookes, 1999).

These studies help to construct the frame list for the research dealing with strategies of the China's handling of 2003 post-SARS issues. For example, quantification of the epidemic, medical care, prevention, rehabilitation, risk conveying, national identity, and magnitude of the condition were all used as frames for analysis but with subtle word changes and ranks between frame categories or sub-frame categories. Not all frames from previous studies could be transferred to the current study because they did not specially focus on post-crisis management.

One final area of literature, previous studies of the SARS epidemic, rounds out the foundation for this study.

SARS Epidemic and Chinese SARS Management

Several studies in public administration, crisis communication, and mass communication were conducted following the 2003 SARS. Among them, three studies examined the Chinese government's use of Chinese media, western-led media coverage

of China's handling of SARS epidemic, and the different strategies used by the Chinese government dealing with different publics respectively.

Zhang and Fleming (2005) examined the coverage of two Chinese newspapers – *Guangzhou Daily* and *Southern Weekend* – during the period from February 2003 to early June 2003. They analyzed what issues were reported in this period and how these two newspapers covered the SARS issue. They concluded that the Chinese Party-government used the newspapers as its instrument of coverage of SARS through appointing the newspapers' editors-in-chief by the propaganda department, issuing directives or circulars at various levels, and disseminating direct instruction of top government officials via their talks or speeches at certain conferences. This study inspired the current thesis through its both surprising and unsurprising conclusion that Chinese media were still used as Party-government's instrument despite the Chinese journalism model becoming more commercial in recent years because of the emergence of market economy forces in the society. But what this study focused on were the early period of the epidemic and the most urgent crisis management period. The present study extends this analysis to the post-crisis period.

Huang and Leung (2005) explored the western-led media's coverage of images of China and Vietnam during the SARS epidemic. The authors found that the two countries were portrayed differently in media coverage. The authors asserted that the negative image of China and the positive image of Vietnam in the Western media were determined by the two countries' different ways of managing SARS. This study suggested the idea that western "media's representation of the *other*" may not always be biased and inaccurate. The coverage may result from the actual problem within the *other*. In the SARS case, the inner problems of policies and crisis management in China itself produced this negative western coverage.

Pang, Jin and Cameron (2004) conducted research to find out if the Chinese government took different stances when they faced different publics in order to manage publics' perceptions and emotions in the 2003 SARS epidemic. They advocated placing different positions in the contingency approach continuum between advocacy and accommodation. Their ideas of separating publics and responding with different strategies are useful for this current thesis study. The publics they segmented were:

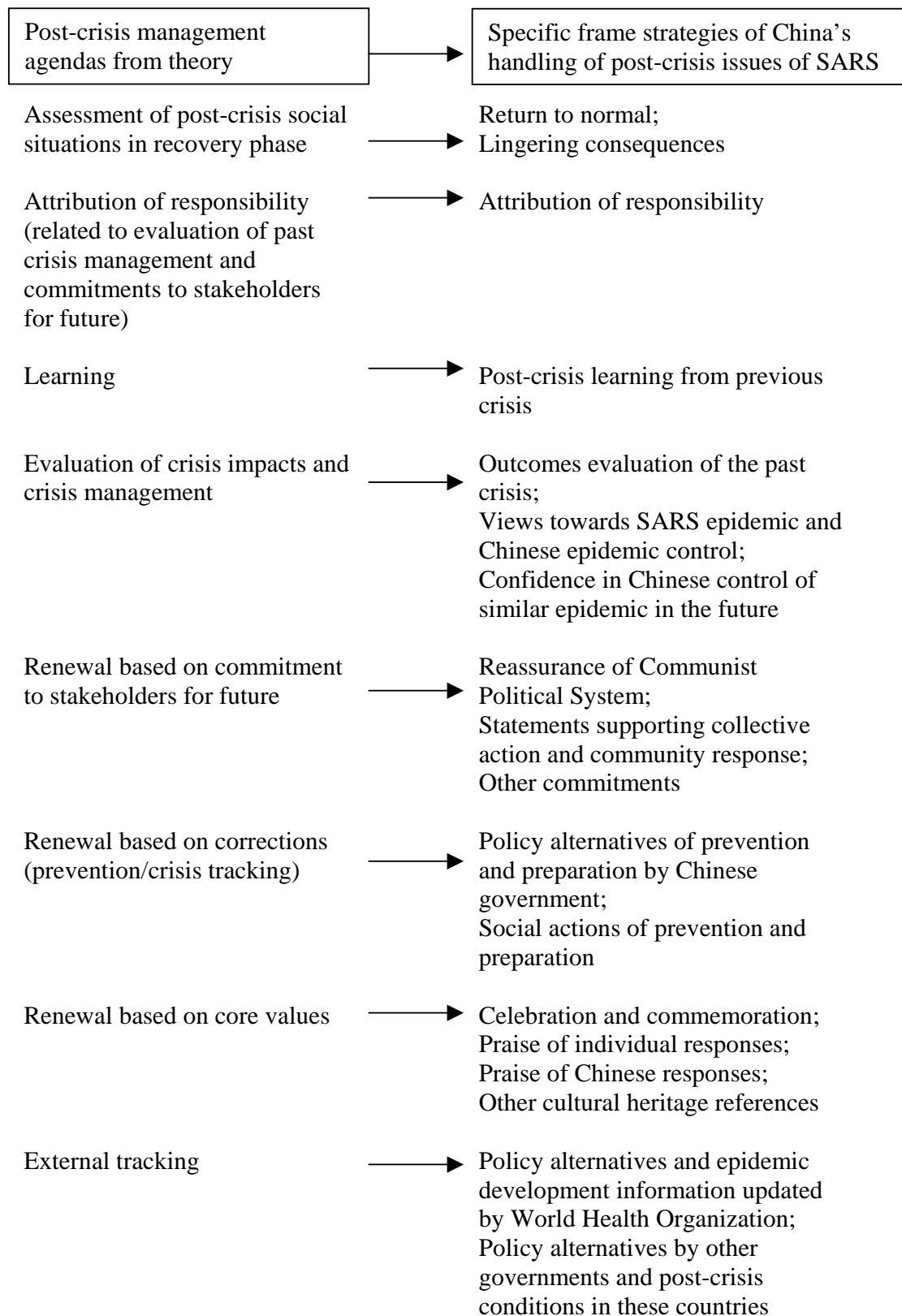
W.H.O.; medical professionals; foreign countries/businesses; affected publics; general publics; domestic businesses; Taiwan; farmers/those lived in rural areas; and others. This study recognizes both an international audience and a domestic Chinese audience as the Chinese government addressed issues of credibility in the post-crisis period.

Thus, as an extension of previous research, this study turns to the deeper crisis of government legitimacy created by the Chinese government's handling of the SARS epidemic. Through analysis of the frames used in government communication and the frames in media coverage, this study explores the potential impact of the government's post-crisis management strategies.

The crisis management and framing literatures were integrated to develop general post-crisis management agendas and the specific framing strategies available to the Chinese government for responding to the post-crisis period. These connections are shown in Figure 1. The post-crisis management agendas and framing strategies are useful for comparison across sources.

The next chapter specifies the research questions and hypothesis guiding this study and the methodology through which the connections between post-crisis management agendas and framing strategies will be tested in China's post-crisis response to the 2003 SARS epidemic

Figure 1. Typology of post-crisis communication agendas and frames



Chapter 3 – Research Questions and Methodology

Because many Chinese people suffered with SARS and because international sources blamed the Chinese government for poor handling of the early crisis, the Chinese government faced a hard task to protect the country from actual damages left by the crisis at all levels, and to rebuild its reputation nationally and internationally in the post-crisis period of the SARS epidemic. Three overarching questions sparked this study: (1) What communication strategies did the Chinese government use to finish the rebuilding work?; (2) Were the communication efforts the Chinese government used effective?; and (3) Did the Chinese government achieve its goals of post-crisis recovery, reassurance and development?

Six research questions and one hypothesis specify components of the overarching questions.

RQ 1: How did the Chinese government frame the SARS epidemic issue in China during post-crisis period?

RQ 2: What communication themes and strategies did the Chinese government use in post-crisis management?

Hypothesis: Renewal was the dominant communication strategy the Chinese government used in post-crisis management.

RQ 3: How did Chinese media frame the SARS epidemic issue in China during the post-crisis period?

RQ 4: How did foreign media frame China's handling of SARS epidemic issue in the post-crisis period?

RQ 5: What information sources did mass media employ in covering China's handling of the SARS issue in post-crisis period?

RQ 6: Were there significant correlations between Chinese government, Chinese media and foreign media about framing China's handling of the SARS epidemic issue in the post-crisis period?

Content Analysis

The study relies primarily on content analysis to examine how the Chinese government led media opinion in covering post-SARS management and conditions, and

how Chinese and foreign media framed this issue. All governmental discourses and media reports were coded for the presence or absence of anticipated frames, information sources, and the values attached. Coded results were input into SPSS software and analyzed statistically. In addition, some categories were examined through rhetorical analysis. The qualitative analysis is used to detect and describe communication strategies in the post-crisis period of the SARS epidemic.

Sample

Official government documents downloaded from the website of the Ministry of Health, PRC were used as samples of official government discourse. Journalistic coverage from Xinhua Chinese and Xinhua English was used to represent the voices of Chinese media. Reports from *The Toronto Star*, *The New York Times* and *The Times* (London) about Chinese post-SARS crisis conditions and management were collected to represent the voice of international media.

Ministry of Health, PRC. Although SARS hit the whole nation and evoked crisis management from almost all departments, the Ministry of Health was the agency most responsible for responding to this epidemic and thus was central to crisis control. According to the website of the Ministry of Health, PRC, there were five categories of articles surrounding the SARS topic that could be retrieved. They were (1) SARS prevention and treatment information; (2) Briefs of SARS prevention and treatment; (3) Statistical analysis and geographical distribution of SARS; (4) Related information about SARS; and (5) Epidemic Report.

In the website, a large volume of articles were offered by mass media but not written by the government agency. They were presented on this official website of SARS management with the possible purpose of supporting the government's crisis management efforts. However, they were not included in this study because of possible confusion between the voice of government and the voice of mass media. In consequence, only eight articles were included as the absolute governmental discourse during the post-crisis period as delimited from June 25, 2003 to September 9, 2003.

Xinhua News Agency (Chinese Version and English Version). Xinhua News Agency was selected to represent the opinions of mass media in Mainland China. Established in 1931, Xinhua News Agency is the largest and most authoritative news

provider in China. It has 30 local news agencies in China and contacts with more than 100 countries. It was selected as the media sample in this study because it was the news media with the greatest national and international reputation in China (website of Xinhua News Agency, <http://www.xinhuanet.com/>).

To select relevant discourse from Xinhua Chinese, “SARS” was searched as the keyword in headlines in the Xinhua Multi-media Database; 289 articles were found. In the Xinhua English, “SARS” was searched as the keyword in headlines in the LexisNexis Database, and 245 articles were found. A random sample of half the articles from the original volume of both Chinese and English version of Xinhua News Agency resulted in 145 articles in Xinhua Chinese and 123 articles in Xinhua English respectively selected to represent Xinhua News Agency.

After the sampling, some principles were checked again before the articles were included in the qualitative, quantitative and comparative analysis. Since a keywords search cannot ensure all articles are truly issue focused, some articles within the initial sample were excluded because they contained the keyword but did not focus on the SARS issue or SARS was only one among many elements of the story. For example, if an article referenced a particular company whose development was negatively influenced by the outbreak of SARS but addressed primarily the company’s plan and role in society, it was categorized as a non-SARS dominant article because the central organizing idea was the path of the company’s growth.

Additionally, the articles that paid attention primarily to the World Health Organization or other countries post-SARS management were also excluded. This principle is employed to ensure a fair cross-national comparative study. Since the main task of this study is to examine the Chinese government’s post-crisis management performance, the keywords search for international media outlets in the database might associate both China and SARS. Thus, Chinese media coverage about post-SARS management and its situation in international circles was also excluded. However, Chinese coverage of the international society’s responses about SARS during the post-crisis period might show some crisis management strategies of the government, such as tracking, learning and communicating international management techniques. However,

in order to maintain fairness of comparison between Chinese voices and international voices, these articles were also excluded.

Under these specific principles, 126 articles were coded out of the 145 from Xinhua Chinese, and 86 articles were coded out of the 123 from Xinhua English.

The Toronto Star. *The Toronto Star* is the newspaper with the largest circulation in Canada with 463,000 daily readers (Townson, 1999). It developed from *The Evening Star*, which was established on November 3, 1892 to serve as the “Paper for the People” (Website of *The Toronto Star*: www.thestar.com). It plays an important role in Canadian society as it attracts more upper-income readers than other newspapers (Townson, 1999).

The primary reason *The Toronto Star* was selected as a media source for this study was because Canada ranked fourth among nations affected by the SARS epidemic, especially Toronto. The Canadian press had reason to pay more attention to this topic, since the Chinese government’s post-crisis performance related directly to public health security in Canada.

Twenty-four articles were found with both “SARS” and “China” in the headlines, lead paragraphs and terms in the LexisNexis Database. But, as with the Xinhua News Agency search, some articles not related to the issue or this study were excluded. Seven articles from *The Toronto Star* were coded.

The New York Times. *The New York Times* is a world-famous newspaper, considered the paradigm in journalism. It advocates responsibility for the public. As for international news coverage, *The New York Times* is generally regarded as the “paper of record” in the United States (Gitlin, 1980). Thirty-seven articles were found with both “SARS” and “China” in headlines, lead paragraphs and terms in the LexisNexis Database. Since some of the articles were not related to the Chinese post-SARS management and conditions, the same selection principles were employed for a second check. After exclusion, eleven articles in *The New York Times* were coded.

The Times (London). *The Times* was selected for this study for the same reason as *The New York Times*; *The Times* is also a prestigious newspaper for its coverage on international issues. Twelve articles were found with both “SARS” and “China” in headlines, lead paragraphs and terms in the LexisNexis Database. Articles were excluded

using the previously described selection principles. Eight articles were coded from *The Times*.

Categories

A series of categories of content frames were developed, derived from research about the 2003 SARS epidemic, other works related to international disease crisis, Coombs' three-staged crisis management model (1999) and Ulmer and Sellnow's renewal model for post-crisis communications (2002). The content frames include:

- (1) Return to normal;
- (2) Lingering consequences;
- (3) Attribution of responsibility;
- (4) Outcomes evaluation of the past crisis;
- (5) View towards SARS epidemic and Chinese epidemic control;
- (6) Post-crisis learning of the previous crisis;
- (7) Confidence in Chinese control of similar epidemic in the future;
- (8) Reassurance of Communist Political System;
- (9) Statements supporting collective action and community response;
- (10) Other statement to stakeholders for the future;
- (11) Policy alternatives of prevention and preparation by Chinese government;
- (12) Social actions of prevention and preparation;
- (13) Celebration and commemoration;
- (14) Praise of Chinese responses at large;
- (15) Praise of individual responses;
- (16) Other cultural heritage bridging the past crisis and future in formats other than celebration, commemoration and praising;
- (17) Policy alternatives and epidemic development information updated by the World Health Organization;
- (18) Policy alternatives by governments other than China and post-crisis conditions in these countries;
- (19) Others.

Besides coding frames to explore how different agencies covered China's handling of post-crisis, information sources were also examined along with the values

journalists associated with these sources. The information source categories include (1) Chinese government agencies and officials; (2) W.H.O. officials; (3) other non-Chinese government voices; (4) Chinese public health experts and professionals; (5) Chinese social organizations, firms or other institute members; (6) Chinese social experts in fields other than public health; (7) Chinese citizens; (8) International voices other than W.H.O. and governments; (9) Xinhua News Agency; (10) other media, and (11) others.

A codesheet and codebook for these categories of content frame and information source are attached in the appendix of this thesis.

Intercoder reliability

Two coders mastering both Chinese and English language were trained to obtain the intercoder reliability necessary for this study. Intercoder reliability was calculated on a sample randomly selected over Chinese government documents and all media outlets during the post-crisis period. Intercoder reliability was assessed on 50 units of analysis for each of the 80 categories. The average intercoder reliability was .95 across all categories, ranging from a low of .82 for outcomes evaluation of the past crisis to a high of 1.00 for “blame others than China for responsibility”, “China accepts its crisis responsibility”, “China rejects its crisis responsibility”, “negative political consequences” and information sources such as “Chinese social experts” and so on.

Additional Rhetorical Analysis

The Chinese government’s post-crisis communication strategies were explored in greater depth through rhetorical analysis. The rhetorical analysis followed the renewal model of Ulmer and Sellnow (2002) including three necessary elements: renewal based on commitments to stakeholders, renewal based on corrections and renewal of core values. It analyzes communication strategies such as bolstering and transcendence developed by Ware and Linkugel (1973).

Chapter 4 - Results

Chinese government's frames of post-crisis management and conditions

Research question 1 asked how the Chinese government framed SARS epidemic issue in the post-crisis period. Table 1 provides a quick answer to this question. As it indicates, government discourses (n = 8 in total) downloaded from the website of the Ministry of Health mainly talked about the Chinese government's policy alternatives of prevention and preparation (n = 6, 75.0% of the total sample), including policies about laws, rules and other systems of management (n = 3, 37.5% of the total sample), policies to mobilize social action (n = 3, 37.5% of the total sample), and case tracking and reporting of the progress of an epidemic situation (n = 1, 12.5% of the total sample). Additionally, the Ministry of Health made statements about the Communist Political System (n = 2, 25.0% of the total sample), praise of individual responses (n = 2, 25.0% of the total sample), social actions of prevention and preparation (n = 1, 12.5% of the total sample), and policy alternatives by governments in other countries and the post-crisis conditions in these countries (n = 1, 12.5% of the total sample).

Chinese Government's Post-SARS Crisis Communication Strategies

Research question 2 and the hypothesis explored what strategies the Chinese government used to reassure the public and recover from the damage of the 2003 SARS epidemic. These strategies were studied both through the official governmental discourses, and the information dissemination from the Communist party's spokesman: Xinhua News Agency – one of the biggest party-owned media agencies. Chinese government discourses on the website of the Ministry of Health are certainly the most direct source to examine the government's strategies for managing the post-crisis period of the SARS epidemic. At the same time, a unique way to assess the Chinese government's management performance was also to observe mass media coverage under the government's guidance since the media system in China is Communist Party-owned (Shoemaker & Reese, 1996; Schell, 1995).

Results for research question 2 showed the Chinese government utilized renewal as the dominant theme for post-crisis rebuilding of SARS epidemic. The renewal theme was elaborated through three elements: (1) renewal based on commitments to

stakeholders such as government's promise of Communist Political System, collectivism, and economic support in the post-crisis period; (2) renewal based on commitments to corrections such as the Chinese Government's policy alternatives of prevention and preparation; and (3) renewal based on core values such as sacrifice, altruism, collectivism, and loyalty. Two communication strategies – bolstering and transcendence – were used to support the Chinese government's renewal theme. The results tested the hypothesis which conjectured that renewal was the dominant communication theme used by the Chinese government in the post-crisis period of SARS epidemic. More details of renewal theme and two communication strategies – bolstering and transcendence are discussed in-depth through a rhetorical analysis in Chapter 5.

The Chinese media's frames of post-crisis management and conditions

Research question 3 explores how the Chinese media framed the SARS epidemic issue in the post-crisis period. Represented by Xinhua News Agency, the largest and the most prestigious news provider in China, Chinese media have 5 dominant frames in covering issues during the post-crisis period of the SARS epidemic in China as indicated by Table 1. Frames represented in more than 10% of the sample are presented here (n = 212):

- (1) Policy alternatives of prevention and preparation by Chinese government (n = 84, 39.6% of the sample), including tracking old disease cases, development of the epidemic, and investigating new cases (n = 56, 26.4% of the sample), mobilizing social actions (n = 18, 8.5% of the sample), laws, rules, and systems of management (n = 15, 7.1% of the sample) and organizational cooperation (n = 10, 4.7% of the sample);
- (2) Statements supporting collective action and community response (n = 35, 16.5% of the sample);
- (3) Celebration and commemoration (n = 31, 14.6% of the sample);
- (4) Outcomes evaluation of the past crisis (n = 28, 13.2% of the sample), including negative economic consequences (n = 15, 7.1% of the sample), positive public health consequences (n = 5, 2.4% of the sample), positive social consequences (n = 5, 2.4% of the sample), positive economic consequences (n = 3, 1.4% of the sample), positive political consequences (n = 0, 0% of the sample);

= 3, 1.4% of the sample), negative political consequences (n = 1, 0.5% of the sample), and negative social consequences (n = 1, 0.5% of the sample); and (5) Praise of individual responses (n = 22, 10.4% of the sample).

Although not as intense as the dominant frames, Chinese media also gave frequent mentions to 6 additional frames. Each of these six additional frames occurred in less than 10% of the sample:

- (1) Post-crisis learning from the previous crisis (n = 19, 9.0% of the sample);
- (2, tie) Return to normal (n = 17, 8.0% of the sample), including business recovery (n = 13, 6.1% of the sample), and other than business and social recovery (n = 4, 1.9% of the sample);
- (2, tie) Statements to stakeholders for the future other than reassurance of Communist Political System, and collective spirit or community response (n = 17, 8.0% of the sample);
- (4) Praise of Chinese responses at large (n = 15, 7.1% of the sample);
- (5, tie) Reassurance of Communist Political System (n = 13, 6.1% of the sample); and
- (5, tie) Social actions of prevention and preparation (n = 13, 6.1% of the total sample).

Additionally, the Chinese media mentioned another 5 frames but paid no significant attention (frame's percentage of frequency less than 5%):

- (1) Views towards SARS epidemic and Chinese epidemic control (n = 7, 3.3% of the sample), which actually is the only positive view towards SARS epidemic and Chinese epidemic control (n = 7, 3.3% of the sample);
- (2) Policy alternatives and epidemic development information updated by World Health Organization (n = 5, 2.4% of the sample);
- (3) Lingering consequences (n = 4, 1.9% of the sample), including lingering business consequences (n = 3, 1.4% of the sample) and lingering social consequences (n = 1, 0.5% of the sample);
- (4) Cultural heritage bridging the past crisis and the future in formats other than celebration, commemoration and praising (n = 3, 1.4% of the sample); and

- (5) Confidence in Chinese control of similar epidemic in the future (n = 2, 0.9% of the sample).

Respective versions of Xinhua News Agency had different dominant frames in this coverage. For Xinhua Chinese, shown in Table 2, the dominant frames (n in total = 126, frame's percentage of frequency \geq 10.0%) are:

- (1) Policy alternatives of prevention and preparation by Chinese government (n = 45, 35.7% of the total sample);
- (2) Statements supporting collective action and community response (n = 29, 23.0% of the total sample);
- (3) Celebration and commemoration (n = 26, 20.6% of the total sample);
- (4) Praise of individual responses (n = 20, 15.9% of the total sample);
- (5, tie) Outcomes evaluation of past crisis (n = 13, 10.3% of the total sample); and
- (5, tie) Reassurance of the Communist Political System (n = 13, 10.3% of the total sample).

Table 2 also shows that the dominant frames (n in total = 86, frame's percentage of frequency \geq 10.0%) by Xinhua English are:

- (1) Policy alternatives of prevention and preparation by Chinese government (n = 39, 45.3% of the total sample);
- (2) Outcome evaluations of past crisis (n = 15, 17.4% of the total sample);
- (3) Return to normal (n = 12, 14.0% of the total sample);
- (4) Statements to stakeholders for the future other than reassurance of Communist Political System and collective spirit (n = 11, 12.8% of the total sample); and
- (5) Post-crisis learning from the previous crisis (n = 9, 10.5% of the total sample).

The Western media's frames of post-crisis management and conditions

Research question 4 explored how foreign media covered China's handling of the post-SARS issue. Since *The Toronto Star*, *The New York Times* and *The Times* (London) were selected for their issue relevance and prestigious reputation for international reporting, these media outlets from Canada, United States, and England can only represent media voices in the western world.

For the Western press, indicated by Table 1, 10 separate frames of Chinese issues in the post-crisis period of the 2003 SARS epidemic appeared in at least 10% of the sample as follows (n = 26 in total):

- (1) Outcome evaluations of past crisis (n = 16, 61.5% of the total sample), including negative economic consequences (n = 13, 50.0% of the total sample), negative public health consequences (n = 4, 15.4% of the total sample), positive political consequences (n = 3, 11.5% of the total sample), negative political consequences (n = 2, 7.7% of the total sample), negative social consequences (n = 2, 7.7% of the total sample), negative consequences on reputation (n = 1, 3.8% of the total sample), and other consequences (n = 1, 3.8% of the total sample);
- (2) Return to normal (n = 10, 38.5% of the total sample), including business recovery (n = 8, 30.8% of the total sample) and social recovery (n = 2, 7.7% of the total sample);
- (3) Policy alternatives and epidemic development information updated by World Health Organization (n = 7, 26.9% of the total sample);
- (4, tie) Attribution of responsibility (n = 6, 23.1% of the total sample), which only include one option that blaming China for crisis responsibility (n = 6, 23.1% of the total sample);
- (4, tie) Statements to stakeholders for the future other than reassurance of Communist Political System and collective spirit (n = 6, 23.1% of the total sample);
- (6, tie) Views towards SARS epidemic and Chinese epidemic control (n = 4, 15.4% of the total sample), including positive view (n = 3, 11.5% of the total sample) and negative view (n = 3, 11.5% of the total sample);
- (6, tie) Social actions of prevention and preparation (n = 4, 15.4% of the total sample);
- (6, tie) Celebration and commemoration (n = 4, 15.4% of the total sample);
- (9, tie) Lingering consequences (n = 3, 11.5% of the total sample), which only refers to lingering business consequences (n = 3, 11.5% of the total sample); and

(9, tie) Post-crisis learning from previous crisis (n = 3, 11.5% of the total sample).

Western media also offered coverage dealing with two additional frames, but not as frequently as the dominant frames (frame's percentages of frequency < 10.0%):

- (1) Policy alternatives of prevention and preparation by Chinese government (n = 2, 7.7% of the total sample), including tracking old disease cases and development of epidemic, and investigating new cases (n = 1, 3.8% of the total sample) and mobilizing social actions (n = 1, 3.8% of the total sample); and
- (2) Confidence in Chinese control of similar epidemic in the future (n = 1, 3.8% of the total sample), which only referred to a skeptical value attached (n = 1, 3.8% of the total sample).

In *The Toronto Star*, all frames the newspaper covered emerged as dominant frames, because of the small number of articles coded. Thus, *The Toronto Star* had eight dominant frames (n = 7 in total):

- (1) Outcome evaluations of past crisis (n = 4, 57.1% of the total sample);
- (2, tie) Return to normal (n = 2, 28.6% of the total sample);
- (2, tie) Attribution of responsibility (n = 2, 28.6% of the total sample);
- (2, tie) Statements to stakeholders in the future other than reassurance of Communist Political System and collective spirit (n = 2, 28.6% of the total sample);
- (5, tie) Lingering consequences (n = 1, 14.3% of the total sample);
- (5, tie) Post-crisis learning from previous crisis (n = 1, 14.3% of the total sample);
- (5, tie) Policy alternatives of prevention and preparation by Chinese government (n = 1, 14.3% of the total sample); and
- (5, tie) Social prevention and preparation (n = 1, 14.3% of the total sample).

Table 2 shows that *The New York Times* contained seven dominant frames (n in total = 11, frame's percentage of frequency \geq 10.0%) when covering post-crisis issues in China. They were:

- (1) Outcomes evaluation of the past crisis (n = 8, 72.7% of the total sample);
- (2) Policy alternatives and epidemic development information updated by the World Health Organization (n = 5, 45.5% of the total sample);

- (3) Statements to stakeholders for the future other than reassurance of Communist Political System, and collective spirit (n = 4, 36.4% of the total sample);
- (4) Return to normal (n = 3, 27.3% of the total sample);
- (5, tie) Lingering consequences (n = 2, 18.2% of the total sample);
- (5, tie) Views towards the SARS epidemic and Chinese epidemic control (n = 2, 18.2% of the total sample); and
- (5, tie) Social prevention and preparation (n = 2, 18.2% of the total sample).

For *The Times* (London), every mentioned frame was considered as a dominant frame since this newspaper only had eight articles in total. Thus, even if a frame was only mentioned once, its percentage of frequency would be 12.5% of the total sample, which is more than 10.0%. *The Times* had eight dominant frames (n = 8 in total, frame's percentage of frequency \geq 10.0%):

- (1) Return to normal (n = 5, 62.5% of the total sample);
- (2) Outcomes evaluation of the past crisis (n = 4, 50.0% of the total sample);
- (3) Attribution of responsibility (n = 3, 37.5% of the total sample);
- (4, tie) Views towards the SARS epidemic and Chinese control (n = 2, 25.0% of the total sample);
- (4, tie) Policy alternatives and epidemic development information updated by World Health Organization (n = 2, 25.0% of the total sample);
- (6, tie) Post-crisis learning from previous crisis (n = 1, 12.5% of the total sample);
- (6, tie) Social prevention and preparation (n = 1, 12.5% of the total sample); and
- (6, tie) Celebration and commemoration (n = 1, 12.5% of the total sample).

Information sources

Research question 5 was designed to identify the most preferable and believable information sources for different media outlets in covering China's handling of the post-crisis issue of the SARS epidemic. Table 1 and Table 2 both offer results. Table 1 indicates the use of information sources by Chinese media in general and Western media in general. Table 2 supplements with the detailed use by each media outlet, including Xinhua Chinese, Xinhua English, *The Toronto Star*, *The New York Times* and *The Times*.

For Chinese media, the information sources the journalistic coverage relied on, ordered from the highest percentage of frequencies to lowest percentage of frequencies, were (n in total = 212):

- (1) Chinese government agencies and officials (n = 130, 61.3% of the total sample);
- (2) Chinese public health experts and professionals (n = 34, 16.0% of the total sample);
- (3) Chinese citizens (n = 20, 9.4% of the total sample);
- (4) Chinese social organizations, firms, or other institute members (n = 19, 9.0% of the total sample);
- (5, tie) W.H.O. officials (n = 9, 4.2% of the total sample);
- (5, tie) International voices other than W. H. O. and governments in other countries (n = 8, 3.8% of the total sample), including social experts (n = 4, 1.9% of the total sample), business investors (n = 3, 1.4% of the total sample), and public health professionals (n = 1, 0.5% of the total sample);
- (7) Chinese social experts in fields other than public health (n = 6, 2.8% of the total sample);
- (8) Governments agencies and officials in other countries (n = 4, 1.9% of the total sample); and
- (9) Others (n = 1, 0.5% of the total sample).

All information sources were used favorably; information sources were presented as trustworthy and not criticized.

For each version of the Xinhua News Agency, differences between versions with the Chinese media in general emerged. Xinhua Chinese used information sources in this order (n in total = 126):

- (1) Chinese government agencies and officials (n = 75, 59.5% of the total sample);
- (2) Chinese public health experts and professionals (n = 25, 19.8% of the total sample);
- (3) Chinese citizens (n = 18, 14.3% of the total sample);

- (4) Chinese social organization, firms, and other institute members (n = 10, 7.9% of the total sample);
- (5, tie) W.H.O. officials (n = 5, 4.0% of the total sample);
- (5, tie) International voices other than W.H.O. and governments in other countries (n = 5, 4.0% of the total sample); and
- (7) Other non-Chinese governments (n = 1, 0.8% of the total sample).

The information sources used by Xinhua English, ordered from the highest percentage of frequencies to lowest percentage of frequencies, consisted of (n in total = 86):

- (1) Chinese government agencies and officials (n = 55, 64.0% of the total sample);
- (2, tie) Chinese public health experts and professionals (n = 9, 10.5% of the total sample);
- (2, tie) Chinese social organizations, firms or other institute members (n = 9, 10.5% of the total sample);
- (4, tie) W.H.O. officials (n = 4, 4.7% of the total sample);
- (4, tie) International voices other than W.H.O. and governments in other countries (n = 4, 4.7% of the total sample);
- (6) Other non-Chinese government officials (n = 3, 3.5% of the total sample);
- (7, tie) Chinese social experts in fields other than public health (n = 2, 2.3% of the total sample);
- (7, tie) Chinese citizens (n = 2, 2.3% of the total sample); and
- (9) Other media (n = 1, 1.2% of the total sample).

Western media employed information sources differently to construct their framing of Chinese post-SARS issues. Ordered from the highest percentage of frequencies to lowest percentage of frequencies, they were (n in total = 26):

- (1) Chinese government agencies and officials (n = 9, 34.6% of the total sample), including in favorable ways (n = 6, 23.1% of the total sample), and unfavorable ways (n = 3, 11.5% of the total sample);

- (2) W.H.O. officials (n = 8, 30.8% of the total sample), including in favorable ways (n = 7, 26.9% of the total sample), and unfavorable ways (n = 1, 3.8% of the total sample);
- (3) International voices other than W.H.O. and governments in other countries (n = 7, 26.9% of the total sample), including public health professionals (n = 4, 15.4% of the total sample), social experts (n = 2, 7.7% of the total sample) and business investors (n = 1, 3.8% of the total sample);
- (4) Chinese citizens (n = 3, 11.5% of the total sample); and
- (5) Chinese social organizations, firms or other institute members (n = 2, 7.7% of the total sample).

In the Western media, *The Toronto Star* had patterns of information source use in the following order (n in total = 7):

- (1) Chinese government agencies and officials (n = 3, 42.9% of the total sample);
- (2, tie) W.H.O. officials (n = 2, 28.6% of the total sample);
- (2, tie) International voices other than W.H.O and governments (n = 2, 28.6% of the total sample); and
- (4) Chinese public health experts and professionals (n = 1, 14.3% of the total sample).

The information sources used by *The New York Times*, ordered from the highest percentage of frequencies to lowest percentage of frequencies, consisted of (n in total = 11):

- (1, tie) Chinese government agencies and officials (n = 5, 45.5% of the total sample);
- (1, tie) W.H.O. officials (n = 5, 45.5% of the total sample);
- (3) International voices other than W.H.O. and governments (n = 3, 27.3% of the total sample);
- (4, tie) Chinese public health experts and professionals (n = 1, 9.1% of the total sample);
- (4, tie) Chinese social organizations, firms, and other institute members (n = 1, 9.1% of the total sample); and
- (4, tie) Chinese citizens (n = 1, 9.1% of the total sample).

The information sources used by *The Times*, ordered from the highest percentage of frequencies to lowest percentage of frequencies, consisted of (n in total = 8):

- (1, tie) Chinese citizens (n = 2, 25.0% of the total sample);
- (1, tie) International voices other than W.H.O. and governments (n = 2, 25.0% of the total sample);
- (3, tie) Chinese government officials (n = 1, 12.5% of the total sample);
- (3, tie) Chinese public health experts and professionals (n = 1, 12.5% of the total sample); and
- (3, tie) Chinese social organizations, firms or other institute members (n = 1, 12.5% of the total sample).

Frame correlations among Chinese government, Chinese media and Western media

Research question 6 asked if there were significant correlations among Chinese government, Chinese media and Western media in how they framed Chinese post-crisis issues of SARS epidemic. The Pearson correlation was used to answer this question and Table 3 offers a clear answer.

Table 3: Correlation analyses comparing frequencies and sources of media content frame coverage of SARS

	HM	XC	XE	TS	NYT	TT
Health Ministry (HM)	1.00	.58**	.60**	.16	.06	-.13
Xinhua Chinese (XC)		1.00	.92**	.43**	.33**	.10
Xinhua English (XE)			1.00	.53**	.46**	.13
<i>The Toronto Star</i> (TS)				1.00	.82**	.58**
<i>The New York Times</i> (NYT)					1.00	.65**
<i>The Times</i> (TT)						1.00
	HM		CM		WM	
Health Ministry	1.00		.60**		.05	
Chinese Media combined (CM)			1.00		.38**	
Western Media combined (WM)					1.00	

** . Correlation is significant at the 0.01 level (2-tailed).

As is shown in Table 3, Chinese media correlated with Ministry of Health in frame frequencies and source employments as significant at $r = .60, p \leq .01$ (each version's correlation with Ministry of Health: Xinhua Chinese $r = .58$, and Xinhua

English $r = .60$). Comparatively, the content frames used by Western media had no significant correlations with Ministry of Health. The correlation was as low at $r = .05$, ranging from *The Toronto Star* as the comparatively highest at $r = .16$, *The New York Times* at $r = .06$, to *The Times* as the lowest at $r = -.13$. The correlation of Ministry of Health and *The Times* shows a slight inverse relationship between their content frame coverage, but the inverse relationship was not significant.

The correlation between each outlet of Chinese media – Xinhua Chinese and Xinhua English – was strongly significant at $r = .92$, $p \leq .01$. This correlation was the highest in all pairs, which included correlation between Ministry of Health and Chinese media.

Chinese media also had significant correlations with Western media in frame coverage. The correlation in general was $r = .38$, $p \leq .01$. The order of correlation between respective Chinese media and Western media from highest to lowest was Xinhua English and *The Toronto Star* ($r = .53$, $p \leq .01$), Xinhua English and *The New York Times* ($r = .46$, $p \leq .01$), Xinhua Chinese and *The Toronto Star* ($r = .43$, $p \leq .01$), Xinhua Chinese and *The New York Times* ($r = .33$, $p \leq .01$), Xinhua English and *The Times* ($r = .13$, $p = \text{n.s.}$) and Xinhua Chinese and *The Times* ($r = .10$, $p = \text{n.s.}$). These data demonstrate that there were significant correlations between each Chinese media and each Western media except *The Times*. *The Times* was the western media, which correlated most weakly with Ministry of Health and Chinese media. *The Toronto Star* was the Western media which had closest correlation with Chinese media, as well as Ministry of Health as shown above. Additionally, coverage by Xinhua English was more similar to Western media coverage than Xinhua Chinese.

Outlets of Western media all had significant correlations with each other. The order of the correlations from high to low were: correlation of *The Toronto Star* and *The New York Times* ($r = .82$, $p \leq .01$), correlation of *The Toronto Star* and *The Times* ($r = .65$, $p \leq .01$), and correlation of *The New York Times* and *The Times* ($r = .58$, $p \leq .01$). *The Times* had no significant correlation with any Chinese voice. Its correlations with the other two Western newspapers were the only times *The Times* correlated to another source.

Chapter 5 – Discussion

Renewal theme by Chinese government in the post-crisis period

As stated before in the results chapter, renewal was the dominant communication theme Chinese government utilized to rebuild in the post-crisis period of the 2003 SARS epidemic. Confirmed with Ulmer and Sellnow' (2002) study, the renewal theme was elaborated through three elements: renewal based on commitments to stakeholders, renewal based on corrections, and renewal based on core values. Bolstering and transcendence were used as main communication strategies to support the renewal theme.

Renewal based on stakeholder commitment

Three stakeholder commitments that contributed to renewal of Chinese society were made in the post-crisis period of the 2003 SARS epidemic. They were: (1) reassurance of Chinese Communist Political System; (2) statements supporting collective action and community response; and (3) other statements such as the government's promise to help in economic recovery.

From its inception in 1949, the People's Republic of China and the Chinese Communist Party had a positive reputation for leading the Chinese people to develop the economy and for constructing an ordered and peaceful society. Thus, a commitment to keep this political system was a commitment for a stable society in any crisis. In the post-crisis period of the 2003 SARS epidemic, Chinese government and Chinese media absolutely emphasized that the central leading idea of the Chinese Communist Party was right and for the population's benefit. They especially mentioned the "Three Represents," which means the Party must always represent the development of China's advanced productive forces, the orientation of China's advanced culture, and the fundamental interests of the overwhelming majority of the Chinese people. The Chinese government concluded that the numerous heroic behaviors through the SARS crisis epitomized the "Three Represents" principle, and, at the same time, showed the advanced quality of the Communist Party. The Chinese Communist Party, represented by the government officials that spoke in public lectures by and about SARS heroes, committed to all Chinese people that they would continue this principle, and more importantly, they

showed the whole population in China their efforts to gain profits for the majority of Chinese people, and keep a prosperous and stable society for them.

A typical example emerged in the official document from Ministry of Health for praising advanced organizations during the SARS epidemic. The document consisted of the congratulation letter from Vice President, Wu Yi, and the address of Vice President of Ministry of Health, Gao Qiang. Wu Yi praised that: “Ministry of Health successfully played its role of leading, cohering and collaborating... Numerous communitarians remembered the principle of serving for publics, worked in the frontline over the SARS epidemic, conducting the duties of communitarians...” Gao Qiang stated that “the performances of medical workers during the battle with SARS epidemic presented the right images of communitarians... We should continually study ‘Three Represents’ and realize its significant leading role” (Ministry of Health, June 30, 2003, p. NA).

Commitments to a collective spirit and to care for others were also made in Chinese post-crisis discourses of 2003 SARS epidemic. Social surveys showed that Hong Kong people tended to be more family-oriented, and cared more for people around them after the SARS crisis. Funds that were aimed to help children whose relatives died in SARS were established. The society was portrayed as more filled with love.

The Chinese government was a strong voice in articulating its confidence for economic recovery. They repeated several times that the Chinese economy was not hurt so much by the crisis, aside from service industries like tourism, restaurants, airlines and so on. The Chinese government published a series of policies to help economic recovery such as tax cuts for industries that were seriously hurt by the crisis and lifting the limit of entries to Hong Kong from Mainland China to stimulate the tourism related industries’ recoveries in Hong Kong.

Renewal based on commitment to correction

The SARS epidemic disclosed the vulnerability of people’s public health security not only in China but also throughout the world. The Chinese government was blamed for misdeeds of delayed management and concealing crisis information in China that resulted in the virus transmissions all over the world. As W.H.O. officials and scientists forecasted a potential second and even a third recurrence of SARS globally, people urgently want to know how they could be protected from the disease.

The Chinese government promised corrections through policy alternatives of prevention and preparation including tracking closely all similar cases to SARS and infected cases for quarantine and other treatments as soon as possible; preparing detailed written management guidelines and laws for clear steps and responsibility attributions if emergencies happened; holding rehearsals for emergencies; assigning cooperation between different departments in Chinese governments; closely cooperating with the World Health Organization; disseminating public health knowledge for virus prevention and preparation; conducting social education for optimal behaviors to fight against SARS such as open windows for fresh air, and steps of antiseptics and virus elimination.

Renewal based on core values

Core Chinese values such as contribution, sacrifice, cooperation, collectivism and loyalty to the Chinese Communist Party were renewed. Conflicts apparent before the crisis, such as the unfriendly relationship between doctors and patients because of the marketization of medical institutions and services and complaints by rural people for their inability to afford health insurance, were relieved. The government called for free medical treatments for all SARS patients, and cooperation to fight against with SARS.

Another example of renewal based on core values appeared in a news report by Xinhua Chinese. It described a public presentation arranged by the government named “serving for people” where several SARS heroes shared their stories and journalists reported audience reactions (Ge, 2003). In the public lecture, several cultural values were advocated as heroes talked about their experiences at the frontline battling SARS. The values were self-sacrifice and altruism; the compromise of self-interest to a group’s interest especially the compromise of family happiness to national interests; responsibility; and dedication.

To reinforce the effect of these values, the article employed two means of presentation. The first was to make the anti-SARS heroes articulate these favorable culture values, and the second was to present the public’s feedback to these values. The co-existence of these two elements served as cultural reinforcement. However, the values that were advocated were only general words in the news report without sufficient and vivid stories to support them. On the other hand, the feedback was more emphasized and seemed to be delicately designed. The journalist used three information sources to

express their feedback: a government clerk, a soldier and a worker at a state-owned factory. These people were not only common Chinese citizens, but also represented the economic and social classes of large segments of the Chinese population.

The last two information sources – the soldier and the worker – were especially salient in the whole article. Every Chinese citizen was educated in childhood to trust the military forces who safeguarded the country. The working class was the dominant class in China and represented the opinions of majority. The presentations of the information sources asserted that the most important forces in China trusted and were loyal to the government in the crisis.

The feedback from the soldier especially reinforced the Communist Party's education principles. He mentioned the "Three Represents" himself, as the evidence that he believed in the advanced quality of the Chinese Communist Party, and wanted to be as advanced as the heroic communarians by learning from their deeds. He renewed the core value of loyalty to the Communist Party. He declared "the public lecture informed him more about the stories of SARS heroes, deepened his understanding of 'Three Represents', and clarified his working direction in the future." He asserted "he will be responsible and dedicated at his job and finish all tasks in his position for the country" (Ge, 2003, p. NA). All other values such as altruism, sacrifice and collectivism seemed to be the values under the dominant value of loyalty in Chinese post-crisis discourses.

Renewal: The crisis communication theme for opportunities

In the renewal discourses, bolstering strategy was used for a better presentation of the renewal theme in China's handling of the post-SARS issues. Generally, this strategy was utilized to help the Chinese people escape from the depressed emotion of the SARS epidemic and see the consequences that showed hope.

For example, Chinese media emphasized the positive consequences of the SARS epidemic at multiple levels in terms of the economy, public health, politics, and social development. People were spontaneously training themselves for healthier living habits like not spitting phlegm on floors anymore, an old Chinese bad habit especially popular in middle and old generations of Chinese citizens. Politics were becoming more open since Chinese leaders learned that concealment couldn't solve a problem, but sincere cooperation and listening could. Emergency response mechanisms were established

through publishing related documents and laws. And the Chinese economy was not hurt as seriously as people thought in the crisis. One article from Xinhua English discussed a new management system “ESARS” established in Hong Kong. It was set up “during the outbreak of the dreadful disease”, and “all the data of the more than 1,700 SARS patients in city were put into the system, making it the world’s largest and most comprehensive data base of SARS patients.” This might be a typical example of bolstering the positive consequence of the annoying disease (*IT proves*, 2003, p. NA).

When Chinese media, under the direction of the Chinese government, talked about the attitude with which to view this crisis, they proposed to learn from a positive view. They summarized experiences and lessons, and confidently asserted the crisis was an opportunity for China to correct its ineffective emergency management system. The positive view of the SARS epidemic sometimes accompanied the bolstering of positive consequences of the disease. For example, people’s desire for city planning in Beijing was portrayed by Xinhua English. The perceived risk of disease spread in populous cities evident in the past crisis made people likely to “move out of the city to larger, better equipped suburban housing.” This consequence offered the new opportunity for city renewal and re-planning; created a chance to change (*Beijing urged*, 2003, p. NA).

Renewal: The crisis communication theme for continuous institution memory

Renewal is a communication form that is based on the organization’s previous credibility and emphasizes continuity. It is not a breaking of institution history and memory, but strengthens it with some corrections. It is a communication form that emphasizes the cultural heritage of the organization. In the Chinese post-crisis communication of 2003 SARS epidemic, transcendence is used to elaborate this characteristic of renewal.

Transcendence from episodic good acts to enduring principles was seen frequently in the articles, especially dealing with a spirit of self-sacrifice with regard to group profits, professionalism, obedience, loyalty, and collectivism. The difficulty to distinguish all of the above as specific behaviors or enduring values demonstrates the success of the Chinese government in using this strategy in the post-crisis period of SARS epidemic.

These good words appeared in government discourses or news coverage praising medical care workers' heroic actions against SARS epidemic. These medical workers were praised for their altruistic behaviors such as when a doctor went to the frontline of SARS fighting, leaving his daughter who would face a critical exam alone at home; a young doctor who was infected by the virus offered other patients the chance to go to the special care medical institutions first to accept more advanced treatment.

These deeds demonstrated the Chinese culture of collectivism, a tradition of giving others benefits and honoring self-sacrifice, and the mission of Chinese Communist Party that all communarians should "serve for people" and "be public servants." They came from the past and were incarnated in the honored heroic behaviors in the war against SARS. More importantly, they will not disappear with the ending of the epidemic. The crisis could revitalize these behaviors and the spirit behind these behaviors. When the government's media covered this issue, they especially portrayed people's commitments that they would learn from these heroes and hand down these principles to promote society's development. At this time, episodic behaviors really turned to permanent national merits.

However, transcendence from one-time heroic behavior to enduring national spirits and culture, actually, was the mixture of two main forms of transcendence shown in Chinese post-crisis discourses of SARS epidemic: (1) transcendence from a one-time incident to enduring change; and (2) transcendence from individualism to collectivism.

Transcendence from a one-time incident to enduring change is a temporal transcendence. The main aim of this type of transcendence is to make responses permanent. The example that was given before about commitments of handing down the national merits of courage, collectivism, professionalism and self-sacrifice is one kind of temporal transcendence. Another kind of temporal transcendence was to hallmark one experience into institution history. SARS, as an experience for Chinese people, can be recorded in their history to educate new generations. An example was China established a memorial forest to permanently represent experience learned from the crisis (Wang, 2003).

Transcendence from individualism to collectivism was a powerful form of transcendence. Collectivism is the dominant culture for China that is totally different

from western countries that advocate individualism. In the “People’s Republic of China,” people are the central concept. Behaviors that serve the people in general are absolutely justified, and considered the primary option in all. Transcendence from individualism to collectivism finished a significant task to reassure Chinese Communist Policy System in post-crisis communication. First of all, a shared merit of people who got praised for their heroic behaviors against SARS was altruism. This behavior was justified since it was a representation of “serving for public,” during which self-interest was compromised for a greater interest for majority of people. Second, the praised anti-SARS heroes were all communitarians in governmental discourses and the Chinese media coverage during the post-crisis period. Thus, an idea was presented that being altruistic was not an individual behavior but the shared identity for all communitarians. This argument supports the advanced quality of the Chinese Communist Party. Stories demonstrated that the Party was advanced and ethical as they saved people in the crisis.

Comparison of frames by Chinese government, Chinese media and Western media

Dominant frames by Chinese government and examples

Five dominant frames in Chinese government discourses are discussed below with the explanations and examples. They were “policy alternatives of prevention and preparation by Chinese government,” “reassurance of Communist Political System,” “praise of individual responses,” “social actions of prevention and preparation,” and “policy alternatives by governments in other countries and the post-crisis conditions in these countries.”

The most frequently mentioned frame of the Ministry of Health – “policy alternatives of prevention and preparation by Chinese government” – discussed the Chinese government’s guidelines to deal with a potential recurrence of the SARS epidemic. They published a 2003-2004 national SARS prevention and treatment working plan in the public health system (Ministry of Health, September 9, 2003a) and a SARS epidemic reporting implementation regulation (Ministry of Health, September 9, 2003b). They offered the guidelines of an Internet reporting system of the SARS epidemic cases and a brief report of the rehearsal of this system (Ministry of Health, September 1, 2003). Most regulation, working plan and system implementation guidelines were written in a

very specific way, supplemented with details for each step and object, which should not confuse people when directing their behaviors.

Besides laws, rules and other systems of management, government's policy alternatives also included social mobilization of appropriate behaviors of epidemic prevention and preparation. The process of social mobilization was reached mainly through urging actions that promoted public health security, which was not as official as a law, or through a mass education process to disclose more information about the virus and strategies to fight it. For example, the Ministry of Health posted the syllabus of a seminar about SARS (Ministry of Health, September 9, 2003c). The epidemic response regulations and the educational materials were designed to help people become more aware of a possible crisis, and informed them what steps they would need to take if the epidemic returned.

Additionally, the Chinese government's policy alternatives on prevention and preparation could also be shown from their close tracking of newly suspected SARS cases in the nation itself or its citizens in the world. For example, the Chinese government posted the information about the discovery of a suspected SARS case of a Chinese citizen in Greece (Ministry of Health, June 27, 2003).

The second equally dominant frames of Chinese post-SARS government discourses are "Reassurance of the Communist Political System" and "Praise of Individual Responses." They were different frames, but co-existed every time in Chinese government discourses after the SARS epidemic. In all of the post-crisis government discourses, 25% of them talked about government's decision of praising individual people and organizations for their excellent performances during the battle against SARS. Discourses always had several paragraphs to discuss the heroic behaviors of these individuals who fought SARS and the government's decision to praise these individuals as the consequences. They also attached the names of these individuals.

When the government introduced the heroic behaviors of individual people and organizations, they emphasized that the victory of fighting against SARS was due to the leadership of the Chinese Communist Party and government, and marked that the individual heroes were qualified communitarians. Thus, the frame of reassurance of the Communist Policy System was visible. A typical presentation of this frame was: "...

medical workers in the whole nation, led by Chinese Communist Party and Council of Ministers under Communist Party's central principle of 'Three Represents', work with all Chinese people, implement central government's policies, collaborate with each other, stick to their positions and proceed without fear to sacrifice to fight against SARS epidemic hardly..." (Ministry of Health, July 28, 2003, p. NA). Praised behaviors were defined as the "advanced qualities of communitarians," and the consequences of their understanding of the Chinese Communist Party's central idea of "Three Represents." Meanwhile, a call for further obedience to the Chinese Communist Party was formed based on how right and how advanced the party was as the discourses claimed.

The frame "social actions of prevention and preparation" was also existent in Chinese post-SARS government discourses. This frame is opposite the frame of "policy alternatives of prevention and preparation by Chinese government." The policy alternatives are what optimal behaviors the government asked people to do, which is a hierarchical top-down frame. "Social actions of prevention and preparation" are what people really do to prevent a possible crisis. They also include what the government really did to prevent crisis except to mobilize other's actions or define behavior standards. In Chinese post-SARS government discourses, one example of this frame is an article that describes what efforts the government made to communicate and cooperate with the Greek government to detect a Chinese citizen's history of contact with others since he was suspected to hold SARS virus when he entered Greece (Ministry of Health, June 27, 2003).

Since there was a Chinese citizen who was a suspected carrier of the SARS virus in Greece, the Chinese government had to report what strategies the Greek government took to deal with this possible case. Thus, another frame of policy alternatives by governments in other countries and post-crisis conditions in these countries appeared.

Dominant frames by Chinese media and examples

Chinese media had five dominant frames, as shown in the result chapter, when they covered China's handling of post-crisis issues of the 2003 SARS epidemic. They were "policy alternatives of prevention and preparation by Chinese government," "statements supporting collective action and community response," "celebration and

commemoration,” “outcomes evaluation of the past crisis,” and “praise of individual responses.” The explanations and examples are offered below.

Policy alternatives of prevention and preparation by the Chinese government referred to policies that were used to prevent a potential epidemic again. These policy alternatives were all initiated by the Chinese government, including investigating possible new SARS cases, publishing laws and guidelines for SARS prevention, cooperating with international society on SARS reporting and prevention, and giving lessons for the public on what behaviors would be beneficial to escape from the SARS threat.

Statements supporting collective actions and community responses referred to commitments and evidence that a collective spirit would continue to be the dominant spirit to social development. A typical example of this frame was the establishment of funds that were aimed to help kids whose parents died in the epidemic. The purpose of this frame was to portray the society after the SARS epidemic as more warm and one in which people cared not only for money and themselves but also for others.

Celebration and commemoration referred to the stories that mainly described a joyful or ceremonious occasion to celebrate the victory over the SARS epidemic in China. Typical examples were ceremonies in hospitals when the last groups of SARS patients in China were released, public lectures of sending out SARS heroes’ stories, a photograph exhibition to celebrate the war against SARS, the establishment of an anti-SARS monument, and a plan for establishing a memorial forest.

Outcomes evaluation of the past crisis mentioned the frames that evaluated how the crisis influenced the Chinese society. The perspectives include economic, political, public health, social, reputation and other consequences. Each consequence was also assessed from points of positive outcome or negative outcome. For Chinese media, the characteristics of outcomes evaluation were observed from a more positive point of view, and escaped a single public health perspective. For example, the numerous people who were infected in the SARS epidemic and lost their lives were not emphasized in Chinese media. But healthier living habits, like caring more about sanitation in restaurants and not spitting on floors, were underscored. Additionally, negative outcomes were mentioned only along with positive outcomes. Examples of this pattern always existed when media

discussed economic consequences. Obviously, tourism related industries were seriously hurt by the SARS epidemic. But Chinese government officials and economic experts always offered figures to prove the general increase of the Chinese economy when they mentioned the negative economic consequences.

Praise of individual responses included the stories about the excellent performances of people who contributed in the battle over SARS. The professions that were honored significantly in the post-crisis period in China were medical care workers, scientific researchers and journalists. The praise followed two different formats. One was attaching a list of names of people who were honored in the news report. The other was articulating the behaviors of these people.

Differences among frames by Xinhua Chinese, Xinhua English and Chinese media in general

As the results showed, each version of Xinhua News Agency differed in its focus when reporting China's handling of the post-crisis issues of the 2003 SARS epidemic. For Xinhua Chinese, shown in Table 2, the dominant frames include: (1) policy alternatives of prevention and preparation by Chinese government; (2) statements supporting collective action and community response; (3) celebration and commemoration; (4) praises of individual responses; (5, tie) outcomes evaluation of past crisis; and (5, tie) reassurance of Communist Political System.

The first five frames were shared by both Xinhua Chinese and Chinese media in general. But the percentages of frequencies are a little different than those of Chinese media. Xinhua Chinese covered policy alternatives of prevention and preparation by Chinese government 3.8% less and outcomes evaluation of the past crisis 2.9% less than Chinese media in general. Meanwhile, Xinhua Chinese considered several frames more important than Chinese media in general since they provided 6.5% more coverage on statements supporting collective and community response, 6.0% more on celebration and commemoration, 5.5% more on praises of individual responses, and 4.2% more on reassurance of the Communist Political System.

The difference between Xinhua Chinese and Chinese media in general indicates that Xinhua Chinese functioned more to revive Chinese national and cultural heritage for reinforcement of the country's memory in post-crisis period than Xinhua English. At the

same time, Xinhua Chinese obeyed the customs of post-crisis management, giving significant coverage to routine strategies in post-crisis period like evaluation and post-crisis correction, which in this epidemic overlapped with pre-crisis preparation.

The dominant frame covered by Xinhua Chinese but not by Chinese media in general: “reassurance of the Communist Political System” means any commitment and facts that showed Chinese Communist Political System would continue to be advantaged as the fundamental system for China. In reports of Xinhua Chinese, typical examples of this frame employed the spontaneous mention by publics to advocate Chinese Communist Party’s leading theory – “Three Represents,” the praise of advanced behaviors of communitarians, and identification of the leading role of the Chinese Communist Party winning the battle against the SARS epidemic.

For Xinhua English, dominant frames were: (1) policy alternatives of prevention and preparation by Chinese government; (2) outcome evaluations of past crisis; (3) return to normal; (4) statements to stakeholders for the future other than reassurance of Communist Political System and collective spirit, and (5) post-crisis learning from the previous crisis.

The Xinhua English, through casting light on different frames, presents its unique coverage of issues in China during the post-crisis period. Different from Xinhua Chinese, Xinhua English did not show as much overlap with dominant frames with Chinese media in general. It is reasonable since the Chinese media sample consisted of only Xinhua Chinese and Xinhua English, and within them, the Chinese Version occupied a higher percentage (Xinhua Chinese $n = 126$, 59.4% of the total sample). Thus, the difference actually shows the uniqueness of frames by the Xinhua English compared with the Xinhua Chinese.

Xinhua English also regarded post-crisis correction and post-crisis evaluations significantly. However, it emphasized some other frames as dominant that were not dominant in Chinese media in general. They promoted “return to normal” as the third dominant frame, covering it 6% more than Chinese media in general. Towards “statements to stakeholders for the future other than reassurance of Communist Political System and collective spirit,” they covered 4.8% more. They offered 1.5% more coverage of “post-crisis learning from previous crisis.”

This composition shows that all dominant frames of Xinhua English are consistent with post-crisis strategies, focusing little on the Chinese national and cultural identity. Besides the two frames shared with Chinese media in general, post-crisis correction and post-crisis evaluation, they targeted post-crisis recovery, non-Chinese characteristic commitments, and post-crisis learning. Thus, all frames of Xinhua English are the common post-crisis communication strategy frames possibly considered important by any government and media institution no matter what its ideological or governance system.

The frame of “return to normal” mainly pointed to the organizing idea of recovery, including business, social and other recovery. Typical examples described people going to restaurants to eat again; hotels, although not fully booked, saw a returned level of receptions for tourists nationally and internationally; and rural workers came back to cities again.

The frame of “statements to stakeholders in the future other than reassurance of Communist Political System and collective spirit” means the continual actions for decreasing crisis damages and helping post-crisis management. These commitments did not include supporting the Communist Political System and the collective cultural spirit, which are always considered helpful in Chinese culture to overcome national difficulties. In post-crisis discourses, these statements may refer to other government policy alternatives or scholar proposals than epidemic prevention to help recovery and stability of the society. One typical example appearing in reports by Xinhua English is the news report informing the public that government would implement a series of policies like tax cuts to help restaurant and hotel industries recover from the crisis (*China vows*, 2003).

The frame of post-crisis learning included learning from the previous crisis from all perspectives such as crisis management perspectives, epidemiology perspectives and so on. For example, lots of scientific research was conducted in the post-crisis period to investigate virus origin and spread path. One specific example could be scholars in Hong Kong conducting research to prove that SARS was a zoonotic disease whose coronavirus first came from animals in southern China such as civet cats, raccoon dogs, and ferret badgers (*HK experts*, 2003). At most times, post-learning from previous crisis functioned as the place for Chinese media to show Chinese scientific research achievements. And it

is widely known that economic development and progress of science and technology are considered as the most important themes for Chinese modernization construction.

Comparison between frames by Chinese government and Chinese media

The correlation table (Table 3) shows that the frame correlation between Chinese government and Chinese media was .60 in general. Respectively, Chinese government correlated with Xinhua Chinese at .58 and with Xinhua English at .60. According to Guilford (1956), a correlation between .40 to .70 means a “moderate correlation; substantial relationship” (p. 145).

Compared to frames by Chinese government, frames by Chinese media were more diverse. As shown in the results chapter, the Chinese government only covered five frames in total, while Chinese media covered sixteen different frames in total. Despite the difference in range of frames, what was considered dominant remained very similar between both sources as the .60 correlation reveals. It means that most of the diverse frames Chinese media covered did not receive a great deal of the media’s attention either, if the Chinese government did not emphasize them.

If the comparison between the government and Chinese media is based on the post-crisis management agendas, according to the typology offered in the end of literature review, the composition and the rank of these agendas are even more similar. The more frequent post-crisis management agendas for Chinese government were: (1) renewal based on correction / crisis tracking and prevention (including two frames: policy alternatives of prevention and preparation by Chinese government, and facts of social actions of prevention and preparation); (2, tie) renewal based on commitments to stakeholders (referring to one frame: reassurance of Communist Political System); (2, tie) renewal based on core values (referring to one frame: praises of individual responses); and (4) external tracking (referring to one frame: policy alternatives by governments in other countries and the post-crisis conditions in these countries). The Chinese media’s dominant frames were in post-crisis management agendas: (1) renewal based on correction / crisis tracking and prevention (referring to one frame: policy alternatives of prevention and preparation by Chinese government); (2) renewal based on core values (including two frames: celebration and commemoration, and praises of individual responses); (3) renewal based on commitment to stakeholders (referring to one frame:

statement supporting collective action and community response); and (4) evaluation of the crisis impact (referring to one frame: outcomes evaluation of the past crisis). The first three frequently used post-crisis management agendas of Chinese government detected from government discourses and Chinese media coverage were the same.

It was surprising that the correlation between frames by Chinese government and Xinhua Chinese was lower than Chinese government and Xinhua English, as shown in the result of Pearson correlation. In the rhetorical analysis of post-crisis management agendas and strategies, Xinhua Chinese seemed closer to the management track of the Chinese government, especially in its presentation of two frames: “reassurance of Chinese Communist Political System” and “praises of individual responses.” This result was also shown in the frequency result of content analysis (Table 2). The two dominant frames of Chinese government aside from “policy alternatives of prevention and preparation” were covered more intensely by Xinhua Chinese than Xinhua English.

However, the correlation result showing that the Chinese government correlated more with Xinhua English might result from Xinhua English having less coverage than Xinhua Chinese on the frames absent in Chinese government discourses. For example, these frames included “lingering consequences,” “view towards SARS epidemic and Chinese epidemic control,” “confidence in Chinese control of similar epidemic in the future,” “statements supporting collective action and community response,” “celebration and commemoration,” “praises of Chinese responses at large,” “other advantaged of disadvantaged cultural heritage bridging the past crisis and future,” and “policy alternatives and epidemic situation updated by World Health Organization.”

The absences of these important frames in Chinese government documents might stem from limitations of access to Chinese government documents.

Dominant frames by Western media and examples

Western media had ten dominant frames, as shown in the results chapter, when they covered China’s handling of post-crisis issues of the 2003 SARS epidemic. They were “outcomes evaluation of past crisis,” “return to normal,” “policy alternatives and epidemic development information updated by the World Health Organization,” “attribution of responsibility,” “statement to stakeholders for the future other than reassurance of Communist Political System and collective spirit,” “views towards the

SARS epidemic and Chinese epidemic control,” “social actions of prevention and preparation,” “celebration and commemoration,” “lingering consequences,” and “post-crisis learning from the previous crisis.” The explanations and examples are offered below.

“Outcomes evaluation of past crisis” meant the frames that assessed the actual influence by SARS epidemic on Chinese society. For Western media, the consequences that were mentioned most were negative economic consequences. For example, *The New York Times* covered the issue that Hong Kong’s economic output was negatively influenced by the SARS epidemic in the second quarter of 2003, and industry of tourism and retailing were seriously damaged (Bradsher, 2003). The conclusion was supported by figures. This article did not present any positive aspects of economic consequences, which was clearly different from Chinese media coverage of the same frame.

“Return to normal” referred to the presentation of Chinese society as recovered to a normal societal order. *The Times*’ story that reported overseas investment in China increased again after the nation had stopped the epidemic was a typical example of the business recovery frame.

“Policy alternative and epidemic development information updated by the World Health Organization” were frequently covered in Western media. They reported a W.H.O. prediction of a second outbreak of the SARS epidemic. They also trusted W.H.O. officials’ evaluation of Chinese scientific research on the SARS epidemic.

“Attribution of responsibility” was another salient frame in Western media’s news coverage. They assigned the responsibility of this wide-spread crisis on the Chinese government’s incompetence of SARS management early in the epidemic and its unwillingness to share information with the international community. This frame appeared mainly in the articles that generalized lessons and experiences in the post-crisis period. When Western media summarized how human behavior could be changed for the future, they reported that Chinese inaction let the virus spread all over the world. The following example was typical of this frame: “Ironically, the Chinese have since April implemented stringent enough social measures to control the spread of SARS successfully” (*Stopping SARS*, 2003, p. NA).

“Statements to stakeholders about the future other than reassurance of the Communist Political System and collective spirit” in Western media coverage mainly referred to economic commitments the Chinese government made to relieve the public. These commitments include the assertions that China was still on the track of high economic growth and SARS didn’t hurt Chinese economy radically; local government’s economic recovery policies such as assigning tourism discounts across all agencies in the industry (Bradsher, 2003b) and central government’s help, for instance reports that Chinese Central government issued more passports to travel in Hong Kong to help the tourism industry recovery in Hong Kong.

“Views towards the SARS epidemic and Chinese control of SARS epidemic” indicated two positions when people in the post-crisis period reviewed experiences of the SARS epidemic and influences to China. One position was to consider the SARS epidemic as the opportunity for China to learn from the experience and urged China on the road for learning and changing. The other view was to describe the SARS epidemic as a totally negative experience for China – China made huge mistakes, was severely damaged and had little remedy for these mistakes and damages. Western media held both of these attitudes of the SARS crisis. A typical example from *The Times* mixed the positive attitude and the negative attitude. The article discussed the beneficial outcomes of the SARS epidemic for China, the most important of which might be the more open atmosphere in Chinese politics (Righter, 2003). The journalist gave examples of openness such as criticism expressed in a Communist Party meeting and President Hu Jintao’s public admission of mistakes. But the article also held a negative view focusing on the reputation damage of China in this epidemic. The whole article was organized around the contention that China had changed because of experiences of the SARS epidemic, but questioned how long these positive changes might last. A skeptical analysis including both the positive and negative view characterized the Western media’s attitude to evaluate the SARS epidemic’s influence on China.

“Social prevention and preparation” described actions that had been taken in Chinese society for preventing a possible crisis. One article from *The Toronto Star* published after travel alerts for Beijing were lifted and the last two SARS patients in China were released, described the social celebrations of last SARS cases in China but

also indicated the whole society, including government, was aware of the continuing struggle with the virus (*China's last SARS patients*, 2003).

In all media outlets of Western media, only *The Toronto Star* had obvious differences in its dominant frames with Western media in general. The dominant frame by *The Toronto Star* that differed from Western media in general was the emphasis on policy alternatives of prevention and preparation by Chinese government. *The Toronto Star*, as the circulation giant in Canadian media, paid more attention to this frame than other Western media because the public health security of Canadian society was closely related with Chinese pre-crisis prevention and preparation, especially under the threat of a possible reoccurrence of the SARS epidemic. *The Toronto Star's* example of policy alternatives of prevention and preparation by the Chinese government was the Chinese government's promise to stay vigilant when the World Health Organization declared the end of SARS epidemic in China (*China's last SARS patients*, 2003).

The New York Times and *The Times* had differences in frequency of each frame when compared with Western media in general. But no dominant frame by *The New York Times* and *The Times* was beyond these of Western media in general.

Comparison between frames by Chinese Sources and Western media

The Chinese government and the Western media differed greatly in framing China's handling of post-crisis issues of SARS epidemic. The correlation of frames between Chinese government and Western media in this study was .05. According to Guilford (1956), a correlation less than .20 means a "slight; almost negligible relationship" (p. 145). The correlation between Chinese media and Western media is higher than between Chinese government and Western media. The Pearson correlation result showed that they correlated at .38. According to Guilford (1956), a correlation between .20 to .40 means a "low correlation; definite but small relationship" (p. 145).

This result confirmed previous studies showing that Western media and Chinese voices had obviously different opinions when covering Chinese issues (e.g. Tian & Li, 2003). Previous studies explained this result by saying Chinese government and policy makers could not exert their influence on the news content selection process of Western media. And the gatekeepers of Western media always had opposite opinions with

Chinese government officials, social elites and media who were under the Communist Political System (Gitlin, 1980).

For the distribution of dominant frames in this study, the Chinese government and Western media only shared coverage of one frame: “social actions of prevention and preparation.” The other four dominant frames by Chinese government and the other nine dominant frames by Western media did not overlap at all. In the five dominant frames covered by Chinese media and ten dominant frames covered by Western media, two frames were shared. They were “celebration and commemoration” and “outcomes evaluation of the past crisis.”

It was obvious that seven frames were regarded as significant in Western media coverage but were not mentioned in Chinese sources. These seven frames were “return to normal,” “policy alternatives and epidemic development information updated by the World Health Organization,” “attribution of responsibility,” “statements to stakeholders for the future other than reassurance of Communist Political System and collective spirit,” “lingering consequences,” and “post-crisis learning from previous crisis.”

Interestingly, Western media did not label “policy alternatives of prevention and preparation by Chinese government” as significant in their diverse dominant frames. This was the most significant frame in Chinese government (HM), Xinhua Chinese (XC) and Xinhua English (XE) coverage overwhelming all others in frequency (HM: 75.0%, 50.0% more than the coverage of the second dominant frame; XC: 35.7%, 13.7% more than the coverage of the second dominant frame; XE: 45.3%, 27.9% more than the coverage of the second dominant frame).

By re-categorizing dominant frames of Western media into the post-crisis management agendas provided by crisis management literature, Western media ranked the importance of post-crisis management agendas in this way: (1, tie) evaluation of crisis impact (referring to one frame: outcomes evaluation of past crisis); (1, tie) assessment on post-crisis social situation in the recovery phase (referring to two frames: return to normal, and lingering consequences); (3) renewal based on commitment to stakeholders for future (referring to two frames: statements to stakeholders for future other than reassurance of Communist Political System and collective spirit, and views towards SARS epidemic and Chinese epidemic control); (4) external tracking (referring to one

frame: policy alternatives and epidemic development information updated by World Health Organization); (5) attribution of responsibility (referring to one frame: attribution of responsibility); (6, tie) renewal based on correction (referring to one frame: facts of social actions of prevention and preparation); (6, tie) renewal based on core values (referring to one frame: celebration and commemoration); and (8) learning (referring to one frame: post-crisis learning from the previous crisis).

Comparing the post-crisis management agendas of the Chinese government and Chinese media frames, shown in the section of “comparison between frames by Chinese government and Chinese media,” there are two salient differences between the coverage by Chinese sources and Western media on China’s handling of post-crisis issues of the 2003 SARS epidemic.

First, Western media dismissed the authority of Chinese government in directing epidemic prevention for future crisis and in uniting Chinese citizens for recovery. When Western media covered China’s handling of post-crisis issues of the SARS epidemic, the frame of “policy alternative of prevention and preparation by Chinese government” was absent. It indicated that Western media in general did not trust Chinese government statements related to leading prevention for another possible crisis. One dominant frame on prevention and preparation for future crisis that was employed by Western media was “policy alternatives and epidemic information updated by World Health Organization.” It showed that on agenda of “prevention and preparation,” Western media might consult the prevention strategies of World Health Organization, but would not consult the Chinese government. Additionally, *The New York Times* and *The Times* did not focus on Chinese government’s efforts to influence Chinese people in prevention perhaps because their readers were not Chinese and not generally at risk from the disease.

Furthermore, the authority of Chinese government and function of Chinese culture was also de-emphasized in the portrayals of Chinese government’s renewal by Western media. Western media reported some renewal strategies of Chinese government but as explained before, these frames mainly covered the commitments Chinese government made to its citizens for economic recovery. The other Chinese commitments were not mentioned in coverage by Western media. For instance, while Chinese coverage referred to both “celebration and commemoration” and “praise of individual responses,”

Western media did not report activities in which the government exerted its power to advocate some optimal behaviors and force to spread these behaviors in the society. Again, Western media ignored the authority of Chinese government by not covering activities involving both cultural values and government power.

Second, Western media considered it important for the Chinese government to acknowledge their mistakes and experiences in the past crisis. For example, the frame “attribution of responsibility” was an important frame following a clear pattern: identify mistakes first and then stimulate improvements based on the locus of mistakes. This frame was frequently used in Western media as it placed blame on China for the spread of this epidemic due to its inactions in the early period of this crisis. It indicated that Western media did not forget Chinese government’s mistakes of management in the crisis period. It might demonstrate that the reputation of Chinese government suffered severely in the West from this crisis and needed more time and effort to recover.

Western media purposely focused on the evaluation of past crisis and past crisis management through presenting several frames. Besides “attribution of responsibility,” Western media covered “outcomes evaluation of the past crisis” intensely. Although the Chinese media covered this frame as well, Western media had 48.3% more coverage on it (Chinese media: 13.2% of the total sample, Western media: 61.5% of the total sample). Additionally, Western media coverage was generally more negative than Chinese media, focusing on the loss and mistakes when they overviewed the SARS epidemic.

The frame of “attribution of responsibility” was absent in Chinese sources. Chinese discourses seemed to deliberately de-emphasize the mistakes of Chinese government in the early period of the epidemic. For Chinese renewal strategies, the Party-government’s good reputation in history was promoted as the “shared past” to bridge to a committed bright future. But the past crisis management experiences of this particular epidemic were seldom mentioned, especially the mistakes government made in the early period. When the crisis experiences were retrieved to establish renewal strategies, the start of the retrieved experiences were from middle-late period when the government began their active management on the disease. This might be a strategy of Chinese government in the post-crisis period to bolster the positive aspects of the crisis and the crisis management. But the indifference of the mistakes in the past crisis

management might negatively influence the government's reputation management in the post-crisis period, since it might lead others to think the Chinese government neglected its faulted history and tried to escape responsibility.

Comparison between use of information sources by Chinese media and Western media

Several information sources were used in Chinese media to construct their stories about China's handling of post-issues of the 2003 SARS epidemic. The Chinese government agencies and officials were the most frequently used and believable information source, which far surpassed the use of others (45.3% more frequency than the second used information source). The information sources next were: Chinese public health experts and professionals; Chinese citizens; Chinese social organizations, firms, or other institute members; W.H.O. officials; international voices other than W.H.O. and governments; Chinese social experts in fields other than public health; and government agencies and officials in other countries.

The main difference between Xinhua Chinese and Xinhua English was the frequency of using Chinese citizens as one of information sources. Apparently, Chinese citizens are more trustworthy sources for a Chinese audience since the percentage of frequency of this source is as high as 14.3% of Xinhua Chinese's news reports, which is 12.0% more than Xinhua English. Since Chinese citizens always appeared to give positive feedback in the scenes honoring heroic behavior against SARS (Li, 2003), Chinese citizens were used as the third-party to offer testimonials of effective leadership by Chinese government. The use of Chinese citizens by Chinese media might function to strengthen the stance of the Chinese government and the Chinese Communist Party and increase the national coherence. The coherence message may be specifically designed for publics in China. Because Xinhua English served primarily non-Chinese publics, the use of Chinese citizens' testimony might be perceived as less credible.

Western media employed different information sources to construct their stories: including Chinese government agencies and officials; W.H.O. officials; international voices other than W.H.O. and governments; Chinese citizens; and Chinese social organizations, firms or other institute members.

The Toronto Star and *The New York Times* were similar in their use of information sources to construct their coverage of China's handling of the post-SARS

issue, and similar to the information sources use of Western media in general. However, *The Times* was very different in its use of information sources. In reports by *The Times*, the Chinese government and the W.H.O. descended from the most preferable information sources in other Western media coverage. Instead, Chinese citizens and other international voices beyond the W.H.O. and governments emerged. Additionally, voices from China were more evenly distributed from government, public health professionals, social organizations and firms to citizens. A possible reason for this result might depend on Britain's correlation with the SARS issue in general. Britain was not like Canada, which was hit hard by the SARS epidemic in Spring 2003. It was also not like the United States, whose scientific research about the SARS epidemic was always used to direct global research related to SARS. Another practical reason for this result may just be because the frequencies of source mentions were low in *The Times*.

The main difference between information source use between Chinese media and Western media was that the Chinese media relied more on Chinese voices to construct their stories, especially Chinese government voices, while Western media relied more on international voices especially W.H.O. The difference was mainly disclosed through their ranks of most frequently used information sources.

Significantly, Western media challenged the credibility of Chinese government agencies and officials three times when they employed them as an information source. They also challenged W.H.O. officials once when the W.H.O. official attached favorable attitude to China on issues that Western media questioned.

Credibility of Chinese government as information sources

Chinese government agencies and officials are responsible for setting coverage in Chinese media (61.3% of the total sample used this information source), shown in Table 1. It was not only demonstrated through the absolutely highest percentage of frequencies (43.5% more than the second reliable information source Chinese public health experts and professionals in Chinese media coverage), but also through the values associated with the use of all these Chinese government voices: all uses were favorable.

However, Western media did not trust Chinese government voices as much as the Chinese media. First, the percentage of frequencies of Chinese government voices was not as high in Western media coverage, although it was still the number one information

source used (34.6% of the total sample). However, the number one information source had only 3.8% more than the number two information source which was W.H.O. officials (30.8% of the total sample). The data suggest the W.H.O. was as important an information source as the Chinese government voices for Western media's coverage of China's handling of post-crisis issue of SARS epidemic, but also was viewed as more reliable.

Among Western media's coverage of Chinese government, 33.3% of the Chinese government voices (3 out of 9, 2 from *The New York Times* and 1 from *The Times*) appeared with an unfavorable value attached by the journalists. Western media reported the dubious credibility of some of the Chinese government's decisions and the explanations for their decisions in post-crisis period.

For example, *The New York Times* reported that China discovered a new SARS case one day after the "World Health Organization lifted its warning about travel to Beijing and declared that China had effectively won its battle against SARS," and noted China's decision to minimize the significance of this case (Kahn, 2003). Although the journalist didn't offer strong evidence in opposition to this decision, the article indicated that the decision was suspect. A journalist would not organize a story under the central theme of "a new SARS case" to increase people's awareness if he believed in the wisdom of the decision. He used the phrases "just one day after" and "minimized the significance" to suggest China might conceal some information after claiming to have won the war against SARS. Similar examples existed in *The Times* coverage that challenged Chinese policy of reopening trade of farm animals due to the link between animals and the spread of SARS (*SARS will return*, 2003, p. NA).

For Western media, other approaches decreased the credibility of Chinese government agencies and officials. When *The New York Times* covered Chinese scientific research, the only source the newspaper relied on was a W.H.O. specialist "Dr. Stohr." Dr. Stohr even repeated the exact words his Chinese research colleagues told him in the interview (Altman, 2003). Since Dr. Stohr trusted the quality of Chinese research (conducted and organized by the Chinese government), *The New York Times* article upheld the results of Chinese scientific research. *The New York Times'* use of third-party testimonial indicated that the Chinese government voices could only be trusted if there

was another source endorsing the credibility of Chinese government officials. Of course, to use a W.H.O. official talking about Chinese research instead of a Chinese official may be due to a Chinese official being beyond the reach of Western journalists. Since the organizing idea of the whole news report was “China lags in sharing SARS clues,” however, the Chinese government was criticized as standing in the way of open information flow (Altman, 2003, p. NA).

Performance of Chinese government in post-crisis management

It seemed that the Chinese government did a good job in post-crisis comfort and rebuilding dealing with its national publics in China. It might be considered to be competent to solve the public health crisis and economic crisis. However, it seemed to be weak to deal with its reputation crisis internationally. The commitments, corrections and values revivals with its national publics helped to maintain its reputation nationally. But international media, as one main international public of the Chinese government, failed to share the stories.

It possibly resulted from the different focuses on China’s handling of post-SARS issues nationally and internationally. For example, the policy to reopen trade of farm animals under some limitation could satisfy Chinese rural residents who relied on this to earn their living. However, this policy could also enrage international publics since they considered it unsafe by making transmission of animal virus, the source of SARS, more likely.

Another reason for the failure of reputation management towards international publics might be the effectiveness of renewal towards different publics. Renewal strategy was presented seriously especially in coverage of Chinese media. Xinhua Chinese contributed many stories around frames that inherently advocated the core values of the Chinese culture and national identity, such as commitment of collectivism spirit, reassurance of stability of Chinese Communist Political System, and activities of celebration, commemoration and praising that associate with traditions, customs and culture. The coverage of Xinhua Chinese also elaborated the details of heroic stories through utilizing the whole transcripts the heroes used to tell their own stories. The renewal presented in this way could have emotional impact on Chinese audiences.

However, this communication theme, especially the elaboration of heroic stories, was never used by Western media.

Renewal, as stated by Hurst (1995), is only effective based on restoring shared past values. The Chinese government's renewal strategies based on Chinese shared cultural values were not relevant to international publics. For renewal to work beyond China, it would have to be based on the shared values of the international community. Thus, the Western media had little justification for publishing renewal strategies targeted to the domestic audience.

The failure of renewal strategy towards outside publics also conforms with previous gatekeeper studies of media content. As Gitlin (1980) asserts, media content is monitored by media owners to maximize its profits through boosting the media content preferred by upper-middle-class audiences in Western society. How Chinese government renewed the damaged society and reactivated Chinese citizens in post-crisis period of SARS epidemic was not the political correctness journalists of Western media would select in their coverage on China's handling of this issue.

China might have had this concern that the same message can never satisfy different audiences in its post-crisis information management. That might explain why there were some subtle differences of frames covered by Xinhua Chinese and Xinhua English. However, this strategy seemed ineffective. Xinhua News Agency was not a credible information source for Western media in the post-crisis period of the 2003 SARS epidemic. It was never cited by Western media about China's handling of post-crisis issues in content coverage, although some pictures Xinhua photographed were used.

Although the use of different content coverage by Xinhua English was not effective to lead Western media, Xinhua was ethical in its coverage because the two versions, Xinhua Chinese and Xinhua English, had content correlations as high as .924. It was reasonable that frame composition was different because of serving different publics and purposes. But it would hurt credibility of Xinhua if the two versions had totally different frames compositions covering the same issue. The root to solve the government's problem facing different media publics might be the creation of policy alternative that satisfied both national and international publics. Although one message is

unlikely to achieve this goal, one central message with a range of options attached might do so.

Chapter 6 – Conclusion

Conclusion

This study produced some important findings. First, the renewal communication theme was used by Chinese government in its discourses and it led media's coverage on China's handling of post-crisis issues of the 2003 SARS epidemic. Through the analysis on how this renewal communication theme was presented, it probably had a positive impact on Chinese audiences recovering from this crisis. It covered all possible paths of renewal, delicately designed to mobilize and move the audiences. However, a real impact of renewal strategies on Chinese audience cannot be asserted through the content analysis and rhetorical analysis.

What has been shown is that Chinese media affirmed most government post-crisis management frames and agendas in its coverage on how Chinese government dealt with this issue. They especially advocated some renewal frames in their coverage, and they trusted Chinese government as a dominant voice to construct their stories. Frame correlation between Western media and the Chinese government was very low. Western journalists challenged the credibility and wisdom of Chinese government officials and their decisions. This result indicated the failure of renewal strategy facing the international public. It also disclosed that Chinese government suffered in an international reputation crisis, and did not rescue its image successfully in the post-crisis period.

Limitations

There are three main limitations for this study. First, there might be biased results due to limited number of official documents available from the Website of Ministry of Health. A great number of articles and documents were posted on the website of Ministry of Health. However, the "official" documents, ones not written by mass media, were especially few in the post-crisis period. The scarce number of these documents may have reduced the diversity of Chinese government frames. It might result in the moderate correlations with frames by Chinese media and Western media.

Second, a model that was deliberately designed to separate Chinese government and Chinese media, and investigate Chinese media's frame correlation with Chinese

government to see government's ability of crisis management agenda setting or political directing cannot be tested in China. The relationship between Chinese government and Chinese media is very complicated. The design to test government's management ability through tracking how media coverage correlated to government documents was not successful, because the government monitored media content. The impact of government systems of influence and directives cannot be fully examined based on the available documents. Furthermore, this study, under the tradition regarding Chinese media as the spokesman of Chinese government, used media content as the default representation of government discourses to supplement the few available official government documents to detect Chinese government's post-crisis communication strategies in the rhetorical analysis. Ironically, it contaminated the research design of comparing government documents and media content. On the other hand, the operation of labeling media content as a representation of government discourse did not separate Chinese media's two functions - representation of Chinese government and conducting professional responsibility of media themselves. This counter acted the progress Chinese media made in journalistic professionalism and self-disciplines in recent years.

Third, the extra sample selection principles excluded the stories shown in the media about policy alternatives of other governments and post-crisis condition in other countries in order to keep a fair comparison. However, this exclusion closed the opportunities to detect a possible strategy of Chinese government that China tracked other countries' epidemic conditions for warning and learning.

Recommendations for future research

This study was designed to test what strategies Chinese government used in the post-crisis period of the 2003 SARS epidemic, and whether these strategies were effective in post-crisis renewal. The first question was answered in the study, and the second was suggested in the study under two testing principles proposed before: if frame correlation between Chinese government and targeted mass media were high, and if Chinese government agencies and officials were used as believable information sources. However, the two principles and the methodologies of content analysis and rhetorical analysis can only suggest the effectiveness of the post-crisis communication strategies through text composition. A real effectiveness test should be gained through surveys,

polls and experiments. Thus, future research can add research methods to the existing content and rhetorical analyses to further investigate strategies and their impacts.

Additionally, this study examined the post-crisis communication strategies in the particular context of the Chinese 2003 SARS epidemic. Research of post-crisis communication strategies can be conducted in other different national crisis contexts, especially the national crises that threaten government's political authority. And comparisons between studies in different contexts can be established for generalizing more post-crisis communication patterns.

Finally, this study is one of the few that attempts to separate Chinese media's function of pure representation of Chinese government from journalistic professional responsibility in China. Although the results showed that it is premature currently to test Chinese government's management performance through investigating Chinese media's opinions, the separation of Chinese media's two function and the examination of their professional functions should be continued as a means to understand the modern democratic process in China. The continual studies could help to understand the level of the societal democratic progress.

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Table 1: Frequencies and percentage of frames and information sources in combined sources

Frames	Ministry of Health n = 8		Chinese Media n = 212		Western Media n = 26	
	F	P (%)	F	P (%)	F	P (%)
Return to normal***	0	0	17	8.0	10	38.5
(1) <i>Business</i> ***	0	0	13	6.1	8	30.8
(2) <i>Social</i> **	0	0	0	0	2	7.7
(3) <i>Other</i>	0	0	4	1.9	0	0
Lingering Consequences*	0	0	4	1.9	3	11.5
(1) <i>Business</i> **	0	0	3	1.4	3	11.5
(2) <i>Social</i>	0	0	1	0.5	0	0
(3) <i>Other</i>	0	0	0	0	0	0
Attribution of Responsibility***	0	0	0	0	6	23.1
(1) <i>Blame China</i> ***	0	0	0	0	6	23.1
(2) <i>Blame Others</i>	0	0	0	0	0	0
(3) <i>China accepts responsibility</i>	0	0	0	0	0	0
(4) <i>China rejects responsibility</i>	0	0	0	0	0	0
Outcomes Evaluation of the Past Crisis***	0	0	28	13.2	16	61.5
(1) <i>Positive economic</i>	0	0	3	1.4	0	0
(2) <i>Negative economic</i> ***	0	0	15	7.1	13	50.0
(3) <i>Positive political</i> ***	0	0	3	1.4	3	11.5
(4) <i>Negative political</i> **	0	0	1	0.5	2	7.7
(5) <i>Positive public health</i>	0	0	5	2.4	0	0
(6) <i>Negative public health</i> ***	0	0	0	0	4	15.4
(7) <i>Positive social</i>	0	0	5	2.4	0	0
(8) <i>Negative social</i> **	0	0	1	0.5	2	7.7
(9) <i>Positive reputation</i>	0	0	0	0	0	0
(10) <i>Negative reputation</i> **	0	0	0	0	1	3.8
(11) <i>Other</i> *	0	0	0	0	1	3.8
Views towards SARS epidemic and Chinese epidemic control*	0	0	7	3.3	4	15.4
(1) <i>Positive view</i>	0	0	7	3.3	3	11.5
(2) <i>Negative view</i> ***	0	0	0	0	3	11.5
Post-crisis learning of the previous crisis	0	0	19	9.0	3	11.5
Confidence in Chinese control of similar epidemic in the future	0	0	2	0.9	1	3.8
Type of confidence						
<i>Favorable</i>	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	2	0.9	0	0
<i>Skeptical</i>	0	0	0	0	1	3.8
Reassurance of the Communist Political System*	2	25.0	13	6.1	0	0

Statements supporting collective action and community response*	0	0	35	16.5	0	0
Other statements to stakeholders for the future*	0	0	17	8.0	6	23.1
Policy alternatives of prevention and preparation by Chinese government***	6	75.0	84	39.6	2	7.7
(1) Case tracking, epidemic situation development*	1	12.5	56	26.4	1	3.8
(2) Laws, rules, and systems of management**	3	37.5	15	7.1	0	0
(3) Organizational Cooperation	0	0	10	4.7	0	0
(4) Mobilizing social actions*	3	37.5	18	8.5	1	3.8
Social actions of prevention and preparation	1	12.5	13	6.1	4	15.4
Celebration and commemoration	0	0	31	14.6	4	15.4
Praise of Chinese responses at large	0	0	15	7.1	0	0
Praise of individual responses	2	25.0	22	10.4	0	0
Other cultural heritage bridging the past crisis and future	0	0	3	1.4	0	0
Type of culture heritage						
Favorable	0	0	3	1.4	0	0
Unfavorable	0	0	0	0	0	0
Policy alternatives and epidemic situation updated by the World Health Organization***	0	0	5	2.4	7	26.9
Policy alternatives and post-crisis conditions in other countries***	1	12.5	0	0	0	0
Others	0	0	28	13.2	5	19.2
Sources						
Chinese government agencies and officials**	2	25.0	130	61.3	9	34.6
Author's attitude towards source***						
Favorable	2	25.0	130	61.3	6	23.1
Unfavorable	0	0	0	0	3	11.5
W. H. O. officials***	0	0	9	4.2	8	30.8
Author's attitude towards source***						
Favorable	0	0	9	4.2	7	26.9
Unfavorable	0	0	0	0	1	3.8
Other non-Chinese government voices	0	0	4	1.9	0	0
Author's attitude towards source						
Favorable	0	0	4	1.9	0	0
Unfavorable	0	0	0	0	0	0
Chinese public health experts and professionals	0	0	34	16.0	3	11.5
Author's attitude towards source						
Favorable	0	0	34	16.0	2	8.0
Unfavorable	0	0	0	0	0	0
Chinese social organizations, firms, and other institution members	0	0	19	9.0	2	7.7
Author's attitude towards source						

<i>Favorable</i>	0	0	19	9.0	2	7.7
<i>Unfavorable</i>	0	0	0	0	0	0
Chinese social experts in fields other than public health	0	0	6	2.8	0	0
Author's attitude towards source						
<i>Favorable</i>	0	0	6	2.8	0	0
<i>Unfavorable</i>	0	0	0	0	0	0
Chinese citizens	0	0	20	9.4	3	11.5
Author's attitude towards source						
<i>Favorable</i>	0	0	20	9.4	3	11.5
<i>Unfavorable</i>	0	0	0	0	0	0
International voices other than W. H. O. and governments***	0	0	8	3.8	7	26.9
Author's attitude towards source***						
<i>Favorable</i>	0	0	9	4.2	7	26.9
<i>Unfavorable</i>	0	0	0	0	0	0
(1) Public health experts and professionals***	0	0	1	0.5	4	15.4
Author's attitude towards source***						
<i>Favorable</i>	0	0	1	0.5	4	15.4
<i>Unfavorable</i>	0	0	0	0	0	0
(2) Businessmen or investors	0	0	3	1.4	1	3.8
Author's attitude towards source						
<i>Favorable</i>	0	0	3	1.4	1	3.8
<i>Unfavorable</i>	0	0	0	0	0	0
(3) Social experts	0	0	4	1.9	2	7.7
Author's attitude towards source						
<i>Favorable</i>	0	0	4	1.9	2	7.7
<i>Unfavorable</i>	0	0	0	0	0	0
(4) Citizens	0	0	0	0	0	0
Author's attitude towards source						
<i>Favorable</i>	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0
Xinhua News Agency	0	0	0	0	0	0
Author's attitude towards source						
<i>Favorable</i>	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0
Other Media	0	0	1	0.5	0	0
Author's attitude towards source						
<i>Favorable</i>	0	0	1	0.5	0	0
<i>Unfavorable</i>	0	0	0	0	0	0
Others	0	0	0	0	0	0
Author's attitude towards source						
<i>Favorable</i>	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0

* Chi-square tests reveal significant difference at the $p \leq .05$

** Chi-square tests reveal significant difference at the $p \leq .01$

*** Chi-square tests reveal significant difference at the $p \leq .001$

Abbreviation: F: Frequencies; P: Percentage

Table 2: Frequencies and percentage of frames and information source in individual source

	HM n=8		XC n=126		XE n=86		TS n=7		NYT n=11		TT (L) n=8	
	F	P (%)	F	P (%)	F	P (%)	F	P (%)	F	P (%)	F	P (%)
Frames												
Return to normal***	0	0	5	4.0	12	14.0	2	28.6	3	27.3	5	62.5
(1) <i>Business</i> ***	0	0	2	1.6	11	12.8	1	14.3	3	27.3	4	50.0
(2) <i>Social</i> ***	0	0	0	0	0	0	1	14.3	0	0	1	12.5
(3) <i>Other</i>	0	0	3	2.4	1	1.2	0	0	0	0	0	0
Lingering Consequences*	0	0	3	2.4	1	1.2	1	14.3	2	18.2	0	0
(1) <i>Business</i> **	0	0	2	1.6	1	1.2	1	14.3	2	18.2	0	0
(2) <i>Social</i>	0	0	1	0.8	0	0	0	0	0	0	0	0
(3) <i>Other</i>	0	0	0	0	0	0	0	0	0	0	0	0
Attribution of Responsibility***	0	0	0	0	0	0	2	28.6	1	9.1	3	37.5
(1) <i>Blame China</i> ***	0	0	0	0	0	0	2	28.6	1	9.1	3	37.5
(2) <i>Blame Others</i>	0	0	0	0	0	0	0	0	0	0	0	0
(3) <i>China accepts responsibility</i>	0	0	0	0	0	0	0	0	0	0	0	0
(4) <i>China rejects responsibility</i>	0	0	0	0	0	0	0	0	0	0	0	0
Outcomes Evaluation of the Past Crisis***	0	0	13	10.3	15	17.4	4	57.1	8	72.7	4	50.0
(1) <i>Positive economic</i>	0	0	1	0.8	2	2.3	0	0	0	0	0	0
(2) <i>Negative economic</i> ***	0	0	6	4.8	9	10.5	4	57.1	6	54.5	3	37.5
(3) <i>Positive political</i> ***	0	0	2	1.6	1	1.2	0	0	1	9.1	2	25.0
(4) <i>Negative political</i> **	0	0	0	0	1	1.2	0	0	1	9.1	1	12.5
(5) <i>Positive public health</i>	0	0	2	1.6	3	3.5	0	0	0	0	0	0
(6) <i>Negative public health</i> ***	0	0	0	0	0	0	1	14.3	1	9.1	2	25.0
(7) <i>Positive social</i>	0	0	3	2.4	2	2.3	0	0	0	0	0	0
(8) <i>Negative social</i> ***	0	0	1	0.8	0	0	1	14.3	0	0	1	12.5
(9) <i>Positive reputation</i>	0	0	0	0	0	0	0	0	0	0	0	0
(10) <i>Negative reputation</i> ***	0	0	0	0	0	0	0	0	0	0	1	12.5

<i>(11) Other***</i>	0	0	0	0	0	0	0	0	1	9.1	0	0
Views towards SARS epidemic and Chinese epidemic control*	0	0	4	3.2	3	3.5	0	0	2	18.2	2	25.0
<i>(1) Positive view</i>	0	0	4	3.2	3	3.5	0	0	2	18.2	1	12.5
<i>(2) Negative view***</i>	0	0	0	0	0	0	0	0	1	9.1	2	25.0
Post-crisis learning of the previous crisis	0	0	10	7.9	9	10.5	1	14.3	1	9.1	1	12.5
Confidence in Chinese control of similar epidemic in the future	0	0	2	1.6	0	0	0	0	1	9.1	0	0
Type of confidence**												
<i>Favorable</i>	0	0	2	1.6	0	0	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Skeptical</i>	0	0	0	0	0	0	0	0	1	9.1	0	0
Reassurance of the Communist Political System**	2	25.0	13	10.3	0	0	0	0	0	0	0	0
Statements supporting collective action and community response**	0	0	29	23.0	6	7.0	0	0	0	0	0	0
Other statements to stakeholders for future**	0	0	6	4.8	11	12.8	2	28.6	4	36.4	0	0
Policy alternatives of prevention and preparation by Chinese government**	6	75.0	45	35.7	39	45.3	1	14.3	1	9.1	0	0
<i>(5) Case tracking, epidemic situation development</i>	1	12.5	30	23.8	26	30.2	0	0	1	9.1	0	0
<i>(6) Laws, rules, and systems of management*</i>	3	37.5	9	7.1	6	7.0	0	0	0	0	0	0
<i>(7) Organizational Cooperation</i>	0	0	3	2.4	7	8.1	0	0	0	0	0	0
<i>(8) Mobilizing social actions</i>	3	37.5	10	7.9	8	9.3	1	14.3	0	0	0	0
Social actions of prevention and preparation	1	12.5	8	6.3	5	5.8	1	14.3	2	18.2	1	12.5
Celebration and commemoration*	0	0	26	20.6	5	5.8	2	28.6	1	9.1	1	12.5
Praise of Chinese responses at large	0	0	12	9.5	3	3.5	0	0	0	0	0	0
Praise of individual responses**	2	25.0	20	15.9	2	2.3	0	0	0	0	0	0

Other cultural heritage bridging the past crisis and future	0	0	3	2.4	0	0	0	0	0	0	0	0
Type of culture heritage												
<i>Favorable</i>	0	0	3	2.4	0	0	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Policy alternatives and epidemic situation updated by the World Health Organization***	0	0	3	2.4	2	2.3	0	0	5	45.5	2	25.0
Policy alternatives and post-crisis conditions in other countries***	1	12.5	0	0	0	0	0	0	0	0	0	0
Others	0	0	18	14.3	10	11.6	1	14.3	2	18.2	2	25.0
Sources												
Chinese government agencies and officials*	2	25.0	75	59.5	55	64.0	3	42.9	5	45.5	1	12.5
Author's attitude towards source***												
<i>Favorable</i>	2	25.0	75	59.5	55	64.0	3	42.9	3	27.3	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	2	18.2	1	12.5
W. H. O. officials***	0	0	5	4.0	4	4.7	2	28.6	5	45.5	1	12.5
Author's attitude towards source***												
<i>Favorable</i>	0	0	5	4.0	4	4.7	2	28.6	4	36.4	1	12.5
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	1	9.1	0	0
Other non-Chinese government voices	0	0	1	0.8	3	3.5	0	0	0	0	0	0
Author's attitude towards source												
<i>Favorable</i>	0	0	1	0.8	3	3.5	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Chinese public health experts and professionals	0	0	25	19.8	9	10.5	1	14.3	1	9.1	1	12.5
Author's attitude towards source												
<i>Favorable</i>	0	0	25	19.8	9	10.5	1	14.3	0	0	1	12.5
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Chinese social organizations, firms, and other institution members	0	0	10	7.9	9	10.5	0	0	1	9.1	1	12.5
Author's attitude towards source												

<i>Favorable</i>	0	0	10	7.9	9	10.5	0	0	1	9.1	1	12.5
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Chinese social experts in fields other than public health	0	0	4	3.2	2	2.3	0	0	0	0	0	0
Author's attitude towards source												
<i>Favorable</i>	0	0	4	3.2	2	2.3	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Chinese citizens*	0	0	18	14.3	2	2.3	0	0	1	9.1	2	25.0
Author's attitude towards source*												
<i>Favorable</i>	0	0	18	14.3	2	2.3	0	0	1	9.1	2	25.0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
International voices other than W. H. O. and governments***	0	0	5	4.0	4	4.7	2	28.6	3	27.3	2	25.0
Author's attitude towards source***												
<i>Favorable</i>	0	0	5	4.0	4	4.7	2	28.6	3	27.3	2	25.0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
(5) <i>Public health experts and professionals***</i>	0	0	2	1.6	0	0	1	14.3	2	18.2	1	12.5
Author's attitude towards source***												
<i>Favorable</i>	0	0	2	1.6	0	0	1	14.3	2	18.2	1	12.5
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
(6) <i>Businessmen or investors</i>	0	0	1	0.8	2	2.3	1	14.3	0	0	0	0
Author's attitude towards source												
<i>Favorable</i>	0	0	1	0.8	2	2.3	1	14.3	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
(7) <i>Social experts</i>	0	0	3	2.4	1	1.2	0	0	1	9.1	1	12.5
Author's attitude towards source												
<i>Favorable</i>	0	0	3	2.4	1	1.2	0	0	1	9.1	1	12.5
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
(8) <i>Citizens</i>	0	0	0	0	0	0	0	0	0	0	0	0
Author's attitude towards source												

<i>Favorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Xinhua News Agency	0	0	0	0	0	0	0	0	0	0	0	0
Author's attitude towards source												
<i>Favorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Other Media	0	0	0	0	1	1.2	0	0	0	0	0	0
Author's attitude towards source												
<i>Favorable</i>	0	0	0	0	1	1.2	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
Others	0	0	0	0	0	0	0	0	0	0	0	0
Author's attitude towards source												
<i>Favorable</i>	0	0	0	0	0	0	0	0	0	0	0	0
<i>Unfavorable</i>	0	0	0	0	0	0	0	0	0	0	0	0

* Chi-square tests reveal significant difference at the $p \leq .05$

** Chi-square tests reveal significant difference at the $p \leq .01$

*** Chi-square tests reveal significant difference at the $p \leq .001$

Abbreviation: F: Frequencies; P: Percentage

Appendix 1: Code Sheet

Chinese Governmental Post-Crisis Management of 2003 SARS Epidemic: Evaluation of Governmental Communication Strategies and Frame Correlation between Government and Mass Media

Date _____
Coder ID _____
Story Date _____
Story Headline _____

1. Publication Name:

- 1) Health of Ministry, PRC
- 2) Xinhua News Agency (Chinese Version)
- 3) Xinhua News Agency (English Version)
- 4) Toronto Star, the
- 5) New York Times, the
- 6) Times, the (London)

2. Story Length (Word Count) _____

Frames (1: present or 0: absent)

3. Return to normal _____
 - 1) Business returns to normal _____
 - 2) Social life returns to normal _____
 - 3) Others return to normal _____
4. Lingering consequences _____
 - 1) Lingering business consequences _____
 - 2) Lingering social consequences _____
 - 3) Lingering other consequences _____
5. Attribution of Responsibility _____
 - 1) Blame China for crisis responsibility _____
 - 2) Blame others than China for crisis responsibility _____
 - 3) China accepts its crisis responsibility _____
 - 4) China rejects its crisis responsibility _____
6. Outcomes evaluation of the past crisis _____
 - 1) Positive economic consequences _____
 - 2) Negative economic consequences _____
 - 3) Positive political consequences _____
 - 4) Negative political consequences _____
 - 5) Positive public health consequences _____
 - 6) Negative public health consequences _____
 - 7) Positive social consequences _____
 - 8) Negative social consequences _____
 - 9) Positive consequences on reputation _____
 - 10) Negative consequences on reputation _____

11) Others (please identify what it is and the positive or negative value that is associated)

7. Views towards the SARS epidemic and Chinese epidemic control _____
 - 1) Positive view (e.g. experiences, lessons learned, opportunities for change) _____
 - 2) Negative view (e.g. harm, loss, mistakes) _____
8. Post-crisis learning from the previous crisis (the real experience and lessons summary, or learning of the disease from epidemiology perspective) _____
Please identify which area this learning belongs to (management, epidemiology or other policy fields):
9. Confidence in Chinese control of similar epidemic in the future (f: favorable, u: unfavorable, s: skeptical) _____
10. Reassurance of the Communist Political System _____
11. Statements supporting collective action and community response _____
12. Other statements to stakeholders for the future _____
13. Policy alternatives of prevention and preparation by Chinese government _____
 - 1) Tracking old disease cases, development of epidemic and investigating new case _____
 - 2) Laws, rules, and systems of management _____
 - 3) Organizational Cooperation _____
 - 4) Mobilizing social actions _____
14. Social actions of prevention and preparation _____
15. Celebration and commemoration _____
Please identify what cultural values are celebrated:
16. Praise of Chinese responses at large _____
Please identify what cultural values are praised:
17. Praise of individual responses _____
Please identify what cultural values are praised:
18. Other cultural heritage bridging the past crisis and future in formats other than celebration and praising (f: favorable, u: unfavorable) _____
Please identify what the cultural value it is:
19. Policy alternatives and epidemic development information updated by the World Health Organization _____
20. Policy alternatives by governments other than China and post-crisis conditions in these countries _____
21. Others

Sources (1: present, or 0: absent) (f: favorable, or U: unfavorable)

22. Chinese government agencies and officials _____
23. W. H. O. officials _____
24. Other non-Chinese government voices _____
25. Chinese public health experts and professionals _____
26. Chinese social organizations, firms or other institute members _____

- 27. Chinese social experts in fields other than public health _____
- 28. Chinese citizens _____
- 29. International voices other than W.H. O. and governments _____
 - 1) Medical care professionals _____
 - 2) Businessmen or investors _____
 - 3) Social experts that contribute to foreign policies and so on

 - 4) Citizens _____
- 30. Xinhua News Agency _____
- 31. Other media _____
- 32. Others

Appendix 2: Code Book

Chinese Governmental Post-Crisis Management of 2003 SARS Epidemic: Evaluation of Governmental Communication Strategies and Frame Correlation between Government and Mass Media

Introduction of the study

This study is aimed to compare the frames employed by Chinese government, represented by Chinese Health Ministry, Chinese media, represented by Xinhua News Agency, and international media, represented by *The New York Times*, *The Times*, and *The Toronto Star*, when they covered SARS epidemic in China in the post-crisis period. Several goals are expected to reach through frame coding: (1) to examine what frames are salient in coverage by different institutions on the same issue to understand the cognitive routines of the wide spread public health crisis; (2) to find what information sources are trusted and frequently utilized when journalists organize their stories; (3) to identify the values oriented by Chinese government when it took efforts to guide public recovery in the post-crisis period; (4) to record vivid examples to rich general frame coding.

Basic coder and article information

To start the coding process, basic information to identify the coder and the article should be filled in the code sheet. They include: Coder ID, date of coding, the publish date of the story, the headline of the story, publication name, and story length.

Frames

Several possible frames are listed in the code sheet. The coder is asked to code the presence and absence of the frame. When the frame is visible in the article, the coder should write down “1” to record its existence. Otherwise, “0” is instead. It is possible that multiple frames are salient in a single article. In this case, the existences of all these frames should be recorded. The coder doesn’t need to compete these multiple frames to decide one dominant frame.

The operating concept of frame employed in this study is: “A frame is a central organizing idea for news content that supplies a context and suggests what the issue is through the use of selection, emphasis, exclusion, and elaboration” (Tankard, 2001; Tankard, Hendrickson, Silberman, Bliss, & Ghanem, 1991).

In the session of frames on code sheet, there are two levels of categories are presented. The ones with numbers in front of such as 1,2,3... are considered as frames. The ones with numbers in parentheses in front of such as (1), (2), (3)... are considered as sub-categories. These sub-categories are more detailed and issue-specific. Some of them are general enough as the cognitive patterns that can be regarded as frames according to the concept. Some are not. But whatever they are, the coder cannot only mark sub-category without marking the upper category it belongs to. In frame coding process, the broad level of categories is checked to examine what frames are salient in articles. The sub-categories are checked to identify the specific aspects to facilitate further data analysis.

Under some categories or sub-categories, the coder is required to code the value or tone associated with the category besides coding the presence and absence. The values and tones are abbreviated by the adjectives' initial letters, such as "f", representing favorable. The value and tone coding means to point out what is the attitude of the article towards specific issue frame. It is the attitude of the person who writes the article as a member of a special institution/media. Specific guideline will be offered in below paragraphs where a value or tone coding is needed.

In following paragraphs, the definition of each frame and specific coding explanations will be offered.

Item 3 and 4 are categories to mention the post-crisis recovery states. **Return to normal** deals with a central idea that multiple business and social life are going back to the normal order before the crisis happened. If an article was organized by the idea of returning to normal, the article should spend a lot to set examples to support this idea. The examples might be the economic recovery, students going back to schools, rural workers returning to the cities, shopping centers and restaurants are becoming prosperous again, and all like these.

Lingering consequences are what are opposite to "return to normal". These consequences mean some social fields haven't recovered and need more time to recover. They refer to the lasting problems in business, social life and other fields.

Item 5 **attribution of responsibility** is a usual frame in crisis related discourses. Attribution of responsibility is a frequent seen process during crisis management teams help to rebuild the organizational legitimacy. To simplify, it is a procedure to find out who should be responsible for the wrong doings that happened before. As for the organizations that really did something wrong to cause the crisis, to accept the crisis responsibility is necessary for the next step of correction and learning. Those efforts together will persuade stakeholders to trust the organization again and thus rebuilding the organizational legitimacy. The organizations that are not related to the wrong doings can build their legitimacy by denying the crisis responsibilities and defending themselves. To do so can also transfer people's attentions to blame others.

Under this category, four conditions are included. (1) Blame China for crisis responsibility: In this condition, the blame action must be taken by an international source. (2) Blame others than China for crisis responsibility: In this condition, the blame action can be taken by both Chinese and international sources. Others that can be blamed than China might be the disease itself or other uncontrolled factors that are not related to management perspective by Chinese government on Chinese SARS epidemic. (3) China accepts its crisis responsibility: In this condition, the subject of the action must be China. And China must believe herself that she should take the responsibility of the whole SARS crisis at large. It may indicate the attitude like apology or further corrective actions. (4) China rejects its crisis responsibility: The coder should code here if China takes a totally

responsibility rejection action. It means China never think herself should take responsibility for the breakout of the global crisis.

Some confusions of what the crisis is might happen here. In this study, the crisis doesn't mean the presence of the new SARS disease. The crisis means the spread of SARS epidemic from China to a world scale based on the situation that SARS was not controlled by the Chinese government in early period of the epidemic. In other words, it is the existence of the spreading of the epidemic rather than the disease that directs a crisis. Thus, it is reasonable someone should be responsible for the crisis other than the disease itself, which also makes these sub-categorizes design reasonably. But it is also possible that two parties should take the responsibility at the same time indicated in the same article. For instance, an article might point out that China thinks that Chinese government lagged management and the infectious characteristics of SARS both cause the global crisis. Then, the coder is needed to check both (2) and (3) at this time.

Item 6 **outcomes evaluation of the past crisis** refers to the evaluation of the consequences influenced by the crisis happened before. Whatever the fields the consequences are in, there are always effects at two possible levels: positive effects and negative effects. It may be easier to understand what negative effects would be. Generally, they may be losses caused by the crisis, such as economic decline, political structure breakdown, epidemic out of control, social instability, damage on reputation and so on. Positive effects are what are opposite to negative effects. They may be the statements that the crisis stimulates the development of special business such as medicine, or disease prevention materials industries. Or, positive effects can also be understood as favorable effects, which means it may not be necessary the outcomes that refer to increase. It can only be the outcomes that indicate no damage and loss.

Something needs to be pointed out is that all under this item are about evaluating what happened before. It must link to the past but not link to the future. For example, if some outcomes are like the crisis didn't make people distrust the Communist political system in China, however, it is the political system that can mobilize the largest collective efforts in the shortest time contributing to manage the crisis successfully. Then, the coder should code it as the positive political effects because the example means the advantages of the political system already existed in the past crisis management. However, if the emphasis of the example lies on Chinese leaders should stick to present the advantages of the Communist Political system and strengthen it for stability in the future, the coder should not code here, because it bridges to the future commitment. It should be coded under category 10.

Under outcomes evaluation of past crisis, several fields are mentioned. Economic effects mean all effects that are related to monetary increase or decrease. Political effects mean all effects that involve power in governance. Public health effects mean all health related effects, such as life loss, medical care system advantages and disadvantages and so on. Social effects are more about people. How this epidemic influenced people's lives? Reputation effects are effects about fames of Chinese agencies, including people, organizations, and government who should take a responsible role in past crisis control.

Item 7 **views towards SARS epidemic and Chinese epidemic control** are the general stances the article stands to see this epidemic. If the article portrays the epidemic and Chinese management from a positive aspect like exploring the positive dimensions of this issue such as learning experiences, lessons or finding new opportunities to change, the coder will code this item under the positive view. By contrast, if the article holds a desperate viewpoint to see the epidemic such as thinking the epidemic is a totally damage, the results of the epidemic cannot be rescued and improved, or emphasizing the mistakes that happened in the past, the coder will code this item under the negative view.

Item 8 **Post-crisis leaning from the previous crisis** refer to the stories that mainly describe the post-crisis facts that some agencies or organizations were learning the previous crisis from any perspective, such as crisis management perspective, disease and virus perspective and so on.

Item 9 **confidence in Chinese control of similar epidemic in the future** indicates a pre-evaluation about the future. Based on Chinese government's performances on managing 2003 SARS epidemic, some parties may ask the questions like would there be improvements if a similar epidemic attacked in the future, or will they trust Chinese government in future epidemic control. The attitudes employed by the article are also required to be coded under this item. If the article indicates a confidence, the coder should code it at **favorable**. If an absolute distrust feeling is indicated, it means **unfavorable**. Besides these two, the author may also feel unsure about this. He/she may foresee both favorable and unfavorable sides that relate to Chinese government's future epidemic management. If the author is detected to experience a feeling like controversy, hesitation to a final judgment, or other middle attitudes between black and white, the coder needs to code it as **skeptical**.

Item 10, 11, and 12 are all commitments to stakeholders for the future. The logic of these commitments are Chinese government will continue the good acts they did in future. Thus, these three items all play the roles to bridge the past to the future. If an article employs item 10 **reassurance of Communist political system** as the organizing frame, it means the article presents the advantages of Communist political system in the battle over SARS epidemic and ensures that China will keep this political system to deal with crisis and other challenges in the future. The advantages were shown in SARS crisis, and the advantages will show again in other crisis and finally overcome the challenge.

Item 11 **statements supporting collective action and community response** emphasizes on collective action. Since collective spirit might be one culture advantage that helps Chinese people fight against SARS epidemic, statements here are aimed to keep this collective spirit in the future. These statements deal with all group actions like the continual group actions to fight against SARS or promises of continual group actions to fight against challenges. It also could be the actual financial, political, material or other support from the upper level of power system or from an organization at large to overcome the crisis.

Item 12 deals with **other statements to stakeholders for the future**.

Item 13 **policy alternatives of prevention and preparation by Chinese government** is what Chinese government asks all social members to do to prevent SARS epidemic's reoccurrence. Prevention and preparation is the dominant theme in the post-crisis period. These policy alternatives may include requirements for medical prevention, medical treatment, guidelines of case reporting, resource preparation, supervision, mobilization, and duty distribution at multiple levels. In the code sheet, all of these possible policy alternatives can be categorized into four fields. **Tracking old disease cases, development of epidemic, and investigating new cases** is the continual study and detection of SARS case. It includes the description of the recovery patients, a new suspected SARS case and the development condition of SARS disease based on disease cases. **Laws, rules, and systems of management** refer to the official requirements Chinese government publishes to deal with SARS epidemic. Usually, it is requirements rather than advices. It may associate with the legal responsibility. Or it may offer a whole set of systematic rules to follow up. **Organizational cooperation** is another policy alternative that emphasizes the cooperation among different departments in the government, and Chinese cooperation with international society. **Mobilizing social actions** refers to government actions that educate and suggest people what to do to prevent SARS. Compared with laws, rules and systems, policy alternatives that should be coded here are the policy alternatives more scattered. They are not mandatory. They are promoted to a broad social scale to regulate people's behaviors.

Item 14 **social actions of prevention and preparation** is designed to compare with item 13. Policy alternatives are the observations from up to bottom. The social actions of preventions and preparation are the observations from bottom to up. This item concerns what public really does and if they follow up the directions of the government.

Item 15 to 18 are all post-crisis strategies or activities that restore the cultural values that contribute to the development of the society. These cultural values are the core values for Chinese society. In history, these values helped Chinese people overcome the difficulties, and they are committed in post-SARS period to function in the future. Since SARS is under control ultimately in China after many hard efforts, there might be some **celebrations and commemorations** to celebrate the ultimate victory as item 15 indicated. A live party broadcasted in TV might be a good example for celebration. Celebrations always refer to the activities in which people gather together for a relaxing and hilarious aim. And commemorations refer to all activities that not only celebrate the end of the crisis but also impress the crisis into national history and experience. The coder is also required to code which specific values are celebrated if they are indicated in the discourse. Values might be patriotism, bravery, cooperation, and so on.

Item 16 and item 17 **praise of Chinese responses at large** and **praise of individual responses** deal with praise of the advantaged behaviors in battle over SARS. They are always presented when government summarizes the experiences and lessons from this epidemic. The difference is the first is to praise China or Chinese government at large, while the second is to praise the behavior of someone such as the nurse, the doctor, the

leader in a resident community and so on. As same as item 15, the coder is required to identify which value is praised if it is clear in the article.

Item 18 is **other cultural heritage bridging the past crisis and future visible in formats other than celebration and praising**. Different media may hold different attitudes towards these values. Thus, the coder is required to code their attitudes as favorable or unfavorable. If the media think the culture was beneficial in the past crisis and will take a positive role in the future for Chinese development, it indicates a favorable attitude. Otherwise, it will be unfavorable. Also, the code is required to code the specific values if they are mentioned in the article.

Item 3 to 18 are all policy alternatives by Chinese government and post-crisis conditions in China. By contrast, item 19 and 20 deal with same objects in the rest of the world. Item 19 refers to **policy alternatives and epidemic development information updated by the World Health Organization**. It may include the new case report, travel alert lifting, guidelines, epidemic lessons summary and so on. Item 20 deals with **policy alternatives by governments other than China and post-crisis conditions in these countries**.

If the coder found some frames not suggested in above frame list, he/she should write down the frame under item 21 **others**. If a same frame frequently shows, a new frame will be added to the previous frame list.

Sources

Information sources will be coded in this study to examine whether Chinese government officials are a trustable and frequently cited information sources when journalists write the post-SARS stories in China. This is one way to test the ability of Chinese government in post-crisis management.

Sources are the persons or organizations whose words are cited by the journalist when he/she organizes the news story. Generally, the journalists employ these sources for two goals. One is to support his/her point, the other is to use them to stand for the other side to balance the story. Thus, besides to code the presence and absence of the sources, the attitude the author holds towards the information sources should also be coded.

If the journalist uses the words of the information source to support his/her idea, or the journalist believes what the information source says as true, the attitude will be coded as **favorable**. If the journalist doesn't believe what the information source says, or holds a skeptical, critical or sarcastic attitude towards the information the source releases, the attitude will be coded as **unfavorable**.

Sometimes, it is difficult to detect if what the information sources say conforms to the journalist's attitude. Someone is only used to present a balanced story by the journalist. It is highly possible that two sources whose ideas are totally conflict are employed in the same article. Since the journalist's attitude is too subtle to be seen, or at the middle between these two sides, the attitudes towards both information sources will be coded as **favorable**.

Item 22 **Chinese government agencies and officials** refer to the voices of Chinese government at central or local level. Officials in Ministry of Health are in this category. They cannot be confused with general medical care professionals. What they say can represent the most official governmental information.

Item 23 **W.H. O. officials** refer to experts who work for World Health Organization.

Item 24 **other non-Chinese government voices** refer to people who work in governments in other countries.

Item 25 **Chinese public health experts and professionals** refer to Chinese doctors, nurses, medical experts and professors and other people who work in this field.

Item 26 **Chinese social organizations, firms or other institute members** refer to social organizational members in China. It is a group of people. It cannot be only one person. However, the person who is cited must be an individual such as the spokesman. Nevertheless, if the spokesman represents for some organizations, the coder should code the information source under this item.

Item 27 **Chinese social experts in fields other than public health** refers to the people who might be employed to analyze Chinese social conditions from other perspectives than public health. For example, they may be sociologists, professors in political science, international relations, economics, and so on.

Item 28 **Chinese citizens** refer to individuals in societies. What they say can only represent their personal ideas rather than organizations behind, which can be distinguished with spokesman who should be coded as social organizational members under item 25.

Item 29 **International voices other than W.H.O. and governments** refer to people who are not members of World Health Organization and government officials in other countries. They may be medical care professionals in other countries, foreign businessmen or investors who have a close tie with China, social experts that contribute ideas to Chinese issues in other countries, and ordinary citizens who may only have the interests to comment on this epidemic.

Item 30 **Xinhua News Agency** indicates where Xinhua News Agency is employed as information sources by other media or government discourse.

Item 31 **other media** refer to the information that is published first on other media rather than the publication which is coded now.

Item 32 **others** indicate the information sources which are not in the source list. The coder needs to write down the specific source.

Vitae

Weirui Wang was born on September 18, 1982 in Beijing, China. She received her Bachelor of Arts Degree in Journalism from Fudan University in Shanghai, China in June 2004. She entered Virginia Polytechnic Institute and State University for graduate study in August 2004 and was funded by a graduate teaching assistantship through her master study. On May 2, 2006, the author successfully defended her Master's Thesis. She will go to College of Communications at Pennsylvania State University, University Park to pursue her doctoral degree.