

PATRIARCHAL ERASURE AND MANUFACTURED PASSIVITY: ASYMMETRIC GOVERNMENT AND NEWS MEDIA ATTENTION TO PROTESTS IN CHINA*

Linda Hong Cheng, Yao Lu, and Han Zhang†

Is media attention to protest events gendered, and what is the relationship between gender, media, and protest? Using novel big data from Chinese social media, Weibo, spanning 2010–2017, this study offers the first systematic analysis of gender bias in media selection and description of protests in China and establishes the “gender-protest-media triad.” In accounting for this gender bias, we distinguish between two types of media accounts on Weibo: government and news media outlets. The results indicate that women-majority protests, despite being more violent and risky, are less likely than men-majority protests to receive coverage in both government and news media outlets (media selection bias). Furthermore, when reporting on women-majority protests, government media sources tend to describe them as more passive than men-majority protests (media description bias). Our research establishes the “gender-protest-media triad”: (1) Women participate violently in protests as a reactive response to exploitation and marginalization; (2) Women’s protests are disproportionately underreported and misrepresented in the media; (3) Such patriarchal media bias deprives women protesters of the public attention and resources necessary to pressure institutions for redress of their grievance. This triadic cycle is symptomatic of what we term the “paternalist stability model”: A mode of governance converging patriarchal logics with neo-Confucian stability maintenance, central to the maintenance of patriarchal hegemony in China and throughout the Sinosphere.

Women receive less media attention than men and are underrepresented in media institutions worldwide (Shor et al. 2015). This extends to social protest, wherein women are most likely to appear in media coverage of protest when the event is “nonpolitical, the tactics are more peaceful” and when more women are participants (Armstrong, Boyle, and McLeod 2012: 633).⁴ In high-income countries, women are less likely to participate in protests, and when participant, more likely than men to utilize nonviolent methods of protest (Dodson 2015). This suggests that the media’s lesser coverage of women in protest could partly be derived from their nonviolent—and thus less sensationalist—protest tactics (Oliver and Maney 2000). However, the existing research primarily focuses on Western high-income countries with similar political systems and media institutions.

This calls to question: Are these trends generalizable to a politically paternalist, non-Western country such as China? Undoubtedly, patriarchal gender inequality is salient in China—as it is throughout the world—but how do interactions between media, protest, and gender manifest? Do women participate less in protest in China—and when they do participate, are they similarly nonviolent, or are they more explosive because of the suppressive nature of patriarchal culture within China? Even if women protesters are equally or more violent compared to men protesters, does the adoption of violent methods by women in protest neutralize or reverse gender bias in media attention? On a broader level, does gender bias persist regardless of whether media or political forces dominate? These interconnected questions are of primary concern to this study.¹

* I would like to thank the Columbia University and the Weatherhead East Asia Institute (WEAI) FLAS Fellowship for its generous support of this research.

† Linda Hong Cheng is a PhD student in Computational Sociology and Clarendon Scholar at the University of Oxford, affiliated with the Leverhulme Center for Demographic Science (LCDS) and International Max Planck Institute. Yao Lu is a Professor of Sociology at Columbia University. Han Zhang is an Assistant Professor of Sociology at Hong Kong University of Science and Technology (HKUST). Direct correspondence to lhc2124@columbia.edu

The extant literature on news media bias in protest event selection primarily focuses on Western societies and does not specifically examine gender bias (i.e., Baylor 1996; Carmichael and Brulle 2017; Oliver and Maney 2000; Smith et al. 2001). Moreover, there is a shortage of studies on how the *government* reports on protests, even in the Western context. Some standout examples are Han Zhang, Yao Lu, and Rui Bai (2024), who used large Weibo data to shed light on the differences between news media and government selection and the description of protest events in Mainland China. Christian Göbel and H. Christoph Steinhardt (2022) use social media to analyze the effect of censorship on data veracity. They find that social media data are less affected by censorship than often assumed and outperform dissident websites and traditional news sources. While a rich but separate line of research on the news media and protest movements in China has developed recently, it has largely ignored the role gender plays in stratifying media attention (i.e., Chen 2020; Johnston and Zhang 2020; Li 2019; Steinhardt and Wu 2016).

To our knowledge, scant literature to date has examined gendered misrepresentation of protest reporting in a non-Western country using large-scale social media data; gender media bias remains inadequately studied outside of the West.

Our study is among the first to systematically investigate gender bias in government and nongovernment reporting on protest events within a non-Western context. It uses novel big data from the Chinese social media platform Weibo between 2010 and 2017. Drawn from Han Zhang and Jennifer Pan's (2019) large Collective Action from Social Media in China dataset (CASM-China), this study analyzes 104,076 unique protest events across all provinces of mainland China, as well as their corresponding matched media posts. This study will add to the literature on comparative social movements studies, gender studies, media studies, and China studies.

Theoretically, this research challenges several prevailing beliefs regarding gender and protest: first, women are more 'passive' and less violent in protest; second, the Chinese media does not report on protests; third, gender bias in protest reporting is predicated on political and economic trends.

Our analysis is carried out in three stages. First, we account for gender differences in protest participation and characteristics. Then, we analyze how the government and news media's selection of protest events differs according to the ascertained gender majority. Finally, we investigate gender differences in how the government and the news media portray protests with respect to their level of violence, target of grievance, police presence, and sentiments toward the protest.

GENDER AND MEDIA ATTENTION TO PROTEST EVENTS

Media attention is a critical factor that shapes the ability of protesters to achieve their goals. Raising the salience level of a given issue can help garner public support and command government attention, which are both essential for the protest's success (Baylor 1996; Carmichael and Brulle 2017; Koopmans 2004; McCarthy, McPhail, and Smith 1996). Given the importance of media attention, media bias in the selection and description of protest carries crucial implications.

Scholarship conducted in Western societies such as the United States has found that media portrayals of protests are invariably shaped by journalistic practices and institutional policies (Halloran et al. 1970; Ketchum 2004; McCurdy 2012; Oliver and Maney 2000). Corporations overwhelmingly control media in Western societies and are thus under pressure to generate commercial revenue (Artz and Kamalipour 2012). Accordingly, accompanying media selection tends to be biased towards protests that deal with the legislative issues of the government and/or measure up to corporate standards of "newsworthiness" (Oliver and Maney 2000). The "newsworthiness" or "news value" of a given protest is typically determined by the number of people affected, the magnitude of the protest event, the level of conflict or controversy it affects,

its timeliness, and its spatial proximity to media institutions (Oliver and Maney 2000). Media institutions also have their own political bent: for example, liberal-leaning newspapers have been found to cover more protest events than their conservative-leaning counterparts (Oliver and Myers 1999). Experienced activists are aware of such newsworthiness standards and often seek to reframe or even “recreate” events so they can accrue a higher “news value” (Cohn and Gallagher 1984; Gamson and Wolfsfeld 1993; Meyer and Tarrow 1997; Oliver and Maney 2000).

Gendered Asymmetry in Media Attention

Compared to the rich scholarship on media bias in protest reporting, there is less research on the role of gender in influencing media coverage of protest. For instance, Cory Armstrong, Michael Boyle, and Douglas McLeod (2012) analyzed how news coverage of protests reinforces gender stereotypes. They found that women were most likely to be mentioned when the event was nonpolitical, peaceful, and/or fewer men were involved. Maria Popova (2014) focused specifically on the Euromaidan protest in Ukraine, finding that the militarization of protest and dissemination of nationalist discourse in the media contributed to male heroes being glorified as “true revolutionaries” and “fighters for freedom,” while women’s contributions to the protests were ignored and/or downplayed—their role seen as secondary (Martsenyuk and Troian 2018). In a similar line of research, Tamara Martsenyuk and Iryna Troian (2018) analyzed gendered media representation of women’s roles in the Euromaidan protest. They found that militarization of the protest reinforced misogynistic rhetoric and patriarchal divisions of labor among protesters.⁵ Furthermore, they found that media representation of women protest participants was overwhelmingly patriarchal, portraying them as “Mother, Ukrainian Beauty, and Victim” (151). On the other hand, Zahra Mustafa-Awad, Majdi Sawalha, Monika Kirner-Ludwig and Duaa Tabaza (2023) analyzed Western media’s coverage of gender in the Arab Spring protests. They found that the media’s coverage of women protest participants is colored by misogynistic Orientalist stereotypes of Arab women.

A separate but related line of research investigates the representation of women’s needs and participation in social movements. Cristina Castellanos, Leticia Henar, and Elvira Gonzalez (2011), for example, focused on gender dynamics in the globally recognized 15M Movement in Spain and whether the women’s and men’s needs in the movement were advocated for equally. They found that women’s needs were systematically underrepresented in the movement’s decision bodies.

The foregoing scholarship on the media representation of gender within protests is aligned with what Gaye Tuchman, Arlene Kaplan Daniels, and James Benét (1978) famously coined as the “symbolic annihilation of women by the mass media.” This leads us to expect a general phenomenon of gendered stratification with respect to both selection and description bias in media reporting.

In general media reporting, several factors contribute to the erasure and misrepresentation of gender. At the structural level, the subordinate political-economic position of women hinders them from pressuring media institutions to change their priorities and standards.

For the most part, media reports have focused on people occupying powerful economic and political positions—who are disproportionately men (Shor et al. 2015). As such, media reports are microcosms of sociopolitical inequality (Shor et al. 2015). The actions of women, who are structurally dispossessed of sociopolitical capital in patriarchal societies, are deemed less “newsworthy” and are, therefore, prone to a disproportionately lower level of media coverage than what men receive. This trend remains consistent even after controlling for economic class.

At the institutional level, women are systematically excluded from decision-making positions (e.g., editorship and leadership positions) in the media industry (Breed 1955). Male editors have been found to favor male-led events (Anderson 1988), while women receive greater exposure in news reports led by female editors (Shor et al. 2015). Female reporters have

also been found to draw upon a greater diversity of sources, exhibit fewer stereotypes in their reporting practices, and write more positive stories than male reporters (Kim and Yoon 2009; Rodgers and Thorson 2003). However, even when women enter positions of editorship in media institutions, they are often compelled to conform to editing and journalistic norms that favor men (Phalen 2000).

Media institutions thus often end up serving as tools that reinforce a gendered hierarchy (Goodall 2012; Holtzman and Sharpe 2014; Mitchell and McKinnon 2019; Shamilishvili 2019), likely contributing to the reproduction of women's subjugation (De Swert and Hooghe 2010). Such reinforcement of gendered ideology has been accomplished through both an under-selection of women in media coverage (Armstrong 2004; Shor et al. 2015; Tuchman 2013) and when women are selected for coverage, misogynistic representations of them as "docile," "fragile," "subordinate," and "sexually suggestive" (Armstrong 2013; Collins 2011). These processes combined likely result in both media selection bias and description bias.

THE STUDY CONTEXT: CHINA

Since the 1978 economic reforms, protests have increased markedly in China (Johnston and Zhang 2020; Lei 2016). The existing literature suggests that protests in Western societies have had long-term and explicitly ideological goals (Meyer and Tarrow 1998; Rucht and Neidhardt 2002; Taylor 2000). In China, by comparison, generalized identity or ideologically based protests are strongly discouraged and even legally punished. Protests in China thus tend to address immediate material needs and largely consist of lower-class participants (i.e., Butollo and Brink 2012; Elfstrom and Kuruvilla 2014; CASM-China Data 2010-2017; Chen 2020), to which we refer to as "short-term economic goal-oriented."

The high risk and taboo nature of protests in China could increase the reward potential for the protesters, should the media cover them. This is because mass media either self-censors or are instructed by the government to shun away from reporting protests, such that protests are rarely reported on newspapers and television. Existing research could only document around 1,000 protests per year if they used newspapers as data sources. This number is several magnitudes smaller than the estimated number of protests (estimated to be over 180,000 each year; see Zhang and Pan 2019) that actually occurred. However, if protesters can somehow overcome the initial hurdles—and because media reports are rare—they could attract enough public attention via media reports and have the ability to compel a response and even concession from the government (Chen 2020). In essence, the cellularization and taboo nature of protests in China imbue them a higher shock value, which can command more public attention when covered by the media (Chen 2020).

News Dissemination via Social Media

Two major media institutions prevail in China: government media and news media. Both government and news media in China are diverse, the former less so than the latter. This means that differing political viewpoints and stances exist across different government and news media, often varying by departments within the same media outlet. Accordingly, these two main types of media play instrumental roles in affecting the course of protest movements. Since the 1980s, news media institutions have been increasingly commercialized, and in the past decade, traditional print media has been increasingly replaced by digital government media and news media (Tong and Lei 2010). These transformations have made the digital news media an increasingly important tool for the government to gauge public opinion and negotiate state-society relations. As Shirk has noted, "[Many government officials] now regularly read and watch what [government and news] media sites are debating as this provides them with a good tool to assess public opinion" (2011: 230). As Guobin Yang (2009) aptly notes regarding the advent of protest and communications via the internet, "this communication revolution is a

social revolution, because the ordinary people assume an unprecedented role as agents of change and because new social formations are among its most profound outcomes” (213). Accordingly, censorship policies have changed over time, gradually evolving from a heavy-handed restriction of certain topics to a strategy guiding public opinion (Tai 2014).

As in Western contexts, the rise of social media has changed the media landscape and transformed state-society relations in China. While still subject to state supervision, social media is not regulated to the same extent as traditional media forms and has thus emerged as a prominent media platform for information dissemination and mobilization (Qin, Strömberg, and Wu 2017; Stockmann and Luo 2017). Social media has enabled a new type of on-the-ground protest reporting (Earl, Hunt, and Garrett 2014), and Chinese protesters have increasingly used social media as a means for making their grievances heard and communicating their protest demands—collective action posts on Weibo are mostly posted by protesters themselves (Chiu, Ip, and Silverman 2012). Given their sensitive political nature, the Chinese government does not publicize official statistics regarding protests, making social media posts of collective action all the more valuable for researchers (Zhang, Lu, and Bai 2024). Information diffusion over social media can have a sizable influence on the growth of protests (Qin, Strömberg, and Wu 2019) and has the potential to pressure local and higher-level governments to engage directly with protesters (Cai 2008).

Throughout the world, social media has amassed a broader public reach than traditional mass media outlets, as it offers a more widely available, decentralized information channel. Within China’s news media outlets, traditional and independent (self-media or *zimeiti* 自媒体) outlets have become active players on social media platforms², using the medium to disseminate and promote their content. Moreover, government media has also developed beyond just state-owned media outlets: Local governments in China have increasingly turned to social media as a means to perform “consultative authoritarianism” in the form of disseminating information, collecting individual grievances, and promoting resolution plans for them online (Distelhorst and Hou 2017; Chen, Pan, and Xu 2016).

Notably, Zhang, Lu, and Bai (2024) analyzed a large dataset of protests from Weibo and found that government media accounts only covered 0.4 percent of the protests, while news media accounts covered 6.3 percent. News media outlets seemed to balance newsworthiness and political sensitivity when selecting events to cover, resulting in a focus on protests by disadvantaged social groups and reluctance to cover protests aimed at the government. In contrast, government media accounts on Weibo tended to avoid reporting on violent protests, as well as those organized by the urban middle class and veterans. Overall, both government and news media accounts tended to downplay the political nature of the protests and present them in a more positive light. However, this bias was more evident in the government’s coverage than the news media’s. Furthermore, the government tends to report in a thematic style, which emphasizes the general development and underlying social contradictions of a protest; by contrast, news media tends to report in an episodic style, which emphasizes the concrete acts of a protest event rather than its underlying social issues.

WOMEN IN CHINESE MEDIA AND PROTESTS

China has a paternalist patriarchal social system that systematically dispossesses women of politico-economic power in differing degrees dependent class and Hukou (Cheng 2019; Wong 1997), or what Cheng (2022: 17) terms “patriarchal stratification.” Attached to this social system is a patriarchal culture and binary gendered ideology that expects women—especially lower-class and peasant women—to be “passive” and “docile” while not “taking up too much space” (Cheng 2019; Cheng 2020; Fan 2003).

In aggregate measures of gender equity, China’s performance has stalled, if not steadily declined, since the mid-2000s (Wagner, Gainous, and Abbott 2019). In 2023, for instance, China ranked 107th out of 146 countries in the World Economic Forum’s annual ranking of

global gender equality (Global Gender Gap Report 2023), down from 63rd in 2008. This decline is driven by a heavily skewed gender ratio at birth, an underrepresentation of women in leadership positions and political posts, women's falling labor participation rate, and the widening gender wage gap (Lee and Wie 2017; Wagner, Gainous, and Abbott 2019; Fu, Su, and Ni 2018; Wagner, Gainous, and Abbott 2019).

Although few studies have systematically investigated gender bias in Chinese media selection and description, the little available research points to pervasive gender disparities in the news media. In Muyang Li and Zhifan Luo's (2020) study, Chinese women were found to be overrepresented in news reports that reinforce gender stereotypes, such as reports of car crashes, thus reifying patriarchal myths of women's inferiority, i.e., "women are bad at driving." Crystal L. Jiang and Wanqi Gong (2016) found that the Chinese media heavily stereotype women who do not participate in cisheterosexual marriage as living a "second-tier life trajectory," in contrast to the idealized "happiness" and "fulfillment" offered by the patriarchal family unit. In a sample survey of Chinese participants, Ziyi Fan and Xinyuan Liu (2022) found statistical significance in participants' reference to gender stereotypes when inferring the gender of a gender-neutral character in fictional scenarios. In an international study comparing the patriarchal censorship of art in Malta, China, and the United States, Heather Van Uxem Lewis (2016) aptly notes that censorship is motivated by political motivations to silence "challenges to patriarchal gender stereotypes and roles." Indeed, as Tunan Huang and Xintong Liu (2021) summarize, the media's penetration of every aspect of society within China has given it great power to shape the gender attitudes of the populace.

In short, within news reports, Chinese women are consigned to roles that abide by the needs of the nation-state and related conceptions of gender—feminized laborer, housewife, and consumer (Wallis 2006).

These trends may also reflect gender stratification within news organizations. Journalism in China largely remains a male-led profession. While Chinese women make up fifty percent of journalists (Chen and Cai 2021), they are vastly underrepresented in leadership positions and disproportionately relegated to part-time, low-paid positions that lack both training opportunities and protection from sexual harassment (Shi 2013).

Protests

There is scant literature analyzing the types of protest tactics women generally pursue in protest events in Chinese contexts—one of the few existing studies is Yin-Zu Chen (2020), which found that women protesters tend to undertake kneeling as an effective tactic for avoiding conflict and gaining negotiation opportunities with authorities in Taiwan. By contrast, research in Euro-America has found that women tend to participate in protest events less than men, and when they do participate, they adopt less violent methods. Such a disinclination largely results from processes that socialize women away from active political participation (i.e., Dodson 2015; McAdam 1992; Schussman and Soule 2005; Sherkat and Blocker 1994; Van Dyke, McAdam, and Wilhelm 2000). This literature suggests that patriarchal gender trends both influence protest participation and tactics undertaken by women and persist regardless of national context.

Furthermore, "political stability" and patriarchal gender mutually affect each other and are analytically inseparable. Political stability demands the maintenance of the patriarchal status quo (Cheng and Lu 2024), which is upheld by a binary gender ideology and, at the microlevel, supported by patriarchal family units (家庭單位 *jiating danwei*). This follows historical conceptions that "to govern the nation, one must first right one's home 家齊而後國治," as well as postcolonial critiques of patriarchal processes within modern nation-state building (Kandiyoti 2015). In other words, patriarchy affects all spheres of society, including political processes.

The Gendered Bias of Media Attention in China: Working Hypotheses

The social processes outlined above tend to attach a lower newsworthiness value to women-majority protests because of their limited social power and perceived passivity and docility. Such processes may also intersect with media institutions, which are largely dominated by men, to reinforce gendered media bias. The paternalistic nature of China's sociopolitical context suggests that women protesters defy the patriarchal system at large and its constraining binary gender ideology, which is concomitant to being considered a threat to political security. Women engaged in protests challenge the state's goals of social stability—part and parcel with the expectation of Chinese women as necessarily “passive,” “docile,” and “obedient” (Wallis 2006). Furthermore, Zhang, Lu, and Bai (2024) found that Chinese news media and government media employ different reporting styles when covering general protest events: Government media tends to report in a thematic style, which emphasizes the general development and underlying social contradictions of a protest. In contrast, news media tends to report in an episodic style, which emphasizes the concrete acts that constitute a protest event rather than its underlying social issues.

This leads us to the following hypotheses:

Hypothesis 1 (underrepresentation). Women's protests are significantly less likely to be covered by the media than men's.

Hypothesis 2 (misrepresentation). Women's protests are significantly more likely to be misrepresented and depoliticized (i.e., reported as less violent than what protesters report) than men's protests.

Hypothesis 3. Gendered media biases manifest distinctly between government and news media reports.

DATA AND METHODS

Our data are from CASM-China (Collective Action from Social Media in China), developed by Zhang and Pan (2019).³ CASM-China contains 104,076 real-world collective action events (derived from individual users' Weibo posts) spread throughout the country from 2010 to 2017. CASM-China was identified from 9.5 million posts that contained at least one of the fifty protest-related words from the Chinese social media site Weibo (Chinese equivalent of Twitter), based on a two-step deep learning algorithm that uses both the text and images of Weibo posts. Human validation has shown that CASM-China extracts ten to 100 times more collective action events than newspaper-based datasets. CASM-China also covers more regions and issues than newspapers-based datasets, and over 90 percent of protests covered in newspapers are also captured in CASM-China.⁴ Furthermore, most newspaper-based datasets are not made publicly available. With all this considered, CASM-China data arguably represents protest events in China better than traditional print media (Zhang and Pan 2019).

Table 1. Total Posts, By User Type

Total Posts	Individual	Government	News Media
N = 120,725	104,076	696	15,953

Our decision to use social media data is based on China's unique political circumstances. While still subject to inconsistent censorship, social media is not regulated to the same degree as print media. As a result, it has emerged as a prominent, if not the most prominent, means for information dissemination and mobilization (Qin, Strömberg, and Wu 2017; Roberts 2018; Stockmann and Luo 2017), thus enabling protesters to directly advertise and mobilize for offline action (Earl 2015; Steinhardt and Wu 2016; Qin, Strömberg, and Wu 2017; Göbel 2019). Accordingly, social media has also emerged as a major medium through which the government and news outlets disseminate protests in China.

Variable Description and Construction

The following variables were constructed by Zhang and Pan (2019) and Zhang, Lu, and Bai (2024): geolocation, year, account characteristics (user gender, post author type, and posts), issues motivating the protest (land/rural protests; unpaid wages; homeowner property; environmental; fraud/scams; pension/welfare; taxi drivers; medical; education; veterans), protest size, protest target (against nonstate entities such as companies, against nonstate entities but with the government as a mediator, or against state actors), violence level (peaceful, disruptive, or violent), whether or not there was a police presence. Readers can reference Zhang and Pan (2019) and Zhang, Lu, and Bai (2024) for a detailed description of variable definition (also available in appendix 1, as well as the machine classification performances in appendix 2. These can be accessed online at https://docs.google.com/document/d/1IVL4ILHN9H-lm_cpemuSv-OySr5kSaEw-swnxW-FbIk/edit?pli=1

In particular, we would like to clarify the definition of violence here because it is important for our results. While violence is commonly defined in protest literature according to its casualties, we propose a more expansive and complete definition of violence: Inclusive of the protest process, up to and encompassing of casualties. Restricting violence's definition to only casualties is limiting when analyzing the subjectivities of participants in contentious politics.

This study has generated the following new variables:

Sentiment: This is a continuous variable ranging from -1 to 1 that indicates a post's tone. In the context of media reports, a higher or more positive sentiment score represents a more sanitizing/neutralizing tone. In contrast, a lower or negative sentiment score indicates a more sensationalized/exaggerated tone. We concatenated three large Chinese sentiment dictionaries (Chen, Becken, and Stantic 2019; Dong and Dong 2003; Grimmer and Stewart 2013; Li 2018) and used quantified dictionary methods to determine the sentiment of each observation. It should be noted that positive/negative is purely a jargon identifier for sentiment analysis. A more positive sentiment is not necessarily equivalent to good-natured reporting, which is a challenge in sentiment interpretation.

Government resolution: an ordinal variable indicating whether each protest was noted as resolved by the government. It was categorized as (1) unresolved, (2) in process of resolution, or (3) resolved. We had research assistants read through each matched government and individual posting to categorize every protest event as one of the three categories. This variable is only available for government-matched data. A detailed coding plan is described in appendix 3 available [at this link](#).

Post Author Type: a categorical variable indicating whether a protest event was posted by an individual, the news media, or a government account.

User gender: a categorical variable denoting the self-reported Weibo gender label of each individual user in the CASM-China dataset. Note that the gender label does not necessarily reflect the actual gender identity of the user. However, the gender label affects the user's perceived gender—which can shape how the government and news media react to the user's postings.

Gender majority ratio: an ordinal variable measuring the gender-majority proportion in protest events. We first created an original gender dictionary. When creating the dictionary, we removed any word that has some gender-related characters but is not indicative of gender, including gendered curse words (e.g., “your father” 你爹的; “your mother” 你妈的) and gender

descriptions of police officers (e.g., colloquial names such as “police sister 警察姐姐”; “police uncle” 警察叔叔). We also accounted for repetition of the same terms in postings by comparing the weighted string count (including a count of repeated term matches from each posting) versus string detection (a count of unique term matches from each posting). These methods yielded very similar results. We thus used weighted string count in the main analysis.

We then constructed two variables, “count women” and “count men,” that summed the number of matched keywords in each post with the gender dictionary. We categorized each protest event into one of three groups: when “count women” was higher than “count men,” which was marked as “women-majority” (e.g., a post mentioning a majority of women workers protesting for their wages); when “count women” was lower than “count men,” which was marked as “men-majority” (e.g., a post mentioning a majority of men workers protesting for their wages); and when “count women” was equal to “count men,” which was marked as “gender neutral.” The “gender neutral” category includes posts that mention similar levels of women and men participation or an unspecified gender makeup.

We performed sensitivity analyses to examine the percentage of women’s participation in protests vs. their victimization (i.e., others protesting on behalf of women). We randomly sampled ten percent of all the postings sorted into the “women” category and hand-coded each posting as either participation or victimization. We found that 82.6 percent of postings indicated participation, not victimization. Furthermore, we found that these few protests carried out on *behalf* of women tend to be less disruptive than protests carried out by women themselves, demonstrating the gendered nature of violence in protest.

Below are some representative examples of posts categorized as women-majority protests:

Changchun civilians protest for their rights, old women and women are the main force (May 14, 2013).

In Hebei, A lead woman worker cut her wrist and committed suicide in protest at the developer’s office, for the cause of getting more than 20 peasant workers their wages back. These wages have been delayed for more than 4 months and total more than 80,000 Yuan (August 18, 2013).

At Bin Lake street on the Yingzhou bridge, the local peasants are blocking the road. Traffic conductors are at the area but it doesn’t seem that they’re able to solve the issue, there are many elderly aunties and women who are sitting on Yingzhou street and not letting any cars come through in protest (August 23, 2014).

Analyzing Gendered Selection Bias

To address gendered selection bias in government and news media coverage, we conducted regression models on the entire data. We tested the likelihood of media selection of a protest event, given the *gender majority ratio*. We controlled for the following protest event characteristics: *Weibo user gender*, *protest size*, *issue type*, *violence level*, *police presence*, and *protest target*. The key independent variable in our study is *gender majority ratio* (a description of the data cleaning process can be found in appendix 3 online, which can be [accessed at this link](#)).

Analyzing Gendered Description Bias

To address gendered description bias in government and news media reports, we compared individual descriptions of protest events with government and news media descriptions across matched protest events. We examined the following protest event characteristics: sentiment, violence level, police presence, protest target, and government resolution (for government-matched posts only). The key independent variables in our study are gender majority ratio, type (a categorical variable indicating whether a protest event was reported by an individual, the news media, or a government account), and their interactions.

RESULTS

Table 2 shows the descriptive statistics of the variables used in the analyses. A higher proportion of protests involved women more visibly than men: 7% versus 3%. Events in which gender was nonspecific, or both genders were similarly visible, made up the majority of the protest events (89%).⁶ There also seemed to be a gender imbalance in the number of Weibo users who posted reports of protest events, with men accounting for 69% of such users. This starkly contrasts the general gender composition of Weibo users (50.5 percent women, 49.5 percent men; Sina Weibo: User Gender Distribution 2021). Furthermore, table 3 on the adjacent page shows the statistics of women's vs. men's protests, revealing that government and news media accounts disproportionately cover men's protests more than women's. Column 3 shows the percentage of government posts covering women's protests in proportion to the total number of individual posts.

Table 2. Descriptive Statistics

	Individual Posts	N = 104,076
Gender Majority Ratio:		
Women's Protests		0.07
Men's Protests		0.04
Gender Neutral Protests		0.89
Weibo User Gender Ratio:		
Woman		0.31
Man		0.69
Violence Level:		
Peaceful		0.36
Disruptive		0.17
Violent		0.47
Protest Target:		
Company		0.40
Company; Gov. as Mediator		0.20
Government		0.40
Protest Size		39.43 (77.23)
Police Presence		0.23
Issue Type:		
Land/Rural Disputes		0.24
Unpaid Wage Disputes		0.29
Home/Property Disputes		0.25
Fraud/Scam Disputes		0.07
Environmental Disputes		0.05
Pension/Welfare Disputes		0.04
Taxi Worker Disputes		0.04
Medical Disputes		0.12
Education Disputes		0.08
Veteran Disputes		0.01

Gender Differences in Protest Characteristics

Table 4 presents the descriptive statistics by gender majority ratio for all protest characteristics. Most of the results are statistically significant at $p < 0.001$. Women's protest events had the highest *violence level*: About 63% of these events were violent, compared to 45% of gender-neutral protests and 51% of men's protests. Our reading of the postings provides an additional explanation: women's protests were more violent because the demonstrators often

Table 3. Government, Media, and Individual Posts—By Gender Majority Ratio

	Government N = 696	News Media N = 15,953	Individual N = 10,4076	Government/ Individual	News/ Individual
Gender Majority Ratio:					
Women's Protests	0.06	0.15	0.07	0.86	2.15
Men's Protests	0.05	0.11	0.04	1.25	2.75
Gender Neutral Protests	0.89	0.77	0.89	1	0.83

threatened or attempted suicide as a last resort. We see similar patterns for protest targets. Women's protests had higher-risk targets (i.e., the government), whereas men's protests were more likely to target nonstate institutions. Because of their higher violence and risk, women's protests were more likely to involve the police (35% compared to 30% for men's events and 22% for gender-neutral events).

Across the eleven issue types, women were more likely than men to participate in protests related to rural/land, medical-related, and education disputes. By contrast, men participated more in protests related to unpaid wage, home/property, and taxi worker disputes. The top three issues motivating women's protests were land/rural (30%), medical-related (29%), and unpaid wage disputes (23%). The top three motivations for men's protests were unpaid wage disputes (38%), medical-related disputes (22%), and home/property disputes (19%). Overall, these results suggest that women protestors tend to be more violent and more likely to target government entities than men.

Table 4. Protest Feature by Gender Majority Ratio

	Women's Protests N = 7,559	Men's Protests N = 4,305	Gender Neutral Protests N = 92,212	Overall P-Value
N = 104,076				
Violence Level:				< 0.001
Peaceful	0.24	0.36	0.37	
Disruptive	0.13	0.15	0.17	
Violent	0.63	0.49	0.45	
Protest Target:				< 0.001
Company	0.30	0.43	0.41	
Company; Gov. as Mediator	0.16	0.22	0.20	
Government	0.54	0.35	0.39	
Protest Size	37.42	37.25	39.70	0.042
Police Presence	0.35	0.29	0.22	< 0.001
Issue Type:				
Land/Rural Disputes	0.30	0.18	0.23	< 0.001
Unpaid Wage Disputes	0.23	0.38	0.30	< 0.001
Home/Property Disputes	0.16	0.19	0.26	< 0.001
Fraud/Scam Disputes	0.05	0.05	0.08	< 0.001
Environmental Disputes	0.04	0.03	0.05	< 0.001
Pension/Welfare Disputes	0.03	0.04	0.04	0.120
Taxi Worker Disputes	0.04	0.10	0.04	< 0.001
Medical Disputes	0.29	0.22	0.10	0.000
Education Disputes	0.22	0.13	0.07	0.000
Veteran Disputes	0.01	0.01	0.01	0.4952

Gendered Selection Bias

Table 5 on the next page presents the regression results of gender bias in government and news media accounts' selection of protest events for reporting. The results are generally consistent with hypotheses 1 and 3. Women's protests are significantly less likely to be selected for coverage by the media. There are important distinctions between the government and news media's reports:

The government is significantly less likely to select women's protests for coverage than gender-neutral protests, which indicates a bias against women. Protests regarding home/property and veteran disputes were significantly less likely to be covered by the government. Protests motivated by unpaid wages, environmental concerns, medical-related issues, and education disputes were significantly more likely to be reported. Government accounts also gravitated toward less disruptive and less violent protests. Net of their violence level, protest events with more participants and police presence were more likely to be covered.

With respect to news media selection, men's events are significantly more likely to receive news media attention than gender-neutral events, indicating a bias in favor of men. There is no significant difference in coverage selection between women's and gender-neutral protests. Female Weibo users were significantly less likely to have their protest posts selected for coverage by the news media. The news media tended to cover a wider range of protests and did so more evenly. This suggests that the news media's selection practices are more inclusive of different types of protests than the government's. Larger protests and those with a police presence also received more attention from the news media. In contrast, protests targeting the government were significantly less likely to be covered.

Our close reading of Weibo posts in the CASM-China dataset offers further insight into gendered media selection bias. For example, on November 18, 2015, in Kunming city, Yunnan Province, a group of peasant women, many of them elderly, protested against local prefectural government officials for their land appropriation measures. The protest turned violent when police physically attacked the women. The enraged protesters posted a description of the event on Weibo, demanding an explanation from the higher-level governmental body. However, neither the government nor the news media covered this event.

In another example, on February 26, 2014, eleven women workers stood on top of a building and threatened to commit suicide if they were not given their rightful wages. Their boss ran away with their wages, which totaled more than 100,000 Yuan. These protesters were met with indifference; their desperate protest did not receive any media coverage.

In contrast, men's protests with a similar degree or even less violence often receive greater media attention. On December 6, 2011, over thirty male migrant workers in Zhengzhou city, Henan province, stood around a public statue of Lake God (a Chinese folk god) to pray for the payment of their rightful wages. As part of the prayer ceremony, these workers lit incense, burned paper money, and spilled chicken blood at the foot of the statue as an offering to the god. This public act of protest was spiritual, far from being dramatic or violent, but it was met with seriousness by the government: "It is the end of the year and our migrant worker brothers have worked hard all year but have yet to receive the money they earned with their blood and sweat. There are many migrant worker brothers protesting around Zhengzhou city. The Middle Court of Zhengzhou city is dedicating its efforts to solving this problem of unpaid wages properly as it works to protect the migrant workers' collective legal rights."

The greater attention to men's protests also holds for the news media. In a telling example, on January 29, 2013, ten male migrant workers protested for their rightful wages on the Beijing's Beisanhuan Anhua bridge. The news media covered this event, even reporting details not mentioned in individual postings: "Migrant workers in Beijing are demanding their wages in back pay. Some even threatened to climb on top of a building if they did not receive them. With the end of the year quickly approaching, many migrant workers are becoming increasingly desperate." The mention of an imminent threat (climbing on top of a building) accentuated the urgency of the issue. Taken together, the foregoing examples shed light on gender bias in media selection that exists in both government and news media reports on protests.

Table 5. Gendered Selection Bias, Logit Model (Log Odds)

Independent Variables	Government Coverage	News Media Coverage
Gender Majority Ratio:		
<i>Reference Category: Gender Neutral Protests</i>		
Women's Protests	-0.61* (0.26)	0.01 (0.06)
Men's Protests	-0.04 (0.25)	0.23** (0.07)
Weibo User Gender:		
<i>Reference category: Man</i>		
Woman	-0.14 (0.12)	-0.33*** (0.03)
Protest Size	0.24** (0.05)	0.18*** (0.01)
Issue Type:		
Land/Rural Disputes	0.16 (0.18)	0.5*** (0.05)
Unpaid Wage Disputes	1.28*** (0.14)	0.71*** (0.04)
Home/Property Disputes	-0.61* (0.18)	0.35*** (0.04)
Fraud/Scam Disputes	-0.19 (0.22)	0.11 (0.06)
Environmental Disputes	1.22*** (0.19)	0.4*** (0.1)
Pension/Welfare Disputes	-0.04 (0.28)	0.37*** (0.07)
Taxi Worker Disputes	0.28 (0.27)	0.58*** (0.06)
Medical Disputes	0.46** (0.16)	0.41*** (0.05)
Education Disputes	0.69** (0.17)	0.53*** (0.05)
Veteran Disputes	-13.04 (306.7)	0.39* (0.18)
Violence Level:		
<i>Reference Category: Peaceful</i>		
Disruptive	-0.62** (0.19)	0.1* (0.05)
Violent	-0.27* (0.16)	-0.05 (0.05)
Police Presence	0.44** (0.15)	0.27*** (0.04)
Protest Target:		
<i>Reference Category: Company</i>		
Company; Gov. as Mediator	0.05 (0.15)	-0.11* (0.04)
Government	-0.22 (0.17)	-0.36*** (0.05)
Observations	68,520	68,520
Squared Correlation	0.01	0.02
Pseudo R ²	0.11	0.05
BIC	4,593.2	34,275.1

Note: *p<0.05; **p<0.01; ***p<0.001. Standard errors are in parentheses.

Gendered Media Description Bias

Tables 6 and 7 on the next page display results for description bias in government and news media reports, respectively. We performed linear and logistic regressions that predicted various protest characteristics based on posting types (government or news media, with individuals as the reference category), the *gender majority ratio* of protests (with gender-neutral as the reference category), and their interaction.

Focusing on the interaction between the gender ratio of protest events and government/news media description, the results indicate that government accounts tend to describe women's protests as having a lower *violence level* than they actually are. Furthermore, government accounts are significantly less likely to mention the state (either as the target or intermediary) in these protests than those of gender-neutral protest events. Government accounts also tend to describe women's protests with more positive sentiments. In comparison, there were no sig-

Table 6. Gendered Description Bias by Government Media

Independent Variables	<i>Government</i>					Sentiment OLS
	Violence Level	Target		Police	Resolution	
	Ordinal	Ref: Company	(Multinomial)	Logistic	Ordinal	
		Company, Gov. as Mediator				
Women's Protests	1.04*** (0.34)	-0.10 (0.47)	0.52 (0.39)	0.86** (0.34)	-0.53 (0.39)	-0.05*** (0.01)
Men's Protests	-0.33 (0.45)	-0.73 (0.53)	-1.31 (0.64)	0.30 (0.45)	-0.40 (0.48)	-0.02 (0.02)
Government	-0.13 (0.11)	1.03*** (0.14)	0.44*** (0.15)	0.71*** (0.14)	-0.05 (0.11)	0.02*** (0.004)
Gov*Women's Protests	-1.27*** (0.47)	-1.76*** (0.61)	-2.96*** (0.73)	-0.14 (0.50)	0.43 (0.51)	0.03* (0.02)
Gov*Men's Protests	-0.22 (0.70)	-0.69 (0.74)	-10.55 (137.78)	0.31 (0.70)	1.16* (0.69)	0.02 (0.02)
News Media						
News*Women's Protests						
News*Men's Protests						
Constant		-0.30*** (0.10)	-0.23** (0.09)	-0.86*** (0.09)		-0.02*** (0.003)
Observations	1,392			1,392	1,374	1,373
R ²						0.04
Adjusted R ²						0.03
Log Likelihood	-1,280.94			-756.27	-1,256.43	
Akaike Inf. Crit.		2,954.50	2,954.50	1,524.53		
Residual Standard Error						0.07 (df = 1367) 10.25***
F Statistic						(df = 5; 1367)

Note: *p < 0.05; **p < 0.01; ***p < 0.001

nificant differences in protest description between men's and gender-neutral protests. Government accounts were, however, more likely to describe men's protests as partially or fully resolved than gender-neutral protests.

Compared to government descriptions of protest events, news media have relatively less description bias against women's protests. Furthermore, news media accounts are more likely to mention police presence in women's protests than gender-neutral protests. However, a media description bias in favor of men's protests was evident. When covering men's protests, news media accounts were significantly more likely to (1) report a higher violence level, (2) identify the government as the target of grievance, and (3) describe the protests with a more positive sentiment than that ascribed to gender-neutral protests.

Taken together, these results support hypotheses 2 and 3: The government and news media are subject to description bias against women's protests, the bias of which manifests in differential ways between the government and the news media. Specifically, government accounts were more likely to exhibit description bias against women's protests, whereas news media accounts were more likely to exhibit description bias in favor of men's protests.

Table 7. Gendered Description Bias by News Media

Independent Variables	News Media				
	Violence Level	Target		Police	Sentiment
	Ordinal	Ref: Company, Multinomial		Logistic	OLS
		Company,	Government		
		Gov. as Mediator			
Women's Protests	0.40*** (0.06)	0.48*** (0.08)	0.58*** (0.07)	0.09 (0.06)	-0.002 (0.003)
Men's Protests	0.16** (0.07)	0.11 (0.09)	-0.22*** (0.09)	0.12 (0.08)	-0.03*** (0.003)
News Media	-0.0004 (0.02)	-0.89*** (0.03)	-0.38*** (0.03)	-0.49*** (0.03)	0.01*** (0.001)
News*Women's Protests	0.11 (0.07)	-0.02 (0.11)	0.02 (0.09)	0.24*** (0.08)	-0.01 (0.003)
News*Men's Protests	0.23** (0.09)	-0.21 (0.13)	0.25** (0.11)	0.40*** (0.11)	0.02*** (0.004)
Observations	31,906			31,906	31,315
R ²					0.01
Adjusted R ²					0.01
Log Likelihood	-32615.73			-18376.90	
Akaike Inf. Crit.		66900.79	66900.79	36765.79	
Residual Std. Error					0.09 (df = 3; 1309) 46.45***
F Statistic					(df = 5; 31,309)

Note: *p < 0.05; **p < 0.01; ***p < 0.001

The findings regarding sentiment in reporting warrant more discussion. We find that government accounts were significantly more likely to report women's protests with a positive sentiment than gender-neutral and men's protests. In the context of protest reporting in China, a positive sentiment often indicates "sanitization," which depoliticized protests through neutral and anodyne language. These results are consistent with our findings of protest characteristics, which suggest that once a government media selects women's protest events for coverage, it deploys a sanitized tone to describe them as less violent and risky compared to on-the-ground descriptions by individual protesters. This bias in reporting reinforces patriarchal stereotypes of Chinese women as "passive" and "docile" while minimizing the contentious nature of women-majority protests.

Meanwhile, the above trends are reversed for news media reports of men's protests. This tendency is likely due to individual descriptions of men's protests as very negative (main effect term: men's protest), while the news media's characterization of men's protests is relatively less negative (interaction terms). Taken together with the government's sanitization of women's protests, this suggests that while government and news media bias manifests itself in distinct ways, both account types aim to emphasize the resolution of protests.

Individual Weibo postings further illustrate the gendered description bias in media reporting. In one telling example, an individual posted the following on January 9, 2015: "I call for all the people of this nation to stand up for the women workers who lost their lives protesting their lost wages at Shanxi Taiyuan Police Station, and I demand justice for them! They were killed by corrupt officials and local warlords. I strongly implore the central government to do the right thing on behalf of its people!" However, when the government account reported this event, it sanitized the reporting by removing any mention of the local government's corruption

and its involvement in the deaths of the women protesting. Its posting read: “It is the time of spring festival, and the number of workers protesting against unpaid wages has skyrocketed. Just recently, a group of peasant women at Shanxi Taiyuan were protesting for lost wages and died after being brought to the local police station. This incident has sparked a heated discussion about protesting for one’s right to their wages. We learned from the Guangdong Provincial High Court that in 2014, there were a total of 131 people who were accused of not paying workers their rightful wages, an eight-fold increase compared to 2013.”

Also worth noting is that the government report directed the readers’ attention to a discourse surrounding wage rights. It ended the report by citing the number of business owners in a completely different province, Guangdong, who have been accused of not paying their workers’ wages. As such, the report effectively shifts blame to individual owners of businesses, redirecting the reader’s attention to a different province, while avoiding providing information on the police violence and circumstances that caused these women’s deaths. Such reporting inherently erases the agency of these women protesters and the violence deployed against them.

News media accounts, by contrast, were more likely to report higher violence and risk levels for men’s protests, a pattern we call “sensationalization.” This should be compared to the “sanitization” approach taken by the government toward women’s protests. For example, on June 5, 2013, an individual user described an instance of police brutality toward protesters who blocked the street while protesting for their home/property rights: “On the streets of Yan’an city in Shaanxi province, the police chief used violent tactics to enforce the law against protesters. From the video, you can see that an officer used violence against a man on his moped. This kind of police violence is just too heartbreaking.”

The report of this event from the news media was notably sensationalized, describing in emphatic detail the violence involved: “Recently netizens revealed evidence that the Shanxi province Yan’an city police used violence against a moped rider; one police officer used both his feet to step repeatedly on the fallen moped rider as he laid on the ground. Yesterday, the Yan’an police department responded, claiming that the police officers who used violence against the moped rider were only temporary workers. They also made clear that the higher-ranking officers who participated in the police response were suspended, pending an investigation. Can the department really avoid responsibility by using so-called “temporary workers” as an excuse?”

These results point to different mechanisms of description bias by the government and the news media. This is another unique contribution of this study. Previous literature in Western contexts has largely neglected the differences between government and news media (e.g., Oliver and Maney 2000). These differences likely reflect their divergent motivations and roles in society. Government reporting appears to engage in a process of depoliticization through downplaying the level of violence and target of the protests whilst using sanitized language. This process disproportionately affects the coverage of women’s protests—reinforcing the state’s imperative of maintaining social stability and reifying patriarchal social roles and expectations for women. By contrast, the news media reports are more likely to emphasize the violence and risk of men’s protests, likely to attract viewership and attention—reflecting and reinforcing patriarchal norms which confer men with more agency and social acceptability to be violent.

CONCLUSION

This study connects the vast but largely separate fields of gender, protest, and media studies by demonstrating the overlapping, triadic relationship among contentious politics, gender hierarchies, and media institutions. Our findings add to feminist theory as applied to the media by drawing attention to the “symbolic annihilation of women by the mass media” (Tuchman 2000: 150). Whereas this theory was originally developed to account for Western media institutions’ denigration of feminist movements, our study demonstrates that this phenomenon

extends to general protest events and non-Western settings. We contribute one of the first systematic analyses of how established patriarchal hegemonies manifest themselves in the sphere of contentious politics and how the government and the news media have reproduced such hegemony within a non-Western and authoritarian context.

Our results reveal a marked gender bias in the media selection and description of protest events in China. We found that despite the higher level of violence present in women's protests (as indicated by individual social media postings), such cases of violence are underreported by the Chinese government and news media accounts on social media relative to gender-neutral and men's protests. Women's protests are more sensational due to their violence, which both government media and news media shun away from reporting. If violent protest alone is already taboo, what about violent gendered contention? Women's violent protest transgresses the inherently patriarchal logics behind 'stability maintenance'; such defiance of patriarchal gender ideology is damaging, even cataclysmic, to social stability (Cheng and Lu 2024). Indeed, patriarchal gender ideology and neo-Confucian stability maintenance policies are simultaneous forces that affect government media attention to protest. We term this the 'paternalist stability model.'

It might be argued that the lower likelihood of reporting on women's protests could be attributed to the significantly higher likelihood of them involving higher-risk targets (i.e., the government) and/or their higher violence level. However, this argument is moot: our regression results remain robust after controlling for these protest features. Furthermore, on the few occasions when women's protests are selected for reporting, media description of these events tends to de-emphasize the violent tactics taken by the women protesters and depoliticize their protests with desensitized language. Taken together, these results suggest that patriarchy plays an important role in shaping the selection and description of protests by Chinese media institutions, a social trend that persists concomitant to and regardless of political and economic motivations.

Importantly, our study illuminates distinct mechanisms by the government and the news media via which gender bias manifests itself. Overall, the government operates with a bias *against* women's protests in both selection and description, while the news media demonstrates an explicit bias in favor of men's protests. In other words, the government is significantly less likely to select women's protests for coverage, while the news media is significantly more likely to select men's protests for coverage. Additionally, government reports appear to disproportionately depoliticize women's protests through sanitized language and downplay the violence present at their protest events. By contrast, news media reports do not significantly understate the violence of women's protests but are more likely to overstate the violence of men's protests. This strategy is adopted presumably to attract viewership as it plays into patriarchal social acceptability of men being more active and aggressive. Taken together, gendered bias against women's protests is more pronounced in government reports than in news media reports in China.

We further found that in protests, Chinese women tend to pursue tactics of active confrontation—both online and on the ground—largely in response to oppressive conditions (Jacobs 2016; Ngai 2005). Indeed, Chinese women's resistance often challenges and even rejects the "patriarchal bargain," a system in which women conform to patriarchal demands for benefits and/or survival (Kandiyoti 1988). This proclivity stands in marked contrast to Western contexts—in which women tend to participate in protest events less than men, and when they do participate, adopt less violent methods due to processes socializing women away from active political participation (i.e. Dodson 2015; Inglehart and Norris 2003; Schussman and Soule 2005; Sherkat and Blocker 1994).

The present study systematically investigates gendered media biases in protest events in China while demonstrating how media attention to contentious protest is stratified on the basis of gender. The results have important implications for numerous subfields spanning gender studies, political science, media studies, China studies, and computational social science. Importantly, this study emphasizes the importance of incorporating the lens of gender into

analyses of media and political institutions. Indeed, a complete analysis of vital societal institutions and systems necessitates an exploration of how such institutions both engender and are, in turn, engendered by cross-cutting social hierarchies.

The main findings contribute to sociological and greater social science knowledge through theorizing a triadic relationship between gender, protests, and the media, which we term the “gender-protest-media triad”: (1) Women participate in protests as a reactive response to exploitation and marginalization, oft-employing violent tactics out of desperation; (2) Women’s protests are disproportionately underreported and misrepresented in the media; (3) Such patriarchal media bias deprives women protesters of the public attention and resources that are necessary to pressure institutions for redress of their grievances.

In paternalistic societies like China, where protests generally lack institutional and elite backing, media attention can often be the overriding factor in a protest’s success. In this respect, the triadic relationship we discovered feeds into the cycle of patriarchal erasure and severely limits opportunities for women to better their lives. Accordingly, these results have broad implications for understanding how gender hierarchies not only shape the social and cultural spheres of a given society, but also stratify the realm of politics and public life.

Limitations

There is much to be further studied on this topic. With the proliferation of social media in all spheres of life, our novel gender dictionary approach is the first of its kind. It can be modified to tease out gender majority and expression on Chinese social media in a multitude of contexts beyond protest events and beyond Weibo.

Several limitations of our study are worth noting and point to potential directions for future research. Firstly, our data is limited to the period from 2010 to 2017. Political and economic conditions in China are constantly evolving. This calls into question how the dynamics of gender bias in media reporting of protests may have changed since 2017 as the state has further tightened its grip on media control in recent years. Additionally, we compared two different datasets of protest posts: individual posts covered by government accounts and individual posts covered by media accounts. We found no overlap between government media and news media coverage of individual Weibo protest posts, disallowing us from comparing government media and news media coverage of the same batch of individual protest posts. This is an interesting empirical phenomenon that is worthy of further study and exploration.

In addition, our development of a gender dictionary marks a methodological contribution, but it yielded numerous gender-nonspecific protest events. This does not impact our study as we mainly focused on how protests were reported, making nonmentions of gender in texts meaningful for study. However, it does matter if the research question relates to the essence of protests, such as the exact numbers of women and/or men participating in a given protest. The current dictionary approach does not allow us to study the gender-participation ratio of protests in China, which is beyond the scope of this article and a future line of research to pursue. For instance, we could potentially measure the gender-participation ratio by using photos posted by protesters on social media (Joo and Steinert-Threlkeld 2018). We are excited to work towards refining methods for gender identification on social media and protests in future research. Furthermore, Weibo, following larger-level state discrimination against gender diversity and non-conformity, only allows users to self-identify within the gender binary of ‘Woman’ or ‘Man.’ This is problematic and, unfortunately, disallows us from considering gender diversity among Chinese participants in protest, an area in urgent need of research.

Last but not least, further analysis is needed regarding the impact of social media protest reporting on the outcomes of these protests and society at large. Much extant research points to the importance of media reporting for protest success (Baylor 1996; Carmichael and Brulle 2017; Koopmans 2004; McCarthy, McPhail, and Smith 1996). Which protests are covered by the media and how they are covered informs public perceptions of protests, which in turn affects

societal treatment of both protests and its participants. We hope our study can serve as a foundation to inspire future studies of impact and policy change in such contexts.

How have protesters continued to resist, contest, compromise, and transgress existing power structures? How do ordinary people persist in asserting their *right to resist*? In an age of ever-ubiquitous global tech surveillance and increased reliance on social media for protest organization and dissemination, these questions are salient now more than ever.

NOTES

¹ For brevity, we use “women’s protests” and “women-majority protests” interchangeably in this article.

² Some representative accounts include 1) the official online accounts of traditional media outlets (e.g., “北京日报”) and 2) new social media accounts aimed at publishing local news (e.g., “北京焦点”).

³ In the CASM-China dataset, instances of collective action are defined as episodic, collective events among makers of claims and their targets (1) when the targets are political and economic power-holders; (2) whereby claims, if realized, affect the interests of at least one of the claimants; and (3) whereby the protest action or actions taken by the claimants is a contentious event with a public and physical presence involving three or more people. This definition follows the classic work of McAdam, Tarrow, and Tilly (2001:5).

⁴ Specifically, urban middle-class protests against real estate developers constitute over half of newspaper reports on protests, while they only constitute a quarter of protests in the CASM-China dataset. In contrast, protests by rural villagers and low-income workers are more accurately represented in the CASM-China figures.

⁵ It is important to note that we were not able to further divide the news media into traditional news media and self-media. This is because many self-media accounts also used terms like “daily newspaper” in their account names. As such, the machine learning approaches were unable to automatically distinguish the two from each other.

⁶ To address the possibility of type II errors (our dictionary being too small), we performed an analysis of whether the type II error was smaller or larger in the variables we found to have a strong impact on outcomes (i.e., by issues, action forms, and the gender majority ratio). We found that type II errors were NOT larger or smaller in these groups. In other words, these biases did not favor any particular independent variables and, therefore, should not impact the regression results significantly.

REFERENCES

- Anderson, Douglas A. 1988. “Changing Thrusts in Daily Newspaper Sports Reporting.” Pp. 175-90 in *Coroebus Triumphs: The Alliance of Sport and the Arts*, edited by Susan J. Bandy. San Diego, CA: San Diego State University Press.
- Armstrong, Cory L. 2004. “The Influence of Reporter Gender on Source Selection in Newspaper Stories.” *Journalism & Mass Communication Quarterly* 81(1): 139–54.
- . 2013. *Media Disparity: A Gender Battleground*. Lanham, MD: Lexington Books.
- Armstrong, Cory L., Michael P. Boyle, and Douglas M. McLeod. 2012. “A Global Trend: How News Coverage of Protests Reinforces Gender Stereotypes.” *Journalism Studies* 13(4): 633–48.
- Artz, Lee, and Yahya R. Kamalipour. 2012. *The Globalization of Corporate Media Hegemony*. Albany, NY: State University of New York Press.
- Baylor, Tim. 1996. “Media Framing of Movement Protest: The Case of American Indian Protest.” *The Social Science Journal* 33(3): 241–55.
- Breed, Warren. 1955. “Social Control in the Newsroom: A Functional Analysis.” *Social Forces* 33(4): 326–35.
- Butollo, Florian, and Tobias ten Brink. 2012. “Challenging the Atomization of Discontent: Patterns of Migrant-Worker Protest in China during the Series of Strikes in 2010.” *Critical Asian Studies* 44(3): 419–40.
- Cai, Yongshun. 2008. “Power Structure and Regime Resilience: Contentious Politics in China.” *British Journal of Political Science* 38(3): 411–32.
- Carmichael, Jason T., and Robert J. Brulle. 2017. “Elite Cues, Media Coverage, and Public Concern: An Integrated Path Analysis of Public Opinion on Climate Change, 2001–2013.” *Environmental Politics* 26(2): 232–52.
- Castellanos, Cristina, Leticia Henar, and Elvira González. 2011. “Protests in Spain: A Gender Review.” *Femina Politica—Zeitschrift für feministische Politikwissenschaft* 20(2), available at <https://www.budrich-journals.de/index.php/feminapolitica/article/view/11780>

- Chen, Jidong, Jennifer Pan, and Yiqing Xu. 2016. "Sources of Authoritarian Responsiveness: A Field Experiment in China." *American Journal of Political Science* 60(2): 383–400.
- Chen, Jinyan, Susanne Becken, and Bela Stantic. 2019. "Lexicon Based Chinese Language Sentiment Analysis Method." *Computer Science and Information Systems* 16: 13–13.
- Chen, Xi. 2011. *Social Protest and Contentious Authoritarianism in China*. New York: Cambridge University Press.
- Chen, Yin-Zu. 2020. "Gendered Symbols and Habitus in Collective Action: Street Protests in Taiwan, 1997–2006." *Asian Journal of Women's Studies* 26(1): 55–73.
- Cheng, Linda Hong. 2019. "Women's Liberation in China: Necessity or Afterthought?" *UNC JOURney* 2: 69–73.
- . 2020. "Breach of Trust as Fuel for Protest: Tiananmen Demonstrations and the Erosion of State-Society Relations in 1980s China." The University of North Carolina at Chapel Hill.
- Cheng, Linda Hong, Yao Lu, and Han Zhang. 2023. "CASM-China Data, Used In This Study."
- Cheng, Linda Hong, and Yao Lu. 2024. "Chinese Computational Sociology: Decolonial Applications of Machine Learning and Natural Language Processing Methods in Chinese-Language Contexts" in *The Oxford Handbook of the Sociology of Machine Learning*, edited by Christian Borch and Juan Pablo Pardo-Guerra. Oxford: Oxford University Press.
- Chen 陳泰瀚, Taihan, and Zhan Cai 蔡展. 2021. "'Her' 20-Years Experience in the Journalism Industry: Women Working in Media '她' 在传媒场中的 20 年：主流媒体助推女性发展." *Timely Statistics 時代數據*. <https://mp.weixin.qq.com/s/vFwvNsWsXmndfzsyJ3dkw>. Accessed February 19, 2022
- Chiu, Cindy, Chris Ip, and Ari Silverman. 2012. "Understanding Social Media in China." *McKinsey Quarterly*. <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/Marketing%20and%20Sales/Our%20Insights/Understanding%20social%20media%20in%20China/Understanding%20social%20media%20in%20China.pdf>.
- Cohn, Steven F., and James E. Gallagher. 1984. "Gay Movements and Legal Change: Some Aspects of the Dynamics of a Social Problem." *Social Problems* 32(1): 72–86.
- Collins, Rebecca L. 2011. "Content Analysis of Gender Roles in Media: Where Are We Now and Where Should We Go?" *Sex Roles* 64(3): 290–98.
- De Swert, Knut, and Marc Hooghe. 2010. "When Do Women Get a Voice? Explaining the Presence of Female News Sources in Belgian News Broadcasts (2003–5)." *European Journal of Communication* 25(1): 69–84.
- Distelhorst, Greg, and Yue Hou. 2017. "Constituency Service under Nondemocratic Rule: Evidence from China." *Journal of Politics* 79(3): 1024–40.
- Dodson, Kyle. 2015. "Gendered Activism: A Cross-National View on Gender Differences in Protest Activity." *Social Currents* 2(4): 377–92.
- Dong, Zhendong, and Qiang Dong. 2003. "HowNet - a Hybrid Language and Knowledge Resource." Pp. 820–24 in *International Conference on Natural Language Processing and Knowledge Engineering (2003) Proceedings*.
- Earl, Jennifer. 2015. "The Future of Social Movement Organizations: The Waning Dominance of SMOs Online." *American Behavioral Scientist* 59(1): 35–52.
- Earl, Jennifer, Jayson Hunt, and R. Kelly Garrett. 2014. "Social Movements and the ICT Revolution." Pp. 359–84 in *Handbook of Political Citizenship and Social Movements*. Northampton, MA: Edward Elgar Publishing.
- Elfstrom, Manfred, and Sarosh Kuruvilla. 2014. "The Changing Nature of Labor Unrest in China." *ILR Review* 67(2): 453–80.
- Fan, C. Cindy. 2003. "Rural-urban Migration and Gender Division of Labor in Transitional China." *International Journal of Urban and Regional Research* 27(1): 24–47.
- Fan, Ziyi, and Xinyuan Liu. 2022. "Gender Bias Induced by Stereotypes." Pp. 1507–11 in *2022 8th International Conference on Humanities and Social Science Research (ICHSSR 2022)*. Dordrecht: Atlantis Press.
- Fu, Huiyan, Yihui Su, and Anni Ni. 2018. "Selling Motherhood: Gendered Emotional Labor, Citizenly Discounting, and Alienation among China's Migrant Domestic Workers." *Gender & Society* 32(6): 814–36.
- Gamson, William A., and Gadi Wolfsfeld. 1993. "Movements and Media as Interacting Systems." *The ANNALS of the American Academy of Political and Social Science* 528(1): 114–25.
- Göbel, Christian. 2019. "Social Unrest in China: A Bird's-Eye View." Pp. 27–45 in *Handbook of Protest and Resistance in China*, Cheltenham, UK: Edward Elgar Publishing.
- Göbel, Christian, and H. Christoph Steinhardt. 2022. "Protest Event Analysis Meets Autocracy: Comparing the Coverage of Chinese Protests on Social Media, Dissident Websites, and in the News."

- Mobilization: An International Quarterly* 27(3): 277–95.
- Goodall, Hannah. 2012. “Media’s Influence on Gender Stereotypes.” *Media Asia* 39(3): 160–63.
- Grimmer, Justin, and Brandon M. Stewart. 2013. “Text as Data: The Promise and Pitfalls of Automatic Content Analysis Methods for Political Texts.” *Political Analysis* 21(3): 267–97.
- Holtzman, Linda, and Leon Sharpe. 2014. *Media Messages: What Film, Television, and Popular Music Teach Us About Race, Class, Gender, and Sexual Orientation*. 2nd ed. New York: Routledge.
- Huang, Tunan, and Xintong Liu. 2021. “The Flow of Gender Equality Education Practices in China and the Media Bias in the New Era: From the Perspective of Sociology of Knowledge.” Pp. 2428–33 in *2021 4th International Conference on Humanities Education and Social Sciences (ICHESS 2021)*, Dordrecht: Atlantis Press.
- Jacobs, Katrien. 2016. “Disorderly Conduct: Feminist Nudity in Chinese Protest Movements.” *Sexualities* 19(7): 819–35.
- Jiang, L. Crystal, and Wanqi Gong. 2016. “Counteracting Indirect Influence: The Responses of Single Chinese Women to Prejudicial Media Portrayals of Single Womanhood.” *Chinese Journal of Communication* 9(3): 215–31.
- Johnston, Hank, and Sheldon X. Zhang. 2020. “Repertoires Of Protest And Repression in Contemporary China.” *Mobilization: An International Quarterly* 25(SI): 601–22.
- Joo, Jungseock, and Zachary C. Steinert-Threlkeld. 2018. “Image as Data: Automated Visual Content Analysis for Political Science.” *arXiv:1810.01544 [Cs, Stat]*, <http://arxiv.org/abs/1810.01544>. Accessed April 22, 2023
- Kandiyoti, Deniz. 1988. “Bargaining with Patriarchy.” *Gender & Society* 2(3): 274–90.
- . 1994. “Identity and Its Discontents: Women and the Nation” in *Colonial Discourse and Post-Colonial Theory*. New York: Routledge.
- Ketchum, Cheri. 2004. *Lost in the Public Imagination: The Dismissal of Political Consumerism in News and Entertainment Food Media*. San Diego: University of California.
- Kim, Kyung-Hee, and Youngmin Yoon. 2009. “The Influence of Journalists’ Gender on Newspaper Stories about Women Cabinet Members in South Korea.” *Asian Journal of Communication* 19(3): 289–301.
- Koopmans, Ruud. 2004. “Movements and Media: Selection Processes and Evolutionary Dynamics in the Public Sphere.” *Theory and Society* 33(3/4): 367–91.
- Lee, Jong-Wha, and Dainn Wie. 2017. “Wage Structure and Gender Earnings Differentials in China and India.” *World Development* 97: 313–29.
- Lei, Ya-Wen. 2016. “Freeing the Press: How Field Environment Explains Critical News Reporting in China.” *American Journal of Sociology* 122(1): 1–48.
- Lewis, Heather Van Uxem. 2016. “The Role of Gender Bias in the Censorship of Art: Three International Case Studies.” Columbia University, Teachers College Ed.D. thesis available at <https://www.proquest.com/docview/1766592689/abstract/918CF55B14CD4CDDPQ/1>
- Li, J. 2018. “Tsinghua Sentiment Dictionary.” 2018. Last accessed on April 29, 2022 at <http://nlp.csai.tsinghua.edu.cn/site2/index.php/13-sms>.
- Li, Muyang, and Zhifan Luo. 2020. “The ‘Bad Women Drivers’ Myth: The Overrepresentation of Female Drivers and Gender Bias in China’s Media.” *Information, Communication & Society* 23(5): 776–93.
- Li, Yao. 2019. “A Zero-Sum Game? Repression and Protest in China.” *Government and Opposition* 54(2): 309–35.
- Martsenyuk, Tamara, and Iryna Troian. 2018. “Gender Role Scenarios of Women’s Participation in Euromaidan Protests in Ukraine.” Pp. 129–53 in *Crisis and Change in Post-Cold War Global Politics: Ukraine in a Comparative Perspective*, edited by Erica Resende, Dovilė Budrytė, and Didem Buhari-Gulmez. Cham: Springer International Publishing.
- McAdam, Doug. 1992. “Gender as a Mediator of the Activist Experience: The Case of Freedom Summer.” *American Journal of Sociology* 97(5): 1211–40.
- McAdam, Doug, Sidney G Tarrow, and Charles Tilly. 2001. *Dynamics of Contention*. New York: Cambridge University Press.
- McCarthy, John D., Clark McPhail, and Jackie Smith. 1996. “Images of Protest: Dimensions of Selection Bias in Media Coverage of Washington Demonstrations, 1982 and 1991.” *American Sociological Review* 61(3): 478–99.
- McCurdy, Patrick. 2012. “Social Movements, Protest and Mainstream Media.” *Sociology Compass* 6(3): 244–55.
- Meyer, David S., and Sidney Tarrow. 1997. *The Social Movement Society: Contentious Politics for a New Century*. Lanham, MD: Rowman & Littlefield Publishers.
- Mitchell, Madeline, and Merryn McKinnon. 2019. “‘Human’ or ‘Objective’ Faces of Science? Gender

- Stereotypes and the Representation of Scientists in the Media.” *Public Understanding of Science* 28(2): 177–90.
- Mustafa-Awad, Zahra, Majdi Sawalha, Monika Kirner-Ludwig and Duaa Tabaza, 2023. “Framing Gender in the Coverage of Protests: Arab Women’s Uprisings in English and German Press.” *International Journal for the Semiotics of Law* 36: 2501–2521.
- Ngai, Pun. 2005. *Made in China: Women Factory Workers in a Global Workplace*. Durham, NC: Duke University Press.
- O’Brien, Kevin. 2008. *Popular Protest in China*. Cambridge, MA: Harvard University Press.
- Oliver, Pamela E., and Daniel J. Myers. 1999. “How Events Enter the Public Sphere: Conflict, Location, and Sponsorship in Local Newspaper Coverage of Public Events.” *American Journal of Sociology* 105(1): 38–87.
- Oliver, Pamela E., and Gregory M. Maney. 2000. “Political Processes and Local Newspaper Coverage of Protest Events: From Selection Bias to Triadic Interactions.” *American Journal of Sociology* 106(2): 463–505.
- Phalen, Patricia F. 2000. “‘Pioneers, Girlfriends and Wives:’ An Agenda for Research on Women and the Organizational Culture of Broadcasting.” *Journal of Broadcasting & Electronic Media* 44(2): 230–47.
- Popova, Maria. 2014. “Why the Orange Revolution Was Short and Peaceful and Euromaidan Long and Violent.” *Problems of Post-Communism* 61(6)
- Qin, Bei, David Strömberg, and Yanhui Wu. 2017. “Why Does China Allow Freer Social Media? Protests versus Surveillance and Propaganda.” *Journal of Economic Perspectives* 31(1): 117–40.
- . 2019. “Social Media, Information Networks, and Protests in China.” Working paper, Stockholm University. https://cbade.hkbu.edu.hk/wp-content/uploads/2020/09/20190730_QIN.pdf
- Rodgers, Shelly, and Esther Thorson. 2003. “A Socialization Perspective on Male and Female Reporting.” *Journal of Communication* 53(4): 658–75.
- Inglehart, Ronald, and Pippa Norris. 2009. *Rising Tide: Gender Equality & Cultural Change around the World*. Cambridge, MA: Cambridge University Press
- Rucht, Dieter, and Friedhelm Neidhardt. 2002. “Towards a ‘Movement Society’? On the Possibilities of Institutionalizing Social Movements.” *Social Movement Studies* 1(1): 7–30.
- Schussman, Alan, and Sarah A. Soule. 2005. “Process and Protest: Accounting for Individual Protest Participation.” *Social Forces* 84(2): 1083–1108.
- Shamilishvili, Guranda. 2019. “Psychological Influence of Modern Mass Media on Formation of Gender Stereotypes.” *Economics. Ecology. Socium* 3(2): 71–76.
- Sherkat, Darren E., and T. Jean Blocker. 1994. “The Political Development of Sixties’ Activists: Identifying the Influence of Class, Gender, and Socialization on Protest Participation.” *Social Forces* 72(3): 821–42.
- Shi, Yu. 2013. “China: Women Journalists, Chinese News Media and Historical Shifts.” Pp. 358–70 in *The Palgrave International Handbook of Women and Journalism*, edited by Carolyn M. Byerly. London: Palgrave Macmillan UK.
- Shirk, Susan L., eds. 2011. *Changing Media, Changing China*. New York: Oxford University Press.
- Shor, Eran, Arnout van de Rijt, Alex Miltsov, Vivek Kulkarni, and Steven Skiena. 2015. “A Paper Ceiling: Explaining the Persistent Underrepresentation of Women in Printed News.” *American Sociological Review* 80(5): 960–84.
- “Sina Weibo: User Gender Distribution 2023.” 2023. Statista. Last accessed on May 27, 2024. <https://www.statista.com/statistics/1287809/sina-weibo-user-gender-distribution-worldwide/>.
- Smith, Jackie, John D. McCarthy, Clark McPhail, and Boguslaw Augustyn. 2001. “From Protest to Agenda Building: Description Bias in Media Coverage of Protest Events in Washington, D.C.” *Social Forces* 79(4): 1397–1423.
- Steinhardt, H. Christoph, and Fengshi Wu. 2016. “In the Name of the Public: Environmental Protest and the Changing Landscape of Popular Contention in China.” *The China Journal* 75 :61–82.
- Stockmann, Daniela, and Ting Luo. 2017. “Which Social Media Facilitate Online Public Opinion in China?” *Problems of Post-Communism* 64(3–4): 189–202.
- Tai, Qiuqing. 2014. “China’s Media Censorship: A Dynamic and Diversified Regime.” *Journal of East Asian Studies* 14(2): 185–210.
- Taylor, Verta. 2000. “Mobilizing for Change in a Social Movement Society.” *Contemporary Sociology* 29(1): 219–30.
- Tong, Yanqi, and Shaohua Lei. 2010. “Large-Scale Mass Incidents and Government Responses in China Large-Scale Mass Incidents and Government Responses in China.” *International Journal of China Studies* 1(2): 487–508.
- Tuchman, Gaye. 2000. “The Symbolic Annihilation of Women by the Mass Media.” Pp. 50–74 in *Culture*

- and *Politics*, edited by Lane Crothers and Charles Lockhart. New York: Palgrave Macmillan
- . 2013. “The Production of News,” Pp. 90-102 in *A Handbook of Media and Communication Research*. New York: Routledge.
- Tuchman, Gaye, Arlene Kaplan Daniels, and James Benét. 1978. *Hearth and Home: Images of Women in the Mass Media*. Oxford: Oxford University Press
- Van Dyke, Nella, Doug McAdam, and Brenda Wilhelm. 2000. “Gendered Outcomes: Gender Differences in The Biographical Consequences of Activism.” *Mobilization: An International Quarterly* 5(2): 161–77.
- Wagner, Kevin M., Jason Gainous, and Jason P. Abbott. 2019. “Gender Differences in Critical Digital Political Engagement in China: The Consequences for Protest Attitudes.” *Social Science Computer Review* 39(2): 211–225
- Wallis, Cara. 2006. “Chinese Women in the Official Chinese Press: Discursive Constructions of Gender in Service to the State.” *Westminster Papers in Communication and Culture* 3(1): 94.
- Wasserstrom, Jeffrey N. 2018. *Popular Protest And Political Culture In Modern China: Second Edition*. New York: Routledge.
- Wong, Yuk-Lin Renita. 1997. “Dispersing The ‘Public’ And The ‘Private’: Gender and the State in the Birth Planning Policy of China.” *Gender & Society* 11(4): 509–25.
- World Economic Forum. 2023. “Global Gender Gap Report 2023.” Accessed on May 27, 2024. <https://www.weforum.org/publications/global-gender-gap-report-2023/in-full/benchmarking-gender-gaps-2023/>.
- Yang, Guobin. 2009. *The Power of the Internet in China: Citizen Activism Online*. New York: Columbia University Press. <https://www.jstor.org/stable/10.7312/yang14420>
- Zhang, Han, Yao Lu, and Rui Bai. 2024. “Selection and Description Bias in Protest Reporting by Government and News Media on Weibo.” *The China Quarterly* 257(1): 75–99.
- Zhang, Han, and Jennifer Pan. 2019. “CASM: A Deep-Learning Approach for Identifying Collective Action Events with Text and Image Data from Social Media.” *Sociological Methodology* 49(1): 1–57.