The State-Preneurship Model of Digital Journalism Innovation: Cases from China

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Abstract

Digital innovation has been widely considered as a key solution to the current journalism crisis. While most innovation projects in democratic regimes receive funding from media organizations, venture capital firms, and foundations, many of China's digital journalism projects are funded and led by the state—a model we define as "state-preneurship." In this study, we compare this model with other digital innovation models on three dimensions: the amount and sustainability of funding, the extent of newsroom restructuring, and the transformation of journalistic culture. We focus on the early national success case, Shanghai-based news outlet *Pengpai*, as well as on eight of its regional copycats. Based on interviews with forty-three executives, journalists, propaganda officials, media investors, and scholars, we argue that while in the short run, state-preneurship has produced fast and large-scale transformations in the digital journalism industry, these changes appear as largely unsustainable in the long run. This is due to (1) the political contingency of state investments and (2) the limited transformation in journalistic culture.

Keywords

China, journalism crisis, digital innovation, state-preneurship, authoritarianism

Introduction

With the rapid decline in revenue and circulation during recent years, in part as a result of the emergence of social media platforms, journalism industry is in a state of

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economic crisis, whereby "old models are in a free fall while new alternatives have not yet solidified a pathway to recovery" (Zelizer 2015: 894). Digital innovation, which refers to embracing the Internet and other communication technologies and incorporating them in the news production and dissemination processes, is widely considered as a key solution to the current economic crisis (Siles and Boczkowski 2012). In the past three decades, rich scholarship has emerged analyzing digital innovation in media organizations, including the role of technology in transforming journalism practices, the processes of adoption or diffusion of technology, digital convergence, and audience engagement online, among other themes (Bélair-Gagnon and Steinke 2020). As Bélair-Gagnon and Steinke (2020) highlight in their review essay, however, the current scholarship is over-concentrated on Western cases and tends to underplay the role of external forces on digital innovation processes. One particular external force that has been understudied is the influence of the state on digital journalism innovation. This is in part because in democratic contexts, the state either plays no part or provides indirect support through subsidies or tax incentives (Powers and Vera Zambrano 2016).

The subdued role of the state in digital journalism innovation has been criticized by some scholars, urging for more active participation of the state in leading media reform. Pickard (2011: 89), for example, suggests that "governmental intervention in the form of providing the key structures necessary for diverse media" is a proper approach as long as the state does not intervene in media content. Benson et al. (2017) similarly call for government policies to ensure that public media smoothly transition to digital sphere while maintaining professional autonomy and civic accountability. While cases of government-supported digital journalism innovation are scarce in liberal democracies, this approach is more common in China, with the party-state leading the effort of transitioning traditional media online.

The case of China's media management is rarely placed in the wider and comparative context of journalism practices in part due to China's authoritarian political system. Despite political restrictions, however, journalism developments in China have mimicked some of the opportunities and challenges in democratic regimes (Repnikova 2017). In the past five years, China's traditional media, similarly to that in the West, has faced a survival crisis, with a dramatic drop in newspaper advertising revenues (38.7, 32.5, and 30.3 percent, respectively, in 2016, 2017, and 2018)¹ pushing media organizations to experiment with ideas of media convergence and digital transformation (Sparks et al. 2016; C. Wang and Yu 2016; Yin and Liu 2014). At the same time, the extensive power of the state vis-à-vis the media in China, including editorial censorship and ownership of the media, makes it an extreme and a somewhat unique case when it comes to state-led digital innovation reform. The China case, therefore, could help us understand both the largely overlooked role of the state (positive or negative) in dealing with the current global journalism crisis and the complex implications of excessive state involvement for the survival of professional journalism in the digital era.

We examine digital journalism innovation in China by analyzing the national success story of a Shanghai-based digital news outlet, *Pengpai* (also known as

The Paper), as well as its later copycats spread across eight different provinces in China. Our investigation found that state-preneurship, a model of state-led digital innovation we present in this article, is effective in jump-starting innovation by providing ample funding and vigorous direction for newsroom restructuring. In the long term, however, we find the performance of state-preneurship model as volatile due to the political contingency of state investments and journalists' reluctance to fully embrace digital change despite the intensive guidance from the state. By explaining both successes and failures of the state-preneurship approach, our study responds to scholars' call for the much-needed research on the failures in digital journalism (Wahl-Jorgensen 2017), as well as Siles and Boczkowski's (2012: 1386) call for "conducting more international comparative research" in the realm of journalism crisis and digital innovation. We also use this case to reflect on the normative expectations placed on media organizations in different contexts, especially how they should be understood in non-Western and non-democratic countries like China.

Conceptualizing the State-Preneurship Model

Two types of digital journalism innovation projects are frequently discussed in the existing literature: those driven by legacy media (described as "intrapreneurship"; see Antoncic and Hisrich 2001) and those facilitated by external funding and launched outside the traditional media ecosystem (described as "digital natives"; see Stringer 2018).

One type of digital journalism innovation that is less prominent in the scholarly analysis is that driven by the state. This is in part due to the imbalance in the geographic distribution of previously studied cases—They overwhelmingly concentrate on Western democracies (Bélair-Gagnon and Steinke 2020) where the role of the state is often limited to funding public service media (PSM), providing subsidies and reducing taxes, rather than a direct involvement in the innovation process. With an exception of some scholars (Pickard 2011) who actively advocate for a more active government intervention in solving journalism crisis, moreover, the existing studies tend to be skeptical about the state's involvement. In European countries, where the state funds PSM and subsidizes news media, scholars have identified worrisome trends. They find that PSM often fail to remain competitive in the digital space (Sehl et al. 2016; Sjøvaag and Krumsvik 2018), and if they succeed, the credit usually goes to individual journalists (Bélair-Gagnon 2013) rather than to the state. As for government subsidies, some scholars argue that there is little evidence suggesting subsidies could help media outlets adapt to the digital era in a sustainable way (Murschetz 2020). In fact, an optimistic assessment is that "the subsidized newspapers have not lagged behind in adopting technical innovations" (Skogerbø 1997: 110). In the less studied authoritarian contexts in Africa and Latin America, scholars find that digital innovation manifests itself as journalistic resistance to state control rather than as a product of state initiatives (Gody 2014; Salaverría et al. 2019).

In our study of China, however, we find that digital journalism innovation is led by the state, rather than by critical journalists, and its effects are relatively impressive in

the short run. Specifically, we examine a more extensive form of state-driven innovation, what we define as "state-preneurship," that goes beyond a provision of subsidies or tax reduction that is common in the West. We conceptualize state-preneurship model of digital journalism initiatives as projects which (1) receive the majority of funding from the state and (2) are created and incubated within state media apparatus and subject to direct state involvement in the innovation process. The state-preneurship innovation carries some features from both intrapreneurial and digital native projects -it incubates innovation within legacy media, but the funding draws from external actors-in our case, the local state. Unlike "digital natives," however, the funder, in this case, is also involved in guiding innovation from within. The extent of state involvement could vary across contexts, with China presenting an extreme case. In our case study of China, we find that the state plays a sweeping role, including hosting the projects within state-owned media groups,² appointing editors and CEOs at these projects, transforming organizational structures and work routines, and regulating content. The state-preneurship model is different from PSM in that the state plays a more proactive and interventionist role-a practice also observed in other innovation projects in China, including in Artificial Intelligence (Allen 2019) and hybrid rice production (Lin 1992) whereby the involvement of the state is a dominant feature in innovation processes.

Key Factors in Digital Journalism Innovation: What Determines Success

Journalism innovation has been described as "intricate and unpredictable" (Micó et al. 2013). Nevertheless, the existing literature has identified both external and internal factors that determine innovation outcomes (see Mitchelstein and Boczkowski 2009 for a review). These factors are summarized in Table 1.

External factors of digital journalism innovation generally include media policies and an availability of funding. Whereas recommendations for media policies vary across contexts (and cases), making it challenging to generalize about their effects, the existing studies overwhelmingly stress that sufficient and sustainable funding is critical for digital innovation, both within and outside of legacy media (Kaye and Quinn 2010). They further find that access to sustainable capital presents a distinct challenge for both. Whereas intrapreneurial projects are able to draw on stable but limited resources (Sehl et al. 2016), digital natives (Stringer 2018), backed by venture capital, straddle abundant but risky funding, contingent upon successful market delivery (Usher 2017), and non-profit initiatives outside legacy media face the harshest conditions of limited and fragile funding allocated by foundations (Benson 2018; Konieczna and Robinson 2014) and crowdfunding (Carvajal et al. 2012).

As for internal factors, the existing research focuses on organizational restructuring and the transformation of journalistic culture. Although the two factors are intertwined, there is also a clear distinction between them. To use Larrondo et al.'s (2016) words, the former refers to "physical" structure, management, and news flows, while the latter

Type	Model	Funding	Newsroom Structure	Journalistic Culture	Example
Within existing organizations (intrapreneurship)	Private-sector Relatively media incubated limited Public service Relatively media incubated limited	Relatively stable but limited Relatively stable but limited	Relatively unfavorable to innovation Relatively unfavorable to innovation	Relatively unfavorable Mixed attitudes toward to innovation changes and innovations Relatively unfavorable Less open to changes and to innovation innovations	The New York Times R&D Lab Innovation projects in BBC and RTVE
Stand-alone projects (digital natives)	Venture-backed Non-profit	Large but competitive and unstable Limited and unstable	Relatively favorable to innovation Relatively favorable to innovation	Relatively favorable to More open to changes and innovation innovations Relatively favorable to More open to changes and innovation innovations	Vox ProPublica
Note. R&D = research and development.	nd development.				

refers to "mentalities" or cooperation and clashes between journalistic cultures. Scholars generally agree that successful digital journalism projects require intensive newsroom restructuring and integration (Sehl et al. 2019), as well as the transformation of journalists' mind-sets toward a more digital and more entrepreneurial direction (Larrondo et al. 2016).

When it comes to internal changes, digital native projects tend to perform better than their counterparts in legacy media. Studies find that the former, including venturebacked and non-profit projects, are more capable of pushing for aggressive organizational changes (Usher 2017), including rigid bureaucracies (Larrondo et al. 2016), and embedded biases toward print journalists in the newsroom (Singer 2004). Digital native initiatives are also found to pursue more aggressive changes in journalistic culture, including incorporation of unfamiliar reporting practices (Carlson and Usher 2016) and more flexible conception of news (Usher 2017) which prioritizes more personalized storytelling (Stringer 2018), more dialogue with ordinary citizens (Konieczna and Robinson 2014), and new, non-editorial activities such as administration and marketing (Scott et al. 2019). Intrapreneurial projects, in contrast, feature higher aversion toward digital shifts in journalistic culture, especially within public legacy media, which are the least financially pressured to innovate, and where journalists see digital practices like algorithm-based personalization as clashing with deeply embedded notion of universality (as opposed to personalization) of content delivery (Van den Bulck and Moe 2018).

The existing literature suggests that sufficient and sustainable funding as well as organizational and cultural transformations are critical for successful digital innovation across the board, both within and outside legacy media. The analysis above further highlights that the two types of digital innovation face distinct opportunities and challenges. Whereas digital native projects especially those backed by venture capital are able to ignite rapid transformation with swift access to large-scale capital and the freedom (and market pressure) to improvise with new ideas and practices, they face high risks of long-term survival. Intrapreneurial projects, in contrast, stifled by limited capital, bureaucratic pressures, and journalists' traditional orientations, face stronger initial hurdles. Our study builds on and contributes to this literature by examining a type of digital journalism innovation thus far omitted in the literature: statepreneurship. Specifically, we ask how state-preneurship fares with the other two types when it comes to access to sustainable funding, newsroom reorganization, and reorientation in journalistic culture. Through the case study of China's latest digital journalism initiatives, we argue that while state-preneurship can achieve fast transformations due to ample state funding and top-down enforced newsroom structuring, these successes are largely unsustainable in the long term due to the political contingency of state investments and weak bottom-up innovation.

Chinese Journalism and Digital Innovation

Before introducing the cases in our study, we would like to position digital journalism innovation in China in the context of China's journalism culture. Among the models introduced in Hallin and Mancini's (2004) seminal work on comparative media systems, the closest model to news media in China is the Mediterranean Model, where journalism is seen as an extension of politics, and the development of journalistic professionalization is constrained by political control.

However, the direct application of this model to the China case would tell only a partial story. Despite extensive political control and propaganda, a dynamic journalistic culture has developed in China over the past three decades. A number of empirical works have identified different facets of Chinese journalism, including its increasingly commercial orientation (Stockmann 2013), as well as the emergence and resilience of critical and investigative genre (Repnikova 2017) alongside with propaganda journalism (referred to by Chinese officials as "guidance of public opinion"). The more critical genre has developed from the synergy of official and journalistic agendas. The central state aspires to collect and guide public opinion, as well as to monitor local government officials through journalistic investigations. And a group of liberal-minded Chinese journalists seized the opportunity to carefully push the envelope within the limits of the permissible (Svensson et al. 2013; Tong and Sparks 2009). These journalists were inspired by both Western journalist role models and the historic positioning of Chinese intellectuals as elite educators or societal advocates (Hassid 2012). They see themselves as representing, informing, and mobilizing the public, which contributes to facilitating China's development and guiding the party and the people in a positive direction. The space for critical and investigative reporting has undoubtedly shrunk as Xi Jinping tightened media control and Internet companies took the advertising revenues away from media outlets (H. Wang and Sparks 2019), and yet the scrutiny of official governance across different sectors has persisted, albeit in a more muted and narrower form. The reporting of the coronavirus outbreak in Wuhan is a good example of the fragile perseverance of critical journalism in China, with many outlets producing highquality investigations of the crisis prior to being censored and redirected to publish positive success narratives (Repnikova 2020). Other academic studies of journalism in the Xi era show that some journalists continued to obtain sensitive information and reach out to citizens via social media (Svensson 2017), as well as to collaborate with lawyers and non-governmental organization (NGO) activists in areas such as environmental protection and anti-sexual harassment advocacy (Repnikova 2018), and to conduct investigative reporting (Repnikova and Fang 2019).

Other than challenging our understanding of the generalizability of the dominant journalism models, as articulated in Hallin and Mancini's framework, the China case also complicates the common normative assumption about the direct linkages between economic success of a media organization and its capacity to serve as an accountability channel and to strengthen democracy. In China, market success does not necessarily correlate with the accountability function of the media. As Stockmann (2013) persuasively argued in her book about media commercialization in China, the introduction of market forces into Chinese media sphere has empowered some critical voices, but mostly sophisticated propaganda, as media outlets can perform credibility by appearing as market-driven while still being heavily managed by the party-state. Accountability journalism in China was a by-product of some state-owned yet commercially vibrant media organizations, but it was never a guaranteed product. Moreover, some powerful investigative journalism has been produced by non-commercial, party-owned outlets, like Xinhua News Agency, which has a special unit dedicated to "internal reporting" or critical journalism only shared "upwards" with officials. *China Youth Daily* has also published a lot of sensitive stories despite being a party-owned outlet with little external advertising. As noted earlier, the appearance and resilience of critical journalism in China is more so rooted in synchronized agendas of the party and the journalists than in a specific business model. The normative expectations for news media in China, therefore, should be different from those for media in liberal democracies—accountability journalism is an exception rather than the norm, and commercial success does not guarantee a more liberal media.

The rapid digitalization of Chinese society in the past decade has presented new challenges and opportunities for the survival of the more critical and professional journalistic practices in China. Officials and journalists now compete for people's attention online, as the party aspires to guide and win over online public opinion (Repnikova and Fang 2018), and journalists attempt to hold on to their jobs and relevance in the digital era. It appears that the joint challenges of social media era have also created new synergies between officials and media actors. The party officials at the highest levels have promoted a creation of digital news media with influence and credibility that could replace the atrophying traditional media, and journalists (many of whom are laid off from influential investigative outlets) seek new platforms for telling powerful stories.

In the analysis that follows, we examine how these synergies work in practice, and whether they can withstand the official dual objectives of creating news outlets that can at once be credible and not threaten the legitimacy of the party-state, as well as the journalists' conflicted aspirations of innovating while maintaining their elite status in society that limits their interaction with digital publics. Rather than seeing statepreneurship digital innovation as merely a reproduction of propaganda, therefore, we suggest that it should be placed in the context of China's dynamic and contradictory journalism culture that features a degree of journalistic autonomy that constantly straddles the shifting objectives of the party-state. It is this autonomy that gives rise to some journalist innovators, as we explain further in the article. At the same time, we find that economic success or the availability of substantial economic resources does not guarantee these journalists' ability to produce high-quality reporting in the long run. This finding underscores the importance of rethinking the normative assumption of economic success as interlinked with accountability journalism, and invites scholars to conceive of this connection as more fluid or impermanent in the context of China. We now proceed in telling this story by introducing our main cases of state-preneurial innovation.

China's State-Preneurial Digital Innovation: Pengpai and Other News Apps

In this article, we analyze the most notable national case of state-preneurial digital journalism innovation in China, Shanghai-based, *Pengpai* (also known as *The Paper*) as well as its smaller scale copycats across the nation. Launched in July 2014, *Pengpai* is considered as the most ambitious and influential state-preneurship project in China. It is embedded in Shanghai United Media Group and is completely state-funded, with the Shanghai government initially providing an estimated RMB 300 million or US\$48 million (S. Wang 2014), followed by further investments by Shanghai-based state-owned companies, estimated at RMB 610 million or US\$97 million (Zhang 2016). The project quickly took on a national scope, with staff of over three hundred journalists covering news nationwide and publishing hundreds of articles every day on its website, app, and social media accounts. Unlike other (private) digital media projects in China that are forbidden from publishing original news content, *Pengpai* was granted permission to do so, indicating the seriousness of state support behind this project.

Shortly after its launch, *Pengpai* has become one of the most popular news sources in China,³ inspiring a launch of a dozen more similar digital news outlets (see Supplementary Information file, Appendix I). These outlets share the same features: They are embedded within local media groups and their innovation is funded and directed by local (provincial or municipal) governments. However, few of them enjoy the popularity and influence of *Pengpai*, despite the fact many are based in affluent locations like Guangzhou and Nanjing. According to the data analytics company analysys.cn, by the end of 2016, *Pengpai* ranked as the fifteenth among all news apps in the Chinese market with daily active users of more than 3 million, while all other similar news apps ranked below fifty. It also should be noted that *Pengpai*'s success has gradually faded as it produced fewer influential articles over time.⁴ As such, we regard *Pengpai* as a case of early success and the other projects as failures—failures in terms of not achieving a significant presence in the media land-scape, not in terms of being shut down.

Data and Method

To examine these state-preneurship digital journalism innovation projects, we conducted intensive fieldwork in China in the summer of 2016, and did some follow-up work in the summers of 2017, 2018, and 2019. Our fieldwork primarily included in-depth semi-structured interviews with key stakeholders. Semi-structured interviews allow for a more interactive and conversational style interview whereby there are guiding questions but also space left for the interviewees to highlight what they deem as important. This is especially meaningful in a politically sensitive context where direct, structured questions may not yield the more subtle reflections that we were seeking in this research. Through our existing connections in China as well as snowball sampling, we managed to interview forty-three individuals, including members of the founding team of *Pengpai*, former and current *Pengpai* journalists, Shanghai propaganda officials, executives, officials, and journalists at other digital media initiatives in eight provinces and municipalities, media investors, experienced journalists in legacy media, and media scholars (see Supplementary Information file, Appendix II, for details). The eight provinces and municipalities were selected based on their geographic representativeness—Shanghai and Jiangsu in the east, Chongqing and Xinjiang in the west, Beijing and Tianjin in the north, Guangdong in the south, and Hubei in central China. The cases reflect significant diversity from within China and also some shared patterns—Most initiatives with an exception of Shanghai ended up as unsuccessful. The interviews lasted on average between 1.5 to 2 hours and were conducted in Mandarin without a translator. Due to the sensitivity of the topic in China, the interviewees' names have been anonymized, and we use city abbreviations and numbers to refer to them throughout the article. The interview questions are listed in Supplementary Information file, Appendix III.

In addition to interviews, the analysis draws on participant observation in the field, including visits to newsrooms and especially participation in dinners and informal gatherings that exposed us to more candid views on the topic, as many important conversations and intimate discussions take place over meals in China (Yang 1994). The analysis of the data followed a grounded theory approach (Glaser 1978; Glaser and Strauss 1967) to identify common themes in the interviews and participant observations.

In the following sections, we analyze our cases on the three dimensions identified above—access to funding, newsroom restructuring, and journalistic cultural change.

Financial Capital: Abundant but Volatile

As mentioned above, access to funding is one of the biggest challenges for digital journalism innovation projects. We find that while state-preneurship projects across China had initially enjoyed generous state support and space for experimentation with digital platforms, the funding has turned out volatile in most cases. Local authorities, at first enthusiastic about propaganda advantages of these news outlets, later became preoccupied with potential political risks and have shrunk these ambitious projects to localized initiatives.

As for initial state investments, aside from the aforementioned investment in *Pengpai* by the Shanghai government, Nanjing-based *Jiaohuidian* received RMB 50 million (US\$7.5 million) from the local government in 2015,⁵ and *Nanfang Plus* obtained a comparable subsidy from the Guangdong government.⁶ *Shangyou* got RMB 60 million (US\$9 million) from Chongqing,⁷ and *Jiupai* was promised RMB 80 million (US\$12 million) in government funding from Wuhan.⁸

The motivation behind launching and investing in these digital-only innovation projects for local authorities was clearly political—the quest to guide public opinion in the social media era, as well as to receive approval from Beijing. A founding executive at *Pengpai* shared a phrase circulating in the party circles: "Our propaganda should be wherever the people are," meaning that digital platforms are now crucial for official propaganda because Chinese citizens get most of their information online. A Shanghai propaganda official phrased this in more drastic terms: "Traditional media have to transform into digital media. This work is as important as saving our country (*jiuwang tucun*), or in other words, it's a moment of 'to be or not to be.""⁹ their propaganda ambitions. A founding member of *Nanfang Plus* shared that "adapting propaganda for the mobile age" was seen by Guangdong officials as the key motivation behind launching the project,¹⁰ and an executive at Chongqing's *Shangyou* revealed that "the local Propaganda Department and Cyberspace Administration supported us largely because they saw us as a tool and a platform to guide public opinion."¹¹

The political rationale for local officials in facilitating journalistic transition online has also been that of competing for approval from the center by implementing its core initiatives. Accomplishments in this sphere have allegedly resulted in political promotions. Both the Shanghai party chief at the time, Han Zheng, and the former propaganda chief, Xu Lin, were promoted to the central government. According to our interviewees in Shanghai, Han and Xu's work on *Pengpai* is widely believed to have contributed to their promotions. Given the decentralized nature of China's political system, experimentation in important reform areas is often encouraged from the top-down and then taken up in a competitive manner by local officials (Heilmann 2007). Digital journalism innovation is no exception.

Journalist interviewees expressed cynical awareness about the political motives behind state's support for digital journalism. A former journalist at *Wujie* compared state investment in these digital journalism projects with that in soccer, which is widely known in China as President Xi Jinping's favorite sport: "It's all political. They don't care about the financial returns."¹² The indifference toward making profit, however, has translated into unusual opportunities for these new media projects. Interviewees claimed that there was no real pressure to make money. *Pengpai* hired hundreds of journalists and dispatched many of them to cities all over China—an extravagant strategy in terms of financial costs. *Pengpai*, *Jiupai*, and *Wujie*, among other initiatives, have also managed to attract top talent from financially fragile legacy media in Beijing and Guangzhou.

While local governments had initially offered generous funding for digital journalism innovation, this funding has turned out volatile. It has either been cut preemptively or post-factum due to perceived political risks. The most striking case of a preemptive cut is that of Wuhan-based *Jiupai*, which has lost the promised funding even before its formal launch. Just months after the agreed-upon launch date of the news outlet, initially named *Changjiang News*, which was to engage in in-depth and investigative reporting online, the local government had decided to switch tracks. It withdrew its promised investment of RMB 80 million (US\$11 million), and transformed the project into that of an algorithm-based news aggregator, dismissing the team of journalists and renaming the outlet as *Jiupai*. Our interviewees have interpreted this change as local government's concern for potential political risk of investigative reporting.¹³

In another case, the cut in funding was an attempt by local officials to react to or manage political risks. After six months in operation, the Xinjiang government ceased to support the initially popular and promising, Beijing-based project, *Wujie*, and shut it down due to a political incident of the site mysteriously publishing an open letter asking for Xi Jinping's resignation (Leavenworth 2016).

In the other cases, the funding cuts have been more gradual, but still notable. Most of the innovation projects we have examined (except for Pengpai) have received significantly reduced financial support over the two- to three-year period after their launch, which has restricted their development. Even when funding has remained consistent, as in the case of *Pengpai*, fears of cuts have transpired into more self-censorship among journalists, diminishing the long-term sustainability of journalistic quality. "We have to accept the fact that government as the funder could determine what to publish and what not, especially after the initial honeymoon period," shared a founding executive.¹⁴ The abundant initial funding for state-preneurial projects in China, therefore, can both empower innovation and stifle it, as state authorities would ultimately favor political stability over successful digital journalism initiatives. Although the annual funding for PSM in Europe can also be affected by a changing political climate (Murschetz 2020), the volatility of funding in China is more severe due to the decentralized and unregulated nature of its distribution. Unlike Europe where funding is generally distributed by the central government and national assemblies (Allern and Pollack 2019), in China, it falls under the jurisdiction of individual local officials. And in contrast to legal regulations that accompany media funding investments (Moe 2011) in Europe, in China, these investments are largely unregulated and can be withdrawn instantaneously without further notice.

Newsroom Restructuring: The Top-Down Reform

As discussed earlier, one key obstacle in launching and sustaining digital innovation projects in newsrooms is the established organizational structure—a challenge especially notable in legacy media innovation. In our cases of state-preneurial innovation, the governments and newsroom leaders have shown awareness for the need for disruptive change. "Money is important, but changes in newsroom structures are more important for the success of our project," shared a founding executive of *Pengpai*.¹⁵ Across cases, we find that the state's guidance over newsroom restructuring has produced effective results.

The state has guided and sometimes enforced newsroom restructuring in several ways. First, officials carefully selected the appropriate legacy media to "host" digital projects. Our interviews across the eight provinces revealed that the digital projects were incubated in the more flexible, market-oriented media organizations (e.g., *Shangyou* incubated in *Chongqing Morning News*) or, in more rare cases, in party newspapers which guaranteed more flexibility in organizational restructuring (e.g., *Nanfang Plus* in *Nanfang Daily* and *Jiaohuidian* in *Xinhua Daily*).

The case of *Pengpai* illustrates the careful considerations guiding the decision of where to incubate a digital project. Facing a choice of dozens of publications in the Shanghai United Media Group, Shanghai officials smartly chose a publication which newsroom was easier to restructure—the commercial newspaper *Oriental Morning Post*. "*Oriental Morning Post* was a relatively independent organization, with more commercial elements, which provided important favorable conditions for the complete digital transformation," shared a founding executive. He further drew a contrast to the

other potential candidates in this media group, *Wenhui Daily* and *Xinmin Evening News*, which had more rigid bureaucracies and risk-averse executives.

Other than directing the appropriate partnerships between digital projects and legacy media, officials have also pushed for newsroom integration, which is key for organizational restructuring (Avilés and Carvajal 2008). In January 2017, Liu Qibao, then the Propaganda chief of the Communist Party, ordered that "the 'central kitchen' (*zhongyang chufang*) or a centralized multimedia production and distribution center should be at the heart of media convergence in all media organizations."¹⁶ Carrying out audience metrics monitoring and coordination among editors and journalists within the same media group, "central kitchen" is essentially a state enforced newsroom integration unit that has been adopted by many of the digital initiatives we study, including *News 117, Jiaohuidian, Nanfang Plus*, and *Shangyou*. The "central kitchen" has allowed digital initiatives to gather content produced by other newspapers of the media group, and has eased collaborations among journalists, designers, product managers, and developers.

Third, local governments have directed the production process to prioritize digital content by delegating breaking news publication to digital initiatives and by tying bonuses to digital metrics. At the request of local government, for instance, *Jiaohuidian*, a Jiangsu-based digital outlet, has been granted the exclusive right to publish breaking news, mobilizing journalists in the media group to write stories and send them to *Jiaohuidian* (rather than to other outlets of the same group where they were officially working) as soon as they completed the interviews. The content and style of the stories has also changed to adapt to mobile devices and to social media platforms, as journalists' bonuses have been tied to page views in addition to article quality. "Our previous routine was interviewing during the day and writing at night, but now everyone cares about speed," shared an executive.¹⁷ Similar policies prioritizing digital production have been found in other cases, from Chongqing to Shanghai.

Journalistic Culture: Largely Unchanged

As discussed earlier, Chinese journalistic culture is characterized by elitist role perceptions and constrained autonomy. Our analysis finds that these features conflict with digital innovation, which expects journalists to directly follow and respond to public sentiments and opinions, and requires a high level of autonomy in initiating innovations.

As for the tensions between Chinese journalists' elite societal status and the demands of digital innovation, we find that journalists push back against the necessity to engage with and even channel public feedback directly in their reporting, as they resist the use of audience metrics and user-generated content. When it comes to the gradual push-back against the use of audience metrics, *Shanghai Observer* is a typical case of journalistic resistance. At the beginning, journalists seemed to have embraced the new metrics, writing clickbait headlines, and reposting their stories on their social media accounts. However, after the initial craze of two to three months,

they have grown concerned with compromising the long-standing journalistic tradition of *Jiefang Daily*, where the project was incubated. One of the journalists shared,

Based on my journalism training, I think that we should continue to provide serious reporting on current affairs and political issues, rather than adding too many clickbaity things on sports or business analysis. We should also limit the amount of stories published per day and focus on the quality of stories.¹⁸

In fact, limiting the scope and volume of reporting would not benefit *Shanghai Observer* as a digital initiative, but journalists have been reluctant to pursue quantity and speed over quality. These frustrations have been shared in newsrooms. Interviews at other organizations (with the exception of *Pengpai*) have also revealed that while journalists have been generally positive toward new platforms and new ways of reaching the audience, few have been willing to follow audience metrics at the cost of producing high-quality journalism that can educate the public and shape policy change. This finding is also in line with previous studies in other contexts, which identified the tension between the use of analytic tools and serving the broader public interest (Moyo et al. 2019), as manifesting itself in "skepticism if not disdain" toward audience metrics among journalists (Zamith 2018: 425).

Our interviewees have also expressed distrust of user-generated content. While encouraging user participation and community engagement is one of the key features of digital journalism innovations (Konieczna and Robinson 2014), journalists at statepreneurship projects have largely ignored this aspect and have not taken user-generated content seriously. An executive at *Nanfang Plus* shared that they are not interested in community content because "it is generally low in quality and not quite trustworthy."¹⁹ A founding member at *Shangyou* has also acknowledged that although they refer to their audiences as "users," they only expect users to contribute likes and shares.²⁰ The skepticism resonates with studies in democratic regimes which suggest that journalists practice boundary work to protect their authority (e.g., Carlson 2007). In the case of China, this sensitivity about upholding societal status is even more pronounced considering the hierarchical positioning of Chinese journalists vis-à-vis the public.

While the tensions between Chinese journalistic culture and digital journalism innovation are in part behind the journalists' resistance toward digital journalism innovation practices, another significant reason behind journalists' lackluster embrace appears to be the top-down nature of these innovations. When asked about their role in the innovations, journalists at media outlets other than *Pengpai* generally considered themselves as followers rather than as initiators or architects of change. Reflecting on why many copycats of *Pengpai* failed to replicate its success, a founding member of *Pengpai* pointed to an important distinction: While the founding team of *Pengpai* was driven by a clear motivation to seek innovation as a way to deal with the journalism crisis ("We would still experiment if not funded by the government"), journalists at other outlets were largely pushed to implement the innovations by the government, which resulted in lackluster compliance, but less so in bottom-up solutions and creative ideas.²¹ These findings are in stark contrast with the proactive role played by individual journalists with innovative mind-sets in previously studied cases in the West (Steensen 2009).

The relatively more successful journalistic cultural transformation at *Pengpai* underscores the benefits of looser state involvement in this process. The founding team suggested that the government did not micromanage them, and as a result, journalists came up with impressive innovations, including effective incorporation of audience metrics, initially initiated as part of internal competition for popular content,²² as well as the launch of a special section, *Wenba*, to engage with audiences by inviting them to pose questions to the key characters from major news stories to key persons involved in important recent news events.

Even at Pengpai, however, bottom-up innovation has reached its limits. Out of frustration with not being allowed to be shareholders under the current funding structure, the team of original founders and core editors has quit after less than 2 years to launch their own digital initiative, Pear Video, where they can own shares of the company.²³ Even the freer space at Pengpai, therefore, was not sufficient in keeping the top talent satisfied. At other digital initiatives we have examined, bottom-up entrepreneurship was largely discouraged. Moreover, unlike some of the Pengpai journalists who managed to break away from state-funded journalism model, our other interviewees generally accepted state-funded approach as the only feasible business model. A founding executive at Nanfang Plus puts it bluntly: "relying on government funding is the business model for many digital initiatives including us, and I do not see any better alternatives for us."24 Ironically, while the availability of financial capital (at least in the initial stages) has freed journalists from worrying about sustainable business models, it has also discouraged them from exploring innovative ideas in expanding the business and in bringing in revenues, further deepening their dependencies on the state. Notably, our findings suggest that operational control played a more important role in impeding digital journalism innovation than political and ideological control. Whereas negotiated political autonomy is a constant feature of Chinese journalism, with journalists routinely navigating political pressures in telling their stories, it is the operational control that dissuaded journalists from experimenting with new ideas.

Discussion and Conclusion

In this study, we focus on China as an exemplary case of the state-preneurship model digital journalism innovation—a model whereby innovation is funded and directed by the state. Our analysis of the key features of digital journalism innovation (financial capital, organizational restructuring, and journalistic cultural transformation) in the cases of the Shanghai-based *Pengpai* and eight other less successful projects reveals some advantages, as well as sustainability challenges of the state-preneurship model. Allowing for substantial start-up financial capital and effective enforcement of quick organizational changes, this model can provide a stable innovation environment in the short term. In the mid- to long term, however, state-preneurship digital initiatives face significant volatility. Out of political concerns, the state's funding commitments

can be fleeting. And the tensions between organic innovation and controlled changes can block long-term transformations.

This study de-westernizes the research on digital journalism innovation and uses the China case to contribute to a more comprehensive understanding of how newsrooms around the globe are experimenting with new projects to solve the journalism crisis, and what implications this innovation may have for the accountability role of journalism. As discussed above, in the authoritarian context, we should not assume critical and investigative journalism as a natural product of economically successful media organizations. In the analysis of *Pengpai* and other digital-only outlets, we emphasize that economic sustainability is the major criterion of success, and yet it does not suffice in ensuring the longevity of quality critical journalism. As we demonstrated in our analysis, accountability journalism in China is built on strategic, yet fluid, opportunities presented by the party and seized by journalists, rather than on economic resources alone.

This study also brings the much-ignored role of the state to the general framework of digital journalism innovation and provides evidence that the state could play both positive and negative roles in promoting innovation projects. The effective role of state funding in jump-starting innovation and of state directives in yielding effective newsroom reorganization, for instance, are positive lessons for other global contexts. The over-reliance on state funding, however, can leave digital media highly dependent on official considerations, making them even more fragile actors in an already challenging space for professional journalism. As such, state investment may work better in democratic contexts with more legal protections safeguarding the press, unlike authoritarian contexts where the state is already an over-powering actor in the media sphere. The state's top-down guidance of innovation process, moreover, can help enforce new digital practices, but it does not necessarily turn journalists into innovators themselves—something essential for long-term changes to take place.

We acknowledge that the cases presented in this study carry their own limitations, as the Chinese context only presents one particular (extreme) form of state involvement. Future research should examine the varied manifestations of state-preneurship model in diverse political contexts. While there are few cases of state's direct involvement in digital journalism innovation in democracies, we encourage more critical and empirical assessments of distinct roles that the state can play in solving journalism crisis, including more intensive media regulation and facilitation of public investment in the media.

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Supplemental Material

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Notes

- 1. See http://zj.sina.com.cn/finance/xfgz/2017-07-12/detail_f-ifyhwefp0693833.shtml and http://www.199it.com/archives/840931.html (see also Cui 2017).
- 2. A media group is a media organization (akin to a media conglomerate) led by a party newspaper (national or local) that includes multiple commercial titles and digital outlets. They are a product of media commercialization and the party's conglomeration of the media in the 1990s. There are around forty major media groups in China.
- 3. As of August 2017, *Pengpai*'s app has been downloaded for more than 86 million times, and the daily active user amount is over 8.5 million (see http://www.xinhuanet.com/zgjx/2017-09/25/c_136636459.htm). According to Alexa.com, *Pengpai*'s global traffic ranking was between five thousand and ten thousand in 2016 and 2017. It is a high ranking for a news outlet. For comparison, the influential newspaper *Southern Weekly*'s global ranking during the same time was around forty thousand, and China's most circulated newspaper *Reference News*'s global ranking was between ten thousand and twenty thousand.
- 4. According to our interviewees BJ-1, BJ-5, and SH-18, *Pengpai*'s critical coverage has faded over time.
- 5. NJ-1.
- 6. GZ-2.
- 7. CQ-1.
- 8. WH-1.
- 9. SH-13.
- 10. GZ-2.
- 11. CQ-1.
- 12. XJ-1.
- 13. WH-1.
- 14. SH-5.
- 15. SH-7.
- 16. See http://m.china.com.cn/appdoc/doc_1_3820_252545.html.
- 17. NJ-1.
- 18. SH-2.
- 19. GZ-2.
- 20. CQ-2.
- 21. SH-8.
- 22. SH-5.
- 23. SH-3.
- 24. GZ-1.

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