

Rumors that Move People to Action: A Case of the 2019 Hong Kong Protests

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A good story persuades people to act. The mobilizing power of a story, however, does not necessarily rely on informational fidelity. During political unrests, word-of-mouth can intermix facts with unverified claims and emotional outrage, often transforming reality into convincing rumor stories. This rapid communication article discusses how rumor publics (dis)approve and participate in 2019 Hong Kong Protests. This survey study finds that police injustice and brutality were the predominant themes of the collected rumor stories, although some stories contained mixed views or anti-protest claims. Rumors of police injustice and brutality were associated with less negative attitudes toward the protests, especially when respondents believed the story. The relationship between rumor stories and protest participation was less obvious, except for rumors about an individual protester's whereabouts. This study discusses the ways in which rumor is embedded in contentious political processes.

Keywords: Rumors, Hong Kong protests, Political unrests, Misinformation

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1. Study overview

The purpose of this study is to discuss how deeply rumor communication is entwined with the process of contentious political actions. While literature of collective behaviors has linked rumor-milling to the emergence of the collective (Aguirre, Wenger, & Vigo, 1998; Turner & Killian, 1987), literature of social movements has rarely discussed the role of rumors in shaping the protest culture, despite their substantial potential to distort original intentions of social movements (Fine, 2012). The underrepresentation of rumor communication may be partly because social movement scholarship has underlined deliberate processes of social movement to mobilize collective ‘actions’ whereas rumors have been regarded as spur-of-the moment processes that lead to collective ‘behaviors.’ However, it is quite common that the scenery of social movement and scenery of rumor transmission coexist and feed each other. Based on the case of 2019 Hong Kong Protest, this study empirically demonstrates that rumors never are a trivial facet of protest culture.

2. Rumor public

Rumors are “claims of fact –about people, groups, events, and institutions –that have not been shown to be true, but that move from one person to another, and hence have credibility not because direct evidence is known to support them, but because other people seem to believe them” (Sunstein, 2009, p.6). Technically speaking, rumor is different from misinformation, which broadly refers to incorrect information. However, as Ruths (2019) importantly points out, rumor is an essential part of misinformation machine, which operates in two layers: In the first layer, misinformation is created and distributed directly from the originator to its message recipients. Then, the piece of misinformation evolves, variegates, and spreads even further through word-of-mouth processes. This second layer is when pieces of information “transform into rumors...and these rumors can amplify beliefs” (Ruths, 2019, p.348).

A substantial body of rumor studies have focused on the questionable factuality of rumors (e.g., Allport & Postman, 1947; Bordia & Rosnow, 1998; Einwiller & Kamins, 2008; Kwon & Rao, 2017; Margolin, Hannak, & Weber, 2018; Oh, Agrawal, & Rao, 2013; Pezzo & Beckstead, 2006). These studies have alluded a rumor to be an informational shortcut that bypasses factual evidence and explored what make people vulnerable to the falsehood that rumors spread. Meanwhile, another family of rumor scholarship has focused on rumor as an act of communication (i.e., rumoring), defining rumor as an improvised public opinion that are formed outside institutional channels of communication (Kwon, Bang, Egnoto, & Rao, 2016; Paterson & Gist, 1951; Shibutani, 1966).

In this latter view, the power of rumors depends not on the “economizing process of memory” (as alluded by the premise for informational shortcut) but on the retaining process of information by which the transmitter wants to be a persuasive narrator (Paterson & Gist, 1951, p. 166). This latter perspective has underscored the agency of “rumor public” (Paterson & Gist, 1951): People engage in rumor-milling not as passive recipients but as active interpreters and communicators of the messages, the result of which is to collectively assign meaning to the uncertain reality. Rumor

public has been an important facet of political resistance in contemporary China: For example, the mobile platform-based rumors have become a “new-style political weapon” (Liu, 2017, p.2). Based on the view that rumor publics are active interpreters and communicators, this study posits three research questions:

RQ1: What types of online rumors did Hong Kong citizens transmitted into offline word-of-mouth during HKP?

RQ2: How did these ‘spillover rumors’ relate with Hong Kong citizens’ (a) (dis)approval of, and (b) participation in, the protests?

RQ3: How did believing in different types of rumor stories relate to Hong Kong citizens’ (a) (dis)approval of, and (b) participation in, the protests?

3. Study design

3.1 Study context

This study was conducted in the context of 2019 Hong Kong Protests (HKP), also known as the Anti-Extradition Bill protests. Mainland China’s influence has become one of the greatest threats to Hong Kong’s pluralism, engendering increasingly polarized public opinion landscape (Public Opinion Programme, 2019). The central Chinese government has fortified its interference with Hong Kong’s governance, unveiling a new scale of ideological tension in the East Asian geopolitics. A series of high-profile political protests have attested to the level of uncertainty and polarization surrounding Hong Kong’s future for democracy. Especially HKP started as a peaceful demonstration in June 2019 but confrontations among pro-democracy camps (i.e., protesters), government authorities, and pro-establishment camps (i.e., pro-China) evolved into violent upheavals ripe with rumors, fake news, and propaganda (Chen, Guo, & Su, 2020).

3.2 Data collection

We conducted an online survey in January 2021 through online panels registered with Qualtrics Hong Kong. Stratified quota sampling was used based on gender and age compositions of the Hong Kong population. We asked respondents to write a spillover rumor related to the protests in their own words: “Rumor refers to an unverified proposition about an event, person, or object. Have you heard or read any rumor related to the Anti-Extradition Bill protest via online/digital channels, and ever shared it during an offline conversation (e.g., at a dinner table, during coffee chat, at a workplace)? Could you tell me one of them? The more detail, the better.” Given the nature of the open-ended question, the quality of answers varied, and the average word count for responses is 20.63. Out of 556 responses, we removed irrelevant or overly brief answers, and those that did not pass the attention-checker question, keeping 331 responses for further analyses.

3.3 Variables

Rumor Themes. To systematically analyze rumor stories, we used text network analysis based on the co-occurrence of words in rumor texts. We used R package *textnets* for text processing and network analysis, which enabled us to compute similarity of rumor texts and classify each rumor into one of the semantically similar clusters (Bail, 2016). The results of specific themes are discussed in detail in the following section. Gephi was used for visualization.

Belief of a Rumor Story. After writing down the rumor they heard, respondents were asked how much they believed in the story they wrote, based on a 7-point Likert scale. Two items were used, including “I think this story has truth in it,” “I think this story is based on fact,” based on a 7-point scale (1 = strongly disagree, 7 = strongly agree) ($M = 5.20$, $SD = 1.78$, $r = 0.856$).

Protest Disapproval. Given the political sensitivity of the protest in China, we took extra caution in wording questions. For example, we measured the protest attitude by asking how much they disapproved of the protest as opposed to how much they approved or supported the protest. We also measured the level of protest participation by asking a wide range of direct and indirect activities that could have contributed to the mobilization. Specifically, respondents answered their agreement about four statements based on a 7-point scale, including “the Anti Extradition Bill Protests is wrong,” “the main agenda that the protesters advocate is unacceptable,” “I disapprove of the withdrawal of the extradition bill in Hong Kong,” “I refuse the idea of independence of Hong Kong from China” (1 = strongly disagree, 7 = strongly agree) ($M = 4.76$, $SD = 1.85$, Cronbach’s $\alpha = 0.891$).

Protest Participation. Respondents were asked with the following question: “Have you ever engaged any of the following actions to express your support for the Anti Extradition Bill Protests? If applicable, please select multiple items: (1) signed a petition; (2) wrote a supportive post/comment online; (3) attended a public forum or event; (4) clicked a like/dislike button, or share/reposted a post on social media; (5) went out to the street; (6) tried to persuade people around me to support the protesters; (7) helped the protest/protesters in other ways.” This variable was additive, ranging from 0 (= none) to 7 (= all of them) ($M = 1.60$, $SD = 1.94$).

Control Variables. Respondents were asked about their gender (Female or Male), political orientation (Neutral, Pro-establishment, Pro-democracy), education level (Elementary school =1, Middle school =2, Associate, college, or higher =3), income level (\$10000 =1, up to \$19,999 =2, up to \$29,999 =3, \$30,000 or higher = 4).

4. Results

4.1. Spillover Rumor Themes

The text network analysis detected six semantic clusters that characterized spillover rumors (Figure 1). Majority of rumors were anti-police, attributing a responsibility of violence and injustice to law enforcers. The manual review of rumor stories and prominent concepts identified in each semantic cluster led to the thematic interpretation of six themes, as follows.

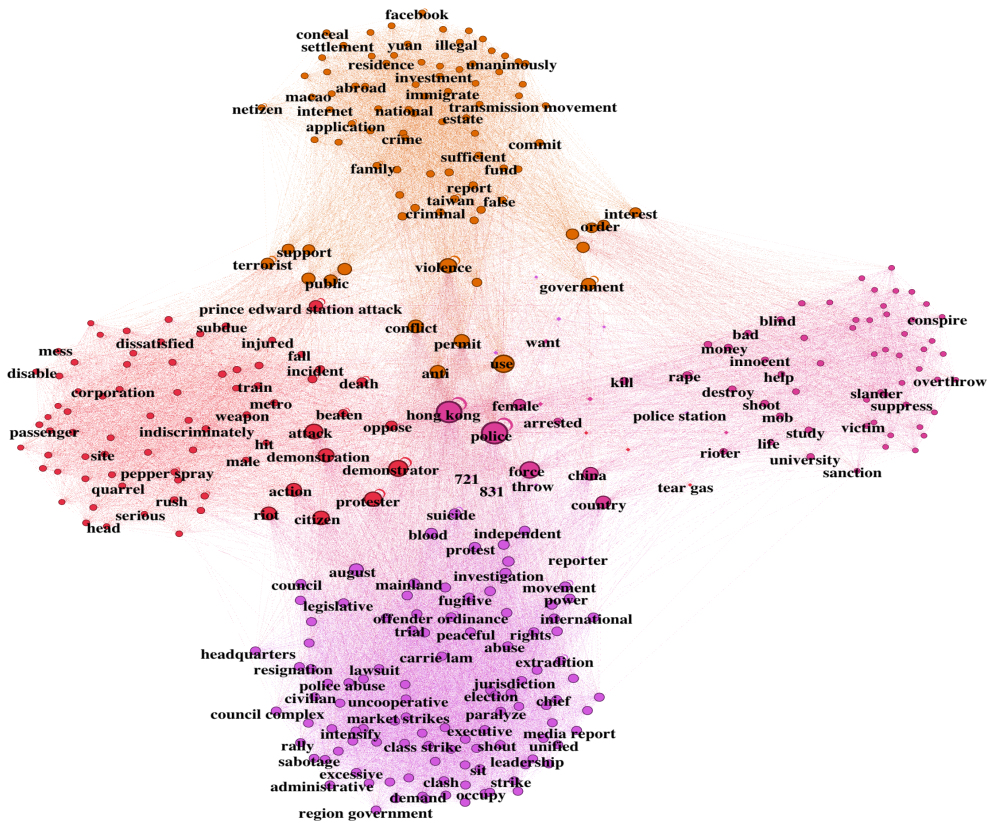


Figure 1. Network visualization of concepts that frequently appeared in the collected rumor stories.

- Theme 1 (neutral/anti-protest, N=56) focused on political agendas that motivated the protests. Some were neutral descriptions of what this protest was about. However, many other stories in this theme depicted the protest negatively by questioning protesters’ civility and foreign interference. For example: “The protesters were like thugs, wounding the police and innocent Hong Kong citizens,” “U.S. government sends people to Hong Kong to incite demonstrations.”
- Theme 2 (use of excessive force, N = 136) was the most prevalent theme. Overall, stories that fell in this theme were critical of police acts. For example, “The 7.21 Yuen Long attack was a case of the police cooperating with the Yuen Long triad or allowing the triad to attack the demonstrators to deter protest actions,” “(At) the 831 event, police beat people to death because the police blockade...it is suspected that there are hidden secrets.”
- Theme 3 (covert operation, N =66) focused on the conflict between protesters and police. One salient concept was a covert operation that aggravated violence. This concept was used in both anti-authority and anti-protest rhetoric. For example: “Many plainclothes policemen disguised themselves as demonstrators and instigated genuine demonstrators to perform a number of dangerous behaviors, including shackling the police and attacking the police,” “There are

policemen who pretend to be demonstrators and may throw gas bombs, but there is no evidence, because all the demonstrators' protective devices are very expensive and professional, and Americans or Taiwanese pay for it. Many protesters collect huge sums of money to do things. Former demonstrators were trained in Taiwan to throw gas and oil bombs. Some girls acted as sex slaves to comfort the former protesters.”

- Theme 4 (rape by police, N= 43) referred to sexual assaults and rapes by policemen during arresting and interrogating female protesters. For example: “Some protesters having been arrested and sent to certain camp and being gang-raped by the police force.” Some responses talked about a similar story yet in a refuting way, for example, “The rumor that a girl was raped at the police station is not true. I don't believe it is true. I think it's just a girl who wanted to get attention from others.”

- Theme 5 (assaulting journalists, N=17) mentioned police attacking journalists. For example: “Police officers hit reporters and other people. police officers use bad languages towards reporters,” “There was a female reporter who was shot blind by the police in her left eye. In fact, someone else did it. It was not police.”

- Theme 6 (suicide mystery, N=13) described suspicion about deaths or disappearances of young adults who were allegedly involved in protests. For example: “During this year, there were many news about young people committing suicide. However, their deaths were unnatural deaths, and there was even no suicide note. Taking the Chen Yanlin incident as an example, she was a swimmer but drowned. And she is an optimistic person by nature (a friend can attest) and there is no reason to commit suicide. More and more similar cases occur, but the Hong Kong police often end with ‘unsuspicious’, which makes it difficult for the public to believe.”

4.2 Effects of Rumor Stories and Belief on Protest Disapproval

To estimate the effects of rumor belief and themes on protest attitude and participation, we used OLS regression modeling. Model 1 estimated only main effects, and Model 2 added the interaction effects between rumor themes and belief. The results of OLS regression modeling suggest that respondents who transmitted overall anti-police rumors showed less disapproval of the protest. Also, in comparison to the neutral/anti-protest theme, believing in other rumor themes overall reduced the disapproval of the protest. The findings were valid even after accounting for the effects of political ideology (pro-establishment and pro-democracy) and demographic variables.

Importantly, the effect of rumor belief on the protest disapproval differed by rumor theme. Two themes were particularly noteworthy: Theme 3 (rape by police), and Theme 5 (use of excessive force). Respondents who believed in these themes showed a disproportionately lower rate in protest disapproval than respondents who believed the mixed/anti-protest rumors. Table 1 and Figure 2 represent the findings.

Table 1

Effects of rumor beliefs and themes on protest disapproval.

Variable	Model 1			Model 2		
	beta	se	t	beta	se	t
Rumor belief	-0.272	0.038	-6.226***	-0.055	0.092	-0.526
Rumor themes						
2. Excessive force	-0.150	0.220	-2.584*	-0.146	0.217	-2.537*
3. Covert operation	-0.157	0.246	-2.973**	-0.167	0.251	-3.104**
4. Rape by police	-0.129	0.279	-2.559*	-0.129	0.275	-2.584*
5. Assaulting journalists	-0.079	0.380	-1.746	-0.081	0.380	-1.786
6. Suicide mystery	-0.098	0.422	-2.224*	-0.094	0.416	-2.151*
Political ideology						
Pro-establish	0.197	0.263	4.528***	0.197	0.261	4.563***
Pro-democracy	-0.449	0.165	-10.174***	-0.428	0.164	-9.748***
Gender (Female)	0.056	0.155	1.349	0.053	0.152	1.300
Education	-0.076	0.172	-1.814	-0.070	0.172	-1.655
Income	-0.008	0.067	-0.181	-0.009	0.066	-0.205
Interaction between rumor theme and belief						
Theme 2 x rumor belief				-0.057	0.107	-2.479*
Theme 3 x rumor belief				-0.006	0.128	-0.265
Theme 4 x rumor belief				-0.041	0.131	-3.013**
Theme 5 x rumor belief				-0.007	0.183	-0.150
Theme 6 x rumor belief				-0.328	0.208	-1.391
	<i>F</i> (11, 319) = 28.07 ***			<i>F</i> (16, 314) = 20.88***		
	<i>adjusted R</i> ² = 0.474			<i>adjusted R</i> ² = 0.491		
Note: * <i>p</i> < .05, ** <i>p</i> < .01, *** <i>p</i> < .001; Theme 1 (neutral/anti-protest) was the reference group for comparison, thus has no estimates reported.						

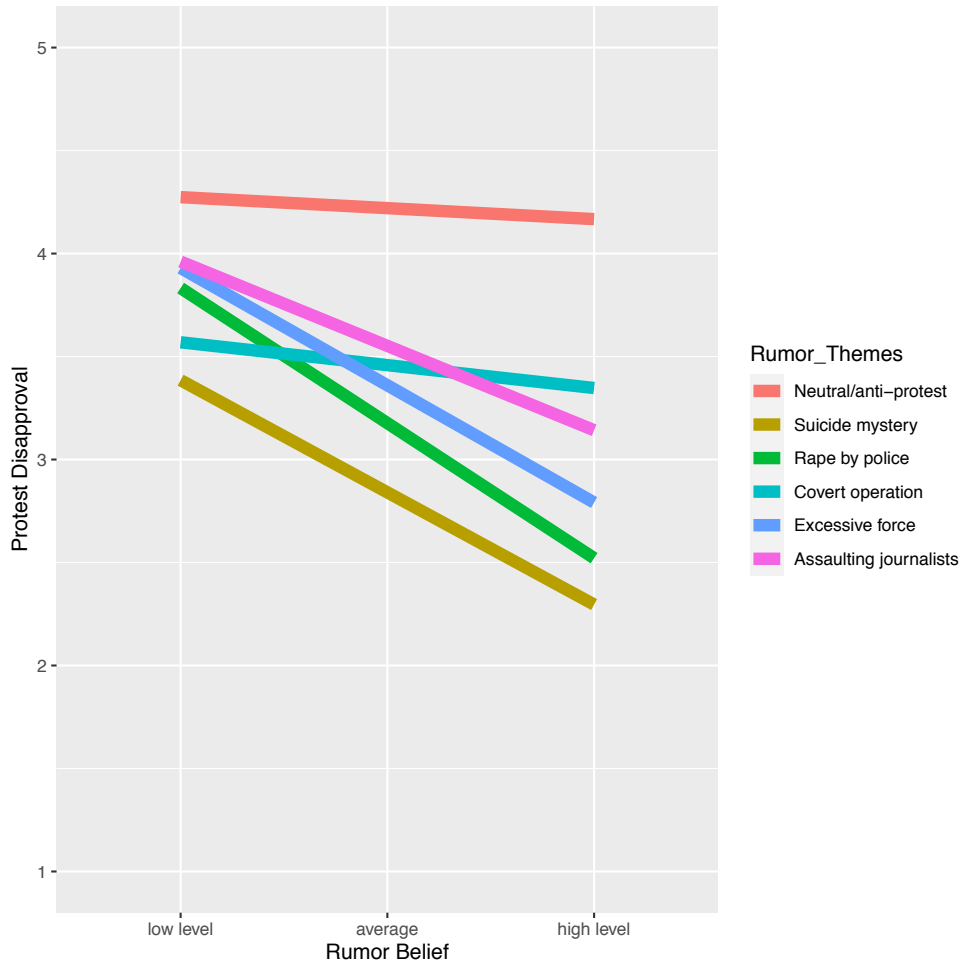


Figure 2. Differential effect of rumor belief on protest disapproval by rumor theme.

4.3 Effects of Rumor Stories and Belief on Protest Participation

Respondents that believed a rumor showed higher protest participation (Table 2). However, the effects of specific rumor themes were less obvious compared to their effects on protest disapproval. None but Theme 2 (suicide mystery) was a significant predictor of participation. Theme 2 questioned alleged protesters’ disappearance or death and could be of particular interest for deeply committed hardcore protesters. The effect of rumor belief on participation did not vary by themes, either.

Table 2

Effects of rumor beliefs and themes on protest participation

Variable	Model 1			Model 2		
	beta	se	t	beta	se	t

Rumor belief	0.221	0.047	4.336***	0.277	0.112	2.274*
Rumor themes						
2. Excessive force	0.073	0.268	1.081	0.071	0.266	1.061
3. Undercover instigation	0.055	0.300	0.893	0.083	0.307	1.311
4. Rape by police	0.109	0.340	1.854	0.122	0.337	2.100*
5. Assaulting journalists	0.040	0.463	0.757	0.051	0.465	0.963
6. Suicide mystery	0.105	0.515	2.034*	0.105	0.509	2.061*
Political ideology						
Pro-establish	-0.032	0.320	-0.633	-0.041	0.320	-0.817
Pro-democracy	0.389	0.201	7.557***	0.386	0.201	7.522***
Gender (Female)	-0.029	0.189	-0.590	-0.024	0.186	-0.498
Education	0.148	0.210	3.017**	0.140	0.211	2.838**
Income	0.047	0.082	0.924	0.054	0.081	1.071
Interaction between rumor theme and belief						
Theme 2 x rumor belief				-0.022	0.130	-0.838
Theme 3 x rumor belief				-0.039	0.156	-1.456
Theme 4 x rumor belief				0.024	0.160	1.515
Theme 5 x rumor belief				-0.007	0.183	-0.150
Theme 6 x rumor belief				0.301	0.254	1.092
	$F(11, 319) = 12.98$ ***			$F(16, 314) = 10.01$ ***		
	<i>adjusted R</i> ² = 0.285			<i>adjusted R</i> ² = 0.304		
Note: * $p < .05$, ** $p < .01$, *** $p < .001$; Theme 1 (neutral/anti-protest) was the reference group for comparison, thus has no estimates reported.						

5. Discussion and Conclusions

By examining rumors during the 2019 Hong Kong unrests, this study demonstrates the relationship between rumor public and the process of contentious collective actions. While literature on collective behaviors have linked rumor-milling to the emergence of the collective (Aguirre, et al., 1998; Turner & Killian, 1987), social movement/protest studies have rarely discussed the role of rumor public as agents that influence the fate of protests. The particular focus has been on rumor stories that spilled over from digital spaces into offline conversations. While the interplay between online and offline social communication have complicated the contemporary misinformation landscape, relatively less attention has been paid to the role of offline word-of-mouth.

This study contends that rumors are not a trivial facet of protests, especially when protests engender social unrests, such as the case of 2019 Hong Kong Protests. We collected spillover rumor stories from Hong Kong citizens, from which six distinctive themes emerged. Four themes

predominantly reflected the brutality and injustice of the state police, including stories of mysterious disappearances of protesters, police raping female protesters, use of excessive force, and assaulting journalists. One theme exhibited mixed claims on secretive operations of police, as well as protesters.

The study suggests that what people hear and share, and whether they believe it, are related with their attitudes toward, and participation in protests. Specifically, anti-police rumors were overall associated with more positive attitudes toward the protests (by lowering their disapproval of protests). The effects of rumors about police raping and use of excessive force on the attitude toward the protests became even more salient when the respondents believed such stories.

One interesting observation was that, even if we explicitly asked to share rumors, many respondents fused their stories with facts. For example, “721, 831, 101” appeared frequently in the responses. These numbers symbolized the dates of three factual incidents that involved physical confrontations between police and protesters. Stories then often appended additional propositions, for example, secret transportation of dead bodies or protesters’ recruitment of extreme militants. While these additional details are not verifiable, grafting such details on real events suggests that rumor is not necessarily about informational shortcut but about making a compelling narrative that reveals one’s interpretation of the situation.

To summarize, contentious political actions constitute an important non-institutional face of participatory democracy. In contentious politics, trust in institutionalized, official sources of information is inherently deficient, resulting in greater reliance on spontaneous word-of-mouth processes of information sharing. The relationship between misinformation/rumors and the development of protests (and ensuing social unrests) is so intricate that it would be naïve to dichotomously conclude the moral values of rumors. Although this study is limited with a relatively small survey data that generated short textual answers. For example, the first theme cluster could have been split into two subthemes like “neutral” and anti-protest” if the sample size were larger. Likewise, the prevalence of rumor themes as a function of political ideology could have been examined if the sample size were sufficiently large. Future research may consider these aspects. The cross-sectional nature of the data also limits the assertion of causality. For example, it is unknown whether rumor triggers contentious actions, or contentious actions triggers rumors (or perhaps bidirectional). Nonetheless, this study demonstrates the intricacy between rumors and contentious political actions. The civil society sectors, such as activism organizers, advocacy groups, and journalists, may pay attention to the dynamics of rumor publics to nurture a healthier protest culture.

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