Journal of Communication ISSN 0021-9916

ORIGINAL ARTICLE

Parsing Framing Processes: The Interplay Between Online Public Opinion and Media Coverage

Yuqiong Zhou[1] & Patricia Moy[2]

1 Department of Communication, Center for Media and Social Changes, Shenzhen University, China 518060
2 Department of Communication, University of Washington, Seattle, WA 98195

To what extent do frame-building and frame-setting processes manifest themselves in the interplay between online public discourse and traditional (offline) media discourse? Employing a content analysis of 206 online posts and 114 news reports regarding a sociopolitical incident in China, we test the associations and causal relationships between the salience of opinion frames and media frames. Online public opinion plays an important role in transforming the original local event into a nationally prominent issue. It also exerts a significant frame-building impact on subsequent media reports but only in the early stage of coverage. However, the media are not passive in this two-way process and adapt online frames as necessary. Although media coverage is the primary source of information for netizens, it does not set frames for online discourse. Noticeably, significant associations between concurrent opinion frames and media frames lend strong support to frame-interacting effects. Discussion focuses on governmental influences in the frame-building process and the potential of netizen autonomy to attenuate frame-setting effects.

doi:10.1111/j.1460-2466.2006.00330.x

Viewing the Internet as a virtual public forum in which to discuss important issues, users of this new medium are self-designated "netizens," a term that implies the online exertion of citizens' basic rights—for example, freedom of speech and political participation. However, such normative expectations are not always realized as manifestations of the digital divide linger and levels of civic and political engagement vary across societies (Norris, 2001). Indeed, Bimber (1998) speculated about the potential for the Internet to alter various conceptualizations of citizenship.

In China, home to the world's second-largest netizen population of approximately 123 million (CNNIC, 2006), online discourse has successfully challenged governmental actions, serving as the impetus for political reform (Peng, 2005). As a result, Chinese netizens optimistically assume the omnipotence of online public

Corresponding author: Yuqiong Zhou; e-mail: yuqiongzhou@126.com

opinion, claiming that "If all netizens yell together, there would be three earthquakes in China" (Ou, 2004).

Is online public opinion really so powerful? How can online discussion resonate among the Chinese population if an overwhelming proportion (more than 90%) does not use the Internet at all but depends primarily on traditional media for information? In order to bridge the gap between online and offline public opinion, online discourse must find its way into traditional media discourse and consequently make itself heard by those who do not use the Internet. The interplay between the two is a dynamic process that involves frequent input and output role transitions; that is, online public opinion can serve as initial input to media coverage, with the latter often shaping subsequent online discussion.

To explore such relationships, this study employs framing theory to analyze online discussion and media coverage in China. Specifically, we examine two processes: how online opinion frames help shape media frames and how media frames contribute to the construction of online opinion frames. The examination of such processes allows us to conceptually and empirically link agenda-building and agenda-setting processes (McCombs, Shaw, & Weaver, 1997) with frame-building and frame-setting processes (Scheufele, 1999). In addition, the study affords us the opportunity to explore the potential and constraints of e-democracy in authoritarian systems.

Literature review

Defining frames

Despite its omnipresence across social sciences and humanities, framing remains a "scattered conceptualization" (Entman, 1993, p. 51). As Cappella and Jamieson (1997, p. 39) put it, the idea of framing "has been used in different ways in several different disciplines to mean different things … [with different] outcomes."

The term "frame" is often used interchangeably with related concepts such as schema, script, package, or theme. Goffman (1974, p. 21) refers to frames as the "schemata of interpretation" that enable individuals "to locate, perceive, identify, and label" occurrences or information. Gamson and Modigliani (1989) consider a frame to be the central organizing idea that lies at the core of a larger unit of political discourse (i.e., package), makes sense of relevant events, and suggests what is at issue.

To frame is to make persistent "selection, emphasis, and exclusion" (Gitlin, 1980, p. 7), or as Entman (1993, p. 52) elaborates, "to frame is to select some aspects of a perceived reality and make them more salient in a communicating text." Entman specifies four functions of frames: problem definition, or the clarification of key facts related to the problem; causal interpretation, the identification of underlying forces of the problem; moral evaluation, or judgments made of parties implicated in the problem; and treatment recommendation, the proposing of solutions and the discussion of possible results. Devices such as metaphors, exemplars, catchphrases, depictions, visual images, roots, consequences, and appeals to principle (Gamson & Lasch, 1983; see also Tankard, 2001) often are used to fulfill the aforementioned functions.

From agenda setting to framing

The distinction between framing and agenda setting remains contested. The two differ conceptually, with researchers referring to "agenda" as public awareness of a set of issues (McCombs & Shaw, 1972) or the rise and fall of a single issue across time (Winter & Eyal, 1981), whereas some definitions of "frames" involve cognitive schemas that individuals use to understand particular issues (Pan & Kosicki, 1993). As two theories of media effects, however, framing and agenda setting have been portrayed as inherently connected. McCombs et al.'s (1997) view of framing as *second-level agenda setting*, though challenged by some (e.g., Kosicki, 1993, 2006), captures the underlying logic shared by agenda-setting and framing researchers, who examine the interactions between the media and the public. This commonality rests in salience—issue salience for agenda setting and frame salience for framing. Whereas agenda-setting researchers correlate the salience of different issues in the media with that perceived by audiences, framing researchers correlate the salience of different media frames of an issue with that of different frames employed by audiences in interpreting that issue.

Decades of research have generated numerous models of agenda setting and agenda building, linking elites, media, and the mass public. These models have motivated framing researchers (e.g., Scheufele, 1999) to reorganize the extensive literature into two groups: one that focuses on the frame-building process and the other that highlights the frame-setting process.

Frame building and frame setting

Unlike the agenda-building process that emphasizes how outsiders (e.g., politicians, interest groups, and other elites) shape the media's agenda, traditional frame-building research is more interested in internal factors (e.g., individual characteristics, ideological or political orientations, professional values, journalistic routines, and organizational constraints) influencing how journalists frame a given issue (Gans, 1979; Gitlin, 1980; Tuchman, 1978; for an overview, see Shoemaker & Reese, 1996). As a result, the frame-building process mainly involves practices of journalistic professionalism rather than interactions between the political system, the public, and the media.

External factors shape frame building as well. Gamson and Modigliani (1989) observed that in addition to journalists' working norms and practices, cultural resonances and sponsor activities help shape media discourse on nuclear power. Over the years, the impacts of political culture and social values on news construction have remained significant (Henry, 1981; Rachlin, 1998), and comparative studies repeatedly have underscored the roles of prevailing ideology, governmental stances, and national interest in framing international news (e.g., Akhavan-Majid & Ramaprasad, 2000; Chang, Wang, & Chen, 1998; Pan, Lee, Chan, & So, 1999; Yang, 2003).

These findings do not necessarily indicate that all media content is shaped equally by internal and external factors. Callaghan and Schnell (2001) examined how interest groups and politicians attempt to insert their preferred interpretative frames into media discourse and found news media actively reconstructing elite frames. But

Scheufele (1999) argues that public opinion (elite discourse in particular) has a greater impact on frames of relatively new issues as journalists have no established line to follow. Of course, the media do not solely mirror public opinion. They also mold public opinion by emphasizing certain voices, highlighting particular views, and generating discourse about certain issues (see Schoenbach & Becker, 1995, for a summary).

Scholars interested in frame setting typically explore how news frames shape the public's interpretation of given issues. In their theoretical arguments, Pan and Kosicki (1993) conceptualize media frames as having impacts on individuals' attitudes and opinions. Some experiments (e.g., Cappella & Jamieson, 1996; Davis, 1995; Iyengar, 1991; Kahneman & Tversky, 1984; Kinder & Sanders, 1990) offer strong support for how variations in news frames can create substantial differences in audience members' understanding and evaluation of issues. Based on a combination of content-analytic data and survey data, other studies have replicated experimental findings in natural settings and concluded that media frames do shape public opinion (e.g., Allen, O'Laughlin, Jasperson, & Sullivan, 1994; Jasperson, Shah, Watts, Faber, & Fan, 1998).

Public opinion: polls versus deliberation

Framing research shares with agenda-setting research a key methodological shortcoming: Although content-analyzing media coverage to measure media frames/agenda, researchers primarily rely on polls to represent public frames/agenda. Such a perspective is grounded in a definition of public opinion as "the aggregation of individual attitudes by pollsters" (Beniger, 1987, p. S54). It assigns the same weight to each individual attitude and employs surveys or polls to determine majority and minority opinions. As widely used and widely accepted as polls are, they typically do not include questions that demand in-depth responses—responses tapping frames that audience members have actively constructed. That is, the expression of public opinion can involve public reasoning and deliberation (e.g., Habermas, 1962). Although this perspective captures the essence of democracy, requiring citizens to take part in political discussion and decision making (Miller, 1995), it is less often the perspective adopted in empirical studies. Certainly, in many instances of contemporary democracy, public deliberation is replaced by congressional debates and public opinion is represented by elite opinion (Bennett, 1990). Fortunately, the Internet offers a virtual public community in which citizens can discuss public issues and make their voices heard, thus making it possible for this study to examine public opinion from a frame-building perspective. In addition, because the analysis of online public discussion allows for finer nuances to emerge, we are better able to study frame setting.

Theoretical framework

Figure 1 illustrates our conceptualization of the interplay between online public opinion and media coverage. Its starting point is a news event that, for whatever reason—whether it be journalists' judgment of newsworthiness or censorship—

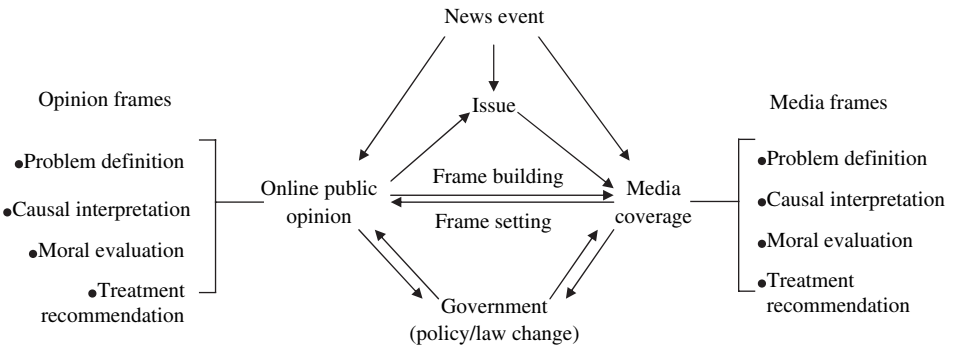

Figure 1 Frame building and frame setting between online public opinion and media coverage.

initially receives insufficient coverage. However, netizens show great interest in this event and discuss it intensively online. Online discussion adds meaning and news value to the event and turns it into an issue. Subsequently, the media come back to report this issue. Such a "value-added process"—a term used by Gamson and Modigliani (1989) to describe the development of nuclear power discourse—underscores the impact of online public opinion on media coverage (frame building).

But journalists are not passive in this process (Callaghan & Schnell, 2001), reconstructing online frames into media frames within a set of working norms and practices. Meanwhile, because netizens depend primarily on information released by traditional media to learn about the latest developments, their understanding of the issue is subject to the influences of media frames (frame setting).

As active as journalists may be in the construction of news, differences exist among journalists in various countries. In contrast to the well-accepted belief that the Western press should serve as the "fourth estate" or the "fourth institution outside the government as an additional check on the three official branches" (Stewart, 1975, p. 634), Chinese media have been considered the voice of the government since the founding of the People's Republic of China (Li, 1999). After 2 decades of press reform, this view has fallen by the wayside as contemporary Chinese media are engaged in a tug-of-war between the Party and the capitalism (Zhao, 1998). The media find themselves between the state and the audiences and face a nearly impossible mission of satisfying both (Xu, 2000). Such a struggle inevitably leads to conflicts in media role-playing (Chen, Zhu, & Wu, 1998): On the one hand, the media must play the "mouthpiece" role assigned by the Party and the government (Chan, 1995) and on the other hand, it must respond to public opinion and act as "watchdogs" on Party leashes (Zhao, 2000).

To the extent that the government can influence news framing in China, researchers have shown that for various topics—the handover of Hong Kong (Pan et al., 1999), the North Atlantic Treaty Organization's (NATO) air strikes on Kosovo (Yang, 2003), and the outbreak of Severe Acute Respiratory Syndrome (SARS) (Luther & Zhou, 2005)—Chinese journalists and their counterparts in Western systems tell

significantly different stories. Such findings suggest that in China, external pressure from the Party and the government (e.g., political ideology and national interest) may play a greater role than internal beliefs of journalistic professionalism in news framing. In particular, the government may exert its influences in two ways. An indirect way is through journalists' mouthpiece role in building media frames. As a result, external pressure from the government is internalized in routine journalistic work. At the same time, the government can directly interrupt or even end the frame-building and frame-setting processes by blocking related news coverage and online discussions.

Finally, previous framing research has differentiated between issue-specific frames that apply to unique topics and have limited generalizability (e.g., Bantimaroudis & Ban, 2001; Davis, 1995; Hertog & McLeod, 2001) and generic frames that are applicable to a wide range of issues over time and across different cultural contexts (De Vreese, Peter, & Semetko, 2001), such as conflict, economic consequence, human impact, and morality (e.g. Neuman, Just, & Crigler, 1992; Price, Tewksbury, & Powers, 1997; Zillmann, Chen, Knobloch, & Callison, 2004). The present study examines a specific issue. But to make the findings more generalizable and conducive to future research, we follow Entman's (1993) classification of frames: frames that define problems; those that diagnose causes; those that make moral judgments; and, finally, those that suggest remedies.

Context of study

The "BMW case"

On October 16, 2003, Liu Zhongxia and her husband rode their onion cart through a crowded market in Harbin (the capital city of Heilongjiang Province in northeast China) and accidentally scraped the rearview mirror of a BMW sedan driven by Su Xiuwen, the wife of a successful businessman. Su reportedly flew into a rage and lashed out at the two peasants. Su later got back into her car and drove it into the crowd that had gathered to watch the commotion, killing Liu and injuring 12 bystanders. On December 20, after a 2-hour trial, a Harbin local court ruled that Su had not been concentrating properly and had merely made a mistake in handling the car. Su was given a 2-year jail sentence that, coupled with a 3-year reprieve, effectively meant that she would not serve any prison time.

With the exception of some brief articles published in local newspapers, the trial received limited media coverage but created an immediate outcry among netizens. Rumors regarding Su's powerful relations traveled quickly. In early January 2004, journalists from outside the province came to Harbin and initiated a series of investigative reports. At the same time, the BMW case became the most salient topic online. By January 8, it had exceeded SARS as the topic to receive the most hits in Sina.com and Sohu.com—China's top two leading portal Web sites—and attracted increasing discussion in various chat rooms and bulletin board systems.

Faced with pressure from the media and public opinion, government officials of Harbin and Heilongjiang Province refuted rumors by repeatedly claiming that Su

was unrelated to province leaders. On January 10, concerned political and judicial organs announced that the case would be reopened. Despite this announcement, online discussion and media coverage about the BMW case continued until the government put a halt to both on January 14. Suddenly, not only were new posts and media reports prohibited but also all old ones were deleted from various Web sites, and newspaper editors were required to apologize for their outspokenness ("Chinese journalists," 2004). By 2005, the authorities' reinvestigation of the case proved fruitless as no additional information was officially released.

A methodological model

Given this context of study, Figure 2 depicts the five sets of relationships between online opinion and media coverage tested in this study. Online discourse is divided into three phases and media discourse into two phases: Phase I (December 22–31, 2003) of online opinion, Phase II (January 1–7, 2004) of online opinion and media coverage, and Phase III (January 8–14, 2004) of online opinion and media coverage. Two causal relationships are hypothesized to test frame building: (a) the impact of Phase I opinion frames on Phase II media frames and (b) the impact of Phase II opinion frames on Phase III media frames. One causal relationship is hypothesized to test frame setting, with Phase II media frames shaping Phase III opinion frames. Two noncausal relationships between simultaneous online public opinion and media coverage are hypothesized to test frame interacting. As in agenda-setting research, hypothesized framing effects are tested by correlating the salience of different opinion frames with that of different media frames.

Method

Data collection

Two sets of data were used to test the relationships specified in Figure 2. The first set of data consists of 206 main posts (not including responses) published in the "in-depth discussion" section of the *Qiangguo Forum* (*Strengthening the Nation Forum*)

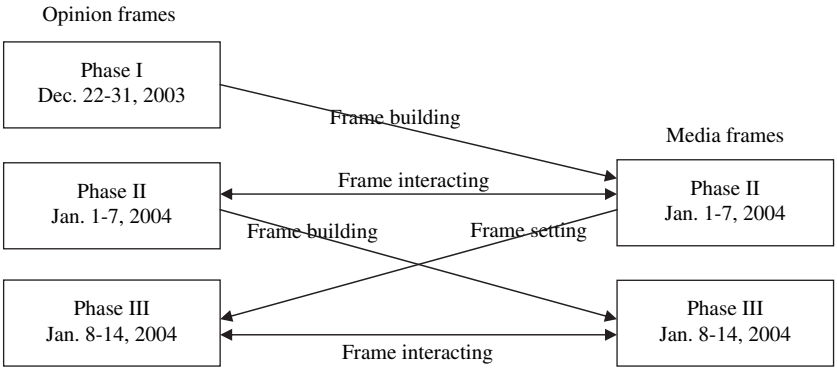

Figure 2 A methodological model to test frame building, frame setting, and frame interacting.

from December 22, 2003, to January 14, 2004. The *Qiangguo Forum*, sponsored by the *People's Daily* (China's largest newspaper, the organ of the Central Committee of the Chinese Communist Party), is the country's leading bulletin board system, hosting more than 470,000 registered users and attracting 300,000 visits per day.

Although the *Qiangguo Forum* bears the imprint of its parent newspaper, its validity in representing online public opinion has been demonstrated in a series of studies. Originally set up to protest NATO's bombing of the Chinese Embassy in Yugoslavia in 1999, the *Qiangguo Forum's* nationalistic discourse (Qiu, 2001) has evolved into a "vibrant civic discourse … for the expression of competing frames by which to explain current events to Chinese web users" (Li, Xuan, & Kluver, 2003, p. 155). Because users "reach out from their immediate environments to the most obscure and disadvantaged individuals in society" (Yu, 2006, p. 320), the BMW case potentially could be a topic of intense discussion on the *Qiangguo Forum*. More importantly, the *Qiangguo Forum* has a unique in-depth discussion section that encourages netizens to elaborate, debate, and argue about issues. Unlike other forums, the *Qiangguo Forum* differentiates between argument- and attitude-based posts. Because this study defines public opinion as involving reasoning and deliberation, the posts in the in-depth discussion section of the *Qiangguo Forum* are more appropriate as units of observation.

The second set of data consists of 114 news reports released by various media outlets (i.e., newspapers, television, magazines, and news agencies) from January 1 to 14, 2004. We used the homepage of the "BMW News Section" at Sina.com to retrieve all listed stories and comments from the Google cache, including 52 news stories and 62 media comments. As China's leading portal Web site, Sina followed professional guidelines in selecting and republishing reports that appeared originally in traditional media. As a result, the media data, albeit not exclusive, can validly represent the population.

Content analysis

Units of analysis in framing studies are varied; they can include a word, metaphor, exemplar, catchphrase, depiction, or visual image (Gamson & Modigliani, 1989); a paragraph (Akhavan-Majid & Ramaprasad, 2000); or an article (Callaghan & Schnell, 2001; Yang, 2003). This study took each main post (not including responses) and news report as the unit of analysis. Instead of coding the topic, theme, position, and tone of an article as is sometimes done (Yang), we decided to take various framing devices into consideration and analyze the article as a whole (Callaghan & Schnell). After thoroughly reviewing the article, coders were asked to choose which of Entman's four functions of frames (i.e., problem definition, causal interpretation, moral evaluation, and treatment recommendation) was the primary function and also asked to determine which specific frame was used to fulfill that function. As noted below, at least two frames could be taken to fulfill each function. For example, if there were three possible causes of the BMW issue, coders were instructed to categorize the article according to the predominant frame.

To test for intercoder reliability, two coders independently coded a random one-third of the posts (n = 68) and half of the news reports (n = 57). Taking chance agreement into account, the more conservative Cohen's (1960, 1968) kappa (κ) was .75 for posts and .78 for news reports. For the purpose of describing the sample, all articles were coded for their date of publication and total number of words. For each news report, we coded its media identity and the frequency with which it cited online posts as sources; for each online post, we coded the number of responses and the frequency with which it cited news media as sources.

Opinion frames/media frames

Two frames defining problems

Because facts are essential to define the nature of the problem related to the BMW case, netizens or the media employed one of two approaches. One was to echo reports by the authorities, reiterating that the police report was objective and trustworthy, that Su's family background was not special, that the accident was an unintentional traffic offense, and that the trial procedures were in line with the law. The other approach was to investigate and question the aforementioned facts and propose alternative "behind-the-scenes" stories.

Three frames diagnosing causes

Posts and news reports also tended to attribute the outcome of the trial and overall issue to a number of factors. Frames across both types of text suggested three causal factors: untrustworthy government officials or government corruption; injustice and/or corruption of the legal system; and social inequality, or the increasing social gap between the rich and the poor.

Two frames making moral judgments

Frames in online posts evoked emotional literary works and included poems, novels, letters, animations, jokes, and dramas, all of which expressed sympathy toward Liu and resentment against Su. Posts or news reports also morally judged the BMW case as violating human rights and dignity. In addition, some news reports portrayed the case from a human interest perspective, exemplified by one report that quoted Liu's 16-year-old daughter's wish to continue high school study and described her memory of her mother (Lu, 2004).

Three opinion frames/four media frames suggesting remedies

Finally, with respect to treatment recommendation frames, some posts and news called for a reinvestigation or a retrial. Others emphasized the role of the media and the public opinion in "supervising" government and legal officials and holding them accountable. Posts also called for social reform; similarly, news reports argued that problems related to this issue could be solved through step-by-step social improvements. In addition, some news reports advocated greater transparency and sense of responsibility in governmental rule.

Statistical tests

The key concept of this study, frame salience, was operationalized by the frequency (%) of online posts/news stories employing each opinion/media frame. With this key variable and others, we conducted the following three statistical analyses: (a) chi-square tests comparing the priority of opinion/media frames in different phases to illustrate the development of frames over time, (b) Pearson correlations between the number of posts, number of news reports, and frequency of citing media in posts to examine whether netizens' enthusiasm in discussing the BMW case is associated with the intensity of media coverage, and (c) Pearson correlations between the salience of opinion frames with relevant media frames[1] to test the frame-building, frame-setting, and frame-interacting hypotheses.

Results

Online public opinion frames

As shown in Table 1, netizens employed significantly different opinion frames to discuss the BMW case across the three phases ($\chi^2 = 49.56$, $df = 18$, $p < .001$). In Phase I (December 22–31, 2003), there were 51 posts in the in-depth discussion section of the *Qiangguo Forum*. The first post ("Attention: the BMW killed a peasant") was published 2 days after the trial. This key post outlined basic points for subsequent discussions, notably that (a) Su was the daughter-in-law of a high-ranking government official, (b) Su killed Liu deliberately, and (c) the trial did not follow legal procedures. To guarantee appropriate problem definition, almost half of

Table 1 Online Public Opinion Frames in Different Phases

Frames	Phase I	Phase II	Phase III	Total
Problem definition (%)				
Authorities' account	7.8	6.5	1.1	4.4
"Behind-the-scenes" stories	41.8	25.8	11.8	23.3
Causal interpretation (%)				
Governmental lack of credibility/corruption	7.8	4.8	9.7	7.8
Legal injustice/corruption	7.8	21.0	19.4	17.5
Social inequality	7.8	6.5	7.5	6.8
Moral evaluation (%)				
Emotional literacy works	13.7	12.9	3.2	8.7
Human rights/dignity	0	3.2	4.3	2.9
Treatment recommendation (%)				
Reinvestigation/retrial	3.9	1.6	16.1	8.7
Opinion supervision	9.8	14.5	18.3	15.0
Social reform	0	3.2	8.6	4.9
Number of online posts	51	62	93	206

Note: $\chi^2 = 49.56$, $df = 18$, $p < .001$.

the online posts in Phase I tried to dig out "behind-the-scenes" stories (41.8%) or proclaim the authorities' account to clarify rumors (7.8%). The other half of the posts were scattered across six other frames. Netizens attempted to understand the underlying causes, evaluate the situation, and suggest remedies. After this period of value-added discussion, the "BMW event" developed into the "BMW issue."

Compared to Phase I, frames used by netizens in Phase II (January 1–7, 2004) were more diverse as the number of posts increased by 20% ($n = 62$). The percentage of posts in the legal injustice/corruption frame nearly tripled in Phase II, whereas the percentage of posts dealing with problem definition dropped by a third. This trend suggested a shift from asking "what" (what happened?) to asking "why" (why did this happen?). At the same time, some netizens began to consider remedies for the issue, with 14.5% of posts framed in terms of government accountability to public opinion.

The total number of posts witnessed a remarkable increase in Phase III (January 8–14, 2004, $n = 93$). Naturally, "behind-the-scenes" stories were no longer salient as news reports had provided enough information about the incident. In addition, fewer posts dealing with moral evaluations appeared in Phase III. At this stage, however, posts tended to be geared toward recommending solutions. Netizens were more likely in Phase III to champion a reinvestigation or a retrial and advocate government accountability to public opinion and social reform, so as to prevent the occurrence of similar incidents. Still, a sizeable proportion (36.6%) of Phase III posts was framed in terms of causes—particularly legal injustice and corruption—partially because causal interpretation is prerequisite to treatment recommendation.

Media frames

Before analyzing the 114 valid cases, it is worth noting the main content of five news stories published before January 1, 2004. All the stories came from Harbin local media (the *Life Daily* and www.northeast.cn), with the earliest one (October 28, 2003) announcing the arrest of Su and the other four (published between December 19 and 31, 2003) reporting police and government statements about the accident, the trial, and Su's family background. The authorities' account was the only frame used in this period.

As Table 2 indicates, the types of media frames increased to seven in Phase II and again to 11 in Phase III. Of the 114 news articles, far fewer were published in the first week ($n = 31$) than in the second week of January 2004 ($n = 83$). Although the overall chi-square test shows no significant difference between the distribution of media frames in Phase II and Phase III ($\chi^2 = 13.16$, $df = 10$, n.s.), the two phases offered distinctive landscapes of media discourse.

In Phase II (January 1–7, 2004), most reports were published in local newspapers, such as the *Shenyang Today, Qilu Evening News*, and *Beijing News,* with only two articles appearing in the national newspaper *China Youth Daily*. The predominant focus in this period was to define the problem by telling the facts. As shown in Table 2, the media played a dual role here: Nearly one-tenth attempted to refute

Table 2 Media Frames in Different Phases

Frames	Phase II	Phase III	Total
Problem definition (%)			
Authorities' account	9.7	8.4	8.8
"Behind-the-scenes" stories	25.8	16.9	19.3
Causal interpretation (%)			
Government credibility crisis	16.1	8.4	10.5
Legal injustice	9.7	10.8	10.5
Social inequality	0	6.0	4.4
Moral evaluation (%)			
Human interest	6.5	2.4	3.6
Human rights/dignity	0	2.4	1.8
Treatment recommendation (%)			
Reinvestigation/retrial	0	16.9	12.3
Opinion supervision	12.9	12.0	12.3
Social improvements	0	3.6	2.6
Transparent/responsible government	19.4	12.0	14.0
Number of news reports	31	83	114

Note: $\chi^2 = 13.16$, $df = 10$, *n.s.*

rumors, acting as the mouthpiece of the Party–government, and more than one-quarter investigated "behind-the-scenes" stories, acting as a watchdog on the authorities. At the same time, journalists interpreted the issue as a crisis of government credibility (16.1%) and evidence of legal injustice (9.7%). A comment by the *Southern City News* (January 4, 2004) asked, "Who should be responsible for rumors in the 'BMW case'?" and criticized the government for lacking credibility. With regards to remedies, some journalists called for a more transparent and responsible government (19.4%). For example, the *Shenyang Today* editorialized that "the 'BMW case' underscores the vital importance of information transparency" (January 7, 2004). Other journalists emphasized the watchdog role played by public opinion (especially the media) in supervising the government and the Party (12.9%). A comment on the official Web site of media in Hunan Province (www.rednet.cn) declared: "At the current stage when the legal system of our nation is not sophisticated enough, it is essential to listen to the voice of the public."

In Phase III (January 8–14, 2004), the BMW case received intensive coverage from China's mainstream media, including the *People's Daily*, Xinhua News Agency, China News Service, China Central Television, and *Southern Weekend*. The number of frames employed in media coverage increased, with the salience of problem-definition frames decreasing. Attention was paid to remedy recommendations, particularly regarding a reinvestigation or a retrial, government transparency, accountability to public opinion, and social improvements. For example, several newspapers and news agency Web sites (including the *People's Daily*, *Shenyang Today*, and www.xinhua.net) publicized information released by the Harbin municipal

news office that "the governmental and legal organs are reinvestigating the 'BMW case' seriously and carefully, and will give the public and the media a responsible answer as soon as possible." Noticeably, frames that implied moral evaluations were uncommon in both phases (6.5% in Phase II and 4.8% in Phase III).

Common attention from netizens and media

The BMW case has drawn much attention from netizens and media. As Figure 3 illustrates, the extent of netizens' interest in discussing this issue (represented by the number of posts) fluctuated with the extent of the media's endeavor in reporting it (represented by the number of news reports). The two indicators were significantly correlated in both Phase II ($r = .811$, $p < .05$) and Phase III ($r = .787$, $p < .05$). Interestingly, the interplay also was demonstrated in how online posts frequently referred to media coverage as the source of information. During Phase I (December 22–31, 2003), when the BMW case received only limited coverage in Harbin local media and no coverage in other media, only 12 netizens cited media reports in their arguments. The frequency of such citations increased in Phase II (16) and again in Phase III (29). It also was significantly correlated with the number of news reports ($r = .660$, $p < .05$) in an overall test, although the coefficient was not significant in either Phase II or Phase III. The above-mentioned findings remind us of the one-issue agenda-building and agenda-setting effects between the public and the media. Their implications deserve further discussion.

If online references to media reports were easily assessed, the frequency of citing posts in news reports was hard to calculate. Because of the government's restrictions on media use of online information (except that published on official news Web

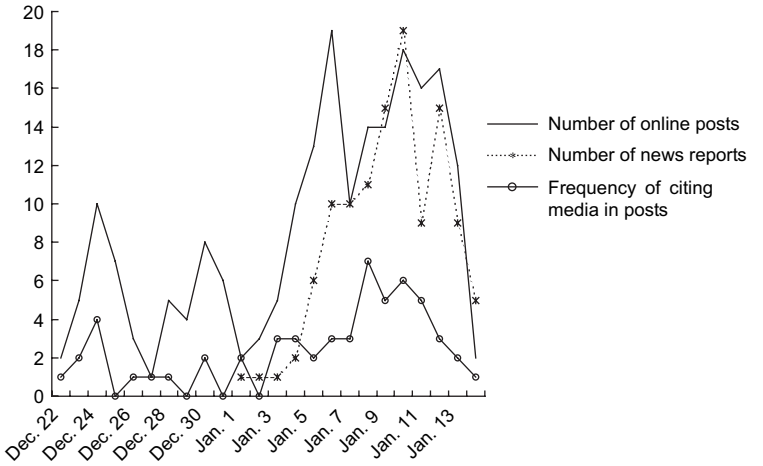

Figure 3 Number of online posts, number of news reports, and frequency of citing media in posts.

sites), most journalists referred to online public opinion in general rather than referencing a particular post. Nevertheless, the *Shenyang Today*, a small local newspaper in a neighboring province that published the greatest amount of related news reports ($n = 19$), published two posts from the *Qiangguo Forum* without revision.

Hypotheses testing

To examine frame-building effects—that opinion frames at one point in time are related to media frames at a subsequent point in time—we correlated the salience of different opinion frames in Phase I with that of different media frames in Phase II and the salience of different opinion frames in Phase II with that of different media frames in Phase III. Statistical analyses demonstrated a significantly positive frame-building effect of Phase I opinion frames on Phase II media frames ($r = .683$, $p < .05$), but the Pearson correlation between Phase II opinion frames and Phase III media frames ($r = .424$, $p = .22$) was not significant.

To test the more "traditional" frame-setting effects, we correlated the salience of different media frames in Phase II with that of different opinion frames in Phase III. Surprisingly, the two were not significantly correlated ($r = .221$, $p = .54$). How the media framed the BMW case had no impact on how netizens interpreted the issue.

Finally, to what extent do opinion frames interact with media frames? We tested the correlations between the salience of the two sets of frames in Phase II and Phase III. The correlation was significant in both Phase II ($r = .738$, $p < .05$) and Phase III ($r = .673$, $p < .05$). Thus, the frame-interacting hypothesis was well supported.

Discussion and conclusions

Recognizing the contribution of Internet-based communications to greater political discourse, this study examines the interplay between media coverage and online public discourse. As a departure from prior studies that explore either the construction of frames or the effects of these frames, we take an integrated perspective to examine both. Descriptive findings trace the evolution of a local event to a nationally prominent issue and the public and media's shifts from problem definition to causal interpretation and then to treatment recommendation. Netizens' enthusiasm in discussing the BMW case is significantly related to media reports of it, which suggests that the public and the media interact in placing the particular issue on the daily agenda. However, such relationships become weaker when one examines how the issue is discussed. Compared with previous findings, frame-building and frame-setting effects found in this study are fairly limited: There is some evidence of netizens' frames dictating media frames early on, but no evidence of the traditional media to public frame-setting effects. Noticeably, significant associations between concurrent opinion frames and media frames lend strong support to frame-interacting effects.

Regarding frame-building effects, our study demonstrates the potential of online public opinion to contribute to larger public discourse. For one thing, online discussions added meaning and news value to the issue; netizens introduced diversified

frames to interpret it, thus transforming the case from an event to an issue that had drawn nationwide attention. At the early stage, the salience of different online public opinion frames in Phase I significantly predicted the salience of different media frames in Phase II. However, this frame-building effect could be largely due to the natural life cycle of an issue. As implied in Entman's (1993) conceptualization and found in this study, frames usually develop from defining problem to looking for causes, making judgment, and suggesting remedies. In a separate test (not shown), when the two problem definition subframes were removed from the data, the correlation between Phase I opinion frames and Phase II media frames dropped dramatically ($r = .014$, n.s.). This finding suggests that the frame-building function of public opinion is more likely to hold for new issues (Scheufele, 1999) when there is no established line to follow and the primary task for both netizens and journalists is to define the problem. Later on, however, the voice of the public fades in media discourse as journalists retrieve professional norms, practice daily routines (Shoemaker & Reese, 1996), or adapt to prevailing political or social values (Henry, 1981; Rachlin, 1998) in reporting the issue.

Prior research in the United States shows that the media are active in reconstructing frames sponsored by politicians and interest groups (Callaghan & Schnell, 2001; Gamson & Modigliani, 1989). This case study in China illustrates that external pressure from the Party–government outweighs internal values of media professionalism in shaping news frames. Unlike Western journalists who subscribe to the watchdog role, the Party-assigned mouthpiece role makes it impossible for Chinese journalists to fully respond to public opinion. When reporting the facts of the BMW case, they attached greater priority to government's voice (8.8%) than did netizens (4.4%). They also employed rhetorical tactics to adjust the relatively "aggressive" public frames to "mild but constructive" media frames. Instead of attributing the BMW case to government and legal corruption, the journalists portrayed it as a crisis of government credibility and one that stemmed from legal injustice. Instead of calling for social reform, the media counted on the government to make spontaneous improvements and become more transparent and responsible in its rule. Compared with netizens' desire to determine the underlying causes of the BMW case (one-third of posts were framed in this manner), the media shifted the focus to treatment suggestions (41.2% of news reports were framed as such).

Although the government announced a reinvestigation on January 10, the hypothesized endpoint in Figure 1 (i.e., the government revising the verdict) was missing in this case, partially due to the lack of media pressure as related reports were prohibited as of January 15. This suggests that in authoritarian systems, frame-building effects may not reach the policy level.

With regards to frame-setting effects, the nonsignificant correlation between frame salience of Phase II media coverage and Phase III online public opinion indicates that the latter is basically independent of the former. This finding challenges the well-accepted frame-setting effects in Western democracies. It is possible that Chinese netizens selectively cite news reports. Nearly one-third of posts in

Phase III quoted news coverage in their discussion. But netizens mainly used raw materials from the media to propose their own arguments. When opinions from the media were quoted, the purpose was to justify rather than challenge netizens' existing beliefs about the issue. For example, on January 12, 2004, the *People's Daily* discussed the reinvestigation of the BMW case and reported comments from the authorities and a law expert. Interestingly, when referring to this article, netizens only quoted the expert, who thought that the verdict was not fair and that the reinvestigation should be conducted by a new team.

Another explanation concerns netizens' active reinterpretation of news reports. On January 6, 2004, the *Beijing News* reported several Heilongjiang Province leaders' promises that "a satisfactory solution to the 'BMW case' will be offered to the public." On January 8, a post appeared in the *Qiangguo Forum* entitled "Why should we trust you?" and immediately received 62 supportive responses. This post cited the news report in a cynical tone and cast doubt on the credibility of government leaders. By doing so, it changed the "transparent/responsible government" media frame to an opinion frame that highlighted governmental lack of credibility and/or corruption.

Our findings may have been influenced by netizens' low levels of trust in China's media outlets (especially the Party media; see Zhu, 1997). Perceiving such news reports to be biased, netizens may make judgments in ways exactly opposite to the media's arguments. For example, the Xinhua News Agency (China's official news agency) interviewed Su, her husband, and the judge on January 10 to show that the trial was fair. On January 11, three posts appeared in the *Qiangguo Forum* that doubted Xinhua News Agency's objectivity and true intention. As one netizen pointed out in his post titled "The report by Xinhua News Agency is obviously biased," the purpose of this report was to hide "behind-the-scenes" facts and lie to audiences. Netizen autonomy—manifested in selective information processing and interpretation—therefore can mitigate frame-setting effects.

Particularly informative are the simultaneous and significant associations between online and media frames (i.e., frame-interacting effects), as well as between netizens' enthusiasm in discussing the BMW case and the intensity of media coverage over time (Figure 3). The typical time span for framing and agenda setting to display effects varies from weeks to months (McCombs, Danielian, & Wanta, 1995). It is reasonable to believe that this span will be shortened online. The results of this study imply that for a quickly rising issue, online agendas/frames and media agendas/frames may immediately impact each other. This observation, however, needs empirical verification in future studies.

Conceptualized in a specific media system and focused on a particular case, the findings from this study might not necessarily be generalizable to other settings. However, the study provides an elaborate example of how the two-way process of framing works. Following the logic of agenda building and agenda setting to conceptualize and operationalize frame building and frame setting, this study makes an empirical attempt to bridge the gap between the two theories (Kosicki, 1993, 2006; McCombs et al., 1997). Although the interactions between the public and the media

have been taken for granted in Western democracies, this case study illustrates that such interactions are more complicated in non-Western contexts. Among others, the government can act as an intervening force in the frame-building process and netizen autonomy as an attenuating variable in the frame-setting process. Follow-up studies, particularly those involving cross-national comparisons, should be conducted to gain a better understanding of various aspects of framing.

Note

1 Some opinion frames were not fully identical to media frames (i.e., opinion frame governmental lack of credibility/corruption vs. media frame government credibility crisis, opinion frame emotional literacy works vs. media frame human interest, opinion frame social reform vs. media frame social improvements). We observed that they essentially meant the same thing but took on different expressions to adjust to different discourses. Therefore, they were treated as equivalent in our statistical analyses. There were 10 opinion frames but 11 media frames. We deleted the 11th media frame (i.e., transparent/responsible government) and ran correlations between the remaining 10 pairs.

References

Akhavan-Majid, R., & Ramaprasad, J. (2000). Framing Beijing: Dominant ideological influences on the American press coverage of the fourth UN Conference on Women and the NGO Forum. *Gazett*, **62**(1), 45–59.

Allen, B., O'Laughlin, P., Jasperson, A., & Sullivan, J. L. (1994). The media and the Gulf War: Framing, priming, and the spiral of silence. *Polity*, **27**, 255–284.

Bantimaroudis, P., & Ban, H. (2001). Covering the crisis in Somalia: Framing choices by the *New York Times* and the *Manchester Guardian*. In S. Reese, O. Gandy, & A. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 175–184). Mahwah, NJ: Erlbaum.

Beniger, J. R. (1987). Toward an old new paradigm: The half-century flirtation with mass society. *Public Opinion Quarterly*, **51**(4), S46–S66.

Bennett, W. L. (1990). Toward a theory of press-state relations in the United States. *Journal of Communication*, **40**(2), 103–125.

Bimber, B. (1998). The Internet and political transformation: Populism, community, and accelerated pluralism. *Polity*, **31**(1), 133–160.

Callaghan, K., & Schnell, F. (2001). Assessing the democratic debate: How the news media frame elite policy discourse. *Political Communication*, **18**, 183–212.

Cappella, J. N., & Jamieson, K. H. (1996). News frames, political cynicism, and media cynicism. *Annals of American Academy of Political and Social Science*, **546**(1), 71–84.

Cappella, J. N., & Jamieson, K. H. (1997). *Spiral of cynicism: The press and the public good*. New York: Oxford University Press.

Chan, J. M. (1995). Calling the tune without paying the piper: The reassertion of media controls in China. In L. C. Kin, S. Pepper, & T. K. Yuen (Eds.), *China review 1995* (pp. 5.1–5.16). Hong Kong: Chinese University Press.

Chang, T., Wang, J., & Chen, C. (1998). The social construction of international imagery in the post-Cold War era: A comparative analysis of U.S. and Chinese national TV news. *Journal of Broadcasting and Electronic Media*, **42**, 277–296.

Chen, C., Zhu, J., & Wu, W. (1998). The Chinese journalist. In D. Weaver (Ed.), *The global journalist: News people around the world* (pp. 9–30). Cresskill, NJ: Hampton Press.

Chinese journalists are forced to apologize for outspokenness in reporting the "BMW case." (2004, January 19). *Asian Times*. Retrieved January 19, 2004, from http://www.asiantimes-chinese.com

China Internet Network Information Center (CNNIC). (2006). *Statistical report of the development of China's Internet*. Retrieved August 1, 2006, from http://www.cnnic.net/

Cohen, J. (1960). A coefficient of agreement for nominal scales. *Educational and Psychological Measurement*, **20**, 37–46.

Cohen, J. (1968). Weighted kappa: Nominal scale agreement with provision for scaled disagreement or partial credit. *Psychological Bulletin*, **70**, 213–220.

Davis, J. J. (1995). The effects of message framing on response to environmental communications. *Journalism and Mass Communication Quarterly*, **72**, 285–299.

De Vreese, C. H., Peter, J., & Semetko, H. A. (2001). Framing politics at the launch of the Euro: A cross-national comparative study of frames in the news. *Political Communication*, **18**(2), 107–122.

Entman, R. M. (1993). Framing: Toward clarification of a fractured paradigm. *Journal of Communication*, **43**(4), 51–58.

Gamson, W. A., & Lasch, K. E. (1983). The political cultural of social welfare policy. In S. E. Spiro & E. Yuchtman-Yaar (Eds.), *Evaluating the welfare state: Social and political perspectives* (pp. 397–415). New York: Academic Press.

Gamson, W. A., & Modigliani, A. (1989). Media discourse and public opinion on nuclear power: A constructionist approach. *American Journal of Sociology*, **95**(1), 1–37.

Gans, H. (1979). *Deciding what's news: A study of CBS Evening News, NBC Nightly News, Newsweek, and Time*. New York: Pantheon Books.

Gitlin, T. (1980). *The whole world is watching: Mass media in the making and unmaking of the new left*. Berkeley: University of California Press.

Goffman, E. (1974). *Frame analysis: An essay on the organization of experience*. New York: Harper and Row.

Habermas, J. (1962). *The structural transformation of the public sphere*. Cambridge, U.K.: Polity Press.

Henry, W. A., III (1981). News as entertainment: The search for dramatic unity. In E. Abel (Ed.), *What's news: The media in American society* (pp. 133–158). San Francisco: Institute for Contemporary Studies.

Hertog, J. K., & McLeod, D. M. (2001). A multiperspective approach to framing analysis: A field guide. In S. Reese, O. Gandy, & A. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 139–161). Mahwah, NJ: Erlbaum.

Iyengar, S. (1991). *Is anyone responsible? How television frames political issues*. Chicago: University of Chicago Press.

Jasperson, A. E., Shah, D. V., Watts, M., Faber, R. J., & Fan, D. P. (1998). Framing and the public agenda: Media effects on the importance of the federal budget deficit. *Political Communication*, **15**, 205–224.

Kahneman, D., & Tversky, A. (1984). Choice, values, and frames. *American Psychologist*, **39**, 341–350.

Kinder, D. R., & Sanders, L. M. (1990). Mimicking political debate with survey questions: The case of White opinion on affirmative action for Blacks. *Social Cognition*, **8**, 73–103.

Kosicki, G. M. (1993). Problems and opportunities in agenda-setting research. *Journal of Communication*, **43**(2), 100–127.

Kosicki, G. M. (2006). Book review: Maxwell McComb's setting the agenda: The mass media and public opinion. *Public Opinion Quarterly*, **70**(1), 124–127.

Li, L. (1999). *Introduction to journalism*. Beijing, China: High Education Press.

Li, X., Xuan, Q., & Kluver, R. (2003). Who is setting the Chinese agenda? The impact of online chatrooms on Party press. In K. C. Ho, R. Klwer, & C. C. Yang (Eds.), *Asian.com: Asian encounters the Internet* (pp. 143–158). London: Routledge Curzon.

Lu, Y. (2004, January 8). Praying that there were no BMW in the heaven. *Shenyang Today*. Retrieved January 9, 2004, from http://www.syd.com.cn/syjb/2004-01/08/content_898025.htm

Luther, C. A., & Zhou, X. (2005). Within the boundaries of politics: News framing of SARS in China and the United States. *Journalism and Mass Communication Quarterly*, **82**, 857–872.

McCombs, M., Danielian, L., & Wanta, W. (1995). Issues in the news and the public agenda: The agenda-setting tradition. In T. L. Glasser & C. T. Salmon (Eds.), *Public opinion and the communication of consent* (pp. 281–300). New York: Guilford.

McCombs, M., & Shaw, D. L. (1972). The agenda-setting function of mass media. *Public Opinion Quarterly*, **36**, 176–187.

McCombs, M., Shaw, D. L., & Weaver, D. (1997). *Communication and democracy: Exploring the intellectual frontiers in agenda-setting theory*. Mahwah, NJ: Erlbaum.

Miller, P. V. (1995). The industry of public opinion. In T. L. Glasser & C. T. Salmon (Eds.), *Public opinion and the communication of consent* (pp. 105–131). New York: Guilford.

Neuman, W. R., Just, M. R., & Crigler, A. N. (1992). *Common knowledge*. Chicago: University of Chicago Press.

Norris, P. (2001). *Digital divide: Civic engagement, information poverty, and the Internet worldwide*. New York: Cambridge University Press.

Ou, W. (2004). *The Internet is changing Chinese journalism*. Retrieved February 24, 2005, from http://www.cddc.net/shownews.asp?newsid=5667.

Pan, Z., & Kosicki, G. M. (1993). Framing analysis: An approach to news discourse. *Political Communication*, **10**(1), 55–76.

Pan, Z., Lee, C. C., Chan, J., & So, C. Y. K. (1999). One event, three stories: Media narratives of the handover of Hong Kong in cultural China. *Gazette*, **61**(2), 99–112.

Peng, L. (2005). *The first ten years of Internet media in China*. Beijing, China: Tsinghua University Press.

Price, V., Tewksbury, D., & Powers, E. (1997). Switching trains of thought: The impact of news frames on readers' cognitive responses. *Communication Research*, **24**, 481–506.

Qiu, J. L. (2001, November). *Chinese nationalism on the net: An odd myth with normalcy*. Paper presented at the Annual Convention of National Communication Association, Atlanta, GA.

Rachlin, A. (1998). *News as hegemonic reality: American political culture and the framing of news accounts*. New York: Praeger.

Scheufele, D. A. (1999). Framing as a theory of media effects. *Journal of Communication*, **49**(1), 103–122.

Schoenbach, K., & Becker, L. B. (1995). Origins and consequences of mediated public opinion. In T. L. Glasser & C. T. Salmon (Eds.), *Public opinion and the communication of consent* (pp. 323–347). New York: Guilford.

Shoemaker, P. J., & Reese, S. D. (1996). *Mediating the message: Theories of influences on mass media content* (2nd ed.). White Plains, NY: Longman.

Stewart, P. (1975). Or of the press. *Hastings Law Journal*, **26**, 631–637.

Tankard, J. W. (2001). The empirical approach to the study of media framing. In S. Reese, O. Gandy, & A. Grant (Eds.), *Framing public life: Perspectives on media and our understanding of the social world* (pp. 95–106). Mahwah, NJ: Erlbaum.

Tuchman, G. (1978). *Making news. A study in the construction of reality*. New York: Free Press.

Winter, J. P., & Eyal, C. H. (1981). Agenda setting for the civil rights issue. *Public Opinion Quarterly*, **45**, 376–383.

Xu, H. (2000). Morality discourses in the marketplace: Narratives in the Chinese television news magazine Oriental Horizon. *Journalism Studies*, **1**, 637–647.

Yang, J. (2003). Framing the NATO air strikes on Kosovo across countries: Comparison of Chinese and U.S. newspaper coverage. *Gazette: The International Journal for Communication Studies*, **65**, 231–249.

Yu, H. (2006). From active audience to media citizenship: The case of post-Mao China. *Social Semiotics*, **16**, 303–326.

Zhao, Y. (1998). *Media, market, and democracy in China: Between the party line and the bottom line*. Urbana, IL: University of Illinois Press.

Zhao, Y. (2000). Watchdogs on Party Leashes? Contexts and implications of investigative journalism in post-Deng China. *Journalism Studies*, **1**, 577–597.

Zhu, J. (1997). Antecedents, covariates, and outcomes of media credibility in China. *Mass Communication Review*, **24**(3/4), 5–18.

Zillmann, D., Chen, L., Knobloch, S., & Callison, C. (2004). Effects of lead framing on selective exposure to Internet news reports. *Communication Research*, **31**(1), 58–81.