

## **The Platformization of Propaganda: How Xuexi Qiangguo Expands Persuasion and Assesses Citizens in China**

FAN LIANG<sup>1</sup>

YUCHEN CHEN

FANGWEI ZHAO

University of Michigan, USA

This study examines China's ambitions to strengthen propaganda by creating a platform called Xuexi Qiangguo. Though platform studies have explored the important role of the U.S.-based platforms, we know very little about the intervention of state power in the design and operation of digital platforms. Using a mixed-methods approach, this article examines the technology, content, and users of Xuexi Qiangguo. The results suggest that the power the platform wields operates through its restrictive control modes, platformized persuasion modes, and user datafication. We reveal that online activities are largely limited to information learning and knowledge testing, and meantime, the platform constantly rates and ranks user behavior. Consequently, Xuexi Qiangguo enables state power to penetrate institutional structures and power relations into the online environment, replacing the conventional multisided markets with state-citizen relations. Our study enriches the understanding of the way in which states operate a platform to reinforce ideological persuasion and citizen assessment.

*Keywords: Xuexi Qiangguo, digital platforms, platformization, propaganda, datafication, quantification*

In recent years, digital platforms like Facebook and Google are playing important socioeconomic and cultural roles throughout the world (van Dijck, Poell, & de Waal, 2018). These technocultural constructs have architectural, computational, and infrastructural capacities, aiming to mediate information circulation and shape social relations (Gillespie, 2010). Though previous research has focused mainly on the programmability, multisided markets, and governance of the U.S.-based platforms (e.g., Gorwa, 2019; Helmond, 2015; Nielsen & Ganter, 2018), a burgeoning literature starts to examine how the mechanisms and logics of commercial platforms could fit into political agenda and initiatives in China (X. Chen, Kaye, & Zeng, 2021; Plantin & de Seta, 2019; Zhang, 2020). More recently, the Chinese state is aggressively

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Fan Liang: fanliang@umich.edu

Yuchen Chen: cycyc@umich.edu

Fangwei Zhao: zfw@umich.edu

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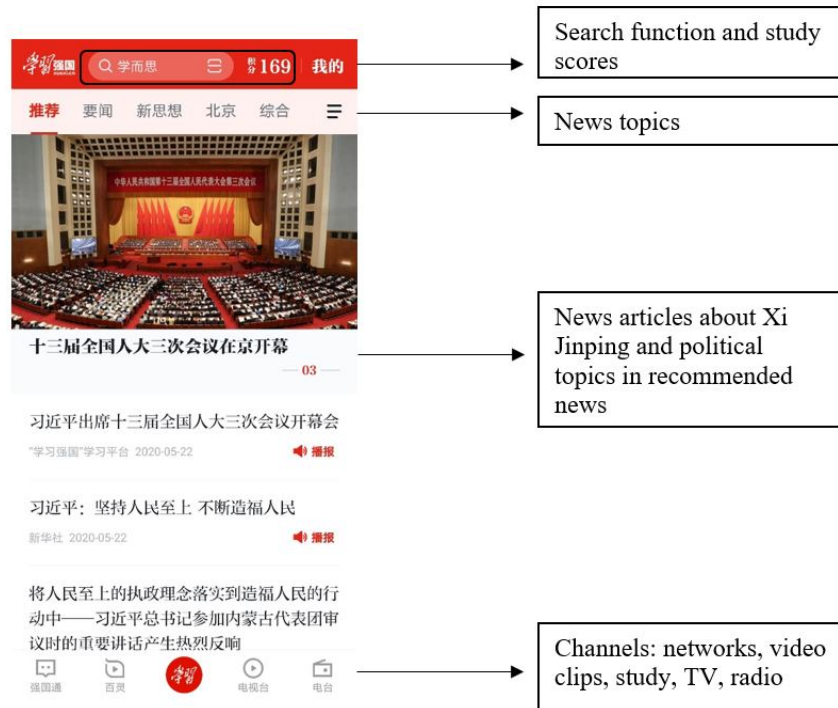
leveraging digital technologies and platforms for the purpose of social control and propaganda (Creemers, 2017; Han, 2018; Leibold, 2020). Therefore, the current scholarship on platform studies needs to interrogate how the intervention of state power reshapes and reconstructs propaganda efforts on digital platforms.

This study aims to fill the gap by examining a Chinese platform Xuexi Qiangguo (i.e., Study the Powerful Nation, hereafter called XQ). Specifically, XQ was released by the Publicity Department of the Chinese Communist Party (CCP) in January 2019. Users can download it from Apple's App Store and device-specific app stores (e.g., Huawei App Gallery). By June 2020, XQ reached more than 180 million users and was the top free app on Apple's App Store in China. Crucially, XQ is different from other commercial platforms in terms of its ownership, content curation, and user behavior. First, the platform is fully controlled by the Publicity Department, and thus the emergence of XQ shows that the Chinese state has become the developer and owner of a platform. Second, the platform is connected with local authorities and used for political learning. Users must sign up with their real names and phone numbers, and the CCP members have to join study groups to connect with other party members in their communities. This suggests that politics and propaganda have been deeply extended into the online environment.

Third, XQ is considered as the online counterpart of Mao's Little Red Book, because it focuses on spreading the political thoughts of Chinese President Xi Jinping (Hernández, 2019). The home page and content of XQ are mandatorily displayed so users cannot personalize the interface and information flows (see Figure 1). Fourth, XQ provides study scores for evaluating user behavior (Z. Huang, 2019). Currently, users can earn a maximum of 59 points per day by reading articles, watching videos, and taking quizzes. More importantly, XQ's users are ranked nationally based on their scores, and people might receive punishment if they have lower scores in their study group. All of these features suggest that XQ allows the Chinese state to insert propaganda into the Web and assess user behavior. In this study, we attempt to address the following research questions:

*RQ1: How does the Chinese state leverage XQ to strengthen propaganda?*

*RQ2: How do XQ's users respond to the use of the platform?*



**Figure 1. The home page of Xue Xi Qiang Guo.**

Recent studies have investigated the economic and cultural roles of Chinese commercial platforms (J. Y. Chen, 2018; Lin & de Kloet, 2019; Wang & Lobato, 2019). This article complements the existing literature by shifting the attention toward a political-oriented application in China. Our analysis yields three lenses to understand the design and application of a state-controlled platform. First, XQ deploys restrictive modes of control, including the identical interface, regulated algorithmic filtering, and limited connectedness, to disseminate ideological content and confine user personalization. Second, it enables platformized modes of persuasion by which the platform penetrates traditional propaganda systems (i.e., content, techniques, and institutions) into its architectures. Third, the platform enacts user datafication to constantly score and sort online activities, indicating the attempt to generate algorithmic visibility and identity for users (i.e., citizens). These results suggest that state power could operate on the platform to maintain the hierarchies between the state and citizens. At the same time, the findings of user responses raise questions about the effectiveness of XQ, as many users are motivated by extrinsic incentives and participate in propaganda-circumvention and gamification practices.

### Emerging Chinese Platforms

Digital platforms are “programmable digital architecture designed to organize interactions between users” (van Dijck et al., 2018, p. 4). Previous studies have mainly explored the roles that the U.S.-based platforms, particularly the Big Five, including Alphabet/Google, Facebook, Amazon, Apple, and Microsoft, play

in North America and Western Europe (e.g., Bossetta, 2018; Gorwa, 2019; Nielsen & Ganter, 2018). More recently, scholars have realized the significant roles of Chinese platforms. In fact, the global platform ecosystem is largely dominated by American and Chinese corporations (de Kloet, Poell, Zeng, & Chow, 2019; van Dijck et al., 2018). China's tech giants like Alibaba, ByteDance, Baidu, and Tencent are essential players in the platform industry (Hong & Xu, 2019; Zhang, 2020). Scholars have examined Chinese platforms like Didi, Douyin, iQIYI, WeChat, and Kuaishou, concluding that these platforms are pivotal actors mediating economic activities and online sociality in China (J. Y. Chen, 2018; X. Chen et al., 2021; Lin & de Kloet, 2019; Plantin & de Seta, 2019; Wang & Lobato, 2019).

Similar to American platforms, Chinese platforms typically boost multisided markets and shape the circulation of cultural products. The video-sharing platform Kuaishou, for example, significantly promotes cultural innovation among Chinese rural youths (Lin & de Kloet, 2019). The riding sharing platform Didi expeditiously reinforces inequalities of gig labor (J. Y. Chen, 2018). Moreover, dominant platforms like WeChat rapidly extend their powers into the Chinese Web and fundamentally affect economic sectors and everyday practices (Plantin & de Seta, 2019). More recently, China's tech giants begin to globalize their platforms. The video-sharing platform TikTok, owned by ByteDance, has become the most downloaded app worldwide.

Notably, the rapid growth of Chinese platforms is tightly related to the government's policies, such as the Internet Plus, released in 2015. In fact, the Chinese government considers platforms as the main participants in the digital economy and innovations (Hong, 2017). Compared with their Western counterparts, Chinese platforms are critical partners promoting technonationalism, offering public services, and achieving official socioeconomic agenda (Lin & de Kloet, 2019; Plantin & de Seta, 2019). Alibaba and Baidu, for instance, provide technologies and data for the construction of China's Social Credit System (Liang, Das, Kostyuk, & Hussain, 2018). The outbreak of COVID-19 has resulted in a collaboration between the Chinese government and two platforms (Alipay and WeChat) to develop contact-tracing apps (Liang, 2020). Commercial platforms also play prominent roles in spreading political agenda and patriotism online (X. Chen et al., 2021). The rise of XQ further challenges our understanding of Chinese platforms and state power, as the Chinese state is currently the owner of a digital platform. Thus, it is important to explore how state actors leverage the architecture of the platform for the purpose of ideological persuasion and citizen quantification.

### **Updating Propaganda Systems in China**

Conventionally, propaganda is "a deliberate, systematic attempt to shape perceptions, manipulate cognition, and direct behavior to achieve a response that furthers the desired intent of the propagandist" (Jowett & O'Donnell, 2014, p. 7). Propaganda involves various forms, like black propaganda and white propaganda, or hard propaganda and soft propaganda. In China, propaganda is considered as broader control systems led by the Party-state, aiming to persuade citizens and manufacture consent (Shambaugh, 2017). The Publicity Department of the CCP is the backbone of China's propaganda system (Brady, 2009). Traditional propaganda techniques include media control, indoctrinations, ideological education and exams, and mass mobilization (Brady, 2009; Shambaugh, 2017). Previous research claims that China has strategically updated its propaganda systems since 1989 (Brady, 2009). The proliferation of digital media offers new opportunities for improving propaganda in the era of Xi Jinping (Creemers, 2017; Repnikova & Fang, 2018).

More recently, China has launched multiple online campaigns, including the use of popular culture and automation to modernize propaganda on platforms (Bolsover & Howard, 2019; Han, 2018). For instance, the Party-state has promoted digital persuasion by actively adopting social media and fostering patriotic users (X. Chen et al., 2021; Han, 2018). Meanwhile, these initiatives emphasize Chinese President Xi Jinping and portray him as a political idol (Repnikova & Fang, 2018). In addition, automation and state-sponsored commenters (i.e., 50 Cent Party) are widely used by the Party-state to disseminate proregime content and distract online opinions on social media (Bolsover & Howard, 2019; King, Pan, & Roberts, 2017). These efforts purport to persuade people using popular culture and digital platforms, indicating that China is extraordinarily adept in leveraging new technologies for propaganda works (Creemers, 2017; Han, 2018).

However, questions about the effectiveness of propaganda remain for discussion. Though China's propaganda can increase regime support and rig public opinions, recent research uncovers that propaganda may backfire in the long term (H. Huang, 2018). The adoption of platforms further complicates propaganda efforts, since propagandists can promote ideological content using digital technologies, whereas citizens have the potential to engage with pluralized online activities (Han, 2018).

### **Platformization and Datafication**

Platforms enhance multisided markets comprising end users, third-party developers, and advertisers (Gillespie, 2010). They can wield enormous power by expanding their services into the online environment (Helmond, 2015). Platformization is defined as "the penetration of economic and infrastructural extensions of online platforms into the web" (Nieborg & Poell, 2018, p. 4276). Indeed, platformization allows tech giants like Facebook and Google to comprehensively penetrate into the Web and deeply shape social structures and everyday practices. Consequently, various stakeholders, including individuals, media outlets, firms, and public actors, are becoming dependent on powerful platforms (Nielsen & Ganter, 2018). In this respect, platforms exercise institutional and infrastructural control over end users, service providers, advertisers, and policy makers (Plantin, Lagoze, Edwards, & Sandvig, 2018).

Moreover, platforms can extract values about users through datafication (Turow & Couldry, 2018). Users often leave digital footprints on platforms, and the by-product has been increasingly harvested by platform owners and their partners for advertising, marketing, and surveillance (Zuboff, 2019). Platformization further helps tech firms aggregate large-scale data from multiple sources across the Web (Helmond, 2015). Furthermore, data mining and real-time analytics allow platforms to construct algorithmic visibility and identity for users, essentially affecting user practices and experiences (Bucher, 2018; Cheney-Lippold, 2018). Consequently, platforms can easily match, track, and steer user behavior (van Dijck et al., 2018). Previous research on platform capitalism has uncovered the data-as-raw-material logic and rampant datafication practices for monetization (Srnicek, 2017). Recently, we have witnessed a shift from cheering platforms' democratizing potential to condemning its infrastructural control over public values, information flows, and political participation (Miller & Vaccari, 2020; Zuboff, 2019).

### Methods

XQ is an important and interesting case because it shows that the Chinese state is actively involved in the process of platformization by deploying a state-controlled platform. Thus, a detailed analysis of XQ helps us understand how state power designs and deploys a platform for propaganda, and how political logics are expanded into the platform. To explore the research questions, this study employs a mixed-methods approach. We first conducted a walkthrough method to understand the technology and content of XQ. The walkthrough method allows researchers to directly engage with a platform via step-by-step observations and documentation of the platform's content (Light, Burgess, & Duguay, 2018). Specifically, the data-gathering procedure followed three steps. First, researchers registered accounts on XQ in April 2019. Next, researchers mimicked the regular use of XQ on their smartphones between May and July 2019. We actively engaged in various activities (e.g., reading articles, watching videos) and recorded the functionalities and content that the platform offered. In the final step, we stopped using XQ and finished our data collection.

Furthermore, we monitored platform manuals, news coverage, and official documentation to understand how XQ is supported by officials, how users build connections on the platform, and what functions are altered during the iteration process. Platform documentation included a user manual developed by the CCP and several guidelines published by local governments. To collect news coverage, we used "Xuexi Qiangguo" as the keyword and searched relevant Chinese-language and English-language articles on Google, Baidu, and LexisNexis between April and December 2019. Finally, official documentation contained reports, regulations, and policies regarding the use of XQ. These supplementary data help us gain further understanding of the development and users of XQ.

To examine how users respond to XQ, we gathered social media posts from Weibo. Weibo is one of the most popular Chinese social media platforms, with more than 500 million users. Using "Xuexi Qiangguo" as the keyword, we collected 8,035 posts published between October 24 and November 14, 2019, via Weibo's API. We further removed posts created by governments, news media, and firms because we were interested in individual users. The data set contained 5,574 posts generated by 4,940 users. We paid special attention to individual users' narratives and conducted close readings of randomly sampled 200 posts, especially the keywords and hashtags. Next, we came up with a dictionary to identify all posts including these terms and hashtags. Researchers then carefully read relevant posts to understand how users discussed their everyday use of XQ and what were users' reactions to the platform.

It is worth noting that Weibo removes politically sensitive content, and its users also self-censor controversial content (Han, 2018). Meanwhile, the government adopts bots and the 50 Cent Party to distribute information on Weibo (King et al., 2017). Thus, Weibo posts may not accurately reflect users' opinions and thoughts. In this study, we aim to identify discourse surrounding XQ, rather than interpreting specific posts. This enables us to explore certain usage patterns among XQ's users.

## Results

### ***Restrictive Modes of Control***

#### *The Identical Interface*

Our walkthrough suggests that XQ offers restrictive modes of control to diffuse propaganda and constrain personalization. Propagandists thus have the potential to nudge people toward desired behaviors by manipulating the interface, algorithmic curation, and network structures of the platform. Rather than facilitating customization and interaction, XQ's control models prioritize ideological content and get users to read specific information. This means that the Chinese state could transform the platform into a centralized communication model for manipulating information circulation and directing user behavior.

The graphical user interface (GUI) refers to the visual portal and layout (e.g., home pages and social buttons) deciding how information is displayed and how users interact with platforms (Bossetta, 2018). Our walkthrough shows that XQ has a simple but standardized GUI, presenting users with chronologically ordered content published by official sources. Figure 1 illustrates that the GUI has four elements. The top of the interface provides a search function and shows users' study scores, followed by five news topics (i.e., Recommended News, Important News, New Thoughts, Local News, General News). Surprisingly, users cannot delete or modify these five categories, indicating that XQ provides identical interfaces to confine user customization.

The main section of the interface is Recommended News, concentrating predominantly on Xi's visits and talks. In addition to texts, XQ also provides audio for each article so that users can listen to the content. Further, the bottom of the GUI provides five channels: networks, video clips, study, TV, and radio. The study channel is the default setting, and users cannot customize it. Users also cannot personalize the layouts of the other four channels. Obviously, XQ has altered traditional platform interfaces by restricting user selection and offering identical GUI. Scholars have found that platforms can delimit user behavior and content elements through their architectures (Bossetta, 2018). While the low complexity of the interface indicates that users can easily navigate the content and functions of the platform, the identical GUI inevitably exerts control over users and content. Therefore, all users have the same interface and home pages, suggesting that the platform promotes a restrictive control mode to constrain content curation and user behavior.

#### *Disabling Algorithmic Filtering*

In principle, platforms rely on algorithms to curate tremendous amounts of content (Bucher, 2018). While commercial platforms enthusiastically promote targeted newsfeed, we find that XQ does not exhibit algorithmic filtering or recommendation systems, as it consistently prioritizes Xi's news and political content. The study channel, for instance, mandatorily presents Xi's news on the top, followed by articles about China's politics and public affairs. Similarly, the TV channel highlights Xi and political news, and users cannot personalize TV programs by watching nonpolitical programs. Rather than offering algorithmically tailored content, XQ injects the same ideological content to all users. Interestingly, XQ has a curated section closely relating to Xi. For example, the study channel recommended an online course about blockchain on October 25, 2019, since Xi Jinping announced the support for blockchain technology on October 24, 2019.

Algorithms by design can facilitate or constrain information distribution and user interaction. Yet previous research claims that Chinese platforms might lack personalization compared with the U.S.-based platforms (Wang & Lobato, 2019). Rather than relying on personal taste, Chinese platforms tend to integrate diverse users into a stable online environment. Consistent with this finding, our analysis suggests that XQ neither gives users control over what information they want to consume nor relies on user preferences for news recommendations. This seems counterintuitive considering how platforms are deploying algorithms to promote content. Given the fact that XQ is developed by the Publicity Department of the CCP, the restrictive control allows the platform to direct user attention and information flows to particular content (i.e., Xi's news). By doing so, users can easily access ideological content, but have limited capacity to personalize the newsfeed on XQ. This suggests that the intervention of state power in platforms has regulated the newsfeed by disabling algorithmic filtering and news personalization.

#### *Limiting Online Connectedness*

Platforms actively engineer user connectedness through their coding and architectures (van Dijck et al., 2018). Users are thus expected to build connections with others and form the networked public. Nevertheless, we find that XQ attempts to knit users' interpersonal networks close together, rather than facilitating algorithmically computed relationships. More specifically, the platform provides a bidirectional network structure, so users can easily establish connectedness with their off-line relationships, particularly strong ties. Currently, XQ offers three ways of searching: mobile numbers, QR codes, and phone contact lists. The searchability on XQ is not high compared with Twitter and Weibo, because users cannot search other accounts using metrics like locations or hashtags. A user needs to either know phone numbers of other users or meet with them in-person. The bidirectional and reciprocal networks imply that user connectedness on XQ primarily mirrors their interpersonal networks.

Interestingly, China's tech giant Alibaba embeds its two platforms into XQ. First, users can log in to XQ through their DingTalk accounts. DingTalk is a platform for enterprise communication and has over 100 million users. Similarly, DingTalk is based on users' interpersonal networks, especially their colleagues and business partners. Second, XQ's users can verify their identity by connecting their accounts with Alipay. XQ also provides interoperability with Alipay so users can transfer money from their Alipay accounts to XQ. Scholars have argued that Chinese platforms are important partners for promoting technonationalism and achieving official socioeconomic agenda (Lin & de Kloet, 2019; Plantin & de Seta, 2019). While the Chinese state relies on platforms like WeChat for political goals, the case of XQ indicates that state power begins to design a new platform for propaganda with the help of tech companies. This further complicates our current case, because XQ collaborates with commercial platforms, and, meantime, Alibaba has expanded its influences into the official platform.

It is clear that XQ's network structures indicate its restrictive control modes. All users are confined to build connections with their interpersonal networks, such as family, friends, and colleagues. In fact, the network structures address the issue of user control, as the platform could enhance interpersonal communication and restrict the possibility of linking users to wider spheres on the platform. As a result, users are more likely to have formal communication with their off-line ties on XQ.



### ***Platformized Modes of Persuasion***

#### *Official Content*

Platforms rarely produce the information they spread; they instead curate and transform content created by other actors like users and advertisers (Gillespie, 2010). Similarly, XQ aggregates various newsfeeds from official sources. Currently, the study channel is the most important section for content distribution. XQ provides 37 news topics in this channel: While 22 topics are related to political content, the other 15 cover nonpolitical news like science, health, sports, culture, and travel. Moreover, the platform offers multiple formats of newsfeed in other channels. For example, users can watch TV programs produced by China's Central Television (CCTV) and 42 local official programs. They can also listen to radio programs from official sources. TV and radio programs include political news, the history of the CCP, online courses, art performances, documentaries, and films. As mentioned, none of the sections provide tailored recommendations or customization functions, so all users receive the same content.

It should be noted that XQ's content is exclusively created by official sources including state media, local governments, and other public institutions. XQ also offers two types of public accounts for subscriptions. The first is Qiangguo Hao, including 88 official media accounts, while the second type is Study Platforms, consisting of 34 provincial-level accounts and seven city-level accounts. This means that the platforms enable propagandists and local governments to integrate ideological content into the architectures of XQ. Although the platform offers various news topics, nonpolitical content is also carefully selected to represent China's "positive energy," nationalist images, and the "new normal." This further restricts users from accessing nonpropaganda information. Notably, this type of content is not unique on XQ, as Chinese commercial platforms like Douyin also facilitate the spread of positive energy and nationalism (X. Chen et al., 2021). XQ further platformizes propaganda content through its technology and content, as all official sources are penetrated into the online environment.

#### *Persuasion Techniques*

One of XQ's novelties is the introduction of persuasion techniques (i.e., political learning and knowledge tests) into its content architecture, which greatly changes how users consume news and information. Traditionally, the CCP considered political education and knowledge exams as key techniques to persuade citizens and manipulate public opinions (Shambaugh, 2017). Citizens were required to study propaganda materials and practice ideological exams in factories, universities, and communities (Brady, 2009). We find that these persuasion techniques have been largely extended into XQ.

Specifically, the platform positions its content as learning resources and thus encourages users to actively obtain knowledge about Xi's thought, public policies, and other nonpolitical topics. The burgeoning XQ shows that propagandists aim to indoctrinate ideological content and stimulate active learning among users, rather than passive exposure. Also, the variety of newsfeed does not necessarily mean users can avoid information learning, as all articles and videos are provided by official sources. Consequently, XQ's users are expected to engage with formal learning and acquire knowledge when using the platform. This

finding shows that the Chinese state has inherently modified how the platform generates the content and how people encounter information.

In addition, the platform enacts a quiz function to test people's knowledge and learning outcomes. At present, XQ offers four types of quizzes—everyday quizzes, weekly quizzes, special quizzes, and challenge quizzes. These quizzes are either multiple-choice questions or fill-in-the-blank questions, including both political topics and nonpolitical topics (e.g., history, science, culture). For example, one question in weekly quizzes asked when China's first constitution was released, and another question was about the outcome of El Niño. These quizzes are also created by official sources. More specifically, everyday quizzes have 10 questions, and users can keep answering this type of quiz. Weekly quizzes have five questions and will be updated every week. Further, special quizzes contain 10 questions and concentrate mostly on Xi's talks. Interestingly, XQ offers hints for these three types of quizzes, so users can always get the correct answers. By contrast, challenge quizzes do not include hints and users can keep taking the quiz if they do not provide an incorrect answer.

Evidently, the quiz function allows the platform to evaluate what users have learned and how they understand political agendas and nonpolitical issues. What this finding suggests is that, as the owner of a platform, the CCP has significantly revised the content element to propagate ideological content and evaluate citizens' knowledge. This allows the Chinese state to considerably penetrate traditional persuasion tools into the online environment. It is worth noting, however, that taking quizzes does not necessarily mean that people internalize political knowledge or increase their loyalty to the CCP. As will be shown, users are motivated by extrinsic factors and engage with gamification in their everyday use of XQ.

### *Institutional Structures*

While the Publicity Department and mass media are the main actors of China's propaganda systems, other organizations also involve in ideological campaigns and thought management in China (Brady, 2009; Shambaugh, 2017). In the current case, XQ organizes study groups for enforcing users' engagement with the platform and local authorities. We find that many local entities (e.g., governments, communities, state-owned enterprises, universities) require the CCP members, civil servants, public sector employees, and college students to join virtual study groups based on their party branches. Users cannot hide their profiles or disconnect with other group members. As users are connected with entities they belong to, study groups help platformize existing institutional structures and power relations.

Furthermore, user data, like study scores, are shared with local authorities and the CCP leaders, thereby fostering off-line monitoring and user engagement. For instance, some institutions issued regulations and often set daily requirements for all employees. Hence, users are required to use XQ and earn certain points every day. Moreover, study groups could facilitate competition among group members because users can compare their scores with other members. Accordingly, XQ creates a peer-reviewed mechanism by which users can compare themselves with others and identify people with low scores. As will be discussed, public shaming and peer pressure coming from off-line interpersonal interactions and institutional impositions promote the use of XQ.

It is noteworthy that XQ also expands its services into physical spaces in several cities. For example, Shanghai inaugurated an XQ theme park in December 2019, aiming to motivate social interactions in public spaces. Hangzhou and Changsha deployed special subway trains for XQ, so passengers can engage with news and quizzes while riding subways. These projects suggest that XQ attempts to enhance user engagement inside the platform and outside its territory. Thus, the combination of online assessment and off-line enforcement entails that the platform offers a new way for local authorities to constantly track and evaluate citizens' political learning and online behaviors.

These findings suggest that the Chinese state is rapidly extending institutional structures and power relations into the architectures of XQ, thereby exerting significant control of citizens. Previous studies show that platforms can penetrate their power into the online environment and generate platform dependence (Helmond, 2015; Nieborg & Poell, 2018). Our results point out that propagandists and state power have the potential to platformize their power and influences. The penetration hence enables the platform and authorities to indoctrinate ideological content and meanwhile monitor user behavior. In other words, the Chinese state could employ the platform to extend existing dependencies and hierarchies between the state and citizens into the online environment. This finding yields insights into the platformization process beyond commercial platforms and monetization (Helmond, 2015), suggesting that platforms could be used for conducting social control and maintaining power relations.

#### ***Datafication of Users***

What is striking in the case of XQ is the role that datafication plays in targeting and assessing users. While commercial platforms frequently exploit user data through datafication, we find that XQ pioneers a new mode for rating and ranking users. XQ's datafication functions through study scores. At present, users can earn study scores by reading articles, watching videos, and taking quizzes. The study scores are displayed on the top-right of the GUI and will be immediately updated when users finish one activity (see Figure 1). XQ's users can earn a maximum of 59 points per day by participating in 14 activities. We characterize these into four categories: log-in, information learning, information engagement, and quizzes (see Table 1).

**Table 1. User Datafication on Xuexi Qiangguo.**

Categories	Activities	Points	Maximum points per day
Log-in	Log-in	1 point	1
Information learning	Reading articles	1 point/1 article	6
	Watching videos	1 point/1 video	6
	Time spent on articles	1 point/2 minutes	6
	Time spent on videos	1 point/3 minutes	6
	Using local channels	1 point/1 channel	1
Quizzes	Everyday quizzes	1 point/2 correct answers	6
	Weekly quizzes	1 point/1 correct answer	5
	Special quizzes	1 point/1 correct answer	10
	Challenge quizzes	3 points/5 correct answers	6
Information engagement	Archive	1 point/2 archives	1
	Sharing	1 point/2 shares	1
	Subscription	1 point/1 public account	2
	Comments	1 point/1 comment	2
Total			59

Source: Xuexi Qiangguo.

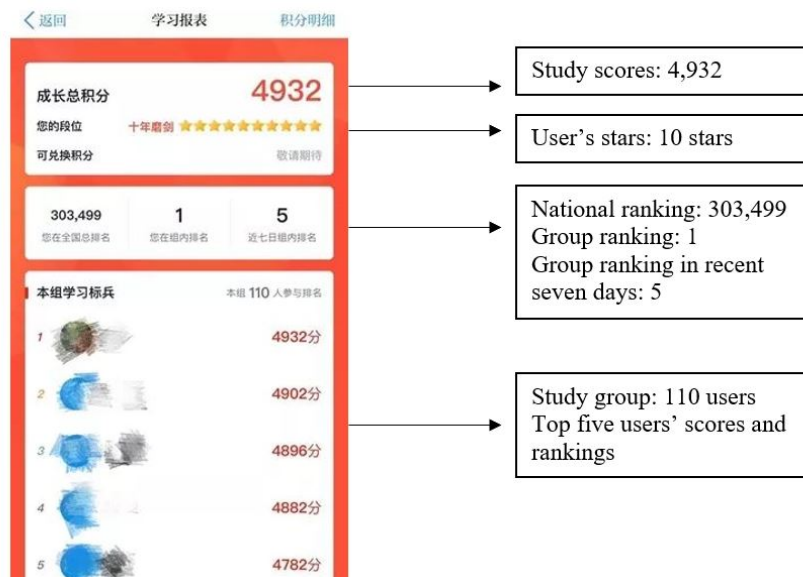
To be specific, users receive one point per day when they log in to XQ. They can also earn points by reading news articles and watching videos. Users obtain one extra point if they spend at least two minutes on an article or three minutes on a video. Overall, a user can acquire a maximum of 25 points every day via information learning. Furthermore, information engagement indicates whether users archive, share, subscribe, or make comments on XQ. The maximum points each user can get from this category are six. Finally, users can benefit from taking quizzes on XQ. They need to provide the correct answer for each question, and they will not receive points for offering the wrong answers. Users can earn a maximum of 27 points per day by taking quizzes.

Table 1 also illustrates that XQ provides more incentives for learning and tests because users can earn more points from these two groups rather than information engagement. As such, users are more willing to read news articles, watch videos, and take quizzes on XQ. By contrast, users have less motivation to share information or make comments on XQ. This suggests that datafication is built to direct the desired way toward information learning and, in the meantime, to evaluate citizens' learning outcomes. However, study scores may not accurately reflect behaviors that the platform attempts to quantify (e.g., political knowledge and loyalty) and effectively affect users. A high score in quizzes does not necessarily lead to increased political knowledge.

Datafication means that user behavior is quantified and assessed by XQ. Therefore, the platform could constantly trace and rate how users engage with the platform and generate further means of user control. The constant assessment further creates algorithmic visibility and microtargeting to all users, as the platform knows exactly how many articles users read and how many correct answers they provide in quizzes. Online activities thus become transparent and quantifiable, meaning that XQ can simplify user behavior and knowledge into a single metric for evaluation and surveillance.

Interestingly, XQ commodifies study scores so users can receive material benefits and reputations. First, the platform provides a shopping function, and users can trade in their scores for a wide range of goods, including books, groceries, and smartphone data packages. Second, XQ collaborates with local governments for providing various off-line benefits. For example, users can get free attraction tickets in Henan, Jiangxi, Guangdong, and Beijing if they have more than 1,000 scores on XQ. Third, local governments generate red lists rewarding people with higher scores. Our monitored news coverage illustrates that those who actively read news and take quizzes would receive higher scores, so they are classified as “good citizens” by local governments. Apparently, commodification could encourage users to earn more points through learning and quizzes, suggesting that XQ generates new ways to stimulate user engagement.

Moreover, XQ ranks users based on their scores and offers detailed study reports (see Figure 2). The study report includes three elements: user’s scores and ranking stars, national and group rankings, and scores and rankings of other group members. Figure 2 illustrates that the user earned 4,932 points and received 10 stars (the highest evaluation). Further, the user’s national ranking was 303,499 and she achieved the first place in her study group. Obviously, users can not only compare themselves with other group members but also know their rankings in the nation. The ranking system thus generates peer pressure and cultivates competition among users.



**Figure 2. The study report on Xuexi Qiangguo. Personal information remains anonymous.**

As shown above, XQ enhances user connection with existing institutional structures through study groups. We find that many institutions adopt study scores and group rankings to monitor and enforce user engagement. Some group leaders, for instance, calculate and publish daily average points for group members, so users can compare themselves with the benchmark. Other groups praise members who are top users and meantime denounce those who are at the bottom of group rankings. As such, the rankings

indicate the assumption that the higher one's score is, the more active the user is in political learning. The combination of online datafication and off-line monitoring enables local institutions to target and manage certain groups of users more effectively. XQ's datafication, together with the pressure from institutional enforcement, could discipline users and motivate their usage.

Overall, XQ's datafication improves the possibility of expanding persuasion and rating citizens. Although a higher score does not necessarily mean internalized knowledge or increased loyalty, such a mechanism can capture massive amounts of data for user assessment. In fact, scholars have revealed that platforms actively exploit user data for marketing and surveillance (Zuboff, 2019). These practices allow platforms to construct algorithmic visibility and identity for end users (Bucher, 2018; Cheney-Lippold, 2018). The visibility illustrates that XQ aims to comprehensively see user behavior and performance on the platform. To some extent, every user is involved in a state of visibility to XQ and institutions they belong to. Moreover, the algorithmic identity means that XQ can transform users into classification schemes (i.e., rankings), making people measurable and comparable. The rankings can be further used to identify good citizens. Accordingly, the platform and authorities could determine who should be targeted for access or exclusion, whereas users remain relatively passive as they need to participate in study groups and interact with existing power structures.

From a broader perspective, we argue that XQ implies China's ambitions to build an indicator-based and data-driven society. In the last few years, China has made considerable progress in constructing the Social Credit System and private credit platforms (Creemers, 2018; Liang et al., 2018). Though the current national system has not assigned numeric sources for people, local governments and private credit agencies are implementing scoring systems that calculate and rank personal trustworthiness. Moreover, ethnic sorting has been used to strengthen surveillance in Xinjiang (Leibold, 2020). These initiatives indicate that China has heavily invested in the use of datafication for social control. The rise of XQ further suggests that, in addition to credit assessment, the Chinese state also deploys a platform for evaluating political learning and ideological education. Therefore, the practice of datafication could become a common means for social control in contemporary China.

### ***User Responses: Extrinsic Motivations, Resistance, and Gamification***

By analyzing 5,574 Weibo posts, we identify three types of usage among XQ's users: extrinsic motivations, resistance, and gamification. First, extrinsic motivations involve off-line pressures and online incentives. Many of XQ's users used the hashtag "#HaveYouStudiedToday" or the keyword "forget to learn" to imply that they were required by employers, local governments, or universities to use XQ. Some users mentioned that they forgot to use the platform before midnight, whereas others complained that they did not meet the daily standard. Several users also expressed negative emotions toward the mandatory use: Some felt fear or guilt when they forgot to use the platforms, whereas others felt angry about political content on XQ. This finding supports our claim that XQ provides a means for combining online assessment and off-line monitoring, suggesting that local entities could encourage or even coerce user engagement.

Furthermore, online motivations like scores and rankings also stimulate user participation. People used the keywords “study scores” and “rankings” to express their concerns about online incentives. For example, some users revealed that they would receive criticisms or fines from their employers since they did not gain at least 30 points per day or they were ranked the last in their study groups. This shows that XQ’s datafication plays a key role in encouraging everyday use and punishing those who failed to achieve the goal. Importantly, online motivations could prescribe user behavior and simultaneously shape social norms. For instance, several users listed questions from challenge quizzes and then explained their answers and reasonings. Users also expressed that they earned more points by moving away from information engagement to taking everyday quizzes. Others said that most of their friends had more than 5,000 points on XQ.

Second, we find that people were aware of propaganda operations on XQ and often resist or evade political content. Some users, for instance, actively engaged with nonpolitical content using the hashtag “#XQIsATreasureApp.” People indicated that they watched live entertainment programs, TV series, documentaries, or listened to music on XQ. Several users also said that they were learning Spanish and history on the platform. In fact, many users considered XQ as mobile TV because they can watch TV entertainment on the platform. While restrictive control modes on XQ offer identical GUI and hinder news personalization, users still have the capacity to evade political content. Another approach that users can resist propaganda and extrinsic punishments is to hire paid services for fake learning and gaining scores. The click fraudster can help users obtain 40 to 50 points every day.

Finally, gamification was also popular among users. Several people expressed that they achieved 8,888 points on XQ, as Chinese people believe that “eight” is an auspicious number that brings good fortune. Users also gamified the rankings on XQ. For instance, one user celebrated that his national ranking has advanced by 320,000 within one month, and another user indicated that her group ranking was in the top eight. Moreover, users often gamified challenge quizzes on XQ. Several users showed that they enjoyed the competition with their family and friends, rather than political learning in challenge quizzes. Others exhibited that they had answered more than 30 questions in challenge quizzes. Thus, though the quiz function can motivate users to engage with knowledge tests, it does not necessarily mean that people internalize political knowledge or increase their loyalty to the CCP.

Taken together, these findings suggest that there have continuous tensions between the platform and its users. Our result reveals that user engagement is not entirely attracted by the content, but enforced by imposed requirements from off-line entities. At the same time, users are aware of propaganda operations and often resist or gamify political persuasion and datafication on the platform. Therefore, restrictive modes of control, platformized modes of persuasion, and datafication of users do not certainly mean that people are passive audiences and cannot avoid propaganda on XQ. The findings suggest that XQ’s users can resist identical interface, news curation, study scores, and mandatory use. This brings questions to the effectiveness of the platform.

### Conclusion

China is currently experiencing the rapid process of platformization (de Kloet et al., 2019). Multiple commercial platforms are progressively extending their products and services into the online environment, fundamentally transforming the Chinese society and economy (J. Y. Chen, 2018; Lin & de Kloet, 2019; Plantin & de Seta, 2019). At the same time, the Chinese state is aggressively using digital platforms for political purposes (Creemers, 2017; Han, 2018). Yet there is much that remains underresearched about the design and practice of state-controlled platforms. This study thus entails an expansion of platform studies previously focusing on commercial platforms driven by economic imperatives. Our results provide insight into how propaganda has been platformized in China.

What is arguably new about XQ is the fact that state power has become the developer and owner of a platform, rather than depending on commercial platforms. The shift of the ownership thus challenges our understanding of digital platforms, because XQ is operated on a political basis and the conventional model of multisided markets has been superseded by state-citizen relations. The embeddedness of political logics and institutional structures indicates that the Chinese state has deeply interfered with how the platform is operated and how users act on the platform. This could further platformize politics into the Chinese Web.

This study reveals that propagandists could nudge people toward desired behaviors by manipulating the interface, algorithmic curation, and network structures of the platform. This means that the Chinese state can leverage platform architecture for political purposes. At the same time, the process of platformization also suggests that state power rapidly extends existing institutional structures and power relations into the online environment. This allows XQ to spread ideological content and monitor user engagement. Moreover, datafication of users improves the possibility of expanding persuasion and rating citizens. Though a higher score does not necessarily mean internalized knowledge or increased loyalty, such a mechanism can capture massive amounts of data for user assessment. More importantly, we argue that XQ is not an isolated case in China; it instead shows that the state can reinforce power relations through digital platforms. The deployment of XQ also indicates the widespread presence of quantification and datafication in China, aiming to continually rate and rank people using data-driven tools (Creemers, 2018; Liang et al., 2018).

One limitation of our study is the difficulty of examining the effectiveness of XQ. Although we employ Weibo to analyze user responses, it is still unclear how XQ persuades citizens and steers user behavior. It is possible that XQ may backfire since it stimulates negative emotions among some users. Thus, future research could be dedicated to the analysis XQ's effectiveness and the tension between the platform and citizens. Another limitation is that our study examines the technology, content, and users of XQ while paying little attention to the third parties, like official media and local governments. The results obtained here hence can be supplemented by a critical analysis of official complementors on XQ. Finally, future research could investigate the partnership between XQ and Alibaba to understand the state-corporate nexus in the platform ecosystem. The collaboration between state power and tech giants may expand our understanding of platforms.



In conclusion, this study approaches XQ from a platform perspective by investigating the technology, content, and users of the official platform. Our results suggest that state power can profoundly modify platform technology and content for its political education and ideological infiltration purposes. In this process, platform users (i.e., citizens) are constantly rated and ranked, and state–citizen relations have been deeply embedded into the platform.

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