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Historicizing Internet Regulation in China: A Meta-Analysis of Chinese Internet Policies (1994–2017)

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Despite growing scholarly attention, few studies have systematically investigated the historical evolution and patterns of Chinese Internet policies. We created the first comprehensive database of national-level Chinese Internet laws and policies between 1994 and 2017 and conducted a meta-analysis of 358 policy documents using content analysis and social network analysis. We found that (1) among the 71 government agencies involved in Chinese Internet regulation, there are central-peripheral dynamics as well as complex networks of collaboration; (2) although more than 40% of regulations concern information services, the overall regulatory emphasis has evolved from Internet infrastructure to online content to digital economy; and (3) while Chinese Internet policies historically follow the principle of "rule by directives" instead of "rule of law," dominated by low-level policies, leading to both arbitrariness and adaptability, recent state efforts aim to streamline policymaking. Overall, our study contributes to debates on three core issues in Internet governance from a Chinese perspective: Who (should) regulate the Internet? What issues (should) fall under regulatory oversight? And how should the Internet be regulated via what mechanisms?

Keywords: China, Internet, policy, law, governance, regulation, content analysis, social network analysis

Internet growth and adoption present a multitude of challenges to governments around the world, ranging from security to economy. Though Internet governance encompasses many domains, three

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questions are central: Who (should) regulate the Internet? What issues (should) fall under regulatory oversight? And how should the Internet be regulated via what mechanisms? Different answers to these questions have formed the basis of various models and practices of Internet governance, including the contentious debates surrounding state and commercial regulation and influence of the Internet (DeNardis, 2014). Despite the phenomenal growth of the Internet in many non-Western developing countries, the fact that knowledge of Internet governance has largely been modeled after and produced from Western societies has prompted scholars to advocate for the inclusion of the "Global South" into Internet policymaking and knowledge production (Bhuiyan, 2014). China, the only country to have built an Internet ecosystem that can rival Silicon Valley's, and which is now exporting digital products globally and striving to become a strong cyber power, is crucial in this respect.

Systematic research of Chinese Internet policies becomes all the more imperative as the Chinese government now aspires to promote its regulatory model abroad to reshape global Internet governance. For example, overseas expansion of Chinese Internet companies including Huawei, ZTE, Alibaba, and ByteDance has gone hand in hand with Beijing's promotion of its Internet sovereignty governance model (Jiang, 2010) to challenge traditional U.S. dominance.

In recent years, research of Chinese Internet policies has been increasingly integrated into global Internet governance discussions. Some study China's participation in global Internet governance (e.g., Shen, 2016). Others focus on specific policies—for instance, China's real name registration policies (Jiang, 2015); and more recently China's new cybersecurity laws and data policies (e.g., Triolo, Sacks, Webster, & Creemers, 2017). However, few studies have systematically reviewed the long-term evolution of Chinese Internet policies or the complex internal dynamics between regulators empirically (Negro, 2017; F. Yang & Mueller, 2014). When it does, this research has several limitations. First, the anthologies of relevant Internet laws and policies lack rigorous systematic analysis (Zhang & Guo, 2012). Second, most studies cover a short time span (L. Hu, 2008). Third, research tends to rely on relatively small samples (F. Yang & Mueller, 2014).

To this end, we propose a meta review of China's Internet policies between 1994 and 2017 to historicize analysis of regulatory agencies, issues and mechanisms. Policies are valuable lens to examine the goals, principles and procedures of Chinese Internet regulation, which informs and drives regulatory practices. Our meta-analysis study fills several research gaps. First, our work uses longitudinal data—a corpus of 358 national-level Chinese Internet policy documents published between 1994 and 2017, the most comprehensive to our knowledge—to historicize the analysis. It serves as a comprehensive baseline for assessing sweeping policy changes epitomized by the passing of China's *Cybersecurity Law* in 2017. Second, we use both content analysis and network analysis to unveil the complex and dynamic relations between agencies and policies. Third, aided by empirical data, we contribute to theoretical debates surrounding several key regulatory issues. First, who regulates the Internet in China? Our analysis shifts the perspective from treating "the state" as a monolithic entity to viewing it as composed of distinct state agencies. By identifying their key roles and complex power relations, we demystify "the state" and with new data gain insight into Chinese bureaucratic politics in Internet governance (F. Yang & Mueller, 2014). Second, what issues fall under regulatory oversight? We identify specific Chinese Internet policy areas and analyze their respective trajectories. By historicizing and contextualizing such macro trends, this study

yields new insight into China's Internet governance and moves research beyond a singular focus on censorship (Dong, 2012) to include diverse topics such as industrial policies and business regulations. Third, how should the Internet be regulated via what mechanisms? We highlight the hierarchy of Internet regulations and China's ad hoc approach of "rule by directive" rather than "rule of law" (Zhu, 2012, p. 26).

In the following, we first review the literature on Chinese Internet regulatory agencies, Internet policies passed, and their characteristics. We then detail our data and methodologies. Using content analysis, we coded Chinese Internet policy documents based on issuing time, agencies, regulatory areas, and policy types. Social network analysis then outlined the relationships between regulatory agencies, reference patterns between various Internet policies, and regulatory responsibilities of different agencies. Coupled with brief case studies, this article depicts the historical trajectory and logic of Chinese Internet policies, and in doing so, we discuss their impact, associated problems, and areas for future research.

Literature Review

Literature Review Regulatory Agencies: Too Many Cooks in the Kitchen?

Different from the United States' generally laissez-faire approach toward Internet regulation and the EU's more interventionist approach (e.g., EU's General Data Protection Regulation [GDPR]), Chinese Internet policies are historically inseparable from various state regulators competing to assert control (Mueller & Tan, 1997; F. Yang & Mueller, 2014). China's state-centric model prioritizes the central government's role in Internet regulation from infrastructure to content, while commercial entities, nongovernmental, civic organizations are subsumed to play complementary roles (Negro, 2017). Within state bureaucracy, interagency conflicts often reflect what Lieberthal and Oksenberg (1988) called fragmented authoritarianism in China's policymaking, which views the Chinese government not as a unified entity but as a complex system of powers and controls, with cracked space for autonomy and loopholes for bargaining.

Because of the multitude of governing bureaucracies and their complex relationships, Chinese Internet governance has been compared to "nine dragons bringing no rain" (Zhan, 2013, p. 93), or "too many cooks in the kitchen," where disputes between multiple agencies often lead to confusion. The many Internet laws and regulations thus can be viewed as a product of such a tangled web of control: Horizontally, ministries and agencies vie for power; vertically, superior and subsidiary bodies also clash to maximize control over resources (Sohmen, 2001). Even Chinese president Xi Jinping admits China's Internet regulation is deeply fragmented and decentralized (People's Net, 2013), justifying the reconsolidation of regulatory power.

Despite fragmentation, however, Internet convergence has not only challenged China's regulatory agencies to cooperate and gradually shaped their organizational structure (F. Yang & Mueller, 2014), it has also led to industry convergence. While scholars argued "China's regulation of the Internet has evolved into a highly coordinated and balanced structure parallel to the institutional convergence" earlier (Tan, 1999, p. 261), we view this process to be one full of conflicts and contradictions despite intentions to bring more institutional coordination. In the 1990s, management of the Internet was dominated by an

emphasis on industry and technology, making the Ministry of Information Industry (MII) the prominent regulator. Since 2000, as the Internet started to play a critical role in online communication and public opinion, ideologically driven agencies such as the Ministry of Culture (MOC) and the State Administration of Press, Publication, Radio, Film and Television (SAPPRFT) became more prominent. Most recently, Internet regulation has been elevated to the level of national strategy under the framework of "no cyber security, no national security" (Xinhua Net, 2015, para. 2). On February 27, 2014, the Cyberspace Administration of China (CAC), answerable to President Xi Jinping himself, was established.

Though the Chinese central government dominates Internet regulation in China, few studies analyze the interactions, conflicts, and cooperation between regulatory agencies. For instance, with the evolution of the Internet, what state agencies participated in regulation? What do they regulate? How do they compete or cooperate? We pose the following questions:

RQ1: Between 1994 and 2017, which Chinese state government agencies have issued Internet policies?

RQ2: What are the regulatory responsibilities of these various state government agencies?

RQ3: What are the networks of relations between government agencies based on policies and regulations jointly issued?

Regulatory Policies: Supremacy of Ideology?

Internet policies are expressions of government desires and positions, designed to address pressing problems of the time. From the start, Chinese Internet research challenged popular discourses that viewed the Internet primarily as a space and instrument for free expression and association. Instead, work has shown that not only can the Internet be used by governments, especially in authoritarian countries, to filter content, it can also disseminate dominant ideologies and propaganda to reproduce existing social relations and strengthen the ruling class (Jiang & Okamoto, 2014). While scholarly work outside China has focused on censorship (Dong, 2012), mainland China research tends to emphasize regulation, business and information management (Herold & Seta, 2015). Moving beyond a "democratization" agenda (Meng, 2010), Chinese Internet research has expanded to include Internet industrial policies, business development, political economy and globalization (Hong, 2017; Shen 2016).

Further, Chinese Internet policymaking shows distinct features at different stages, heavily influenced by the political thinking and outlook of the leadership at the time as well as China's social, economic, and political conditions. In the late 1970s, reforms reset China's development path and connected China to the global market and transnational capital during Deng Xiaoping's presidency (1981–89). Under the sway of the Third Wave and information superhighway, "informatization" became part of China's social imaginings and national policies associated with modernization and progress (Wu & Yun, 2018). During Jiang Zemin's presidency (1993–2003), China started to build Internet infrastructures. Several policies on network security were issued during this period. After joining the WTO in 2001, China became more embedded in the global economy. Commercial Internet grew rapidly, evidenced by the

founding of three Chinese Internet giants—Baidu, Alibaba, and Tencent—all around 2000. Under President Hu Jintao and Premier Wen Jiabao (2003–2013), while the state continues to maintain ideological work, Internet activism and contention moved to the foreground in public opinion formation and expression, triggering tighter state control (G. Yang, 2009). Between 2000 and 2014, official discourse of Internet governance evolved from one dominated by moral and security concerns to one obsessed with the Internet's potential to bring instability and contention (Cui & Wu, 2016).

Unlike previous presidencies under Deng, Jiang, and Hu, the administration coming into power in 2012 under Xi Jinping elevated the management of public opinion to unpreceded levels with a focus on centralizing regulatory power that significantly weakened the autonomy and spontaneity of the Chinese netizenry. President Xi's reemphasis of government thought work prompted scholars to suggest Chinese Internet governance is witnessing a Maoist "return of ideology" (G. Yang, 2014, p. 109). Meanwhile, the central government supported the "Internet Plus Plan," aimed at enhancing economic productivity and China's transition from the world's factory to a new digital economy (Hong, 2017). Further, the Chinese state grew interested in exporting China's Internet governance model to reshape global Internet governance, an aspiration likely to exert greater influence and pose challenges to global affairs. Based on the regulatory regime's changing emphases, we pose the following research questions:

RQ4: How has the number of Chinese Internet policies changed each year from 1994 to 2017?

RQ5: How has the focus of Chinese Internet policies evolved in the past 20 years?

Regulatory Approach: "Rule of Law" or "Rule by Directive"?

Over the past two decades, hundreds of laws and regulations have been issued in China to tame the Web and minimize its political ramifications (F. Yang & Mueller, 2014). As part of the Chinese legal system, Chinese Internet policies comprise legal regulations at various levels. According to the *Legislation Law of the PRC*, Chinese laws and regulations include laws, judicial interpretations, administrative regulations, local decrees, autonomous decrees, special decrees, and rules. All laws and regulations are subsumed under the Constitution with laws forming the main body of legal documents, whereas administrative regulations and local decrees constitute the supporting components (State Council Information Office, 2011).

Despite large numbers of regulations targeting the Internet, very few have high legal status. Among them, only four were passed by the National People's Congress between 1994 and 2017 as laws. The rest take the form of "regulation," "decision," "decree," "administrative measure," and even "opinion" and "notice." Given the relative absence of high-level Internet-related legislation, agencies have published many ad hoc regulations to solve problems. Invariably, such policies are designed to maximize the power of respective regulatory agencies, reflecting what Tian (2008) identifies as the prime characteristics of Chinese legislation: agency-based power, interest-driven agency, and law-sanctioned interest.

More importantly, although all Chinese legislation is expected to observe the Constitution, large numbers of regulations targeting the Internet directly contradict the supreme law. As Y. Hu (2010)

pointed out, while Article 35 of the Chinese Constitution stipulates Chinese citizens enjoy the freedoms of speech, the press, assembly, association and of demonstration, *Interim Provisions on the Administration of Internet Publishing* (2002) required permits for Internet publishing. The contradictory reality has led Y. Hu (2015) to quip that in China, "The Constitution is inferior to common law, common law is inferior to administrative statute, administrative statue is inferior to bureaucratic provision, and bureaucratic provision is inferior to a leader's opinion" (p. 55). Given such ironies, how to best investigate the hierarchy in China's Internet legislation? Which legal documents are more important than others? We base our analysis on legal citations (i.e., Chinese Internet legislation often cites other legal documents published prior as sources of authority). Based on the above literature, we pose the following questions:

RQ6: Which types of legislation such as laws, judicial interpretations, administrative regulations, departmental rules and regulatory documents dominate China's Internet regulation?

RQ7: In Chinese Internet legislation, which are the most frequently cited policies?

Data Collection and Analysis

Data Collection

This study covers Chinese Internet policies between 1994 and 2017, drawn from 44 sources in eight categories (see Table 1 in Miao & Jiang, 2021). Our data, built on systematic triangulation of different sources, creates the first comprehensive database of 358 policy documents for national-level Chinese Internet laws and policies (see dataset in Miao & Jiang, 2021). Taking cues from F. Yang and Mueller's (2014) study that collected 63 policies for content analysis, we expanded our data gathering to include (1) authoritative academic legal databases; (2) leading commercial legal databases; (3) law sections of 15 Internet regulators' websites; (4) Chinese search queries in Baidu and Google[2]; (5) legal anthologies maintained by top official Chinese media; (6) top Chinese legal journals; (7) books and reports on Chinese Internet laws and regulations culled through extensive literature review[3]; and (8) think-tank and research institute reports. For search queries in legal databases or websites, we used (Internet or Network) in Chinese as keywords.

In the end, we collected 358 national-level Chinese Internet policies. Our national focus led us to include laws and regulations passed by central government agencies but not local decrees, self-disciplinary provisions, or those partly relevant. This collection vastly expands the scope of data compared with F. Yang and Mueller's (2014) seminal work. It also accounts for changes after Xi Jinping took power in 2012: an ambitious Internet governance approach adopted by the state, consolidated Internet policymaking

[2] We queried each year from 1994 to 2017 in Baidu and Google: China AND (Internet or Network) AND (policy or regulation or law or decree) AND (year). Relevant results were collected from the first 20 pages (10 results per page).

[3] We searched for relevant books and reports in the library databases of Peking University and Tsinghua University, two of China's top research institutions, using the query "(Internet or Network) AND (policy or regulation or law or decree)." The most relevant ones were selected.

power, and greater numbers of Internet policies issued. The study, however, does not assign weight to specific agency (e.g., CAC) or policy (e.g., *Cybersecurity Law*), but complements the quantitative approach with qualitative assessments.

Content Analysis

To code the data, we first analyzed the codebooks developed by previous research (F. Yang & Mueller, 2014) and coded several variables including time, issuing agency, policy type, and policy area based on our research questions. Two PhD student coders randomly selected 40 of 358 legislative documents to code and further refined the codebook. The final codebook (see Table 2 in Miao & Jiang, 2021) details five Internet policy types (law, judicial interpretation, administrative regulation, administrative rule, and regulatory documents) and four policy areas (resources and infrastructure, cybersecurity, Internet economy, and information services). The two coders then coded all 358 policy documents. Intercoder reliability in Cronbach's alpha are: time (alpha = 0.99), issuing agency (alpha = 0.99), type (alpha = 0.95), and area (alpha = 0.92; Neuendorf, 2002).

Our four policy areas differ from F. Yang and Mueller's (2014) typology to adapt to recent policy-making development. We preserved "cybersecurity"; combined "Internet resources" and "development" into "Internet resources and infrastructure," emphasizing Internet access and infrastructure; replaced "intellectual property" with "Internet economy" to account for the growth of policies related to digital economy far beyond IP laws; and replaced "content regulation" with "information services," as more policies focus on algorithms, data, and privacy.

Social Network Analysis

We used the UCINET 6 software (Borgatti, Everett, & Freeman, 2002) to analyze two types of relational networks: (1) joint policy network indicating degrees of cooperation between government agencies; (2) two-mode networks between policy areas and government agencies.

First, when two agencies jointly issue a policy, they are considered to cooperate once as part of a joint legislature network. If eight agencies issue a legislation, each pair is considered to have cooperated once. Such cooperation is undirected. The more times two agencies cooperate, the greater the "degree" of their cooperation, and the larger the "node" in the network.

Second, the two-mode network includes policy areas and government agencies. One dimension involves the four policy areas. The other dimension corresponds to related government agency. The resulting two-mode network is a matrix of 4 × 71.

Results

Regulatory Agencies

We report below our findings in three areas: core Chinese Internet regulatory agencies, their respective regulatory areas, and the patterns of cooperation between them.

Core Chinese Internet Regulatory Agencies

We grouped regulatory bodies into three tiers based on their formal legislative power. In the Chinese legal system, National People's Congress (NPC) is nominally the highest-level authority to issue Internet laws (see Table 3 in Miao & Jiang, 2021). Between 1994 and 2017, the NPC passed four Internet laws focused on electronic signature, information protection, and cybersecurity. Under the NPC are the second tier government bodies including the Supreme Court, the Supreme People's Procuratorate, and the State Council. Most of the policies passed by the Supreme Court and the Supreme People's Procuratorate are legal interpretations. The State Council issued many midlevel administrative rules such as the *Regulation on Internet Information Services of the PRC* (2000). Among all regulators, the State Council plays a crucial role: Besides supervising various ministries, it directs several departments and bureaus with legislative power. Internet news, for instance, was previously under the purview of the State Council News Office, later supervised by the State Council Information Office (SCIO). In 2011, SCIO was folded into State Internet Information Office (SIIO). In 2014, SIIO became the Cyberspace Administration of China (CAC), an administrative unit to carry out the decisions made by the Party's Central Cybersecurity and Informatization Leading Group (CCILG), headed by President Xi. At the third tier are various ministries, commissions, bureaus, and departments directed by the State Council.

Table 3 (see Miao & Jiang, 2021) shows that 71 government agencies have been involved in Internet policymaking. Some are more central than others. First, Ministry of Industrial and Information Technology (MIIT), which participated in issuing 98 regulations, is a key player. Since 1996, MIIT has passed Internet regulations almost every year, solidifying its status as a major regulator. Second, Ministry of Public Security (MPS), State Administration of Press, Publication, Radio, Film, and Television (SAPPRFT), Cyberspace Administration of China (CAC), and State Administration for Industry and Commerce (SAIC) issued 56, 51, 47 and 40 regulations, respectively, making them important policy players. Specifically, MPS has independently issued 12 regulations in areas such as cybersecurity and has co-issued 44 rules with other agencies, making it an authority issuing the second largest number of Internet provisions. Third, Ministry of Culture (MOC), National Development and Reform Commission (NDRC), People's Bank of China (PBC), and China Banking Regulatory Commission (CBRC) make up the "third tier" of Internet regulators, having each issued more than 15 statutes.

In particular, Cyberspace Administration of China (CAC) is composed by Chinese leaders at the highest level, including the president, vice president, and related members of the Standing Committee of the Chinese Communist Party Politburo, State Council, and other agencies. This new high-level regulatory agency issued 47 policies in merely four years (as opposed to 98 policies issued by MIIT over 24 years). Although CAC was initially tasked to review and filter information and issued 24 related policies in four

years, its regulatory reach has extended to two other areas: cybersecurity (nine policies) and Internet economy (14 policies).

Regulatory Agencies and Their Respective Regulatory Areas

To display the regulatory areas corresponding to regulatory agencies, we used network analysis tool UCINET 6 to draw a two-mode network (see Figure 1). The two modes are (1) regulatory areas, including resources and infrastructure, cybersecurity, Internet economy, and information services; and (2) regulatory agencies.

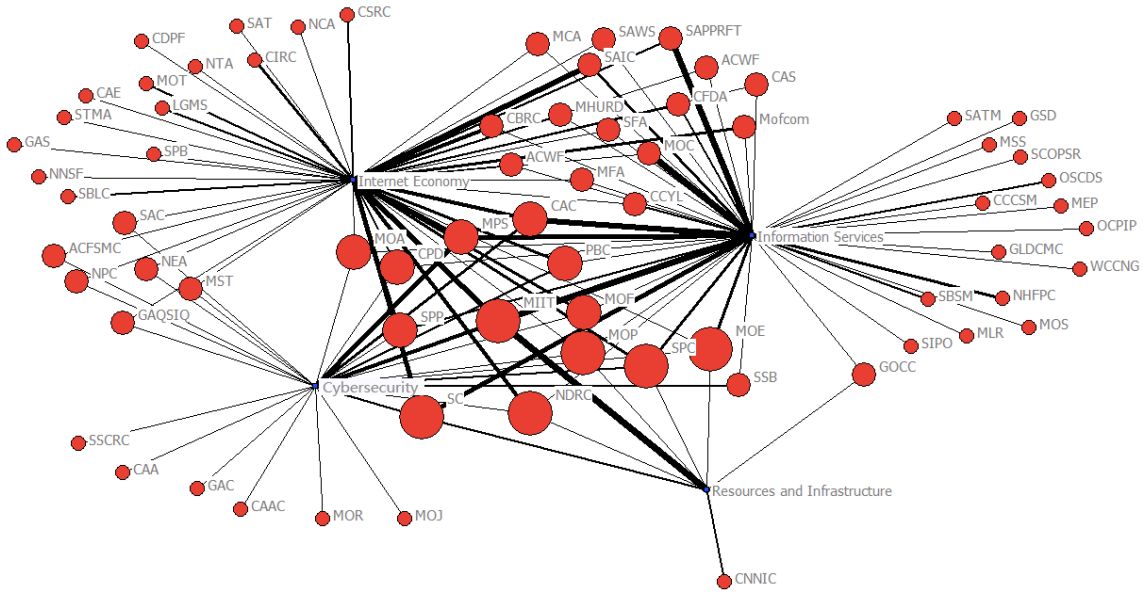

Figure 1. Two-mode network of regulatory agencies and areas (out-degree centrality).

First, the in-degree centrality of the two-mode network displays which regulatory area involves more agencies. The more complex the area, the more agencies are involved and, in network visualization, the denser are the dots surrounding a given area. Our analysis shows large numbers of agencies participated in Internet policies ranging from information services, Internet economy to cybersecurity, resources, and infrastructure. Particularly, "information services" (targeting online content) involves more regulators, whereas "resources and infrastructure," given its technicality, mainly involves MIIT and CNNIC.

Second, how agencies jointly issue legislation across regulatory areas is an indication of a regulator's degree of specialization. The size of nodes in the graph indicates out-degree centrality of a regulatory agency. The bigger the node, the more regulatory areas an agency covers. Hence, in the graph, the nodes have four sizes signaling regulatory areas range from one to four. Figure 1 shows MIIT, Ministry of Public Security (MPS), the Supreme People's Court (SPC), the State Council (SC), Ministry of Education (MOE), National Development and Reform Commission (NDRC), and Ministry of Personnel

(MOP) have issued legislation across all four regulatory areas. For instance, although MOE has issued only 15 legal documents, it is central to the regulatory area network due to the interdisciplinary nature of its functions.

Third, thickness of the tie in the graph implies the dominance of an agency in a given regulatory area. The more policies an agency issues, the stronger the tie. In "resources and infrastructure," MIIT reigns. In "cybersecurity," MIIT, MPS, and CAC dominate. In "Internet economy," SAIC, State Council (SC), and MPS, MIIT, NDRC, and CAC are most central. In "information services," SAPPRFT, MOC, CAC, MPS, MIIT, and SC are major players.

Cross-Agency Cooperation

Though various ministries and departments issued policies in their respective areas, the complexity of the Internet also compelled agencies to coordinate (F. Yang & Mueller, 2014). We analyzed which agencies collaborated the most often with others, central to the network of cooperation. Among the 358 policy documents, 256 are issued by individual agencies. One hundred and two are jointly issued by more than two agencies. These 102 policies involve 68 of 71 agencies identified in our study, reflecting the complexity of coordination. Three agencies—Ministry of Railway, State Intellectual Property Office, and National Copyright Administration—did not collaborate with others, issuing highly specialized policies that didn't require collaboration.

Figure 2 displays the cooperative relations between state agencies. The size of the nodes indicates the degree of connectedness, where the more an agency cooperates with others, the higher the degree centrality. Figure 2 shows the most central in the network are Ministry of Industry and Information Technology (MIIT), Ministry of Public Security (MPS), and State Administration for Industry and Commerce (SAIC). The second tier includes the State Council (SC), Cyber Administration of China (CAC), People's Bank of China (PBC), Ministry of Finance (MOF), National Development and Reform Commission (NDRC), and State Administration of Press, Publication, Radio, Film and Television (SAPPRFT).

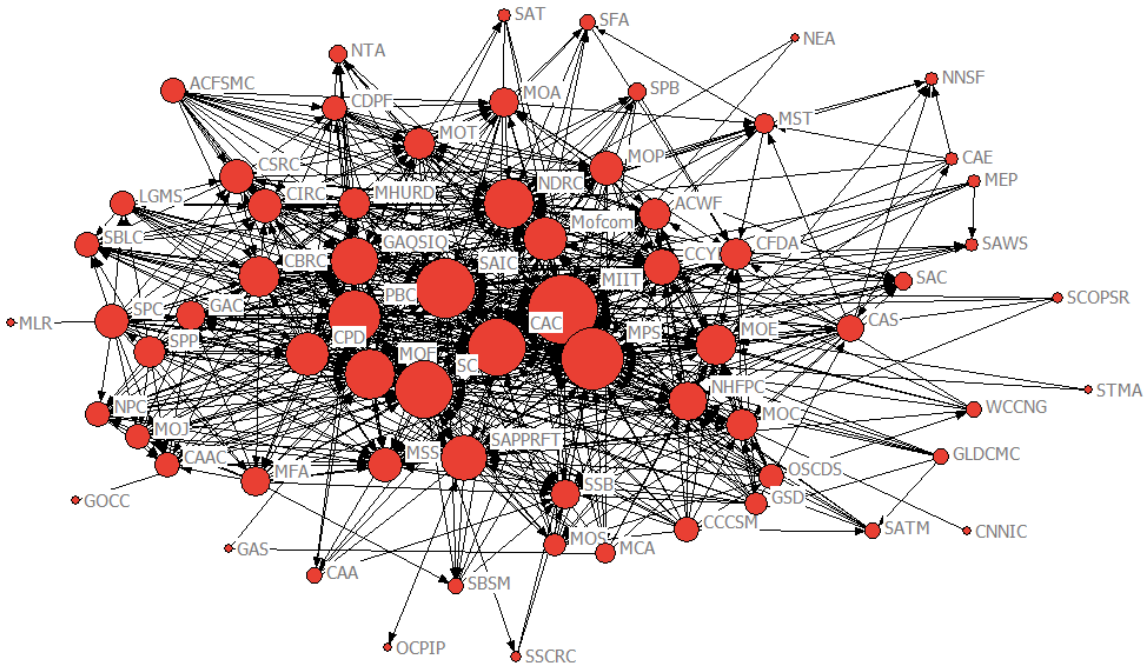

Figure 2. Cooperation between agencies to jointly issue policies (degree centrality).

Figure 3 uses betweenness centrality to depict which agencies (as nodes in the network) act as the most important bridges between agencies across different types of Internet policies. It shows MIIT and Ministry of Public Security (MPS) appear to have the highest betweenness centrality, indicating they are the most important players in legislation of different kinds.

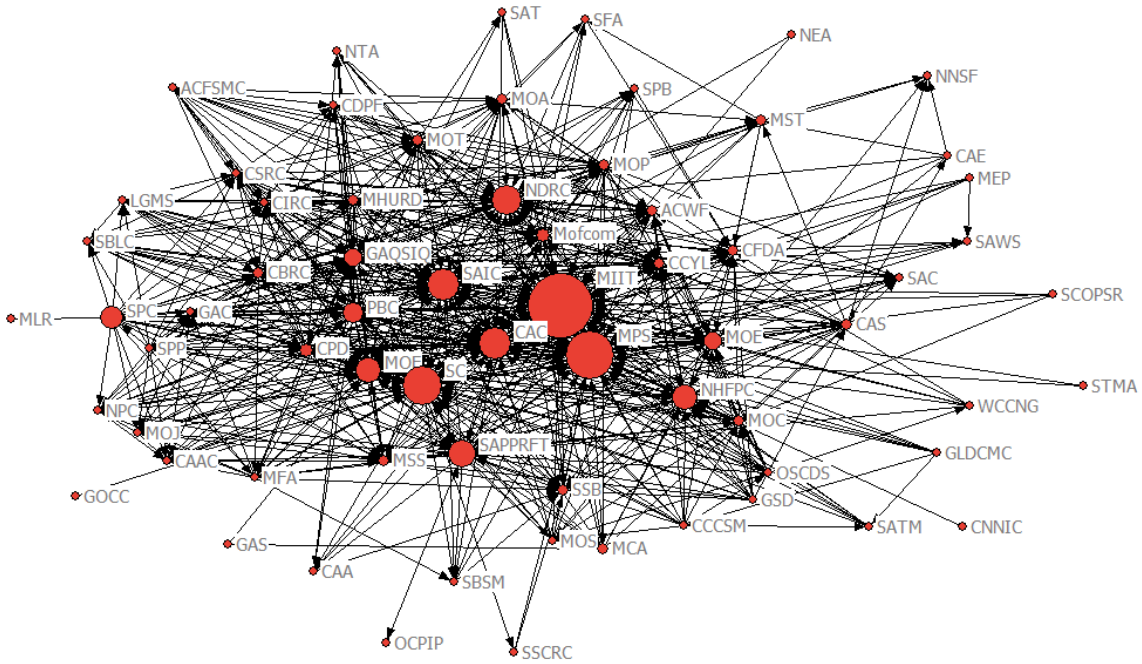

Figure 3. Cooperation between agencies to jointly issue policies (betweenness centrality).

Regulatory Policies

Between 1994 and 2017, the number of Chinese Internet policies issued each year has been on the rise (see Figure 4), reflecting a general evolution of regulatory emphasis from Internet infrastructure to online content to digital economy. The majority of policies concentrate in "information services" (40%) and "Internet economy" (32%). In comparison, "cybersecurity" and "resources and infrastructure" policies are at 14% and 13%, respectively. "Information services" targets content control, whereas "Internet economy" focuses on economic planning and guidance, reflecting the state's dual concern in economic development and political control.

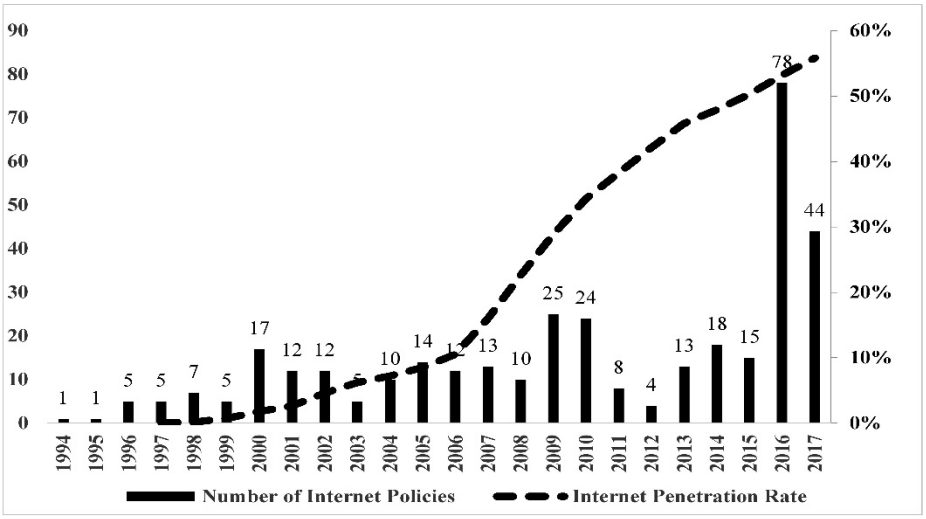

Figure 4. Internet penetration rate and number of Chinese Internet policies issued (1994–2017).[4]

Table 4 shows the evolution of policy types and trends. "Information services" policies, for instance, experienced a peak between 2000 and 2010, whereas "Internet economy" policies quickly grew while "resources and infrastructure" policies declined. This reflects the focus in Chinese Internet policymaking shifted from infrastructure to content to digital economy.

Table 4. Percentages of Four Internet Policy Areas (1994–2017).

	1994–99 (n = 24)	2000–10 (n = l 54)	2011–17 (n = l 80)	Total (N = 358)	χ^2
Information services	8.33% (2)	51.30% (79)	35.56% (64)	40.50% (145)	19.58***
Internet economy	4.17% (1)	22.73% (35)	43.89% (79)	32.12% (115)	26.27***
Internet security	45.83% (11)	9.74% (15)	13.89% (25)	14.25% (51)	22.18***
Resources and Infrastructure	41.67% (10)	16.23% (25)	6.67% (12)	13. 13% (47)	25.03***

***p < .01, **p < .05, *p < .10.

First, in the early stage of Internet development in China, authorities' preoccupation with Internet infrastructure and security manifests itself in policymaking. Between 1994 and 1999, among the 24 Internet policies issued, 10 (or 42%) concern "resources and infrastructure" and 11 (or 46%) "cybersecurity." Internet access, connection, and domain name allocation were important infrastructural

[4] Internet penetration data comes largely from CNNIC annual reports. Note: (1) CNNIC annual reports started in 1997 when Chinese Internet survey data became available; (2) between 1997 and 2001, CNNIC annual reports only provided estimates of Chinese Internet populations. We calculated penetration rates based on figures from China's National Bureau of Statistics; (3) between 2002 and 2018, CNNIC reports provided Internet penetration rates.

work. During this time, MIIT (issuing four policies) and the State Council (issuing four policies) played critical roles in connecting the Chinese Internet to the global network and managing domain names. Cybersecurity concerns not only the State Council but also specialized agencies such as Public Security, People's Bank of China, and Ministry of Railway.

Second, between 2000 and 2010, policy-making focus shifted to regulating Internet applications and content. For example, as major Chinese portals such as Sina, Sohu, and Netease experienced rapid growth since 2000, State Council issued *Regulation on Internet Information Services* (2000) to target website registration, content publishing, and foreign investment. When blogs and Web 2.0 applications became popular in 2004, the state issued more stringent Internet regulations that required personal websites, blogs, and other not-for-profit websites to register with authorities. Policies directed at content regulation reached a peak between 2009 and 2010. Among the 49 policies issued during this period, 32 target content regulation.

Between 2011 and 2017, during China's economic slowdown, digital economy became a hotbed for entrepreneurship and investment. The Chinese state issued numerous policies to position the Internet as a new driver of China's economic restructuring. In 2015, the "Internet Plus Plan" was unveiled to integrate the Internet with traditional industries to fuel economic growth (Hong, 2017). The State Council accordingly issued the *Guiding Opinions of the State Council to Actively Promote the "Internet Plus Plan"* (2015), elevating the Internet to be a national economic engine. Prompted by such policies, many agencies released related directives in their own regulatory fields such as plans to develop modern agriculture, smart energy, and artificial intelligence. Between 2016 and 2017, "Internet economy" policies totaled 55, close to the number of "Internet economy" policies (n = 60) issued between 1994 and 2015.

Regulatory Approach: "Rule by Directives"

Our research finds overall Chinese Internet policies are dominated by lower level regulations such as regulatory documents (63.13%) and departmental rules (26.54%), whereas few enjoy high legal status such as laws (1.12%), judicial interpretations (5.87%), or administrative regulations (3.35%; see Figure 5).

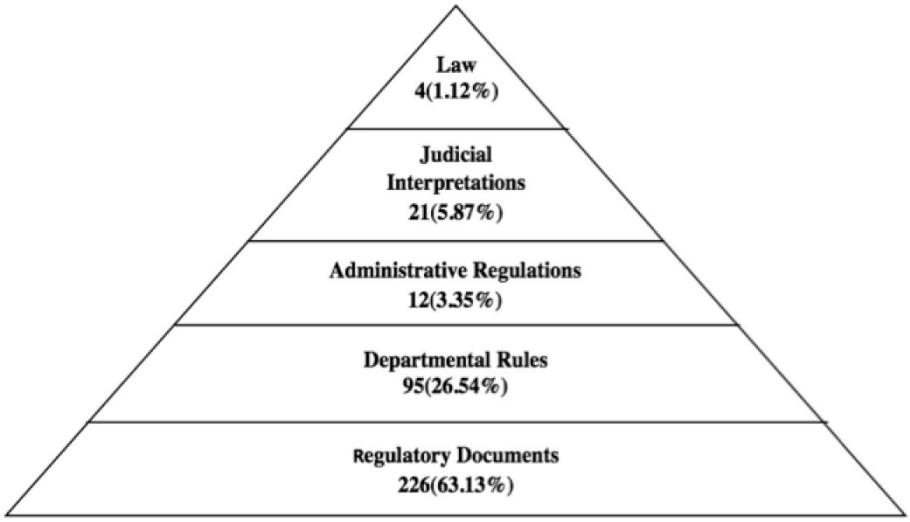

Figure 5. Pyramid of Chinese Internet policies by legislative type.

Hierarchy of Chinese Internet Policies

Given the regulatory hurdles the passing of a law involves and the changing nature of Internet technologies, the state has opted to issue powerful lower level policies such as departmental rules and regulatory documents. The structure of Chinese Internet policies takes the shape of a pyramid (see Figure 5), where lower level rules and regulations ironically matter more in terms of both numbers and importance. This paradox reflects several problems in the Internet policy framework in China historically (though this situation has changed significantly with *Cybersecurity Law of the PRC*): (1) it lacks systematic design, driven mostly by ad hoc problem solving; (2) its enforcement is based largely on lower level policy documents that lack legal authority; and (3) coordination between policies at different levels is poor.

Among the 358 policies, four were passed as "laws," approved by the National People's Congress: *Decision of the Standing Committee of the National People's Congress on Preserving Computer Network Security* (2000), *Electronic Signature Law of the PRC* (2004), *Decision of the Standing Committee of the National People's Congress on Strengthening Information Protection on Networks* (2012), and *Cybersecurity Law* (2017). Among them, the first three target specific issues such as network security and electronic signature. After two decades, the absence of top-level Internet law changed with *Cybersecurity Law*. Anchored in security concerns, the new law marks a milestone of Chinese digital policymaking with broad ramifications (Triolo et al., 2017).

On the other hand, judicial interpretations are supplemental, meant to provide objective interpretations. Although China's Supreme People's Court and the Supreme People's Procuratorate have issued 21 judicial interpretations such as those involving network security, online defamation, and online auction, such interpretations do not provide a robust enough legal framework for Internet regulation in China.

Thus, large numbers of departmental rules and regulatory documents form the main body of China's Internet policies. While policies are often perceived to be systematic, normative and stable, in the Chinese context, they tend to be temporary fixes to existing sociolegal problems, which strictly speaking are only "paralegal." High-level laws are expected only to provide broad frameworks, whereas lower level rules and decisions are to address specific issues. For instance, various agencies including Ministry of Transportation, State Administration for Industry and Commerce (SAIC), and General Administration of Quality Supervision issued six policies in 2016 alone to regulate problems emerging from Uber-like ridesharing apps.

Core Internet Policies

Among the many Internet policies, which are most central? Policy documents often reference prior rules for imposing punishment or legal justification. This study focuses on the legal precedents cited by an Internet policy document in its introduction. The policy cited is commonly considered upper law. Table 5 shows the most cited.

Table 5. The Most Cited Chinese Internet Policies (1994–2017).

	Policy name	Number of times cited
1	*Regulation on Internet Information Services* (2000)	27
2	*Telecommunication Regulation* (2000)	16
3	*Cybersecurity Law* (2017)	15
4	*Guiding Opinions on Promoting the Healthy Development of Internet Finance* (2015)	12
5	*Guiding Opinions of the State Council to Actively Promote the "Internet Plus Plan"* (2015)	10
6	*Notice of the State Council on Charging the Cyberspace Administration of China with the Content Management of Information on the Internet* (2014)	10
7	*Measures for the Administration of Internet Domain Names* (2004)	10
8	*Regulation on Protecting the Safety of Computer Information System* (1994)	10
9	*Interim Provisions on the Administration of Internet Culture* (2003)	9
10	*Decision of the Standing Committee of the National People's Congress on Strengthening Information Protection on Networks* (2012)	9

Regulation on Internet Information Services (2000), issued by the State Council, is the most cited Chinese Internet policy. Offering a broad framework to oversee network information transmitted in China, it regulates commercial Internet service providers (ISPs) through licensing and noncommercial entities through filing and registration to ensure their online content meets state requirement. Article 18 of the regulation requires publishing, education, health, commerce, public security, state security and other relevant authorities to supervise and manage Internet content in their respective area according to law. Such a clause gives various state agencies the legitimacy to legislate related Internet services. The "licensing + filing" model has also been cited in other policies such as *Management Provisions on Electronic Bulletin Services in Internet (2000).* However, such policies created significant challenges for ISPs which must obtain relevant licenses for their services in multiple areas.

Cybersecurity Law, effective in 2017, has been cited 15 times in our dataset to regulate issues covering various areas such as "cybersecurity" (eight times), "information services" (six times), and "resources and infrastructure" (once). This law is designed to pose stricter control over information use by individuals, commercial and noncommercial entities. For instance, while this law covers privacy issues, it also includes clauses such as data localization, causing concerns among foreign businesses over trade secrets and intellectual property (Triolo et al., 2017). In addition, frequent citations of Internet policies such as *Guiding Opinions on Promoting the Healthy Development of Internet Finance* (2015; cited 12 times) and *Guiding Opinions of the State Council to Actively Promote the "Internet Plus Plan"* (2015; cited 10 times) in a mere two years indicate the growing importance of the Internet to the overall Chinese economy.

Discussion

This meta-analysis employed content analysis and social network analysis to examine 358 national-level Chinese Internet policies issued between 1994 and 2017, focusing on regulatory agencies, policies, and approaches. Building on previous research (e.g., F. Yang & Mueller, 2014), our study expanded data collection, conducted new analysis, and generated new insight.

Regulatory Agencies

First, in terms of regulatory agencies, this study empirically studied 71 state agencies involved in regulating the Chinese Internet for the first time. Compared with F. Yang and Mueller's (2014) study that identified 15 core agencies, we mapped out with greater detail many more state agencies and their changing influence, especially after Xi's ascendance to power. Our data show historically the State Council and various ministries were the major Internet regulators. While the State Council issues broad policies, ministries target specific issues. We find within various ministries there are "central-peripheral" dynamics: Ministry of Industrial and Information Technology (MIIT) issued the largest number of Internet regulations in the last 20 years, mostly in the areas of "resources and infrastructure" and "cybersecurity." Ministry of Public Security (MPS) issued the second largest number of regulations, often collaborating with other agencies as a key enforcer of state power over the Internet. SAPPRFT, CAC, and SAIC were also main players, reflecting state concerns over ideology and digital economy.

Second, social network analysis, employed for the first time to empirically analyze interagency relations in Chinese Internet regulation over 25 years, shows although as many as 71 state agencies are involved in Internet regulation in China, a division of labor exists among different agencies with clusters and centers of power in different regulatory areas (see Figure 1). MIIT is the dominant player in "resources and infrastructure." In the field of "cybersecurity," MIIT, MPS, and CAC share regulatory power where MIIT focuses on technology, MPS on management, and CAC on strategy. In "Internet economy," SAIC, NDRC, and SC remain predominant. In regulating "information services," ideologically oriented agencies such as SAPPRFT, Ministry of Culture, and CAC are major architects.

Third, despite specialization, various regulators collaborate, increasingly driven by digital convergence. Social network analysis (see Figure 2) finds that MIIT and MPS cooperate the most with

other agencies, acting as the most important bridges between agencies across different policy types with the highest betweenness centrality.

Fourth, it is worthwhile to critically assess the newly established CAC, a "super" Internet regulatory agency, and its impact. *Cybersecurity Law of the PRC* (2017) has explicitly tasked the CAC to coordinate the planning of cybersecurity work and supervise relevant agencies. Miao, Zhu, and Chen (2018) showed CAC has also assumed the crucial task of informatization, i.e., coordinating policies on industrial upgrades and modernization such as the "Internet Plus Plan," a task that used to fall under the purview of MIIT and NDRC (p. 6). Overall, CAC has also grown more powerful to regulate online content and public opinion.

While President Xi has consolidated Internet regulatory power at the highest level via the CAC (Miao & Lei, 2016), decentralization (F. Yang & Mueller, 2014) and fragmented authoritarianism (Lieberthal & Oksenberg, 1988) will remain useful explanatory frameworks as conflicts between regulators persist. Given the existence of influential agencies such as MIIT, CAC is unlikely to monopolize Internet regulatory power. Rather, CAC serves as a strategic conductor to set the tone and direction of regulation and facilitate collaborations between factional interests. The ongoing tensions surrounding regulators and their regulatory power may be best characterized as multicentered power sharing that incorporates elements of both centralization and decentralization. Overall, while China's Internet policymaking is dominated by the central government, coordinated via the CAC lately, various regulators manage their respective areas, compete against and collaborate with others, which creates both competition conducive to industry growth and dysfunctional rivalry at times. Centralization and decentralization are thus part of the conflicting regulatory process in China.

Last but not least, certain regulatory agencies, most notably the Central Publicity Department (CPD, formerly the Central Propaganda Department), can exert considerable impact on Chinese Internet content from behind the scenes. It does so not through overt legislation but daily administration of media content. The CPD, which oversees the press, radio, film and television, views the Internet as an extension of traditional media and regulates it through its elaborate system of propaganda units at central, provincial and local levels. Although CPD issued only seven Internet policies with other agencies and hence is not prominently featured in our network analysis graphs, its critical role in content regulation should not be overlooked.

Regulatory Policies

Chinese Internet policies have focused on a combination of issues including security, content regulation and digital economy. Although content regulation (censorship) will remain central, Internet governance in China has expanded to include new topics and areas. New data from this study shows while cybersecurity was of paramount concern early on (heightened in the post-Snowden era) and content regulation remains a dominant regulatory issue, Internet economy and consumer protection have started to occupy public conversation and policymaking lately.

In terms of cybersecurity, between 1994 and 2017, National People's Congress passed four laws, three of which concern security. Over time, the notion of security in Chinese cyber policymaking evolved from network security to information security to more broadly cybersecurity today. The evolution culminated in the *Cybersecurity Law* (2017). By then, cybersecurity has become a multi-faceted concept, emphasizing a more holistic and systematic approach toward security issues including personal data protection, consumer protection, cybercrime, public order, and cyberdefense (Jiang, 2020).

The Chinese state's deep-seated insecurity over regime stability has manifested itself in numerous Internet regulations. Between 1994 and 2017, 40% of Chinese Internet policies in our dataset target "information services." This control-based regulatory model, opposite a rights-based model to limit power abuse and protect user rights, is designed to minimize political risk, maintain social stability and spur economic development. China's overly broad and vague policies provide flexibility for the state to regulate online content (Han 2016), while limiting individual expressions, public discourse, and collective actions (G. Yang, 2009).

Moreover, the combination of cybersecurity, economic growth, and depoliticization is increasingly achieved in China through a complicated alignment between the state and the market. Although censorship is commonly seen as antithetical to the growth and innovation of the Chinese Internet, Hong (2017) argues that the Chinese government and indigenous Internet firms can form a mutually beneficial political–economic alliance. First, state preoccupation in cybersecurity has provided a more protected environment for indigenous Internet businesses to function. While security considerations have led to the construction of the Great Firewall to filter information, they have also effectively blocked foreign competitors like Google, Twitter, and Facebook, giving domestic companies like Baidu, Alibaba, and Tencent the opportunity to prosper. Second, both the state and Internet firms have a shared interest in developing China's digital economy into an economic driver: the former benefiting from increased political legitimacy for improving China's economy; the latter from stable profits. Our analysis shows state policies restrict political content but endorse apolitical content such as entertainment and e-commerce with an increasing focus on personal data protection, consumer protection, privacy and AI in response to GDPR and growing Sino–U.S. rivalry (Jiang, 2020).

Unlike its U.S. and European counterparts where the market drives economic development, China's Internet and digital economy are much more closely watched, supervised, and promoted by the state. Not only did the Chinese government set strict boundaries for political discourse, it has also invested heavily in network infrastructure, owns the country's telecom networks, and actively promotes industry growth. Seen in this light, state Internet policies are expected to serve long-term national strategic goals, which in recent years have focused on economic restructuring and digitization. Particularly, the "Internet Plus Plan" and "Made in China 2025 Plan" have put information, data, and AI at the heart of China's economic transition to a digital economy (Hong, 2017). Guided by this macro policy framework, 2016 alone saw the passage of the largest number of Internet policies in a single year between 1994 and 2017, totaling 78, where various ministries and bureaus issued detailed plans. This top-down, whole-of-government approach has achieved considerable success. China's digital economy reached 31.3 trillion RMB (or US$4.43 trillion) in 2018, counting for 34.85% of the nation's GDP (Xinhua Net, 2019).

Regulatory Approach

In terms of regulatory approach, our data provide systematic, empirical evidence lacking in previous research. The Chinese legal system and its Internet policymaking embody the ethos of "rule by directives" instead of "rule of law." Between 1994 and 2017, Nearly 90% of the 358 Internet policies are issued as "departmental rules" or "regulatory documents," whereas only four are "laws" passed by the NPC. Most policies targeting specific issues were issued by lower ranking regulators requiring much less legislative coordination. They lack systematic, overarching legal frameworks and often impose arbitrary rules.

The "rule by directive" ethos in Chinese Internet policymaking reflects the state's ad hoc approach toward Internet regulation historically, following a "develop first, regulate later" pattern (Wang, 2016, para. 8). Liu and Jayakar (2012) also argue: "China's telecommunications decision-making is significantly affected by the macro level political rearrangement and is more likely to be non-incremental" (p. 13). In essence, "rule by directive" conjures instinctive regulatory responses to a fast-changing environment, providing businesses and public opinion a space to thrive sometimes and less room for maneuvering at other times.

Notably, the "rule by directives" ethos observed in TV content regulation (Zhu, 2012) previously is also undergoing considerable changes in Xi's Internet governance regime. Our data show that since Xi took power in 2012, the corpus of Internet policies has grown both in number and scope. Reversing decades of ad hoc regulatory approach that often lacks systematic design, Xi's administration has embarked on an ambitious Internet regulatory redesign, exemplified by the passage of *Cybersecurity Law* in 2017. This high-level national law now serves as the overarching framework for a burgeoning set of new policies (Triolo et al., 2017).

Despite the central government's restructuring of Internet policymaking bodies and processes by concentrating power in the newly established CAC, the "rule by directive" principle continues to reign. Lower level administrative regulations and departmental rules are regularly issued, coordinated via the CAC, to circumvent the more arduous process through the NPC. This arrangement not only allows China's top leadership to exert considerable power over policy directions but also speeds up decision-making process in a fast-changing economic, political and international environment, a bureaucratically systematic process some scholars bemoan the U.S. government lacks in its cybersecurity policymaking (Trautman, 2015).

Conclusion

As an emerging cyber superpower, China's ever more complex legal edifice of Internet regulation will gain importance in both domestic and international Internet governance. Overall, this work historicizes the development of Chinese Internet policies from a macro, longitudinal, and network perspective, based on the assumption that legal documents can reflect state approaches toward Internet governance. Here, we briefly discuss the implications and limitations of the study and offer suggestions for future research.

That China has developed the only Internet ecosystem that can compete with the United States while maintaining the one-party state is not lost on keen observers. Our brief historical survey of Chinese Internet policymaking reveals a complex picture of interdepartmental bureaucratic competition,

collaboration, and central-peripheral relations that a monolithic view of the state often fails to capture (Miao et al., 2018). Moreover, China has adopted a state-centric, interventionist approach of Internet governance, relying on an extensive censorship apparatus that is sanctioned by Chinese laws, coordinated by central propaganda organs, and facilitated by Internet companies (Dong, 2012). While government intervention in the economy is anathema to Western market-centric models of Internet development, China's insistence on technological self-reliance has charted a different path, placing the state at the center for research funding, infrastructure investment, industrial development, and market regulation (Hong, 2017). Last but not least, the tendency in the Chinese legal system to "rule by directive" instead of following the "rule of law" will continue to frustrate practitioners and scholars who look for clarity to avoid confusion and conflicts over policies (Han, 2016).

Finally, we acknowledge several limitations of this study and point to areas for future research. First, our macro approach cannot yield detailed analysis of policy-making process. In-depth case studies can supplement to reveal the varied perspectives, behaviors and negotiations between government agencies and other actors. Second, this study uses frequency (e.g., the number of times an agency issues policies or how often a policy is cited) rather than other metrics to measure policy influence. Alternative measurements can yield different insight. Third, we focused on state-level policies, thus unable to analyze policies at provincial or local levels, which may differ from state regulations. Fourth, policies only reflect the intent of state agencies, not their actual implementation or effects. Different agencies and interest groups may interpret and execute Internet policies differently and produce unintended consequences. We hope future work can leverage the historical, empirical data of our study to further explore Chinese Internet regulators, policies, and approaches from diverse theoretical and methodological perspectives. Such work to understand China's complex bureaucratic structures and dynamics may also serve as a useful baseline for comparison with other countries or regions (e.g., United States, EU, Russia, India, Brazil). Given the increasing importance of China in the global digital economy and the Chinese state's desire to influence global Internet policies, we believe a more historicized, critical, systematic, and empirical understanding of Chinese Internet policies and policymaking that informs global Internet governance research is warranted.

References

Borgatti, S., Everett, M., & Freeman, L. (2002). *UCNET for Windows: Software for social network analysis*. Lexington, KY: Analytic Technologies.

Bhuiyan, A. (2014). *Internet governance and the Global South: Demand for a new framework*. London, UK: Palgrave Macmillan.

Cui, D., & Wu, F. (2016). Moral goodness and social orderliness: An analysis of the official discourse about Internet governance in China. *Telecommunications Policy, 40*(2), 265–276. doi:10.1016/j.telpol.2015.11.010

DeNardis, L. (2014). *The global war for Internet governance*. Cambridge, MA: MIT Press.

Dong, F. (2012). Controlling the Internet in China: The real story. *Convergence, 18*(4), 403–425. doi:10.1177/1354856512439500

Han, D. (2016). From vagueness to clarity? Articulating legal criteria of digital content regulation in China. *Global Media and Communication, 12*(3), 211–227. doi:10.1177/1742766516675495

Herold, D., & Seta, G. (2015). Through the looking glass: Twenty years of Chinese Internet research. *The Information Society, 31*(1), 68–82. doi:10.1080/01972243.2014.976688

Hong, Y. (2017). *Networking China: The digital transformation of the Chinese economy*. Urbana: University of Illinois Press.

Hu, L. (2008). 1998年之前的中国互联网立法 [Internet legislation in China: A history before 1998]. *Internet Law Watch, 4*, 55–64.

Hu, Y. (2010). 中国政府对互联网的管制 [China's regulation of the Internet]. *Mass Communication Research*, *103*, 261–287.

Hu, Y. (2015). 中国互联网立法的原则问题 [The principles of Internet legislation in China]. *Journalism Lover*, *8*, 54–57.

Jiang, M. (2010). Authoritarian informationalism: China's approach to Internet sovereignty. *SAIS Review of International Affairs, 30*(2), 71–89.

Jiang, M., & Okamoto, K. (2014). National identity, state ideological apparatus, or Panopticon? A case study of Chinese national search engine Jike. *Policy & Internet, 6*(1), 89–107. doi:10.1002/1944-2866.POI353

Jiang, M. (2015). Managing the micro-self: Governmentality of real name registration policy in Chinese microblogosphere. *Information, Communication & Society, 19*(2), 203–220. doi:10.1080/1369118X.2015.1060723

Jiang, M. (2020). Cybersecurity policies in China. In L. Belli (Ed), *CyberBRICS: Cybersecurity regulations in BRICS countries* (pp. 195–212). Berlin, Germany: Springer.

Lieberthal, K., & Oksenberg, M. (1988). *Policy making in China: Leaders, structures, and processes*. Princeton, NJ: Princeton University Press.

Liu, C., & Jayakar, K. (2012). The evolution of telecommunications policy-making: Comparative analysis of China and India. *Telecommunications Policy, 36*(1), 13–28. doi:10.1016/j.telpol.2011.11.016

Meng, B. (2010). Moving beyond democratization: A thought piece on the China Internet research agenda. *International Journal of Communication, 4*, 501–508.

Miao, W., & Jiang, M. (2021). *China Internet laws and policies (1994–2017).* Retrieved from https://doi.org/10.15139/S3/SVMGNK

Miao, W., & Lei, W. (2016). Policy review: The Cyberspace Administration of China. *Global Media and Communication, 12*(3), 337–340. doi:10.1177/1742766516680879

Miao, W., Zhu, H., & Chen, Z. (2018). Who's in charge of regulating the Internet in China: The history and evolution of China's Internet regulatory agencies. *China Media Research, 14*(3), 1–7.

Mueller, M., & Tan, Z. (1997). *China in the information age: Telecommunications and the dilemma of reform.* Westport, CT: Praeger.

Negro, G. (2017). *The Internet in China: From infrastructure to a nascent civil society*. Lugano, Switzerland: Palgrave McMillan.

Neuendorf, K. A. (2002). *The Content analysis guidebook*. Thousand Oaks, CA: Sage Publications.

People's Net. (2013). 习近平谈关于加快完善互联网管理领导体制 [President Xi Jinping on the acceleration of improving the leadership system for managing the Internet]. (2013). *People's Net.* Retrieved from http://politics.people.com.cn/n/2013/1115/c1001-23559689.html

Shen, H. (2016). China and global Internet governance: Toward an alternative analytical framework. *Chinese Journal of Communication, 9*(3), 304–324. doi:10.1080/17544750.2016.1206028

Sohmen, P. (2001). Taming the dragon: China's efforts to regulate the Internet. *Stanford Journal of East Asian Affairs, 1*(1), 17–26.

State Council Information Office. (2011). 《中国特色社会主义法律体系》[*The socialist system of laws with Chinese characteristics*]. Retrieved from http://www.scio.gov.cn/zfbps/ndhf/2011/Document/1034943/1034943_2.htm

Tan, Z. (1999). Regulating China's Internet: Convergence toward a coherent regulatory regime. *Telecommunications Policy, 23*(3–4), 261–276.

Tian, X. B. (2008). 中国的立法体制现状 [The present situation of China's legislative system]. *Modern China Studies, 3*. Retrieved from https://www.modernchinastudies.org/us/issues/past-issues/101-mcs-2008-issue-3/1060-2012-01-05-15-35-31.html

Trautman, L. J. (2015). Cybersecurity: What about U.S. policy? *Journal of Law, Technology & Policy, 2*, 341–392.

Triolo, P., Sacks, S., Webster, G., & Creemers, R. (2017). *China's cybersecurity law one year on: An evolving and interlocking framework*. Retrieved from https://is.gd/UnUJjB

Wang, S. (2016). 做好立法司法工作，提升互联网治理法治化水平 [Improve Internet governance through legislative and judicial work]. *People's Net*. Retrieved from http://theory.people.com.cn/n1/2016/0421/c148980-28294671.html

Wu, J., & Yun, G. (2018). From modernization to neoliberalism? How IT opinion leaders imagine the information society. *International Communication Gazette, 80*(1), 7–29. doi:10.1177/1748048517742773

Xinhua Net. (2015). 学习有方：5个词读懂习近平的网络安全新主张 [Study strategies: 5 keywords to understand President Xi's new proposal on cyber security]. *Xinhua Net*. Retrieved from http://www.xinhuanet.com//politics/2015-08/06/c_128099493.htm

Xinhua Net. (2019). 《中国数字经济发展与就业白皮书（2019年）》：各地数字经济发展成效显著 [*China's Digital Economy Development and Employment White Book 2019*: Significant achievements in digital economy development in many regions]. *Xinhua Net*. Retrieved from http://www.xinhuanet.com/info/2019-04/19/c_137989822.htm

Yang, F., & Mueller, M. (2014). Internet governance in China: A content analysis. *Chinese Journal of Communication, 7*(4), 446–465. doi:10.1080/17544750.2014.936954

Yang, G. (2009). *The power of the Internet in China: Citizen activism online*. New York, NY: Columbia University Press.

Yang, G. (2014). The return of ideology and the future of Chinese Internet policy. *Critical Studies in Media Communication, 31*(2), 109–113. doi:10.1080/15295036.2014.913803

Zhan, X. (2013). "九龙治水"的互联网管理能改变吗? [Can the management of the Internet by multiple regulatory agencies be changed?]. *Youth Journalism, 34*, 93.

Zhang, P., & Guo, K. (2012). 《互联网法律法规汇编》 [*Anthologies of Internet laws and regulations*]. Beijing, China: Peking University Press.

Zhu, Y. (2012). *Two billion eyes: The story of China Central Television.* New York, NY: The New Press.