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The politics between power and digital capital in China's cyberspace: a case study of Chinese digital games

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Based on a case study of digital games, this paper explores the politics between power and digital capital ingrained in the rapidly expanding Chinese cyberspace. The results show that digital capital and power in cyberspace form a paradoxical relationship that produces four sorts of politics: alliance, semi-alliance, disjunction, and semi-disjunction. Chinese modernity, as well as China's unique capital structure and governance system, have contributed to these politics. It is these politics that have given rise to a more decentralized regulatory system, brought freedom and autonomy to cyberspace, and maximized the Chinese government's power. Then digital capitalists in cyberspace can weave digital technology quickly into various social practices and make full use of netizens' creativity. Consequently, the politics between the Chinese government and digital capitalists in cyberspace not only triggered an unexpected social transformation but also opened up a different path for Chinese digital technology.

KEYWORDS

digital technology, modernity, body politics, identity, cyberspace, power, governance

1. Introduction

Nowadays, digital technology is empowering modern Chinese people and liberating their productive power to promote Chinese economic growth. Therefore, some Chinese scholars view digital technology as the backbone of China's economy and examine digital governance within a nation-state power framework (Dai and Bao, 2017). However, they downplay the structural politics brought about by the rise of digital technology. Through a case study of Chinese digital games (in general, digital games include a wide range of games based on digital platforms, such as computer games, online games, television games, arcade games, mobile games and games in virtual environments) (Rutter and Bryce, 2006, p. 8), this article runs directly counter to the idea that cyberspace is never a homogeneous space that eliminates power-capital politics, locates these politics within the history of Chinese modernity and develops cyberspace as a multipolar politic-economic space. According to a US military definition, "Cyberspace is a domain characterized by the use of electronic and the electromagnetic spectrum to store, modify, and exchange data via network systems and associated physical infrastructures." (US Department of Defense, 2010), this article defines cyberspace as a virtual world or digital space consisting of hardware and software created by digital technology (Giles and Hagestad, 2013).

Power refers to the nation-state government, which claims sovereignty that is more or less anarchic. In contrast to this notion, we find that Chinese state power is not a conservative hierarchy in cyberspace but entangles with private and foreign capital, cultural factors, and bottom-up vitalities (Yang, 2003). Digital capitalists, who are behind the development of services and products for an economy based on digital technologies (Bukht and Heeks, 2018), generally act positively toward liberalism and global capitalism, and can be largely contingent and temporarily free from Chinese power mechanisms. Under the influence of this escape, power and capital have formed a repressive-supportive, competitive-cooperative relationship in cyberspace.

1.1. The framework for power-capital politics in China's cyberspace

As a contradictory unity, the politics of power and digital capital in Chinese cyberspace can be described as “Neo-Leninism” or Leninist corporation (Pei, 2006), which does not deny the Chinese government as a predominant supplier of effective public governance and an immensely powerful institution designed to address the problems of Chinese modernity. However, for years, debates over the role of the state in digital space have been distorted by a series of false dichotomies and cyber-libertarianism (Milton and Mueller, 2010, p. 2).

The political possibilities of digital technology coexist with the state's power, which generates conflicts in cyberspace. The Chinese government handles these politics through self-updating in the existing power institutions, but sometimes it cannot solve all the problems, especially when digital capitalists endanger the government's authority (Lirui, 2015). Therefore, we need to explore the reason why the Chinese government maintains non-state capital in cyberspace? What is the role of state power in the development of digital technology?

Essentially, this article explores why digital technology can be a boost to Chinese growth within the relationship between digital capital and power. Some early advocates attribute the rapid economic growth to emancipatory capabilities and innovative power, which were engineered into internet protocols without any other forces involved (Jorgenson and Stiroh, 1999). Some Chinese scholars argue that the internet has brought changes to Chinese society with its rich resources, freedom and independence (Zhang et al., 2010). The above discussion falls into technological determinism. In order to go beyond technological determinism, this paper takes a political-economic theoretic framework to analyze the political and economic factors involved in China's cyberspace.

The politics of digital capital and power in cyberspace not only concerns economic benefits but also links to political-ideological legitimacy (Zou, 2023). Chinese state power as a party authority over cyberspace differs from the liberal-capitalism model. China's government has a pragmatic logic in cyberspace where it strengthens its political authority, promotes economic growth and prioritizes technological innovation (Hachigian, 2001). It endorses some contradictory policies, mostly within the Chinese modernity

framework, and forms a new model of disjunction and alliance with capital (Jorgenson and Stiroh, 1999).

1.2. Ambiguous logic behind capital-power politics

The politics between digital capital and power is an ambiguous system: from ownership to management rights, from absolute sovereignty to multiple surveillance, both are caught in a vague position that is between repressive and supportive. Specifically, the logic of governance in cyberspace is mainly through the administrative and juridical supervision of digital capital (Zhang, 2010). This logic can be divided as follows.

First, market licensing policies focus on operational security, business qualification, minimum space size, the number of computers, and so on. Second, business restricting policies mainly focus on business scope, business hours, and business goals. These policies include banning digital game services and information that violates national laws and security (Ministry of Culture of China, 2010). However, except for the repressive policies mentioned above, the government also issues supportive policies for the standardized, industrialized, and large-scale homogeneous development of digital technologies. For example, the Chinese Culture Market Development Center of the Chinese Ministry of Culture launched an internet industry revitalization plan in July 2005, including the plan for improving digital games quality, the plan for promoting digital technology, and the plan for integrating the internet cafe industry, and the “10 + 3” layout plan: 10 national brands, and 3 bar chains in each province.

In recent years, digital technology has been increasingly shaped by political, economic, cultural, and other historical factors in China and the Chinese government named it “Internet+” (Tang et al., 2017, pp. 13–15). The supportive government power integrated digital capital gradually into Chinese society and produced a subculture that is beyond the government's control, and in particular, exerted power over space and body politics. The alliance of power and capital seems irresistible (Dyer-Witheford, 1999, p. 1), and promotes an expansion of the digital game space that pertains to complex competition and cooperation between economic and political power. Hence, it drives the transformation of Chinese society, leading the government to frequently adapt itself to make the most of this alliance. The simultaneous repressive and adaptive nature of the state in cyberspace means that the state will govern differently on different issues, as the politics between power and capital are central to the concerns of contemporary China (Jorgenson and Stiroh, 1999).

This repressive-supportive or repressive-adaptive logic stems from (a) information control, (b) technonationalism, and (c) social fears, (d) pragmatic nationalism (Ernkvist and Ström, 2008). Unlike the mass media, which acts as the mouthpiece of the state, cyberspace is primarily tasked with harnessing its technological potential to promote Chinese modernity. By owning the media, the state, with its strong ideological control over the personnel of media organizations and strict censorship mechanisms such as “stratified censorship” (in Chinese, *ceng ceng shen he* 层层审核), has created a complete system of nation-state newspaper and

television propaganda. While the state power accepts non-official and non-state ownership in cyberspace to exploit its economic and techno-nationalist possibilities, this has resulted in ambiguous policies that are more pragmatic, and where digital capitalists can be more dedicated to pursuing commercial interests (Qiu, 2000).

2. Methods and data

2.1. Research aim and research questions

We must be aware of the new possibilities, new social relations and new economic structure fostered by digital technology, but at the same time, we must be wary of the political, cultural and economic forces that shape digital technology (Mueller, 2010, p. 5). In the ambiguous policy context, the impulse of capital constructs cyberspace and influences the development of digital technology with its interests. Therefore, capital's excessive speculation in cyberspace poses a challenge to the rationality and governmentality of power. The capital also leads to deficiencies in power discipline, and the lack of stability, rationality, and integrity of regulatory policies.

Moreover, the multi-agency and multi-fragmentation of government policies lead to offenders belittling the government and gaining speculative benefits, ultimately increasing governance costs and freedom for cyberspace. State power and digital capitalists have created multiple politics in China's cyberspace. Analyzing these politics is crucial to understanding the model and logic of digital technology development in China. Therefore, this study aims to prospectively explore the politics between power and capital in Chinese cyberspace and attempts to answer the following questions.

RQ1: How does the Chinese government govern digital capitalists in China, and what structural and contextual factors do government policies provide for the development of digital technology?

RQ2: How do digital capitalists bargain with the Chinese government, and what are the perceived trade-offs between them?

RQ3: What are the politics between the Chinese government and digital capitalists, and how do these politics influence the path of digital technology development in China?

2.2 Methodological and theoretical approaches

This study focuses on dissecting the politics between digital capital and power in China's cyberspace through a case study of Chinese digital games, analyzing the unique governance policies of Chinese cyberspace, as well as identifies potential barriers and facilitators of digital capitalists' coping strategies in the face of Chinese government policies. The paper then further attempts to reveal the underlying reasons why digital technology has become the driving force of Chinese society. Therefore, the theoretical source of this study lies in the political economy paradigm, and the approach adopted is shown in Figure 1.

(1) Step 1: After this paper has developed its problem statement and research questions, it selects a common or representative

case of Chinese cyberspace-digital games-as the research focus. Digital games can provide a deep insight into the politics between power and digital capital in China's cyberspace.

This article conducts an explanatory case study of digital games because the insights gained from such research can help us conduct an in-depth exploration of intricate digital technology within the digital games context. The researcher is interested in seeking factors that may have caused the rapid growth of digital technology. The discussion of the interplay between capital structure and the operation of power in the development of Chinese digital games contributed to an examination of the relationship between the government and digital capitalists in cyberspace.

(2) Step 2: Build a theoretical framework by borrowing from the research paradigm of the political economy framework. Because case study is not just an isolated description or focus on concrete details, but is integrated into general theories. We use the political economy framework as a theoretical foundation for the case study of digital games, so that we can explain the case under investigation.

This paper takes a political economy framework to explore the structural and contextual factors, incentives, bargaining processes, and stakeholders surrounding the development of digital technology. The inter-agency relations, the changing role of private capitalists, and the role of key actors, netizens, and institutions within the policy-making process. The political economy framework involves a content analysis of existing policies and management logic. Through a political economy theoretical framework, this study identifies digital policy implementation barriers and enables, including why private digital capital is embedded in China's cyberspace for achieving Chinese modernity and future opportunities for addressing barriers and incorporating cultural, ideological, and socio-economic considerations into promoting the development of digital technologies. This article tries to document the digital capitalists' struggles and resistances that accompany the changing balance of power, and to explore the implications for digital technologies.

(3) Step 3: Collect data. There are many different methods we can use to collect data on the research subject. Case studies tend to focus on qualitative data. So, this paper conducts the political economy framework at different growth stages of digital technologies through various sources of qualitative data such as newspaper reports, electronic bulletin, official records, and netizens discourse (as shown in Table 1). Most of the data has been published, and we can examine them on the Chinese websites.

(4) Step 4: Describe and analyze the case. In writing up this case study, the paper brings together all the relevant aspects to give as complete a picture as possible of the research subject. The paper describes the case in a more explanatory style, aiming to explore the case from various angles and analyze its implications. During the analysis process, this paper attempts to give contextual details about the case, connects it back to

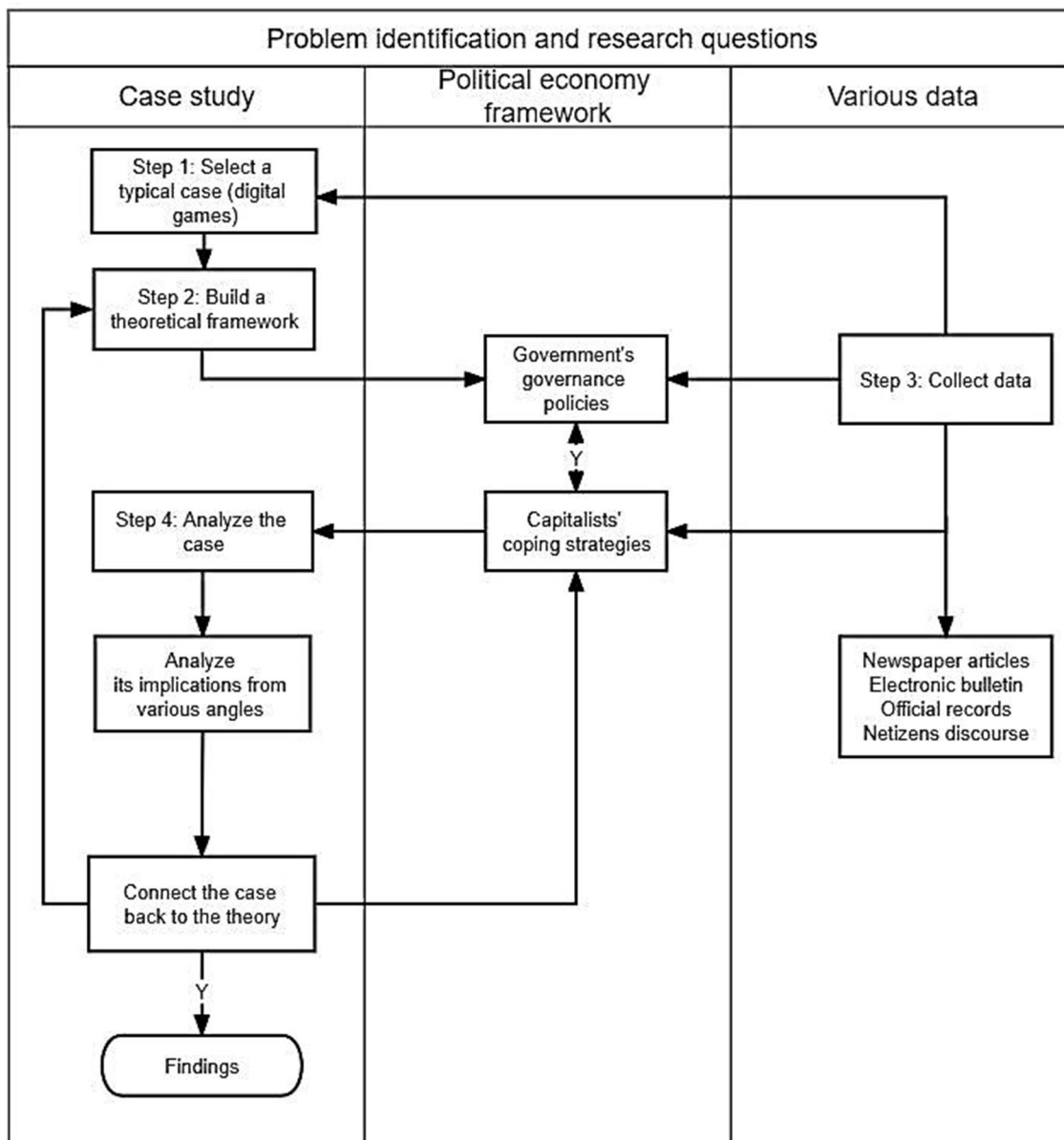


FIGURE 1
The methodology of this paper.

the political economy framework, and discusses how it fits into broader debates about politics in China's cyberspace.

Case studies not only provide informative descriptions of intricate politics between digital capital and power in China's cyberspace within China's digital games context but also analyze the ins and outs of these politics in depth, helping us to grasp the essence of China's digital technology development. However, there are also some limitations. The main limitation of this approach is that there are certain biases, such as selection bias, due to the subjective factors of the researcher, which may affect the validity and generalizability of the research findings.

To enhance the generalizability of the findings, this article chooses a typical and common case in Chinese cyberspace. Revenues from Chinese digital games account for most of the interests of Chinese digital capitalists, and have also triggered the Chinese government's intricate attitude and governing policies toward cyberspace. Therefore, a case study of Chinese digital games can reveal the inner and general laws of Chinese cyberspace. Then, this study draws on the political economy framework to explore these inner laws and engages these laws in a dialogue with the theory.

To overcome the limitations of validity, this paper applies a longitudinal multi-angle approach to study a typical or

TABLE 1 Main qualitative data for the paper.

Types	Title	Source
Newspaper articles or online news	1.Summary of China's Informatization: A Review of the Development of Informatization [2008-12-15]	https://tech.sina.com.cn/roll/2008-12-15/1005914377.shtml
	2.How Does Digital Capital Form? What Are the Implications for Economic Development? [2022-10-17]	https://baijiahao.baidu.com/s?id=1746920513574657569&wfr=spider&for=pc
	3.The Evolution of the Computer and Digital Game Industry: 1975-1989 [2023-06-21]	https://view.inews.qq.com/k/20230621A0141O00?no-redirect=1&web_channel=wap&openApp=false
	4.Regulatory Framework and Key Policies for the Online Mobile Gaming Industry [2019-09-16]	https://www.reportrc.com/article/20190916/1423.html
	5.The Ministry of Culture Issued a New Regulation on Online Games to Provide Legal Protection for Management [2010-07-11]	http://games.sina.com.cn/y/n/2010-07-11/1036416151.shtml
	6.China's Game Market Actual Sales Revenue of 203.61 Billion Yuan in 2017 [2017-12-19]	http://baijiahao.baidu.com/s?id=1587191942354125094&wfr=spider&for=pc
	7.Internet-addicted Boy [2005-08-05]	http://www.cntv.cn/program/xlft/20050805/101495.shtml
	8.When Arena of Valor Was Criticized, Who Remembered the Lv Ba Software? [2017-07-07]	https://www.163.com/dy/article/CONRO59E05178JUB.html
	9.Reading Chinese Internet from Tencent- Reading Notes on Tencent Biography [2020-03-17]	https://www.sohu.com/a/380901499_120057219
Electronic bulletin	1.Analysis of China's Online Game Industry Size and Revenue in 2017 [2017-08-18]	https://www.chyxx.com/industry/201708/552130.html
	2.Analysis of the Development Status and Trends of China's Online Game Industry in 2018 [2018-04-18]	https://www.chyxx.com/industry/201804/631654.html
Official records	1.National High-tech R&D Program (863 Program) [2006-10-21]	https://www.most.gov.cn/ztl/swkjjh/kjihjj/200610/t20061021_36375.html
	2.Circular of the General Office of the State Council Transmitting the Opinions of the Ministry of Culture and Other Departments on the Implementation of Specialized Governance of Electronic Game Business [2000-06-15]	https://www.gov.cn/gongbao/content/2000/content_60240.htm
Netizens discourse	1.How Would You Rate the Video Production of "Kan Ni Mei: the Internet Addiction War" and the Impact it Has Had? [2005-08-01]	https://www.zhihu.com/question/34472280
	2.Classic Lines From "Kan Ni Mei: the Internet Addiction War" [2022-02-04]	https://www.5iyl5.com/bbs/show-12561.html
	3.4K Ultra HD Commemorative Edition of "Kan Ni Mei: the Internet Addiction War" [2022-11-18]	https://www.bilibili.com/read/cv19851642/?from=search&spm_id_from=333.337.0.0&jump_opus=1

representative case in China's cyberspace under the political economy theoretical framework. A longitudinal approach can help us to track the cause and effect of the case in a long time. By using a multi-angle analysis approach, we can validate the stability of the findings across situations. Moreover, the validity of the findings is also strengthened by the use of multiple sources of data in this paper. These multiple sources of data are evidence of the multi-perspective and multi-faceted nature of Chinese digital games. This article is not satisfied with collecting publicly available data but also conducts an in-depth and meticulous investigation of data to understand the motives and mechanisms behind the case. Instead of analyzing the data in a subjective and fact-by-fact way, this paper adopts an objective, contextual and structural analysis to explore the data further.

3. Findings: the politics between digital capital and power in china's cyberspace

3.1. The alliance between capital and power

In the 1990s, computers served as an indicator of the information society, the power of info-capitalism, and the benefits of commercialism. This is what Mosco (2005, p. 24) called the "digital sublime." The possibilities of digital technology have been transformed from a utopia of technological democracy to a localized resource of constructing legitimacy for the nation-state in China. In this way, digital technology becomes an ideological expression of Chinese modernity and the anxieties that accompany it.

In Max Weber's famous studies on the sociology of religion, he "not only depicted the secularization of Western culture but also and especially depicted the development of modern societies from the viewpoint of rationalization" (Habermas, 1987, p. xx). This rationalization process is associated with the institutionalization of purposive-rational economic and administrative governance. Then in the 1950s, "modernization" was introduced into the "modernity" program. However, Chinese modernity is first and foremost a political task aimed at establishing an independent social system to achieve modernization goals, including the enlightenment and prosperity of a modern nation-state (Zou, 2005). China encounters modernity with some doubts and criticisms, so it attempts to localize modernity with its logic. What matters, therefore, is whether China can identify the real problems of its society and whether it can cautiously address them in a given situation (Wang, 1998). The politics between digital capital and power in cyberspace is part of Chinese modernity, which determines political legitimacy and ideological security.

As a signifier of Chinese modernity, digital technology and its capital are a kind of "productive" force. Therefore, China has overcome some of the limitations of government based on power sovereignty in the early times. More importantly, the practices of internet service providers and digital capital operators can establish their order and bargain with the government through bilateral and sometimes multilateral capital arrangements (Jorgenson and Stiroh, 1999). In addition, the state supports the stable operation of private or foreign capital in cyberspace. For example, the Chinese government supported a "private" company—Huawei Technologies Co.Ltd—to become one of the largest suppliers of telecommunications equipment (Ball, 2011). In this way, the Chinese government has promoted its modernity and legitimized its authority.

Since the 1980s, the Chinese government has launched several network projects, such as the Chinese Academy of Sciences Net (CASNET), the China Research Net (CRN), the National Computing and Networking Facility of China (NCFC). Then in the 1990s, the Chinese government allocated considerable funds to foster a digital economy such as "Golden Gate," "Golden Card," "Golden Shield," "Golden Customs," and "Golden Tax" while it was suffering from economic difficulties (Ye, 2011, p. 7).

Throughout the 1990s, the government took a laissez-faire approach to digital capital. In 1999, China.com went public on the NASDAQ and its stock price rose 235%, from 20 USD to 67 USD on the first day. Subsequently, the Chinese government advocated for digital capital. In October 2000, the Chinese Ministry of Foreign Economic Relations and Trade, the Ministry of Science and Technology, the Ministry of Industry and Information Technology, the Chinese Academy of Sciences, and the Shenzhen Municipal Government organized the "Second China International Hi-Tech Fair." More than 1,300 investors attended, and many foreign capital organizations expressed their desire to invest in China, including the New York Stock Exchange, NASDAQ, Toronto Stock Exchange, JASDAQ, Singapore Stock Exchange, and SESDAQ (Lin and Zhou, 2000).

Guided by a technocratic ideology, joint ventures from foreign financial capital markets were embraced by the Chinese government. Then, private as well as public-private partnerships were encouraged to forge their structure and foundations

(Ernkvist and Ström, 2008). The most famous venture investment companies were America's IDG (International Data Group) and South Africa's MIH (Myriad International Holdings). In the Chinese business world, venture capitalists soared in late 1999, even though they had been denied access to cyberspace before 1999 due to a lack of political support and an industrial environment. With the rise of internet companies, venture capitalists found a lucrative market (Wu, 2017, p. 56).

When considering the alliance between digital capitalists and the state that derived from their shared interest, it remains important to understand how they have been thrown together by state's resolving the conflicts under technonationalistically balancing benefits over costs (Kang and Segal, 2006). The Chinese government supports digital capitalists to achieve domestic economic growth by promoting digital technology infrastructure (Qiang, 2007). For example, the Chinese government launched the high-tech "863" program in 1986 to address key technology issues. The program established a national digital entertainment industry base and then conducted video game training programs, initiated business incubation and international cooperation, created a database for Chinese independent game software, and provided support or small game companies.¹

Then, in 2005, China's Ministry of Culture and Ministry of Information jointly issued "Several Opinions on the Development and Management of Online Games." In addition, the Chinese government has made significant efforts to develop its digital infrastructure throughout the country, provided internet access to rural and frontier areas and encouraged programs to utilize digital technologies in communities. If digital capital aims to develop productive linkages and integrate them into the inclusive and intensive network of capital accumulation, it must reactivate horizontal linkages in power networks.

The interaction between the government and capitalists has formed contradictory and complementary relationships between them. Under these relationships, China's technoationalism can be labeled "neo-technoationalism" or "open technoationalism" (Suttmeier and Yao, 2004, p. 22). The maximization of capitalist profit coincided with the highest theological aspirations (Dyer-Witthford, 1999, p. 7). On October 7, 2010, China Daily, the official Chinese newspaper, reported that Zhongguancun, China's Silicon Valley, was facing a shortage of funds and needed 200 billion RMB in the next 10 years. China welcomed private and foreign funding into cyberspace. The Chinese Communist Party Ministries and the Chinese Communist Youth League have responded positively to the economic potential and the increasing influence of the rapidly growing digital game capital in China (Zhang, 2010). With the support of government policies, the digital game capital has undergone a dramatic change. On the one hand, the sales of domestically produced digital games surpassed those of imported games, reversing the dominance of imported games. In addition, the annual growth rate of digital games reached 21.7%, and in 2015, China's video game industry was worth 140.7 billion RMB

1 Ministry of Science and Technology of the People's Republic of China (2006). National High Technology Research and Development Program 863. Available at: https://www.most.gov.cn/ztlz/swkjhh/kjhjj/200610/t20061021_36375.html.

(Guo, 2017). In 2016, the profit of Chinese digital games reached 165.57 billion RMB, an increase of 19.9% over 2015.²

3.2. Disjunctive politics in terms of bio-politics

“Governments everywhere, not only in China, are struggling to strike a balance between civil liberties and control of a new medium of communication” (Herold, 2008). All these were generated by digital technologies’ potential of facilitating decentralized and horizontal information exchange (Rawnsley, 2008, pp.118-135). When the Chinese government found it difficult to guard its mainstream value against the influence of emerging digital subcultural ideologies, disjunctive politics emerged.

In April 1989, the first negative report on digital games appeared, and in May 1989, digital games were first regarded as gambling. In October 1989, members of the Shanghai CPPCC wrote to the National Committee of the Chinese People’s Political Consultative Conference to call for the governance of game consoles. Faced with ongoing pressure from social anxiety and negative reports, digital games have become a major target of the government’s “anti-vice and pornography” efforts. Accordingly, in 1990, 1992, and 1996, China’s Ministry of Culture, China’s Ministry of Public Security, the State Administration for Industry and Commerce, and other departments worked with the media to achieve a bio-political goal.

Some media disciplined themselves under the political power to strengthen their legislative, blocking, and censorship policies on digital games. For example, in 2004, the news of a Tianjin teenager’s suicide was widespread in the media. There were many reasons for this teenager’s suicide, but most of the media simply blamed his suicide on his addiction to the digital game “World of Warcraft” and claimed that teenagers were victims of digital games (Yu, 2018).

In July 2000, the General Office of the State Council (2000) issued a “Notice on the Special Governance of Electronic Game Commercial Sites.” It was the strictest policy on digital games with a three-month special governance plan, and all local governments were no longer allowed to approve e-games business licenses (He and Cao, 2018). This disjunction and discipline for digital capital is part of the body politics that are guided by instrumental and pragmatic rationality, which is often accepted by government regulatory regimes. “The rational exercise of power tends to make the fullest use of the maximum instrumental efficacy” (Foucault, 2000, p. xviii).

In 2008, the government spent 40 million RMB on a filtering software “Lv Ba” (in Chinese, 绿坝), which was jointly developed by Zhengzhou Jinhui and a Beijing company. In April 2009, China’s Ministry of Education and other departments required all primary and secondary schools to install this anti-addiction software on their computers. All the censorship and prohibitions are aimed at preventing unhealthy digital games from entering the market and undermining China’s cultural traditions and Confucian morality.

However, with the support of digital game capitalists, teenagers can speculate on this anti-game-addiction system. Some internet cafes even provided adult ID numbers to teenagers to help them escape government control, rendering this anti-addiction software system ineffective (Peng, 2008; Tao, 2017). With an ineffective system, gamers enjoyed their second life and liberated their bodies in cyberspace. Usually, teenage gamers feel unable to exert influence over their destiny (their future) and the ever-changing society in the real world, but at least can control the world and their bodies in the digital game space. They are powerless in the modern real world but are heroes in the digital game space (Wang, 2007).

Digital capital varies according to social logic and body politics, especially in the case of identity (Valkenburg et al., 2005). Recognizing that the internet has become an alternative space for body politics, where identity is constructed through body adornments and figures in the virtual game worlds, many young people change their physical appearance, shape, name, and age as part of the “Dionysian carnival” (Liu, 2008).

Although the government attempts to increase its surveillance over cyberspace in response to fears of political resistance, digital technology has undermined the government power in the following ways: (a) it globalizes the reach of communication with its distance-incentive cost structure, which is beyond government’s intervention; (b) it expands the scale of communication with its convenient access, which overwhelms the capacity of government to control; (c) it distributes autonomy with its decentralized-democratic protocols, which weakens the government’s authority; (d) it creates new institutions with possessing key resources, which intervenes the government’s decision-making process; (e) it affects the polity with altering the cost and capabilities of communication, which transforms the governments’ information sovereignty (Pei, 2006, pp. 4–5). In the face of these challenges, the Chinese government still holds its control over cyberspace, and guides discussions about social concerns, while digital capitalists strive to escape government control and exploit loopholes in policies. There are difficulties in “grasping the yardstick” generated by “gray space” when digital operators take risks (Cuiming, 2008).

3.3. Semi-alliance politics: negotiation and escape

The Chinese government maximizes its legitimacy based on information control, socialism mainstream value infiltration through neo-technationalism, pragmatic strategies and social fears discourse. But sometimes, the legitimacy of power is weakened by frictions and disagreements among digital capitalists (Zhang, 2010). Then the government needs to mediate tensions with digital capitalists, giving rise to semi-alliance politics. The most typical case is the triangular politics among Tencent, Qihoo 360, and the Shenzhen government.

In 2005, the economic benefits of China’s digital game industry reached RMB 6.1 billion. In the first quarter of 2010, Tencent’s game market share reached 25.3%, while Shengda and Netease each held 62% of the market share. In early September 2010, Zhou Hongyi, head of Qihoo 360, proposed a cooperation plan to Tencent chairman Ma Huateng, but the proposal was rejected by Ma. Then

² <http://www.chyxx.com/industry/201708/552130.html> <http://baijiahao.baidu.com/s?id=1587191942354125094&wfr=spider&for=pc> <http://www.chyxx.com/industry/201804/631654.html>

Qihoo 360 suddenly released “360 Privacy Protector” software directly targeting Tencent, and revealed Tencent’s invasion of user privacy, causing great public outrage against Tencent. Tencent quickly responded by asking for help from the Shenzhen Public Security Bureau and China’s Ministry of Information. Then, the Shenzhen Public Security Bureau attached great importance to the case and assigned special officials to handle it. Unfortunately, these officials did not know how to handle the case, and even turned to Tencent and Qihoo 360 for help. Here, the government’s legislative and administrative power in cyberspace is weak and vague. In 2010, the case was transferred from Shenzhen to Chaoyang District Court in Beijing. In April 2011, Chaoyang District Court made the first judicial decision, requiring Qihoo 360 to stop its actions and compensate Tencent for its economic loss of 400,000 yuan. Subsequently, Qihoo appealed to the Beijing Second Intermediate People’s Court, but the final verdict was unchanged (Wang, 1998, p. 165). This dynamic interplay of control and escape from provincial control is a process of evolution and change, rather than “business as usual.”

Why was Tencent involved in this lawsuit? The absence of state-owned capital in cyberspace has led to an unbalanced capital layout, a segmented-walled cyber system and a weakness of state governance in the “cyber jungle,” which continue to exist until 2022 in Douyin, Tencent, Alibaba and Baidu. Here, weakness is not equal to powerlessness, it means that the Chinese state-centric and hierarchical power system is not entirely effective in capital-centric cyberspace. However, the government power cannot break up the monopolistic capital structure of cyberspace and cannot control the overall uncertainties of cyberspace.

After Chinese digital game companies emerged, they joined the NASDAQ and Hong Kong stock markets, seeking financial support from foreign capital. Unlike the traditional mass media, the Chinese Communist Party has not established formal rules and state capital in cyberspace. Since the beginning of the mass media, Chinese authorities have controlled them through hierarchical state ownership. “However, there was no formal rule for the internet from 1986 to 1993, a period longer than the six-year history of China’s regulation of the internet” (Ministry of Culture of China, 2010).

How did non-state capital come to dominate cyberspace? This is related to three capital enclosure movements in Chinese cyberspace. The first movement was around 1999 and was characterized by the emergence of three news portal giants: Sina, Sohu, and NetEase. After 2007, application website giants caused a reshuffle, and news portals were caught in a dilemma. Baidu (internet search), Alibaba (e-commerce), and Tencent (instant message) emerged as the three digital giants, and in 2010, they were collectively called BAT. The third enclosure movement began in 2012 that was labeled as the era of Tencent supported by mobile phones (Wu, 2017, p. 21). Tencent emerged as the most powerful company, with annual profits in 2010 exceeding those of Baidu, Alibaba, Sina, and Sohu combined.³

³ Baidu, Alibaba, Sina, Sohu, NetEase, and Tencent are different internet service providers or internet operators, providing search engines, e-commerce, e-mail, social communications, news information and other services.

The shift from the transcendence of power to the transcendence of capital does not require a top-down monolithic shift. Thus, digital capital is a transcendental power, but also a control mechanism in cyberspace. Through the structure and mechanism of digital capital, rather than the dominance of political power, the government imposes an unconventional order on the limited and separated electronic game space, gradually replacing it with monopolistic capital market barriers (Nie, 2012).

However, there is a strong and persistent tension between state sovereignty and digital capitalists, a territoriality-bounded power competing with the non-territorial power. This tension puts pressure on existing institutional arrangements for state-centered information policy. Chinese cyberspace prefers non-state capital to state-owned capital because it involves relatively uncertain variables and technological modernity. While non-state capital does not completely fit perfectly into China’s modern governance system, it can facilitate the development of digital technologies. This capital structure not only allows them to enjoy their autonomy and adapt to the latest changes but also leads to the inability of state-owned capital to profit in cyberspace. Thus, while the semi-alliance of digital capital and power has brought unexpected economic and social transformation to China, it has also brought new forms of chaos and irreconcilable conflicts to cyberspace (Wu, 2017, p. 27).

In the semi-alliance of power and capital, they conspire to promote the development of digital technology while clashing with each other. Specifically, power needs to recognize the economic and cultural benefits of digital technology, and grant a certain degree of freedom to digital capitalists. For example, after the new regulations were issued in 2016, the number of games approved by the SARFT (State Administration of Radio, Film, and Television) skyrocketed from 50 to 500 per month, with 1,140 games approved that year. SARFT worked hard to improve its efficiency to meet the needs of digital game capitalists. Before this, the Chinese government had imposed the most extensive censorship on digital games.

3.4. Semi-disjunction politics

Contrary to simple economic logic, the politics of digital capital and power in China’s cyberspace display a multi-dimensionality. Rather than simply being shaped by capital, the digital game space mirrors Chinese social structures and Chinese modernity: “It is clear then that virtual interactions may be shaped by, and grounded in, the social, bodily and cultural experiences of users” (Hardey, 2002). However, this is not a sufficient perspective without considering the social and pragmatic potentialities inherent in digital technologies. As Langdon Winner puts it, “technologies are inherently political” (MacKenzie and Wajcman, 1999, p. 3), as evidenced by how the Chinese government conceived digital technology as an important political, economic, and cultural actor (Yang, 2009, pp. 10–20).

Although digital technology is a product of capitalism and modernity (Mansell, 2004), it needs to be adapted to local cultural structures: “Even if it is mistaken to see technologies as requiring particular patterns of social relations to go along with them, some technologies, in given social circumstances, more compatible with some social relations than with others” (Yang,

2009, p. 4). Therefore, we can understand the role of capital as breaking through the division of power in China. First, the initial accumulation of digital game capital follows the market rules. The high risk of investment led to the division of digital capital and the formation of an oligopoly structure in cyberspace. The digital technology giants with advanced management concepts and strong financial support could survive (Wang and Leng, 2013).

Second, the rules governing the operation of digital capital not only override capital and guide capital operations from top-down but also have a historical change inherent in the operation of capital, such as the rules of profitability. These rules may conflict with power, which means that the transcendence and concentration of Chinese sovereignty conflict with the internalization of capital's proliferation. In terms of the history of Chinese state-owned companies, capital relies on the support of sovereignty and power structures, especially the political legitimacy of the capitalist economy and the social culture of the capital, but these structures are not the operation of digital game capital.

Third, because media technologies are more than transmitters of content, they represent cultural ambitions, political machines, modes of leisure, the relationship between technology and the body, and the spirit of an era (Larkin, 2008, p. 2). The capital of digital games brings various values and cultural resistances into a virtual common domain and provides the infrastructure to facilitate and channel the patterns of affect, desire, and fantasy that these games provoke. People in the 1980s became "subjects" of resistance as "players" who confronted the combination of capital and power through their subcultural communities.

In early 2010, a popular video, "Kan Ni Mei: the Internet Addiction War," spread widely online. The video's popularity stemmed from more than 500,000 players of the "World of Warcraft" game. This user-generated video, which lasts for 60 mins, was created by people mostly born after the 1980s. It satirizes the Chinese government's censorship of game content and the war between two internet companies, Jiucheng and Netease. It also incorporates "Yang Yongxin's electroshock therapy incident," which is related to abstinence from internet addiction. It also intertwines many online events of 2009, such as confinement and the Hangzhou "70 yards" case.⁴ The film started by spoofing "KUSO,"⁵ and taunting power, and within days it had millions of views:

"We enjoyed playing the game this year like everyone else,
And then seriously, we take the bus to work every day,
Seriously, we eat all kinds of food every day,
Regardless of whether or not there are any unknown
chemicals in the food,
We don't complain about the low pay,

We enjoyed playing the game this year like everyone else,
Cry for the flood, cry for the earthquake,
Cheer for the Olympics,
We do not want to lag behind anyone in the world,
And this year, because of you people (government officials
and digital capitalists),
We can't compete with players from other countries.
....."(Wang, 1998)

Before the advent of this video, the government and the game companies had been bargaining for half a year, resulting in 5,000,000 game players "starving" for new games. Therefore, the new game version of the "Luke Witch" gained popularity in a short period and became the main target of "Kan Ni Mei: the Internet Addiction War."

These submissive-rebellious discourses constitute the content of a subcultural community formed by the digital game players, acting to some extent as a regulator of the conflicts between power and capital. This subcultural community elevates power-capital to a cohesive unity by directing the flow of capital and power. In other words, these subcultures urge digital game companies to operate under the supervision of state power, which in turn reinforces the state's discipline and domination over digital capital.

The governance of cyberspace is no longer implemented through the modern power model but through the integration of multiple stakeholders such as capitalists and netizens, which aims to stimulate the productivity and possibilities of cyberspace. Thus, the autonomy of capitalists and the cultural resistance of netizens are, to a certain extent, recognized and allowed by power. The recognition of power allows players to establish a submissive subject in the digital game space, which then turns to capital, thus affirming the legitimacy of power (Xiaoyu, 2014). And the imperial government itself is also aware that the legitimacy of governance in cyberspace derives from the consent of netizens (Liu, 2017). Digital capitalists need the support of netizens as an autonomous force for productive cooperation, so the power and digital capital in cyberspace must be semi-aligned but not completely decoupled.

4. Conclusion and discussion

The logic of China's power governance in cyberspace differs from that of traditional media power governance systems. It is a combination of the logic of central power and the logic of networks (Qiu, 2000). Therefore, compared to other countries, China's cyberspace is more politically centralized, making internal contradictions and conflicts difficult to manage. Having faced these problems, the Chinese government is aware of contradictions and conflicts between the impulse of capital and the governance of power. Its regulation and governance require the logic of power, that is, legal action (cyber police) (Inkster, 2010). Self-regulation or self-discipline, which moves the relationship between power and digital capital from uncoordinated conflict to coordination, and governance have gradually moved from a single dimension to a plural one (Hardey, 2002).

State governance operates through three methods: legislative-administrative governance, ideological governance, and self-regulatory governance. Legislative-administrative governance is

⁴ "70 yards" is a network buzzword. It originated from a traffic accident in Hangzhou on May 7, 2009. The Hangzhou police said that the speed of the car was "about 70 yards (112 miles) per hour." "70 yards" quickly became a phrase used ironically to imply public dissatisfaction with the government.

⁵ KUSO means "detestable" in Japanese and is also the pronunciation of "dung." It was originally used to teach gamers how to seriously play a "bad game," and it is also often used as a mantra. However, for Taiwan's gamers, "KUSO" (or Cousteau) has gradually evolved to mean "spoof," and later, this word was introduced to the mainland.

an explicit monarchical power and authoritarian. Cultural and ideological governance is implicit, democratic governance, while market self-discipline is governance that requires consultation with network capitalists. These three different forms of governance have shaped China's cyberspace (Zeng, 2012), preserving the vitality and productivity of cyberspace.

The Chinese government guides cyberspace and netizens to self-regulate in order to control commercialization (for example, a self-regulatory convention for the internet industry was issued in 2002) (Weber and Jia, 2007). Any relationship between digital capital and power in cyberspace is constantly renewed through the authoritarian nature of the imperial mechanisms and the fluidity and vitality of cyberspace. Power, with its monopoly and flexibility, serves capital and netizens, guiding the development of capital in cyberspace and transforming various productive forces.

Thus, the politics between digital capital and power constitute a driving force behind the development of digital technologies and the digital economy. Digital capitalists can expand and gain social support under the flexibility and centrality of power. The unique structure of China's cyberspace permeates people's daily lives and is closely integrated with Chinese modern social practices, making full use of the creativity and uniqueness of Chinese society to promote the development and application of network technologies, which in turn creates a bottom-up impetus for China's modernity. Centralized power must confront the productive forces of digital technology and all the endogenous forces that facilitate its development. This impetus comes from the inseparable and indispensable endogenous forces of Chinese modernity and the vast majority of netizens. In this cycle of new forms of power generated by endogenous forces, digital technologies have experienced the most extensive and rapid growth in promoting China's modernization, industrialization, and marketization (Cuiming, 2008).

The politics between power and digital capital has facilitated the expansion of cyberspace, creating a different path for Chinese digital technologies. This lies between two paths: a top-down process in which the government has exerted extensive power

over digital capital in line with its modernization goals, and a bottom-up process in which digital capital can negotiate with power in its decentralized and liberating potential (Qiu and Liuning, 2005). This is why digital technologies can be a driving force for China's growth.

Author contributions

JL is responsible for conceptualization, methodology, formal analysis, writing. Namely, she finished the original draft.

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Conflict of interest

The author declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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References

- Ball, D. (2011). China's cyber warfare capabilities. *Secur. Chall.* 7, 81–103. doi: 10.3316/agispt.20114361
- Bukht, R., and Heeks, R. (2018). Defining, conceptualising and measuring the digital economy. *Int. Organisat. Res. J.* 13, 143–172. doi: 10.17323/1996-7845-2018-02-07
- Cuiming, P. (2008). Self-censorship and the rise of cyber collectives: an anthropological study of a chinese online community. *Intercult. Commun. Stud.* VXII (3) 57–76. Available online at: <https://api.semanticscholar.org/CorpusID:154664640> (accessed February 8, 2023).
- Dai, C., and Bao, J. (2017). Digital government governance—an examination based on the evolutionary process of social form. *China Administr.* 9, 21–27. doi: 10.3782/j.issn.1006-0863.2017.09.04
- Dyer-Witthof, N. (1999). *Cyber-Marx: Cycles and Circuits of Struggle in High-Technology Capitalism*. Urbana: University of Illinois Press.
- Ernkvist, M., and Ström, P. (2008). Enmeshed in games with the government: governmental policies and the development of the Chinese online game industry. *Games Cult.* 3, 98–126. doi: 10.1177/1555412007309527
- Foucault, M. (2000). *Power: Essential Works of Foucault 1954–1984*. New York, NY: The new press.
- Giles, K., and Hagestad, W. (2013). “Divided by a common language: Cyber definitions in Chinese, Russian and English,” in *2013 5th International Conference on Cyber Conflict (CYCON 2013)*. (London: IEEE), 1–17.
- Guo, Y. (2017). Towards a new reality: On the development of the electronic game industry and its cultural influence. *Huazhong Acad.* 9, 35–44.
- Habermas, J. (1987). *The Philosophical Discourse of Modernity*. Cambridge: Polity Press.
- Hachigian, N. (2001). China's cyber-strategy. *Foreign Affairs* 80, 118–133. doi: 10.2307/20050069
- Hardey, M. (2002). Life beyond the screen: embodiment and identity through the internet. *Sociologic. Rev.* 50, 570–585. doi: 10.1177/003802610205000406
- He, W., and Cao, S. (2018). From “Electronic Heroin” to “Created in China”: The discourse changes of the people's daily game report (1981–2017). *Int. Journal.* 40, 57–81. doi: 10.13495/j.cnki.cjic.2018.05.004

- Herold, D. K. (2008). Development of a civic society online? Internet vigilantism and state control in Chinese cyberspace. *Asia J. Glob. Stud.* 2, 26–37. Available online at: <https://api.semanticscholar.org/CorpusID:154148673> (accessed February 8, 2023).
- Inkster, N. (2010). China in cyberspace. *Survival* 52, 55–66. doi: 10.1080/00396338.2010.506820
- Jorgenson, D. W., and Stiroh, K. J. (1999). Information technology and growth. *Am. Econ. Rev.* 89, 109–115. doi: 10.1257/aer.89.2.109
- Kang, D., and Segal, A. (2006). *The Siren Song of Technonationalism*. *Far Eastern Economic Review*. Available online at: <http://www.feer.com/articles1/2006/0603/free/p005.html> (accessed February 8, 2023).
- Larkin, B. (2008). *Signal and Noise Media, Infrastructure, and Urban Culture in Nigeria*. Durham: Duke University Press.
- Lin, J., and Zhou, M. (2000). China's "internet" industry calls for capital market. *Productiv. Res.* 6, 11–12, 149. doi: 10.1016/S1365-6937(00)90067-4
- Lirui, L. (2015). *Enabling Technologies and Collaborative Governance for the Network Society*[EB/OL]. 2015-06-25. Available online at: https://mp.weixin.qq.com/s?_biz=MzA4ODg4NDkzOQ==&mid=210513764&idx=2&sn=c6ab6a9c1f2b455171686d3709c153f2andchksm=195bdcc02e2c5d60c45dabf41cfcd9c41a57a0ff44fba3b760c247a0734726e9dc44bb902dandscene=27 (accessed February 8, 2023).
- Liu, C. (2008). Second life and virtual self. *Gansu Soc. Sci.* 2, 225–229+76. doi: 10.3969/j.issn.1003-3637.2008.02.058
- Liu, H. (2017). Patriotic as loving beans: the birth of new media and "fan nationalism." *Mod. Commun.* 39, 27–36. doi: 10.3969/j.issn.1007-8770.2017.04.007
- MacKenzie, D., and Wajcman, J. (1999). *The Social Shaping of Technology*. London: Open University Press.
- Mansell, R. (2004). The Internet, capitalism, and policy. *Int. Res. Ann.* 1, 175–184. Available online at: <http://eprints.lse.ac.uk/id/eprint/3870> (accessed February 28, 2023).
- Milton, L., and Mueller. (2010). *Networks and States: The Global Politics of Internet Governance*. Cambridge: The MIT Press.
- Ministry of Culture of China (2010). *Interim Measures for the Management of Online Games* (Ministry of Culture Order No. 49), 2010-06-22. Available online at: http://www.gov.cn/zhengce/2010-06/22/content_2603314 (accessed February 8, 2023).
- Ministry of Science and Technology of the People's Republic of China (2006). *National High Technology Research and Development Program 863*. Available online at: <http://www.most.gov.cn/> (accessed February 6, 2023).
- Mosco, V. (2005). *The Digital Sublime: Myth, Power, and Cyberspace*. Cambridge, MA: MIT Press.
- Nie, Q. (2012). *The theory of the SCP Paradigm Study of China's online game industry*. Ph.D. thesis, Central South University.
- Pei, M. (2006). The dark side of China's rise. *Foreign Policy* 153, 32–40. Available online at: <https://carnegeendowment.org/2006/03/01/dark-side-of-china-s-rise/a51> (accessed February 28, 2023).
- Peng, G. (2008). *Research on government regulation of China's online game industry (1996–2007)*. Ph.D. thesis, Central China Normal University.
- Qiang, C. Z. (2007). *China's Information Revolution: Managing the Economic and Social Transformation*. Washington, DC: World Bank Publications.
- Qiu, J. L. (2000). Virtual censorship in China: Keeping the gate between the cyberspaces. *Int. J. Commun. Laws Policy* 4, 1–23. Available online at: <https://api.semanticscholar.org/CorpusID:14367213> (accessed February 28, 2023).
- Qiu, J. L., and Liuning, Z. (2005). Through the prism of the Internet café: managing access in an ecology of games. *China Inform.* 19, 261–297. doi: 10.1177/0920203X05054683
- Rawnsley, G. D. (2008). "The media, internet and governance in China," in *China's Opening Society: The Non-State Sector and Governance (China Policy)*, eds Z. Yongnian and J. Fewsmith (Abingdon: Taylor and Francis).
- Rutter, J., and Bryce, J. (2006). *Understanding Digital Games*. London: Sage Publications.
- Suttmeier, R. P., and Yao, X. (2004). *China's Post-WTO Technology Policy: Standards, Software, and the Changing Nature of Techno-nationalism*. Available online at: https://www.nbr.org/wp-content/uploads/pdfs/programs/cs_brochure.pdf (accessed February 8, 2023).
- Tang, X., Wu, X., Huang, C., and Ruisheng, L. (2017). *Development Report on China's New Media*. Singapore: Springer.
- Tao, Y. (2017). *Research on government regulation of China's video game industry*. Ph.D. thesis, Hunan Normal University.
- US Department of Defense (2010). *Joint Terminology for Cyberspace Operations*. Available online at: <https://publicintelligence.net/dod-joint-cyber-terms/> (accessed February 8, 2023).
- Valkenburg, P. M., Schouten, A. P., and Peter, J. (2005). Adolescents' identity experiments on the Internet. *New Media Soc.* 7, 383–402. doi: 10.1177/1461444805052282
- Wang, H. (1998). The problem of ideological status and modernity in contemporary China. *Content. Lit. Art.* 6, 6–21. doi: 10.3969/j.issn.1007-2438.2013.20.009
- Wang, S., and Leng, C. (2013). Re-recognition of the Internet: decentralization is a false proposition? concurrently discussing the problem of "centralization" with Mr. Li Biao. *J. Mass Commun. Monthly* 20, 46–49. doi: 10.3969/j.issn.1672-0008.2007.04.019
- Wang, X. (2007). Second life and digital game-based learning environment. *J. Dist. Educ.* 4, 76–78+82. doi: 10.3969/j.issn.1672-0008.2007.04.019
- Weber, I., and Jia, L. (2007). Internet and self-regulation in China: the cultural logic of controlled commodification. *Struct. Agency* 29, 772–789. doi: 10.1177/0163443707080536
- Wu, X. (2017). *Tencent Biography: Evolution of Chinese Internet Companies (1998–2016)*. Hangzhou: Zhejiang University Press.
- Xiaoyu, L. (2014). Study of the structure and evolution of China's Internet content regulation strategy. *Information Science* 32, 24–29. doi: 10.13833/j.cnki.is.2014.06.009
- Yang, G. (2003). The Internet and the rise of a transnational Chinese cultural sphere. *Media Cult. Soc.* 25, 469–490. doi: 10.1177/01634437030254003
- Yang, G. (2009). *The Power of the Internet in China: Citizen Activism Online*. Columbia: University of California Press.
- Ye, M. (2011). Chinese Internet governance: goals, methods and characteristics. *Expanding Horizons*. 1, 45–47. doi: 10.3969/j.issn.1006-0138.2011.01.012
- Yu, H. (2018). From "electronic heroin" to "ninth art": the evolution of chinese video game image under the media criticism perspective. *New Media Res.* 4, 122–123. doi: 10.16604/j.cnki.issn2096-0360.2018.10.053
- Zeng, Q. (2012). "Contraction and adjustment: analysis of changes in chinese internet content regulation policy (2002–2012)," in *Journal of the 6th National Conference of Journalism and Communication Doctoral Students in Communication University of China, Beijing*, 578–591.
- Zhang, D. (2010). *Research on the model of Internet information governance in China*. Ph.D. Thesis, Renmin University of China.
- Zhang, H., Zhou, Q., and Wang, C. (2010). Information technology, network effects and regional economic growth: an empirical analysis based on spatial perspective. *China Soft Sci.* 10, 112–123 179. doi: 10.3969/j.issn.1002-9753.2010.10.014
- Zou, S. (2005). The Chineseization of marxism and the construction of Chinese modernity. *Soc. Sci. China* 1, 16–21+205.
- Zou, X. (2023). *Discourse Competition and the Spread of Mainstream Ideology in Online Political Space, Ideological Studies (1st series), 2016-11-02*. Available online at: <https://www.hswb.org.cn/wzzx/llyd/wh/2016-11-01/40842.html> (accessed February 20, 2023).