COVID-19 news reporting and engaging in the age of social media: Comparing Xinhua News Agency and The Paper

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Abstract
“To follow and to be followed” has become the new normal in news communication in the age of social media. News audience follow news via social media while they are being followed by news anytime anywhere. This new normal has created a pressing need to investigate whether social media have brought any changes to both party-controlled and market-oriented news media in China in reporting crises. Comparing Xinhua News Agency (party-controlled) and The Paper (market-oriented), this study investigated how they reported COVID-19 and how their news consumers engaged with their COVID-19 news stories on Jinri Toutiao, a popular and yet special form of social media. This study found that Xinhua News Agency continued to stay overwhelmingly positive, while The Paper was more neutral in reporting the health crisis. Xinhua News Agency was surprisingly more episodic than The Paper in framing the pandemic. The Paper, however, had a higher level of user engagement than Xinhua News Agency. To cater to the changing news-seeking behaviors and patterns, both party-controlled and market-oriented news media have changed their operations, but not their fundamental orientations.

Keywords
COVID-19, market-oriented, news frames, news media, party-controlled, social media, story tone, user engagement

Since the inception of its open and reform policies in 1978, China has undergone speedy and yet steady changes on many fronts. News media in China used to be tightly controlled by the Communist Party of China, the ruling party, to play the sole role of its mouthpiece. The 40-year-plus-old reform and open efforts, however, have brought about a gradual and yet great transformation of China’s news media from an authoritarian model to a “state vs market” scenario (Meng & Rantanen,
where party-controlled news media (such as Xinhua News Agency, People’s Daily, and China Central Television) remain dominant in terms of user reach and penetration (Yang, 2012; Zhang et al., 2014), while market-oriented news media (such as The Paper and Caixin) grow in popularity and influence (Yang, 2012; Zhang, 2007).

The party-market dividing line has been further identified by earlier studies on crisis reporting. Market-oriented news media tend to be “less controlled by government,” “enjoy more autonomy” and “their viewpoints are less influenced by government propaganda machine” (Yu, 2003, p. 91), while party-controlled news media remain powerful in guiding public opinion, as required by the ruling party, especially in reporting major events or issues, including health crises, such as SARS, Ebola, and H1N1 (Hong, 2007; Yang, 2012).

More specific differences between party-controlled and market-oriented news media were found to lie in reporting crises predominantly through news framing and story tone setting, especially in the case of the SARS outbreak in 2002 (Beaudoin, 2007; Hong, 2007; Luther & Zhou, 2005; Yang, 2012). More than 18 years later, after the COVID-19 outbreak in late December 2019, the Chinese government was much quicker and more decisive in responding to COVID-19 than SARS by implementing a series of strict measures including the lockdown of the city of Wuhan, the epicenter of the pandemic when it first broke out in China, followed by nation-wide travel restrictions, wearing face masks, physical distancing, and health code to control the human flow so as to stop the virus flow. Unlike SARS, COVID-19 was reported by Chinese news media soon after its outbreak. On top of the difference between SARS and COVID-19 in terms of news media responses to health crises, another contextual difference lies in the fact that since after SARS in China, there has been a gradual but dramatic change in news reporting and consuming, that is, the switch to social media for following news and users. “To follow and to be followed” has become the new normal in news communication in the age of social media. News audience follow news via social media while they are being followed by news anytime anywhere. This new normal has created a pressing need to investigate whether it has brought any changes to both party-controlled and market-oriented news media in China. In responding to this pressing need, this study examined how Xinhua News Agency (party-controlled) and The Paper (market-oriented) leveraged their social media to report COVID-19 and how their news consumers engaged with their COVID-19 news stories.

Research framework

News media in China have been examined by many studies (see Hong, 2007; Luther & Zhou, 2005; Meng & Rantanen, 2015; Ren et al., 2014; Yang, 2012; Yu, 2003; Zhang, 2007; Zhang et al., 2014) within the party-controlled versus market-oriented news media research framework (see Chan, 2003; Pan, 2000; Zhao, 1998). In competing for readers and advertisers, party-controlled and market-oriented news media have entered an intrinsic tension between market logic and traditional state regulation (Zhao, 1998). Market-oriented news media in China, being less or indirectly controlled, have more freedom to act as a watchdog in their news reporting (Zhao, 1998).

The party-market model is a complex news media system, in which the tight control of the ruling party over news media co-exists with increasing commercial incentives of the market to cater to the diversified needs of news audience (Pan, 2000) and in which “tensions exist between political demands and economic needs” (Luther & Zhou, 2005, p. 857). As observed by Akhavan-Majid (2004), the media transformation process in China could be best interpreted as increasingly cooperative and non-adversarial interaction between the state and non-state actors, and the ruling party has been successful in keeping market-oriented news media within what Zhao (2000) called “orbit.”
While party-controlled news media continue to be required by the ruling party to serve as its mouthpiece, to guide the public opinion and to maintain the so-called “harmony” (social harmony) and “stability” (political stability), market-oriented news media are struggling to strike a nice balance between serving the diversified needs of news audiences and not deviating much from the general parameters set side by the ruling party.

This party versus market framework was applied in this study to generate indicators of party-controlled and market-oriented news media for comparison. Party-controlled news media feature wider user reach and penetration (Yang, 2012; Zhang et al., 2014) due to its very nature as it is the mandate of the ruling party for the whole nation, in principle, to subscribe or follow news disseminated by party-controlled news media. The emphasis of party-controlled news media on social harmony and political stability could be translated into its focus on guiding public opinion, especially in time of crises (Hong, 2007; Yang, 2012). Market-oriented news media are characterized by their growing popularity and influence (Yang, 2012; Zhang, 2007) due to their focus on human interest, investigative reporting, and other topics that would interest their news audiences.

The differences between party-controlled and market-oriented news media could be best indicated by news framing, story tone setting, and user engagement. While news framing and story tones are two traditional research areas for comparative studies of news reporting of natural, political, social, and economic crises including health crises, user engagement in this study is relatively a new area since it is more related to news communication via social media.

News framing has been investigated in comparative studies of news reports of crises (e.g. Beaudoin, 2007; J. Li et al., 2017; Luther & Zhou, 2005; Oh & Zhou, 2012; Parsons & Xu, 2001). To examine how news is framed in a news story is an important way to locate differences between news media, as “how an issue is characterised in news reports” via framing “can have an influence on how it is understood by audiences” (Scheufele & Tewksbury, 2007, p. 57, cited by S. T. Lee & Basnyat, 2013). Framing is a special way to select some aspects of a perceived reality and make them more salient in a communicating text, in such a way as to promote a particular problem definition, causal interpretation, moral evaluation, and/or treatment recommendation for the item described. (Entman, 1993, p. 52)

In earlier studies of news framing of health crisis reporting, differences have been located between party-controlled media and market-oriented media. In a comparative content analysis of news frames of SARS between overseas-targeted China Daily and domestic-targeted People’s Daily, Luther and Zhou (2005) found that although the two news providers use similar frames, they differed from each other in terms of extent and tone due to their target audiences. In another comparative content analysis of news framing of SARS and Sichuan Earthquake, Yang (2012) found that among other differences in styles and use of sources, party-controlled media would “tactically used the leadership frame to build a positive image of the government,” while market-oriented media “frequently utilized the attribution frame to criticize social actors and the government, therefore representing the general public’s concerns” (p. 73).

Further differences have also been identified. For instance, in a comparative study of news framing of SARS and Ebola, it is found that more frames of economic effects, government responses, reassurance, and confidence in government were used for SARS than Ebola, while more frames of the health effects and responses by international government(s) were used for Ebola than SARS (J. Li et al., 2017). Another study of SARS news reporting located such thematic frames as economic consequences, responsibility, risks, conflicts, and human interests (Oh & Zhou, 2012). Still another study of SARS identified the following frames: attribution of responsibility, human
interest, economic consequences, and severity (Beaudoin, 2007). Similar news frames were located in other studies (Dan & Raupp, 2018; Hong, 2007; Luther & Zhou, 2005; Yang, 2012).

Based on the commonly shared features of news frames identified by earlier studies, this study proposed to use episodic framing and thematic framing. Originally, episodic framing refers to its focus on individuals, single cases, and discrete events or issues, while thematic framing is used to highlight contexts and environments of those cases, events, or issues (Iyengar, 1991). In this study, however, episodic frames in times of health crises refer to those that focus more on people first, individuals, and individual efforts in fighting the pandemic, while thematic frames emphasize institutions, organizations, contexts and environments of what happened.

To guide the public opinion in covering health crises, party-controlled media would focus on thematic frames to highlight contexts and environments of cases, events, or issues related to health crises. Market-oriented media would focus on episodic frames so as to attract more eyeballs via individual and human interest approaches to their news reports of health crises. Therefore, in this investigation, party-controlled news media would be best indicated by their emphasis on thematic framing, while market-oriented news media would be best indicated by their focus on episodic framing.

How news media set tones in their news stories has also been addressed in earlier studies (Aday et al., 2005; Craft & Wanta, 2004; Dunaway, 2013; Kim & Yoon, 2009; Liu, 2018; Newhagen, 1994; Rodgers & Thorson, 2003). Differences in story tone can be determined by gender (Craft & Wanta, 2004; Rodgers & Thorson, 2003), media ownership, economic incentives, and political contexts (Dunaway, 2013). In this study, party-controlled news media would be expected to place more emphasis on setting positive story tones, while market-oriented news media would focus on neutral or critical story tones.

Different from SARS in the pre-social media age, COVID-19 has been predominantly reported first via social media by all news media, party-controlled or market-oriented. In reporting the health crisis, one prominent feature is to engage users in news communication via social media. User engagement in this study refers to a process of users’ interacting with news stories through reads, likes, shares, and comments. User engagement via social media has become increasingly important and essential for online news communication, especially at times of crisis, since social media have become the fastest and most effective way to reach the widest possible audiences, who have been accustomed to following news on social media or being followed by news via social media. In this examination, party-controlled news media would be expected to emphasize less user engagement than market-oriented news media in reporting COVID-19.

In summary, party-controlled news media could be best indicated by (a) more thematic framing, (b) more positive tones, and (c) less user engagement, while market-oriented news media could be best demonstrated by (a) more episodic framing, (b) more neutral or critical tones, and (c) more user engagement. Using these indicators, this study investigated news reporting of COVID-19 on social media to locate changing differences between party-controlled and market-oriented news media in framing news, setting tones, and engaging users (see Table 1).

**Research questions**

To locate differences in reporting a crisis, one of the commonly used methods is to look into how news is framed by news media. In earlier studies of news framing in reporting health crises, differences have been located between party-controlled media and market-oriented media. In a comparative content analysis of news frames of SARS between overseas-targeted China Daily and
domestic-targeted *People’s Daily*, Luther and Zhou (2005) found that although the two news media use similar frames, they differed from each other in terms of extent and tone due to their targets audiences. In another comparative content analysis of news framing of SARS and Sichuan Earthquake, Yang (2012) found that among other differences in styles and use of sources, party-controlled media would “tactically used the leadership frame to build a positive image of the government,” while market-oriented media “frequently utilized the attribution frame to criticize social actors and the government, therefore representing the general public’s concerns” (p. 73). News media in China differed considerably in using news frames (Beaudoin, 2007). For instance, in reporting SARS, market-oriented news media were found to focus more on responsibility frames than party-controlled news media (Hong, 2007). And while market-oriented news media tend to be more critical, party-controlled news remain conservative (Hong, 2007).

When SARS broke out in November 2002, it was not reported by any Chinese news media until mid-February 2003 in China, resulting in the spread of SARS to Hong Kong, Singapore, Taiwan, Vietnam, and Canada. More than 18 years later in early December 2019, when the coronavirus epidemic spread in the city of Wuhan, the Chinese news media did not bring it to the national and global spotlight until the central government stepped in after COVID-19 got out of control in the city due to the initial delayed responses from local governments. In reporting the pandemic, the Chinese news media leveraged their presence and influence on social media for speedy and effective news communication since social media have become many users’ first choice to follow news or to be followed by news, especially at times of crises. In comparing with news framing of SARS more than 18 years ago, this study seeks to locate the differences between party-controlled and market-oriented news media in framing COVID-19 in their news reporting. Therefore, the first research question of this study is as follows:

**RQ1.** What are the differences between *Xinhua News Agency* and *The Paper* in framing COVID-19 in their news reporting?

As the national leading news provider, *Xinhua News Agency* has long been tightly controlled by the ruling party to guide the public opinion in covering major events and issues including health crises. At times of crisis, *Xinhua News Agency*, as the mouthpiece of the ruling party, would be expected to use more thematic frames than market-oriented news media to provide more contexts and environments of the health crisis in the pre-social media age. After traditional mainstream news media have leveraged social media for more effective news dissemination, users are given more chances to engage with news stories. Whether such an increasing user engagement with news stories has changed the way both party-controlled and market-oriented news media used news frames in reporting COVID-19 is the question to be addressed in this study:

### Table 1. Indicators of party-controlled and market-oriented news media.

| Party-controlled news media | Market-oriented news media |
|-----------------------------|-----------------------------|
| Framing news                | More thematic frames         | More episodic frames         |
| Setting tones               | More positive tones         | More neutral/critical tones  |
| Engaging users              | Less user engagement        | More user engagement         |


RQ1a. Did Xinhua News Agency use more thematic frames than The Paper?

Another question to be addressed is whether The Paper, since it is more market-oriented, would focus more on episodic frames than Xinhua News Agency to attract more eyeballs and dollars via individual and human interest approaches to their news reports via social media.

RQ1b. Did The Paper use more episodic frames than Xinhua News Agency?

It has long been the tradition of news media in China to be required by the ruling party to provide more positive than neutral or negative news reporting of events and issues, especially in times of crises such as natural disasters or health crises. This tradition was found to be more strictly followed by party-controlled news media than market-oriented news media in reporting SARS (Hong, 2007; Yang, 2012) in the pre-social-media age. More than 18 years have passed, especially in the age of social media, did party-controlled news media continue to stay more positive than market-oriented news media in reporting COVID-19? Therefore, the next research question is as follows:

RQ2. Did Xinhua News Agency continue to focus more on positive news reporting of COVID-19 than The Paper?

Different from the age of mass media, once going online, both party-controlled and market-oriented news media are open to different ways of engaging their users. In the age of social media, users no longer stick with a few traditional news media for news. Instead, they have far more sources to turn to for following news. Furthermore, they have also been followed by news via social media. How to attract and engage users via social media has become a major challenge and a big concern for both party-controlled and market-oriented news media. While serving as the mouthpiece of the ruling party, party-controlled news media continue to struggle to keep their users and try every possible way to please them and make them stay. On the one hand, they have to remain more vigilant than market-oriented news media to filter and delete any user comments if they are deemed to be sensitive, unsafe, or unhealthy politically or culturally in the definition of the ruling party. On the other hand, they have to increase user engagement with their news stories so as to please them. To serve two masters at the same continues to be a big challenge for both party-controlled and market-oriented news media.

User engagement has been defined differently in different disciplines. For instance, O’Brien and Toms (2014) defined user engagement in relation to technology as “a quality of user experience characterized by attributes of challenge, positive affect, endurability, aesthetic and sensory appeal, attention, feedback, variety/novelty, interactivity, and perceived user control,” consisting of four components: “point of engagement, period of sustained engagement, disengagement, and reengagement” (p.938). User engagement can also be related to Csikszentmihalyi’s (1990) flow theory, Stephenson’s (1967) play theory, and Toms’ (2002) information interaction (O’Brien & Toms, 2014).

Taking the different components of user engagement proposed by earlier studies that can be applied in users’ engagement with news stories, this study has some of the legacy theoretical components incorporated and integrated in the proposed user engagement, including interactivity and feedback (Csikszentmihalyi, 1990); feedback and user control (Brown & Cairns, 2004); news reading (Stephenson, 1967); browsing (Toms, 1998, 2000); decision-making on the Web (Atkinson &
Guided by the legacy theoretical components of user engagement, this study proposed to investigate reads, likes, shares, and comments as four forms of user engagement with COVID-19 news stories. Users’ needs, tastes, and preferences for news were increasingly diversified due to their increased education and income levels. Their growing exposure to more and more global media content has also put more pressure on the Chinese news media (Wang, 2007). What is local can become regional, national, or even international with the help of discussion among online users (Zhao & Moy, 2007, cited in Yang, 2012). Social media have also dramatically increased user engagement with news reporting via reads, likes, shares, and comments. Moving from “online first” to “mobile first” and “social media first,” users have been following news and they have been followed by news anytime anywhere. Therefore, user engagement has become closely intertwined and inter-influenced with news reporting of crises, which deserves further investigation.

Being market-oriented, The Paper would be expected to exercise less censorship, to be more open to diversified and negative comments than Xinhua News Agency since market-oriented news media would be less censored or filtered than party-controlled news media. As Xinhua News Agency and The Paper do not provide any numbers of shares or likes to go along with their news stories via Jinri Toutiao, only reads and comments were used in this study to locate differences in user engagement between party-controlled and market-oriented news media. Therefore, by addressing the following research question, this research seeks to locate key differences between the two news media in engaging users in their news stories:

**RQ3.** What are the differences between Xinhua News Agency and The Paper in user engagement with their news stories?

These three main research questions are designed to locate the changing differences between party-controlled and market-oriented news media in China in the age of social media, which have become popular sources for news (Sterrett et al., 2019). As social media are exerting great impact on the practice of journalism (Barberá et al., 2017; Belair-Gagnon, 2015; Bright, 2016; Jian & Liu, 2018; B. Li et al., 2017), this study is designed to explore whether use of social media by both party-controlled and market-oriented news media has brought any changes to their news orientations and operations.

**Research methods**

To address the three key research questions, this study employed a comparative content analysis of selected news reports published by the two news providers on their Jinri Toutiao (Headline News Today) accounts, a special form of social media in China. Since it was founded in 2012, Jinri Toutiao has been growing exponentially powerful and popular in enabling its users to engage with news stories through likes and comments, and shares, which offers a unique case for further investigation of how users engage with news stories of a public health crisis. Jinri Toutiao is a typical example of the exploding social media space in China, which is inhabited by more than 300 million social media users (Chiu et al., 2020). In the absence of Facebook, Twitter, and YouTube, which are banned in China, the country has, among others, Jinri Toutiao, WeChat, Douyin, Youku, and QQ. Jinri Toutiao and other social media in China have become indispensable platforms for most
Chinese users to follow news, especially at times of crises. Since the coronavirus outbreak in Wuhan, Jinri Toutiao and other social media have become the first choice for most Chinese to follow COVID-19 news.

Another important reason of choosing Jinri Toutiao is that both Xinhua News Agency and The Paper published their headlines news stories on the platform instead of all of their daily news stories. They select their news stories to be published on Jinri Toutiao as headline news stories according to their respective criteria. And these criteria are also determined by their different natures, roles, expectations, and their corresponding reporting policies along the dividing line between party-controlled and market-oriented news media.

The choice of the two selected news media Xinhua News Agency and The Paper for comparison can be well justified by that the fact that they can typically represent party-controlled news media and market-oriented news media. Xinhua News Agency has been the national news agency of China since 7 November 1931. It is the leading news media under the rigid supervision of the ruling party. It has been the mouthpiece of the ruling party to guide the public opinion since its inception. Founded in 2014, The Paper is the key player in covering current affairs in China. As a market-oriented news provider, The Paper is less strictly controlled by the ruling party, enjoying more professional freedom.

As the three major areas of comparison in this study, news frames, story tones, and user engagement can be best compared through content analysis by coding each news story according to specific coding items designed in a codebook. To collect news stories from the two selected news media for content analysis, a two-constructed-week method was employed in a span of 3 months starting from 23 January 2020, when Wuhan was locked down, through 23 April 2020, with a 7-day interval between each chosen date. From Xinhua News Agency, 184 news stories were collected as the sample, while 158 news stories were collected from The Paper as the sample for the comparative content analysis. To code the collected news stories, a codebook was used, which includes the following major coding items: (a) story tone, (b) story framing, (c) reader comments, and (d) reader reads.

The four major coding items, except story framing, are self-explanatory. Story tone refers to the predominant tone of the news story, which might be positive, neutral, or negative. Reader comments refer to those made by readers below each news story, while reads refer to the number of reads of a news story. During the two constructed weeks, Xinhua News Agency generated 1.4 million reads and 4633 comments from its 184 selected news stories, while The Paper led to 8.32 million reads and 17,323 comments from its 158 selected news stories.

For story framing, the predominant frame in a news story was coded to be episodic or thematic. As conceptualized in the research framework of this study, episodic framing in times of health crises refers to any frame that focuses more on people first, individuals, and individual efforts in fighting the pandemic. Driven by this conceptualization, any of the following 13 dimensions predominantly detected in a news story would be coded episodic framing: (a) individual patient’s fight against virus infections, (b) patient’s family support, (c) individual party official efforts, (d) individual party member efforts, (e) individual healthcare professional efforts, (f) volunteer efforts, (g) ordinary individual efforts, (h) successful individual medical treatment, (i) individual patient survival stories, (j) individual complaints during the pandemic, (k) individual violations of public health rules, (l) individual success stories of resuming work, production or school, and (m) individual difficulty stories of resuming work, production, or school. Thematic framing in this study refers to any predominant frame in a news story to emphasize institutions, organizations, contexts, and environments of what happened. Operationally, thematic framing can be any of the following
Table 2. Episodic and thematic framing: sub-frames in summary.

| ID  | Episodic framing                                         | ID  | Thematic framing                          |
|-----|----------------------------------------------------------|-----|-------------------------------------------|
| EF01| Individual patient’s fight against virus infections      | TF01| Public concerns                           |
| EF02| Patient family support                                   | TF02| Social consequences                       |
| EF03| Individual party official efforts                        | TF03| Economic consequences                     |
| EF04| Individual party member efforts                          | TF04| Political consequences                    |
| EF05| Individual healthcare professional efforts                | TF05| Causes of the virus outbreak              |
| EF06| Volunteer efforts                                        | TF06| COVID-19 medical research progress        |
| EF07| Ordinary individual efforts                              | TF07| Successful medical treatment efforts      |
| EF08| Successful individual medical treatment                  | TF08| Collective survival stories               |
| EF09| Individual patient survival stories                      | TF09| Success stories in containing the virus   |
| EF10| Individual complaints during the pandemic                | TF10| Causes of success stories in containing the virus |
| EF11| Individual violation of public health rules              | TF11| Success stories of resuming work, production, or school |
| EF12| Individual success stories of resuming work, production, or school | TF12| Difficulty stories of resuming work, production, or school |
| EF13| Individual difficulty stories of resuming work, production or school | TF13| Collective efforts in containing the virus |

13 sub-frames: (a) public concerns, (b) social consequences, (c) economic consequences, (d) political consequences, (e) causes of the virus outbreak, (f) COVID-19 medical research progress, (g) successful medical treatment efforts, (h) collective survival stories, (i) success stories in containing the virus, (j) causes of success stories in containing the virus, (k) success stories of resuming work, production or school, (l) difficulty stories of resuming work, production or school, and (m) collective efforts in containing the virus (see Table 2). Any other sub-frames under either episodic or thematic framing would be coded as others.

Two coders coded the following three key coding items and reached the following intercoder reliability levels (using Holsti’s formula): (a) story tone (81%), (b) story framing (78%), and (c) tone of reader comments (75%) in the case of Xinhua News Agency and (a) story tone (80%), (b) story framing (82%), and (c) tone of reader comments (76%) in the case of The Paper.

Results and discussion

The results of this study are discussed in the following sequence: (a) comparing news frames, (b) comparing story tones, and (c) comparing user engagement. The discussion also involves a comparison of the findings of this study with those of earlier studies on SARS reporting and other health news within the party-controlled versus market-oriented model.

Comparing news frames

In reporting the coronavirus pandemic, both Xinhua News Agency and The Paper would be expected to use more thematic frames. It is especially true in health news reporting. Xinhua News
Agency was found to focus less on personal stories than Associated Press in reporting SARS (Beaudoin, 2007). People’s Daily, another party-controlled largest newspaper in China, used thematic frames by emphasizing “the social dimensions of the disease” in the case of SARS reporting (Wang, 2007, p. 29). Similar thematic framing approaches to crisis reporting were also discovered in other studies (see Fu et al., 2012; Hong, 2007; Yang, 2012). In a comparative study of reporting depression, Chinese newspapers were found to use more thematic frames than American newspapers (Zhang & Jin, 2017).

The findings of this study, however, show that both Xinhua News Agency and The Paper used more episodic frames (81.52% and 62.66%) than thematic frames (18.48% and 37.34%), respectively. Xinhua News Agency did not use more thematic frames than The Paper (18.48% vs 37.34%) although both were more episodic than thematic. On the contrary, The Paper used more thematic frames than Xinhua News Agency. In terms of episodic frames, Xinhua News Agency also surprisingly used more episodic frames in reporting the pandemic than The Paper (81.52% vs 62.66%; see Table 3).

In comparing with news framing of SARS more than 18 years ago, this study has found that both Xinhua News Agency and The Paper were more oriented toward their individual and human interest approaches to their respective news reporting of COVID-19, which has been translated into use of more episodic frames. Similar findings have also been provided by earlier studies related to health news reporting. For instance, Chinese newspapers displayed a gradual increase in episodic framing from 2000 to 2012 in depression reporting (Zhang & Jin, 2017).

The switch from predominant thematic framing to predominant episodic framing in reporting the pandemic can be theoretically supported by the findings of earlier studies on episodic versus thematic framing (Aarøe, 2011; Aarøe & Petersen, 2018; Gross, 2008). Episodic frames focusing on specific individuals can “elicit stronger emotional reactions than thematic” frames and are “most likely to influence and persuade others” (Aarøe & Petersen, 2018, p. 1579). Episodic frames “may prompt the public to share more personal comments” than thematic frames (Holton et al., 2014, p. 825).

Use of more episodic framing among news media in China is largely due to the need to cater to the changing needs and preferences among Chinese news audiences for more individual-focused stories, which is congruent with the finding that news media’s choice of episodic or thematic framing may also be determined by their target population (Feezella et al., 2021). Different from the findings of earlier studies outside of China (Boukes, 2021; Iyengar, 1990; Kang, 2013; Matthes, 2009; Zhang et al., 2014), the dividing line between episodic and thematic framing was not found to be associated with the attribution of responsibility in this study. Instead, it was more associated with the unique cultural and organizational changes in China, which include the shift of cultural orientations from collectivism to individualism in the modern Chinese culture due to

| Areas of comparison | Xinhua News Agency (N = 184) | The Paper (N = 158) |
|---------------------|-----------------------------|--------------------|
| Number %            | Number %                    | Number %           |
| Framing: episodic   | 150 81.52                   | 99  62.66          |
| Framing: thematic   | 34  18.48                   | 59  37.34          |
| Total               | 184 100                     | 158 100            |

Table 3. Comparing framing between Xinhua News Agency and The Paper.
modernization and industrialization (Triandis, 1995, cited in Zhang & Jin, 2017), open and liberal political governance, market-oriented economic structure, urbanization and the emergence of middle-class (Zhang, 2009, cited in Zhang & Jin, 2017), increasing media attention to the individual interests, plights, and pursuits, which were overlooked or dismissed (Lin, 2002, cited in Zhang & Jin, 2017). Consequently, “episodic framing which emphasizes personal storytelling” has already “become more prevalent” (Zhang & Jin, 2017, p. 102).

In the age of social media, *Xinhua News Agency* does not simply present itself on social media only. Instead, it has also shifted from its traditionally predominant thematic to predominantly episodic approach to news reporting to cater to the changing and diversified needs of their audiences. *The Paper*, on the contrary, surprisingly on the surface, was more thematic than *Xinhua News Agency*. But a closer look at its target audiences in the age of social media shows that *The Paper* is designed to serve the elite segments of the population, who desire more contextual coverage or interpretation of events or issues, while *Xinhua News Agency* is the national leading news agency targeting predominantly the non-elite majority of the population, who would like to read episodically focused news stories. This is particularly the case in the context of social media.

In the context of the gradual changes in the news media in China since the open and reform policies were implemented more than 40 years ago, more freedom has been given to market-oriented news media, which has brought about more diversified news reporting of issues and events in China. In reporting crises such as the coronavirus pandemic, party-controlled news media have also changed their approaches to their news reporting, giving more attention to episodic or individual approaches while maintaining their key roles required by the ruling party. Market-oriented news media, on the contrary, while enjoying more leeway in news reporting, could not afford to deviate much from party-controlled news media in their news reporting of the health crisis. What both party-controlled and market-oriented news media have in common is their increasing focus on individual and human interest coverage in the age of social media while at the same time they still have to manage to meet the requirements of the ruling party.

**Comparing story tones**

*Xinhua News Agency* and *The Paper* also differed from each other in story tones in reporting the pandemic. As shown in Table 4, *Xinhua News Agency* emphasized far more than *The Paper* on positive news reporting of the pandemic (69.02% vs 24.05%) to set the mainstream tone for reporting the pandemic. *The Paper*, however, stayed more neutral than *Xinhua News Agency* (72.78% vs 27.17%). But they shared the same strategy, that is, not to cross the red line by limiting their critical news reporting of the pandemic, as indicated by the lower percentage of negative news stories by *Xinhua News Agency* and *The Paper* (3.80% vs 3.16%). Consequently, malpractices in containing the pandemic, serious problems in the anti-COVID-19 battle, and lack of trust in local government in different cities, among others, were not reported or downplayed by either *Xinhua News Agency* or *The Paper*. Although news media in China do have a limited leeway to provide negative news reporting, they are still not allowed to provide the so-called “out of balance” negative news reporting.

The findings have provided further support of this news reporting strategy in China, which has been widely shared and highly required by the ruling party. The identified differences in story tone between different news media (Luther & Zhou, 2005) echoed in the findings of this study. And the legacy of positive news reporting (Yang, 2012) also continued in the case of COVID-19 news
reporting. Therefore, the tradition of the news media being required by the ruling party to provide overall positive news reporting of crises continues to be a guiding principle for the news media in the country even in the age of social media.

This continued divide between party-controlled and market-oriented news media in story tones has given further support to the importance of story tones as a key variable in distinguishing news media differences (see Aday et al., 2005; Craft & Wanta, 2004; Dunaway, 2013; Kim & Yoon, 2009; Liu, 2018; Newhagen, 1994; Rodgers & Thorson, 2003). It has also been reconfirmed to be determined by media ownership, economic incentives, and political contexts (Dunaway, 2013). Therefore, a story tone in news reporting remains a strong and influential factor in shaping the differences between party-controlled and market-oriented news media in China in the age of social media.

**Comparing user engagement**

During the two constructed weeks, although *Xinhua News Agency* published more news stories than *The Paper* (184 vs 158), it did not get more reads (1.4 million vs 8.32 million) or more comments (4663 vs 17,323) than *The Paper*. The identified difference between the two in the volume of news flow is understandable and predictable as *Xinhua News Agency* is the leading news media in China to serve the interests of the ruling party as well as the general interests of the whole nation while *The Paper* is designed to serve the elite audience. Their big difference in the volume of user engagement, however, is worth special attention. In the race for engaging news audience, *Xinhua News Agency* is much weaker in terms of reads (1.4 million vs 8.32 million) and comments (4663 vs 17,323), respectively (see Table 5).

As shown in Table 6, *Xinhua News Agency* and *The Paper* did leverage their presence on social media such as *Jinri Toutiao* to enable their readers to comment on their news stories. Out of its total number of news stories (158), *The Paper* has 137 news stories commented by its readers. *Xinhua News Agency* has only 93 news stories out of its total number of news stories (184). The difference between *The Paper* and *Xinhua News Agency* in terms of their percentage of having reader comments is huge (86.71% vs 50.54%).

As expected, *Xinhua News Agency* did have fewer stories with negative comments (9.68% vs 35.77%) but more stories with positive comments (70.97% vs 41.61%), respectively, than *The Paper*. The findings are not surprising at all as *Xinhua News Agency* still serves as the mouthpiece of the ruling party. Although users could post more negative or critical comments on news stories provided by *Xinhua News Agency*, the filtering system imposed by the news provider would censor and filter out any users comments if they are deemed to be sensitive, unsafe, or unhealthy.

### Table 4. Comparing story tone between *Xinhua News Agency* and *The Paper*.

| Areas of comparison | Xinhua News Agency (N = 184) | The Paper (N = 158) |
|---------------------|------------------------------|---------------------|
|                     | Number | %     | Number | %     |
| Positive            | 127    | 69.02 | 38     | 24.05 |
| Neutral             | 50     | 27.17 | 115    | 72.78 |
| Negative            | 7      | 3.80  | 5      | 3.16  |
| Total               | 184    | 100   | 158    | 100   |
politically or culturally in the definition of the ruling party. *The Paper*, on the contrary, would have more leeway than *Xinhua News Agency* although it would do the same as *Xinhua News Agency* to censor and filter any user comments deemed to be unhealthy politically or culturally as shown by the big difference between the two, with *The Paper* having 35.77% stories, which contain negative comments, and *Xinhua News Agency* having only 9.68% stories, which contain negative comments.

User engagement is the only area that earlier studies did not examine in relation to news reporting of crises, especially in the case of SARS. Although *Xinhua News Agency* has been trying to enhance its user engagement by increasing its presence and influence on social media, its level of user engagement has been handicapped by its very own nature and role required by the ruling party. Although *Xinhua News Agency* has taken a more episodic approach to its news reporting of the health crisis, it has not received as much user engagement as *The Paper* has won. Being market-oriented, *The Paper* has its own advantage of being given more freedom to encourage more user engagement by allowing more negative comments and engaging more with its users in their news stories.

The findings of this study show that to reach out the widest possible audience in the age of social media, both party-controlled and market-oriented news media could not afford not to use the identified forms of user engagement such as reads, likes, shares, and comments in their news communication, which were made possible by interactivity and feedback (Csikszentmihalyi, 1990); feedback and user control (Brown & Cairns, 2004); news reading (Stephenson, 1967); browsing (Toms, 1998, 2000); decision-making on the Web (Atkinson & Kydd, 1997); and engaging experience that resulted from the interaction between users and systems (O’Brien & Toms, 2014). With increasing exposure among their audiences to more and more global media content, Chinese news media (Wang, 2007) are pressurized to race for more user engagement. With more user engagement, what is local could become regional, national, or even international and vice versa (Zhao & Moy, 2007, cited in Yang, 2012). Despite its advantages and benefits, user engagement could also

### Table 5. Stories, reads, and comments between *Xinhua News Agency* and *The Paper*.

| Dates       | *Xinhua News Agency* (N = 184) | *The Paper* (N = 158) |
|-------------|---------------------------------|-----------------------|
|             | Stories | Reads | Comments | Stories | Reads | Comments |
| 23 January  | 2       | 255k  | 214      | 3       | 216k  | 413      |
| 30 January  | 4       | 622   | 16       | 40      | 3.54m | 7413     |
| 6 February  | 6       | 12,047| 45       | 15      | 315k  | 1147     |
| 13 February | 10      | 2227  | 171      | 14      | 273k  | 343      |
| 20 February | 13      | 335k  | 378      | 7       | 88.5k | 265      |
| 27 February | 9       | 50.7k | 156      | 14      | 1.27m | 1942     |
| 5 March     | 7       | 27.2k | 26       | 10      | 865k  | 1994     |
| 12 March    | 15      | 12,891| 44       | 4       | 62.8k | 1115     |
| 19 March    | 27      | 42.2k | 208      | 7       | 90.9k | 559      |
| 26 March    | 14      | 92.8k | 1800     | 6       | 1.13m | 528      |
| 2 April     | 17      | 547k  | 1507     | 14      | 202k  | 610      |
| 9 April     | 21      | 3518  | 33       | 11      | 66.9k | 147      |
| 16 April    | 26      | 12,959| 55       | 9       | 150k  | 575      |
| 23 April    | 13      | 2905  | 10       | 4       | 48.5k | 272      |
| Total       | 184     | 1.4m  | 4663     | 158     | 8.32m | 17,323   |
be restricted by media ownership, economic incentives, and political contexts (Dunaway, 2013) as shown by the findings of this study.

## Conclusion

After comparing COVID-19 news reporting and engaging between *Xinhua News Agency* and *The Paper*, it is found that they differed from each other in framing news although they shared the same trend to switch from predominantly thematic framing to predominantly episodic framing. As found by this study, *Xinhua News Agency* used more episodic frames than *The Paper*. Different from earlier studies, which largely focused more on thematic frames in health news reporting (Beaudoin, 2007; Dan & Raupp, 2018; Hong, 2007; J. Li et al., 2017; Luther & Zhou, 2005; Oh & Zhou, 2012; Yang, 2012), this study has discovered the switch from predominant thematic framing in reporting SARS (e.g. Wang, 2007) to predominant episodic framing in reporting COVID-19. This switch echoed another gradual increase in episodic framing in depression reporting (Zhang & Jin, 2017). The change was more associated with the shift of cultural orientations from collectivism to individualism in the modern Chinese culture due to modernization and industrialization (Triandis, 1995, cited in Zhang & Jin, 2017) and increasing media attention to the individual interests, plights, and pursuits, which were overlooked or dismissed (Lin, 2002, cited in Zhang & Jin, 2017).

In reporting COVID-19, *Xinhua News Agency* continued to emphasize on overall positive tones as part of its expected role in guiding the public opinion in the country. *The Paper*, however, was allowed to stay neutral and at times critical in reporting the pandemic as long as it did not challenge the authority or the legitimacy of the ruling party or jeopardize the social harmony and political stability in the definition of the ruling party. This dividing line continues to clearly distinguish party-controlled news media from market-oriented news media in COVID-19 news reporting. More than 18 years after SARS, this divide continues to feature news media in China even in the age of social media.

The ruling party in China remains strong and smart in controlling and regulating party-controlled and market-oriented news media in what C. C. Lee et al. (2007) described as an interlocking relationship among the ruling party, the market, and media. News media in China have long been controlled by the ruling party as a powerful tool to win the hearts and minds of the people in the country. They are required to play the fundamental role of guiding the public opinion and of serving the mouthpiece of the ruling party although more freedom has been given by the ruling party to market-oriented news media to allow some amount of neutrality, criticism, and negative news.

| Areas of comparison       | Xinhua News Agency (N = 184) | The Paper (N = 158) |
|---------------------------|------------------------------|---------------------|
|                           | Number | %   | Number | %   |
| News stories with comments| 93     | 50.54 | 137    | 86.71 |
| Tone of comments          |        |      |        |      |
| Positive comments         | 66     | 70.97 | 57     | 41.61 |
| Negative comments         | 9      | 9.68  | 49     | 35.77 |
| Mixed comments            | 18     | 19.35 | 31     | 22.62 |
| Total                     | 93     | 100  | 137    | 100  |
reporting to provide a more symbolic framework of diversified news media reporting or voices (see Luther & Zhou, 2005; Pan, 2000; Zhao, 1998).

The difference between party-controlled and market-oriented news media in overall story tones in news reporting has further confirmed the continuous intrinsic tension between market logic and traditional state regulation (Zhao, 1998). While more freedom was given to market-oriented news media to act as a watchdog in their news reporting (Zhao, 1998), the ruling party remained successful in keeping market-oriented news media within what Zhao (2000) called “orbit.” The root cause of the divide was largely due to the complex co-existence of between the tight control of the ruling party over news media and increasing commercial incentives of the market to cater to the diversified needs of news audience (Pan, 2000). Different from earlier studies which found that story tone could be determined by gender (Craft & Wanta, 2004; Rodgers & Thorson, 2003), this study reconfirmed that story tones could be shaped by media ownership, economic incentives, and political contexts (Dunaway, 2013). It was also further confirmed that party-controlled news media would focus more on social harmony, political stability, and public opinion guiding, especially in time of crises, resulting in overall positive story tones (Hong, 2007; Luther & Zhou, 2005; Yang, 2012), while market-oriented news media would focus more on human interest, investigative reporting, and other topics that would interest their news audiences, leading to overall neutral and critical story tones (Yang, 2012; Zhang, 2007).

User engagement can be used to detect differences between party-controlled and market-oriented news media in terms of how social media are leveraged to encourage users to engage with news stories, such as likes, comments, and shares. As social media have become popular sources for news (Sterrett et al., 2019), both party-controlled and market-oriented news media have fully leveraged social media to increase their presences and influences. With great impact on the practice of journalism (Barberá et al., 2017; Belair-Gagnon, 2015; Bright, 2016; Jian & Liu, 2018; B. Li et al., 2017), social media could enable news users to engage with news through likes, comments, and shares. As found by this study, although Xinhua News Agency enjoyed wider market penetration and larger number of users than The Paper, it had lower level of user engagement than The Paper. It has demonstrated that user engagement was tightly connected with and largely determined by the nature and the role of news media. The divide between party-controlled and market-oriented news media also leads to their differences in user engagement.

The differences between Xinhua News Agency and The Paper were located through applying the three-differentiating-indicators approach (framing news, setting tones, and engaging users) proposed by this study. It has been proved to be an effective approach to facilitate more accurate detection of changes and differences between party-controlled and market-oriented news media in China in the age of social media.

By applying the party-market model as the research framework for this study, it is concluded that the located changes and differences between party-controlled and market-oriented news media in framing news, setting tones, and engaging users in the age of social media have demonstrated and further proved the sustainable power of the party-market model (see Chan, 2003; Pan, 2000; Zhao, 1998) in describing, explaining, and even predicting differences between party-controlled and market-oriented news media in China after this model has been applied in earlier studies for more than two decades (see Akhavan-Majid, 2004; Hong, 2007; Luther & Zhou, 2005; Meng & Rantanen, 2015; Ren et al., 2014; Yang, 2012; Yu, 2003; Zhang, 2007; Zhang et al., 2014).

This study has also demonstrated that both party-controlled and market-oriented news media have changed and will continue to change their news operations in terms of how to cater to the
changing news consumption behaviors, patterns, and preferences and in terms of how to enhance their user engagement in the age of social media. Despite their operational changes, however, their fundamental roles required by the ruling party remain unchanged. Furthermore, their dividing line has not been changed in the age of social media. It would be too naïve to believe that those operational changes would gradually change their fundamental roles required by the ruling party. It would be equally naïve to believe that those operational changes would become substantial enough to blur the differentiating line between party-controlled and market-oriented news media.

One notable thing that has been discovered from this study is that news media in China, party-controlled or market-oriented, have become increasingly pragmatic and adaptive in the age of social media. They are pragmatic and adaptive in that they have realized that they can no longer afford to take the top-down approach or “we report, you read, listen or watch” mindset in their news reporting in the age of social media. They have paid more attention to “people first” by catering to their changing needs, tastes, and preferences for news. Being pragmatic and adaptive is a new feature among Chinese news media in the age of social media. While it is not surprising to find market-oriented news media to stay pragmatic and adaptive in their news reporting, it is a remarkable new development for party-controlled news media to become so pragmatic and adaptive too in their news reporting as demonstrated by the operational changes of Xinhua News Agency in reporting COVID-19. Although these changes are more operational than orientational, they have sent out a clear signal that news media in China are increasingly pragmatic and adaptive in their news operations to stay relevant and competitive in the age of social media.

This study is limited by investigating two news media only although they are representative of party-controlled and market-oriented news media in China. Another limitation lies in the limited scope of investigation of user engagement. This study compared reads and comments only due to the fact that the two chosen news media did not provide any information regarding how many likes or shares their respective stories had at the time of data collection. Still another limitation is that the interactions were not compared between the chosen forms of user engagement (reads and comments) and specific forms of news reporting (news framing and story tone).

It is recommended that further studies should choose a more representative sample of party-controlled and market-oriented news media at national, regional, and local levels to locate their respective changes and differences. Further recommendations include a full range of specific forms of user engagement such as reads, likes, shares, and comments to provide further comparative investigations of the diversified interactions between user engagement and a full range of news reporting devices beyond story tone and news framing. It is also recommended that other forms of social media should also be included for comparison with collect richer data to investigate more subtle or deeper differences or diversities between party-controlled and market-oriented news media.

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