

Duke
UNIVERSITY

DEPARTMENT *of*
POLITICAL SCIENCE

**“China’s Internet Governance: A New Conceptualization of the
Cybersovereignty Model”**

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Duke University

Fall 2018

Political Science Undergraduate Honors Thesis

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Abstract

In recent years, China’s Internet governance regime has been subject to increasing literature scrutiny and attention. A rising superpower, China’s vision for the Internet on domestic and international stages has far-reaching implications for the future cyber world order. While traditional theories of governance typically categorize China as a cyber-sovereign nation, I argue that China’s approach is more nuanced and can better be considered under a “flexible” cyber-sovereignty model. Through both a historical and case-study analysis, I suggest that this new model for China better considers the effects of new, rising capital forces—Chinese internet corporations—and explains the dynamic mix of rejection and assimilation into the existing regime that characterizes China’s current Internet governance strategy. Ultimately, this new model can help us conceptualize China’s vision and strategy for Internet governance, which can have far-ranging implications for the future of cyberspace and the Internet as we know it.

Many thanks to Dr. Matthew Stephens for sparking my interest in this topic during my internship with WZB in Berlin; to Dr. Mickiewicz for cultivating my growth and teaching me invaluable knowledge about research, writing, and critical thinking; to Dr. Munger for his guidance, patience, and support; to Ms. Pierce, Mr. Hysjulien and the Political Science faculty and staff; to the BN Duke Scholarship Program for funding my trip to China; and lastly to my parents and friends for supporting me through this process.

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Glossary

International Institutions

ICANN- Established, with help from the US government, in 1998 as a California non-profit, the Internet Corporation for Assigned Names and Numbers oversees the assignment of domain names and internet protocol addresses on the Internet, important resources that nation-states have contended over (Housley, Curran, Huston, & Conrad, 2013). Many sovereign nations have criticized ICANNs central role in regulating the DNS, along with its sustained links to the US Department of Commerce as an illustration of US unilateral control over a key Internet resource (Arsene, 2016). After a series of propositions for alternate governance mechanisms of the DNS, ICANN alleviated some controversy by ending its contract with the US Department of Commerce in 2016 and turned its governance over to the international community (Finley, 2017).

IETF- Created by the US Government in 1986, the Internet Engineering Task Force (IETF) is a central authority that worked with other standard setting organizations like the International Telecommunications Union, Internet Society, and the World Wide Web Consortium to control key Internet standards, protocols (IPv4 and IPv6), and other technical resources (IETF and the Internet Society, n.d.).

Request for Comments- Official documents from the technology community, through members in the Internet Engineering Task Force (IETF), the Internet Research Task force (IRTF), the Internet Architecture Board (IAB), or independent authors. “Internet

Requests for Comments” (2000) says it describes methods, behaviors, research, and innovations applicable to the working of the Internet. The IETF adopts some of the RFCs as Internet standards.

Internet Society- Due to concerns over US hegemony and federal funding constraints, the US government established the Internet Society in 1992 to provide financial support for IETF. It was later recognized internationally as the overseeing board that coordinates the functions of IETF, IAB, IRTF, IANA, and some other smaller institutions (IETF and the Internet Society, n.d.).

Internet Governance Forum- Forum created out of the second World Internet Summit. Based on the principle of multi-stakeholderism, it championed a bottom-up approach to internet governance, in which various stakeholders, including the technical community, corporations, governments, international institutions, NGOs, civil society, and netizens have a role in discussing policy issues. The forum has no official decision making power, and promotes open discourses characterized by non-binding decisions, decentralized authority, and transparency (Chenou, 2014; DeNardis, 2010).

Working Group on Internet Governance- A UN body formed out of the first World Summit intended to “to investigate and make proposals for action, as appropriate, on the governance of Internet by 2005.” Created a list of four proposals for governance mechanisms, one of which was the establishment of a new forum for discussing Internet

governance issues. This led to the creation of the Internet Governance Forum (WGIG Report, 2005).

World Summit on Information Society I (WSIS I)- Due to concerns over US domination over the root-zone file, the digital divide, and other internet-related issues, the UN hosted this conference in Geneva in 2003, where delegates from 175 countries came together to create a new plan for the future of Internet governance (World Summit on the Information Society, 2015). The first summit was inconclusive, and could not come to any agreement on what internet governance should be; however, it led to the establishment of the Working Group on Internet Governance and a second phase of the conference.

World Summit on the Information Society II (WSIS II)- The second World Summit hosted in 2005 in Tunis. Resulted in the creation of the Internet Governance Forum, and agreement over the Tunis Agenda for Information Society, in which the principles of multi-stakeholderism and enhanced cooperation in Internet governance were established as guiding the norms of internet governance (Mueller, 2010).

Internet Governance- the collective decision-making by owners, operators, developers, and users of the networks connected by Internet protocols to establish policies, rules, and dispute resolution procedures about technical standards, resource allocation, and/or the

conduct of people engaged in global internetworking activities (Mueller, Mathiason, & Klein, 2007).¹

Multi-Stakeholder Model- Guiding principle established in Tunisia Agenda for Internet governance; refers to the coming together of different interest groups on an equal footing, to identify problems, define solutions and agree on roles and responsibilities for policy development, implementation, monitoring and evaluation (Mueller, 2010).

Chinese Institutions

China Network Internet Information Center (CNNIC)- Established in 1997, a state-owned non-profit organization that manages domain name registration and IP address allocation (Shen, 2016).

Ministry of Information Industry (MII/ MIIT)- created in 1998 to regulate telecommunications, which later became the Ministry of Information and Information Technology in 2008 (Shen, 2016).

Central Propaganda Department (CPD)- Founded in 1825, the CPD is in charge of regulating online content control and enforces media censorship (Shen, 2016).

¹ The first definition of Internet governance was given at the first WSIS, as “the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet” from Chapter Three in Mueller, M. (2010). “Networks and states: The global politics of Internet governance.” Cambridge, MA: MIT Press.

State Council Information Office (SCIO)- Works with CPD to regulate online content and censorship; the Chinese government's chief information office (Wines, 2011).

Cyberspace Administration of China (CAC)- A ministry-level agency, this agency was established under Xi that consolidated the Internet content regulation functions that were previously spread across often-competing governmental branches (Creemers, 2017).

The Central Cyber Security and Informatization Leading Group- in 2014, Xi Jinping formed a leading group on Internet governance composed of high-ranking officials from different ministries. This centralization of control greatly helped reduce structural problems; and consequently, under Xi Jinping a more assertive internet policy took shape on the domestic and international stages (Creemers, 2017).

People

Xi Jinping- a Chinese politician serving as general secretary of the Communist Party of China (CPC), president of the People's Republic of China, and chairman of the Central Military Commission. Established two new bodies for Internet governance: the Cyberspace Administration Center and the Central Cyber Security and Informatization Leading Group to consolidate government branches. Pushed for the idea of Internet sovereignty and started the World Internet Conferences to showcase China's growing technological prowess (Tiezzi, n.d.).

Lu Wei- Lu ran the Cyberspace Administration of China from its launch in 2014 to 2016, and met frequently with the likes of Apple Inc. Chief Executive Officer Tim Cook and Facebook Inc. founder Mark Zuckerberg. He was nicknamed China's "internet czar" because he oversaw regulations that amounted to the biggest crackdown ever on freedom of expression by China's web users. He was charged with corruption and put under investigation by the Communist Party's anti-corruption agency in Nov. 2017. (Buckley and Mozur, 2017)

Premier Li Keqiang- a Chinese politician who is the current Premier of the State Council of the People's Republic of China. Li has also been a major force behind the implementation of the "comprehensively deepening reforms" announced in the fall of 2013. Made in China 2025 and Internet Plus is a strategic plan issued by Li and his cabinet in May 2015 ("Li Keqiang— Premier of China's State Council", 2018)

Jack Ma- The co-founder and executive chairman of Alibaba, a multinational Chinese internet company. In September 2018, he announced he will retire and pursue educational work, effective one year with Daniel Zhang succeeding him as executive chairman. He was official revealed to be a Communist party member by the People's Daily on November 27th (Matsuda, 2018).

Ma HuaTeng (Pony Ma)- Founder, chairman, and chief executive officer of Tencent, Asia's most valuable company, one of the largest Internet and technology companies, and

the biggest investment, gaming and entertainment conglomerates in the world (Xiao, 2018).

Section I: Introduction

In recent years, a growing body of literature has traced the rise of China within the Internet governance sphere (Shen, 2016; Mueller, 2010). Within the literature, China has traditionally been referred to as a “cyber-sovereign nation”, which holds that China wants the Internet to fall within the jurisdiction of traditional, national government control. If it is not possible to do so, cyber-sovereign nations prefer multilateral governance mechanisms over private sector governance, and other forms of non-governmental control.

However, China has greatly changed in the 21st century, leading us to question whether cyber-sovereignty is the best model through which to view China’s Internet governance vision. In particular, China has seen the rise of new, global Chinese Internet corporations that are starting to shape the economic and political landscapes in China. Some of these large corporations include the well-known “BAT Trio”, composed of three companies, Alibaba, Baidu and Tencent. These three companies rose around the early 2000s, about 20 years after Deng Xiaoping instituted radical economic reforms that increased state support for the nascent private sector (Krug, 2004). With support via state economic protectionism policies, they have grown to dominate the Chinese domestic market without competition from Western companies. Now, the BAT trio is entering the

world stage as international giants: Alibaba, China's e-commerce giant, handles more transactions each year than do Ebay and Amazon combined; Tencent, which specializes in gaming and social media, is now the world's tenth largest public firm, worth \$275 billion; and Baidu is one of the largest AI and Internet companies in the world ("China's internet giants...", 2017). The rise of these three giants just reflects a growing, powerful Chinese private sector that could affect China's Internet governance vision and strategy, and suggest that a new reconceptualization of China's cyber-governance is necessary.

In general, however, research on the rise of corporations in Internet regulation and governance is not a new area of literature. Businesses exert a large amount of influence over the content and regulation of online spaces, by providing service provider peering agreements, terms of service agreements, and end user licensing agreements that have direct implications on information accessibility and flow online (Miguel, 2010). While traditional Internet governance scholars have analyzed Internet regulation primarily around four loci of activity: in the Internet Corporation for Assigned Names and Numbers (ICANN), the International Telecommunications Unit (ITU), the World Intellectual Property Organization (WIPO), and the World Summits on Information Society (WSIS) (Mueller, Mathiason, & Klein, 2007), a number of scholars have argued for the necessity to consider the role of private sector actors, both within traditional Internet governance bodies and outside of formal institutions (Flyverboom et al. 2017; MacKinnon, 2012; DeNardis, 2010). Behemoth internet corporations have become key commercial actors not only because they have large amounts of control over valuable online resources, such as user data and domain names (Carrapico & Farrand, 2016), but also because they are increasingly integrated in transnational and national financial

markets and political spheres of influence. A recent example is Facebook's disastrous "pivot to video" initiative in 2015, in which Facebook intentionally hid serious miscalculations about multiple metrics from the public, including "Average Duration of Video Viewed", in measuring the success of the shift (Lapowsky). In addition to the Cambridge Analytica leak, such a dangerous move by a powerful company is but one example that shows the extent to which Internet companies can control and exert influence over public spaces.

However, while researchers have analyzed the effects of large Western companies on cyberspace, such as Facebook and Google (Flyverboom et al. 2017; West, 2014), less attention has been dedicated to their growing parallels in the East. This lack of attention is perhaps why the traditional "cyber-sovereignty" view of China is still well represented in the literature. A reconceptualization is long overdue. Although it is true that China has received much scrutiny in recent years (Shen, 2016; Mueller, 2010), the established traditional literature view of China as a cyber-sovereign nation still oversimplifies the complex dynamics between the Chinese government and businesses. A more nuanced analysis of China's internet governance vision and strategy which considers the rise of capital can better clarify China's stance on internet governance is, and potentially elucidate what the future of internet governance holds.

Therefore, the purpose of this thesis is to analyze what China's vision and strategy for Internet governance is, and explore the role that Chinese internet companies play in shaping these. This thesis will be guided by three questions:

Question 1: What is China's ideal vision for how the Internet should be governed?

Question 2: What is China's strategy to implement the vision they want for governing the web?

Question 3: How do Chinese businesses fit into the Chinese vision and strategy? What role do they play? Are there, if any, areas of cooperation, and areas of contention between the state and businesses, and how are these conflicts resolved?

There is some inherent speculation in addressing these questions. For one, it is hard to “truly know” what China’s vision is, considering not only the diplomatic maneuvers the government may employ when speaking with different audiences, but also the effects of other stakeholders outside of Chinese corporations. Indeed, while this thesis focuses on how the rise of corporations affects China’s Internet governance approach, this does not discount the effects other groups, including but not limited to transnational financial corporations, the Chinese populace, and western governments (Jia and Winseck, 2018). Other stakeholders may play varying degrees of influence in both the Chinese corporate-state relationship, and the state’s overall vision for cyber-governance.

Thus, I decided to conduct two analyses: first, a historical analysis of China’s Internet governance policy under three leaders: Jiang Zemin (1989-2002), Hu Jintao (2002-2012), and Xi Jinping (2012-present), and second, a case study of two Chinese internet conferences. Having two analyses can better address the first concern: that China’s strategy may vacillate depending on the audience, as I can explore what China says under different contexts. In the historical analysis, I chronicle (a) notable historical events, (b) social and cultural initiatives, (c) economic and political initiatives, and (d) technical initiatives regarding Internet governance. Adding onto this historical view, I

also conduct case studies of two conferences: the World Internet Conference, and the US-China Internet Industry Forum. These conferences were influential in the Internet governance space, and were heavily publicized in both Chinese and Western news sources, making it easier to find information for analysis. In both conferences, I chronicle the (a) demographics of attendees present (international and domestic), including absent attendees, (b) backlash and controversy over the conferences, and (c) notable speeches/ events.

As a note, before getting into both these analysis, I introduce a definition for Internet governance as a framework for this paper. I give a brief background of the three layers of Internet governance, the main institutions involved, and areas of conflict within the field. As this field is constantly changing, and as there is often unclarity as to what Internet governance, and it's history, constitutes, I decided this background section would be a helpful addition for the reader to situate him or herself within the general Internet governance literature. Additionally, the reader could see what is at stake in Internet governance, and better understand the importance behind the areas that China is fighting to control.

The outline of the paper will be as follows. First I will conduct a literature review analysis of two sources that have, from different angles, explored this Chinese business-government dynamic. Then, I will overview the three layers of Internet governance and institutions involved in governing each, and the changes in the field of Internet governance, from the establishment of ICANN to the World Summits to the Internet Governance Forum. After which, I conduct both historical and case study analyses, and describe the conclusions drawn, limitations, and areas for future research.

From this research, I suggest that China's vision for Internet governance relies on a "flexible cyber-sovereign model". While cyber-sovereignty is the belief that governing the Internet should fall within the jurisdiction of traditional governmental control, "flexible cyber-sovereignty" allows for the contributing influence of private sector players in governing the Internet. Instead of centering all the power in states, flexible cyber-sovereignty accounts for the dynamic between the state and private sector and market forces, considering multiple flows of information that affect internet policy. This concept of "flexible cyber-sovereignty" fits with the rising role of private Chinese companies, which, I will illustrate, have gained larger roles in hosting and speaking at large Internet conferences, and in helping promote market-based solutions in Internet governance.

To further support the concept of "flexible cyber-sovereignty", I will highlight the complexity of China's approach: one that I characterize as both a rejection and acceptance of the current international Internet governance regime. Indeed, China has participated selectively in certain parts of ICANN and IETF, while also developing its own web-based initiatives and standards domestically. This further suggests that a one-dimensional cyber-sovereignty model cannot always predict China's approach, and that we need a better reconceptualization of China as a more dynamic, strategist player in the Internet governance.

This study draws information from academic research, professional interviews of Chinese ministry officials and Western Internet governance experts, official document reports, and primary news sources (Chinese and American) for press coverage of conferences and initiatives, speeches, government policies, etc. This is due to both the

dearth of synthesized academic research on this topic, especially in Xi Jinping's time, about China's Internet governance, and an increase in media coverage of China during this time. It is important to note that there is an inherent bias in any news source, particularly ones controlled by the government, or large corporations, and this bias is acknowledged in analyzing these sources. In addition, the translated, English versions of official government documents were often reviewed, and there could be changes in the integrity of the essential message of the piece lost in translation.

Literature Review

In this section, I will review Jia and Winseck's work on Chinese corporate power-relations in Internet governance, discussing gaps in the existing work.

The political economy of Chinese internet companies: Financialization, concentration, and capitalization (Jia and Winseck, 2018)

Jia and Winseck hypothesized that the financialization of Baidu, Alibaba and Tencent ("BAT trio"), three of the top Chinese corporations, is occurring through a three-way dynamic between the state, Internet companies, and international finance capital. They surmised that the BAT trio is experiencing the same characteristics of financialization that occurred to the media, Internet, and telecom industries in the early 21st century, in which hallmarks were (1) increasing centrality of financial interests as corporate shareholders, (2) increased debt leveraged to finance growth through mergers and acquisitions, and (3) the 'financial' conception of corporate assets as a 'portfolio' of

liquid subunits. To test this hypothesis, they looked at six aspects of each company, i.e. ownership, directors, operating profits, debt level, mergers and acquisitions, and connections to broader global networks of capital, media, and entertainment companies, ICTs, retailing, and the Chinese Government, amongst others. They found that all aspects tested, except for debt level, verified the financialization thesis.

While Jia and Winseck created an extremely organized, logical, and quantitative method to measure financialization in these three companies, they did not connect the rising power of Internet business to its effects on Internet governance institutions. Therefore, they analyze a similar question I had, albeit from a different perspective: through understanding the financial and capital markets, not through analyzing the Internet governance system (Jia, personal communication, Nov 30, 2018).

Section II: Internet Governance: Areas and Institutions

This section will give an overview of the field of Internet governance, in order to briefly illuminate the history of Internet governance and the areas that Internet governance covers. In this section, I will layout the three areas of Internet governance: governance of the Internet's technical infrastructure, governance of Internet critical resources, and governance of human conduct, and the institutions used in governing each. In doing so, I will address these questions: what is the history of these institutions? What is the hierarchy between different institutions? What kinds of institutions are these: private-owned, state institutions, international organizations? And which states are typically involved in creating and managing these institutions? This section is intended to

establish a background context in which to analyze China's strategy; it is designed to situate China within an international framework and describe the importance and significance of the areas in which China has contested for control.

In order to layout the main institutions, networks, and players in the field of Internet Governance, one must first have a conception of what Internet governance is. In the early stages of the Internet, back when it originated through federal government research efforts in the 1960s to build a robust, communication system with computer networks, governance fell only to state governments, and there was no need for a sophisticated definition of Internet governance, which had not yet developed as a scholarly field (Mueller, 2010). Gradually, as the Internet became more transnational in scope, the UN convened two World Summits to address the increasingly growing digital divide and US domination over a debatably public resource. As, consequently, interest in the internet evolved, a definition for Internet governance formulated as well, stated in the first World Summit as, "the development and application by Governments, the private sector and civil society, in their respective roles, of shared principles, norms, rules, decision-making procedures, and programs that shape the evolution and use of the Internet" ("Tunisia Agenda for the Information Society", 2005). To add on to this definition, some researchers divided the Internet into a technical layer, a resource allocation layer, and a human conduct layer (Mueller, Mathiason, & Klein, 2007; DeNardis, 2010), although slight variations from these layers range (Benkler, 2012; Kurbalijia, 2012). Technical standardization involves governance over networking protocols that affect how information is transferred, stored, and manipulated online. Resource allocation involves governance over key Internet resources, such as "virtual

spaces” and the domain name system, which must be unique and exclusive to function properly. Lastly human conduct is the governance of the actions of people through enforcing laws, regulations, and policies, in areas of cybersecurity, cybercrime, intellectual property rights, and consumer protection issues (Mueller, Mathiason, & Klein, 2007). Human conduct can fall under the jurisdiction of multiple fields; for instance, cybersecurity, cybercrime, intellectual property rights, and consumer protection issues are governed by different government and non-governmental institutions. In a slight contrast, standards setting and network protocols issues have a more centralized organization for governance. Below I will give an overview of these three layers and the main institutions involved in governing each.

The Three Layers

Technical Governance

Designing a complex artifact like a distributed computer network is both a material and discursive feat; as much as engineers design new material arrangements of circuits and chips and wires, they also design arrangements of words, concepts, and meanings (Gillespie, 2008, 431; Merrill, 2016). For instance, one with control over the criteria for creating top-level domains in the root zone file, and the semantics associated with them, could create virtual hierarchies that determined the relative status of organizations and governments who need to purchase domain names. The cultural, political, and economic significance of Internet architecture in shaping the norms, culture, and virtual power structures has catalyzed international institutional change, and led to

geopolitical power-struggles over key resources. Thus, what is included in the technical layer of the Internet, and what implications does it have for governance?

To address this question, we must first understand how information flows on the Internet. The Internet is, as the name implies, a network of networks. To transmit information, a file of data is broken down into packets, which are then relayed independently through a system of routers, and then assembled into their proper order in the final destination (Franklin, 2000). Routers can determine, at any particular moment (in the matter of milliseconds), the best route between 2 computers for a packet to travel on. This concept of “packet-switching”, transferring data in the form of packets, is a unique characteristic of the Internet, and increases efficiency, speed, and fault tolerance (Mitchell, 2018). Indeed, if one pathway breaks down or is extremely congested, packets can follow different paths to reach the same destination. Furthermore, transferring data in packets saves bandwidth space, because one does not need to wait for a long file to be sent before sending a small file. What TCP/ IP Protocols do is determine the “mailing address” of each packet; i.e. where the final destination is (White, 2001). A data file is broken down into its packets by the TCP protocol, travels the Internet over different routes according to its IP address, and is then reassembled by TCP at the final destination. If any part of the data file is missing, TCP/IP software from the sending computer will communicate with the receiving computer to ensure the packets are resent, and reach the final destination.

This novel and unique architectural structure of the Internet lay grounds for an early wave of cyber-libertarian thought to develop in the early 1990s. Froomkin, for instance, argued that the internet could not be controlled due to two technological

reasons: 1) the internet is a packet-switching network, meaning data can travel various routes to one destination, making it harder to intercept information, and 2) routing is flexible, so if a government tries to block one computer, data can be rerouted through a “proxy server” (Solum, 2008). Cyber-liberalists believed the Internet was like a free market, and argued that government interference could only be justified if policies provide rationale, free market incentives and correct market failures (“Cyber-Libertarianism: The Case for Real Internet Freedom”, 2010). Even then, private institutions are better than national institutions in implementing control (Chenou, 2014; Harvey, 2017; Murray, 2011). Cyber-anarchists, on an extreme, supported the complete abolishment of government interference; as John Perry Barlow, a notable cyber-anarchist, stated in his 1996 “Declaration of Independence for Cyberspace”:

“Governments of the Industrial World, you weary giants of flesh and steel, I come from Cyberspace, the new home of Mind. On behalf of the future, I ask you of the past to leave us alone. You are not welcome among us. You have no sovereignty where we gather.” (Barlow, 1996)

On another end, cyber-paternalists held that governments should maintain and regulate code-standards, with support from the technical community and private sector (Lessig, 1999). The range of these ideas overlap, and draw from, the concept of internet exceptionalism: that due to the unique architectural properties and self-regulatory nature of the Internet, it should be governed differently than regulatory precedents in other media- if not at all.

These ideas of minimal to no government interference were historically grounded in American libertarianism and the Internet's early hacker and activist culture in Silicon Valley (Tariq, 2018). Perhaps as a consequence, or a reflection, of these ideas, the American government's early position on Internet governance was to a) support competition and consumer choice, and b) rely on the private sector to perform the technical management of the Internet (Crook, 2008). Indeed, the US government was opposed to a "monolithic structure for Internet governance", and instead sought to "create mechanisms to solve a few, primarily technical (albeit critical) questions about the administration of Internet names and numbers" (Crook, 2008). It was remarkably consistent about following through with this vision.

In 1981, the TCP/IP official Internet Protocol was created by Cerf, Postel, and Danny Cohen, officially creating the Internet address space (Mueller, 2010). Soon after, in 1986, the US government founded the Internet Engineering Task Force (IETF), chartered as a non-profit organization and composed of a large number of working groups and informal discussion groups to manage the TCP/IP protocol and other standards ("IETF Who we are", n.d.). The process for creating new standards involves submitting a request for comment (RFC), usually done by network operators, engineers, and computer scientists within the technical community, which is then approved through review and independent testing by IETF. The organization is remarkably transparent: meetings are open to the public, and anyone can participate. A depiction of its culture is succinctly stated by David Clark in 1992, "we reject presidents, kings, and voting; we believe in rough consensus and running code" (Russell, 2006). However, a majority of the

participants are government-funded researchers, engineers, and members of the technical community.

While the IETF is the primary body to develop and govern new Internet standard specifications, several umbrella and overlapping organizations are also involved in various aspects of standards-setting. A parallel organization, the Internet Research Task Force (IRTF), promotes long-term research on the Internet by creating focused, long-term Research Groups working on topics related to Internet protocols, applications, architecture and technology (“Internet Research Task Force”, n.d.). Furthermore, the World Wide Web Consortium (W3C) is the main international standards organization for the web, and coordinates with IETF to foster compatibility of new standards (“About W3C”, 2018). The International Organization for Standardization (ISO) develops voluntary international standards and makes sure standards are compatible between nations; however, these standards range across different sectors, including agriculture, healthcare, technology, and food safety (“About ISO”, 2018). Furthermore, the International Telecommunications Union is a more intergovernmental body, an agency of the UN, and is involved in issues involving communication and information technology (“About ITU”, 2018).

Finally, as a note, while these organizations are often considered as part of the “technical community” in Internet governance, their work on technical standards has implications in governing human conduct and online resources. Therefore, one should be cautious about too rigidly separating governance the technical layer, resource layer, and human conduct layer, since many fall under the jurisdiction of similar organizations.

Resource Governance

How are Internet number resources, including Internet Protocol (IP) addresses, allocated to different regions of the world, and how does an organization register an IP address? How can one buy and/or designate a top-level domain name? These questions deal with the distribution, sell, and management of key Internet resources, including IP addresses and the root zone file. This section will give an overview of the hierarchical structure of each and how each is governed.

Firstly, IP addresses are numerical labels assigned to devices connected to a computer network, so routers can determine where to send data packets too. These IP addresses are delegated by the Internet Assigned Numbers Authority (IANA) through five regional Internet registries (RIR): the African Network Information Center, the American Registry for Internet Numbers, the Asia-Pacific Network Information Centre, the Latin America and Caribbean Network Information Centre, and the Reseaux IP Europeens Network Coordination (“Development of the Regional Internet Registry System”, 2016). These RIRs then further delegate a block of IP addresses to local Internet registries (LIRs), which then assigns the blocks to customers, including internet service providers, academic institutions, or enterprises (“What is a Local Internet Registry?”, 2018).

In addition to IP addresses, the domain name system is another key Internet resource: arguably one of the most contentious, and critical, Internet resource that nation-states have contested for control over (Mueller, 2004). The domain name system was created as an easy way to transfer human-readable domain names to their machine-readable IP addresses: therefore, instead of remembering a long chain of numbers like

74.125.239.82, one could just type in google.com (Mueller, 2004). The DNS requires centralized governance to ensure each domain name corresponds with a unique IP address, and organizations do not register for the same domain name.

The DNS is composed of a hierarchy arrangement of different domains, starting with top-level domains (TLDs), which include organizational names, .com, .net, .org, and country code domains, including .uk, .fr, and .pe, to second level domains and lastly sub-domains (“What is DNS and the DNS Hierarchy?”, 2018). Since failure of domain name servers could disrupt the entire Internet, 13 root servers are distributed around the world to ensure there are back-ups available (“Root Servers”, 2018)². 10 servers are located in the US, 2 in Europe, and 1 in Japan, showing a disproportionate Western influence; this geographical distribution has, therefore, been the subject of many attacks and contentious disputes between nations (“Root Servers”, 2018).

Contention over the domain name typically involves fights over the root zone, because whoever sets policy at the root level could significantly affect events at the lower levels (Mueller, 2004). The current authority with control over the root zone file is a California nonprofit called the Internet Corporation for Assigned Names and Numbers (ICANN), created by the US government in 1998. Through establishing ICANN as the institution to govern the DNS, the US government was able to create a government regime dominated by itself and the private sector, consistent with its intended vision for the Internet. Yet, concerns over US hegemonic control over a key Internet resource was visibly expressed, notably at the first World Summit on Information and Society, by nations South Africa, China, and Brazil (Arsene, 2016; Mueller, Mathiason, & Klein,

² For an interactive look at the root-servers and their geographical distribution, see <http://www.root-servers.org>.

2007; Shen, 2016). After a series of propositions for alternate governance mechanisms of the DNS, ICANN alleviated some controversy by ending its contract with the US Department of Commerce in 2016 and turned its governance over to the international community (Finley, 2017).

Human Conduct Governance

While the first two areas of governance are concerned with more technical functions, the governance of human conduct orders the actions of people. It includes public policy for areas such as spam, cybercrime, copyright and trademark disputes, consumer protection issues, and public and private security (Mueller, Mathiason, & Klein, 2007). Unlike the centralized governance of the technical areas, human conduct governance often falls to a variety governmental institutions and non-governmental institutions, and are often governed more within the boundaries of individual nations. General, institutions involved in governing human conduct range from EU institutions like the World Intellectual Property Organization, which regulates the distribution of copyrighted materials over the Internet, along with the private sector in decisions involving licensing agreements, infrastructure network, and security management (DeNardis, 2010), to the American Office of Cybersecurity and Communications in the Department of Homeland Security. It is important to recognize the general existence of these institutions; however due to the breadth of institutions involved in human conduct, it would be impractical for this paper to overview each— particularly, as I will illustrate in the following section, since international conflicts in internet governance typically center over control of technical resources.

Essentially, what we can take-away from an overview of institutions in technical infrastructure, resources, and human conduct online is both the decentralization and breadth of areas in Internet governance. The range of issues raised by the governance of the Internet is huge: it includes contention over censorship and content regulation; battles over the protection of trademarks and copyrights; privacy and surveillance policies; economic regulation of communication services; and technical standards formation (Mueller, 2010). And of course, there are also a host of policy problems unique to the Internet or the Internet era, such as cybersecurity and cyber-attacks; the resource assignment and coordination policies of ICANN; the control of spam; or the promise and pitfalls of social networking sites and other forms of user-generated content (Mueller, 2010). However, the breadth of this space does not imply Internet governance cannot be grouped into major stages or periods. Indeed, two landmark events stand out in the evolution of the Internet as a focal point for international political contention.

Section III. Historical Examination of Internet Governance: Conflicts and Main Events

This section is intended to give an overview of two key events in Internet governance: the creation of ICANN in 1998 by the US government and the United Nations World Summit on Information Society (WSIS), and explicates the points of conflict in the existing regime of Internet governance. This overview will trace the evolution of prominent ideas in Internet governance, such as multi-stakeholderism and enhanced cooperation, and, moreover, situate China into the world Internet governance

narrative. What is represented below is more reflective of the “traditional view” of the history of Internet governance; from it we can also gather why China is typically conceived of as a traditional cyber-sovereign nation, a viewpoint we will reconceptualize in the following two analyses.

ICANN Regime

One of the first institutions involved in managing the Internet was ICANN, a US non-profit organization create in 1998. The creation of ICANN was one of the most prominent manifestations of the way the Internet was transforming relationships between people and governments (Mueller, 2010). ICANN was a radical departure from traditional forms of governance: a) it was a private organization, b) it was supervised and accountable to a single sovereign power, the United States, and c) it was designed to establish *global* coordination of unique Internet domain names. As Mueller stated, “the new global institution set up in 1998 consisted of one national government with direct, formally unrestrained control over a private corporation that was delegated the authority to make policies affecting the core of the global Internet’s identifier system” (Mueller, 2004, pg. 32). This phase, often called the “ICANN Regime”, is characterized by unilateral governance of the Internet, with a heavy role from private actors and the US government. It was during this time that the technical community had a large stake in Internet-affairs: in institutes like IETF, IRTF, and ICANN. Not surprisingly, however, other nations were not satisfied with this system of governance that reflected a high amount of US control, and US hegemony, over the Internet space.

World Summits on Information Society

Thus, the push for a world summit to discuss how to revise the current space of Internet governance started: modestly in 1998, with a proposal at the International Telecommunications Union (ITU) Conference in Minneapolis that called for a “world summit on the information society” (“International Telecommunications Union”, n.d.). After the proposal passed through the UN, such a summit was held, split into two sections: the first was in Geneva in 2001; the second in Tunisia in 2005. This conference sought to address unresolved questions in Internet governance: what was the role of the nation-state in Internet governance? What norms, principles, and culture should guide a proper Internet governance regime? Who should get a say in governance?

The first phase of the conference, in Geneva, drew a large crowd: 11,000 people from over 175 countries attended, with more than 100 ministers and vice ministers and 50 heads of state or vice presidents (“World Summit on the Information Society”, 2015). At the Geneva conference, the subject of ICANN control became a key dispute, as sovereignist countries, such as China, Brazil, India, and South Africa criticized the unilateral regime put in place by the US. Led by Brazil, these countries pushed to shift domain-name governance from a private institution to national governments and intergovernmental bodies, such as the International Telecommunications Union (“Rich and Poor Countries Divided at WSIS”, 2004). While the Geneva phase did not get rid of ICANN governance, it produced the Geneva Declaration of Principles and the Plan for Action, primarily establishing the Working Group on Internet Governance (WGIG) to study the problem.

While working groups are typically established as ways to diffuse the problem, the WGIG came up with many tangible reforms. First, they created a broader definition of internet governance, as explicated in the previous section. Secondly, they came up with a list of four proposals to reduce or supervise US unilateralism, one of which was the Internet Governance Forum, a global multi-stakeholder forum, later adopted at the second summit. Thirdly, there was agreement among the participants that “No single Government should have a preeminent role in international Internet governance”, directly addressing the issue of US control (“WGIG Report”, 2005).

In-between the publishment of WGIG proposals and the second WSIS II in Tunisia, a number of concerns further escalated concerns over US control of the Internet. Firstly, the Bush regime published a statement affirming US unilateral control, although it expressed willingness to negotiate with other nations about country-code domains (Mueller, 2010). Secondly, there was concern over ICANN’s working approval of an xxx.domain, a “red-light district” for adults, which could include porn; not surprisingly, there was a lot of public conservative backlash and indicated, for other nations, that the US should not be in charge of such an institution (Cheng, 2011). Thirdly, the European Union in 2005 publicly broke ranks with the US government and called for changes in the ICANN regime (Marchant and Bowen, n.d.).

Thus, tensions broiled high at the second World Summit in Tunisia. In the Tunisia Agenda, the resulting document from the summit, the ICANN system was established permanently, although the proposal did call for long-term changes to it. This dashed hopes of many sovereigntist nations who had advocated for an intergovernmental forum,

such as ITU.³ Secondly, the agenda affirmed principles of (1) multi-stakeholderism and (2) enhanced cooperation that would guide the norms and culture of Internet governance (Kummer, 2007). Multi-stakeholderism affirmed that internet governance would include the participation of many stakeholders in policy-making decisions, although, perhaps as a check, enhanced cooperation called for governments to, on an equal footing, carry out their roles and responsibilities (“Enhanced Cooperation and Internet Governance”, n.d.).⁴ Lastly, WSIS II established the Internet Governance Forum, a multi-stakeholder forum in which various stakeholders, including the technical community, corporations, governments, international institutions, NGOs, civil society, and netizens have a role in discussing policy issues. The forum has no official decision making power, and promotes open discourses characterized by non-binding decisions, decentralized authority, and transparency. It was first convened in 2006 and has had annual meetings since then.

In essence, we see that Internet governance started with the US government, and was characterized by privatization of key Internet resources. Concerns over US unilateralism, the DNS root zone file, and access to other key resources led to the convening of the two world conferences, in which an official conception of Internet governance was established and more stakeholders entered the field. Tensions at the conference reflected, on an overly simplified level, debates between countries who

³ However, in response to the Tunisia Agenda, Brazil hosted the controversial Netmundial Initiative that sought to create a new platform to discuss Internet issues. It did not receive much support from Western nations and China briefly supported it before withdrawing. For more information, see <http://www.netmundial.org>.

⁴ The precise nature of what the enhanced cooperation clause means is still debated: some view it as a sovereign check against the culture of multi-stakeholderism, and a justification for a return to more intergovernmental forms of governance, while others hold it supports the multi-stakeholder model. For more information, see <https://internetdemocracy.in/reports/unlocking-enhanced-cooperation/>

wanted a more formalized, intergovernmental system of internet governance (China, Russia) and countries who wanted more freedom and private organization ownership of key internet resources (the US, UK). The disputes led to the establishment of an Internet governance forum, which ultimately did not alleviate the tensions and left many nations, such as China, dissatisfied with the current system for Internet governance.

Section IV: China – Historical Analysis of Three Time Periods

	Historical Context/ Notable Events	Social and Cultural Initiatives	Economic and Political Initiatives	Technical Initiatives
Jiang Zemin (1989-2002)	<p>-Effects of 1978 Deng Xiaoping reforms that boosted private sector development (Krug, 2004).</p> <p>-1992, Deng Xiaoping Southern Tour (Shen 2016).</p> <p>-Maya vs. CNN 2001 Case (Shen, 2016)</p>	<p>-Chinese President Jiang Zemin (2002) affirmed to 16th National Congress says, “IT application is a logical choice if industrialization and modernization of our country are to be accelerated” (Goldkorn, n.d.)</p>	<p>-Ninth Five-Year Plan for State Informatization and Long-Range Objective of the Year 2010 (published in 1997) (“Ninth Five-Year Plan”, n.d.)</p>	<p>-first TCP/IP academic network, National Computing and Networking Facility (“Introduction of Computer Network Information Center”, n.d.)</p> <p>-Creation of four major networks that went through a central international gateway controlled by China Telecom (Shen, 2016).</p> <p>-DNS: registered country code top-level domain name in 1990 (Shen, 2016)</p> <p>-1997: State establishes</p>

				Network Internet Information Center (CNNIC) to manage .cn name (Weiwei, n.d.)
Hu Jintao (2002-2012)	<p>-Entered the World Trade Organization (“The Impact of China Joining the WTO”, 2017)</p> <p>-Three Internet Giants born (Baidu, Alibaba, Tencent)</p> <p>-WAPI case: standard setting dispute (2003) (Lee & Oh, 2008).</p> <p>-Break-off with ICANN/ Selective participation in the ICANN regime (Shen, 2016).</p>	<p>-Global Mobile Internet Conference (GMIC), hosted by the Great Wall Club, non-governmental organization by Wen Chu, includes technical representatives from Alibaba, Tencent, Microsoft, DeNA (“Global Mobile Internet Conference”, n.d.)</p> <p>-US-China Internet Industry Forum (“US-China Internet Industry Forum”, 2008)</p> <p>-White Paper 2010 affirms cyber-sovereign vision (Fayette, 2010)</p>	<p>-11th Five-Year Plan for National Economic and Social Development in 2005 (Shen, 2016)</p> <p>-Medium and Long-term National Plan for Science and Technology Development in 2006 (Cao and Simon, n.d.)</p>	<p>-Chinese government launches official Network Access Points (NAPs) in Beijing, Guangzhou, and Shanghai to enable better interconnectivity in China (Liu, 2016).</p> <p>-Development of own IPv6 Protocol version and promotion of .cn domain name system (Shen, 2016)</p> <p>-ICANN approves Chinese establishment of ccTLDs in simplified and traditional characters (Dam, n.d.)</p> <p>-2010, 79th IETF meeting held in China for the first time (“China actively involved in developing Internet Standards, n.d.)</p> <p>-China increases number of RFC proposals to IETF (Shen, 2016)</p>
Xi Jinping (2012-Present)	<p>-Restructures Chinese Cyber-governance departments to be more centralized; big crackdown on online content (Creemers, 2017).</p>	<p>-Cyberspace Administration of China at Beijing Internet Association gala, performs anthem titled, “An Internet power: tell the world that the Chinese Dream is uplifting China’ (Laskai, n.d.)</p> <p>-Xi Jinping gives</p>	<p>-Mass Entrepreneurship and Innovation plan for economic growth, introduced in 2014 (“Mass entrepreneurship and Innovation as new growth engine”, n.d.)</p> <p>-Clean Internet 2015: closed down tens of thousands of websites</p>	<p>-Before this, no Internet Exchange Points in Mainland China. First carrier-neutral Internet Exchange Point, CHN-IX Beijing, in 2015 (“Building CHN-IX, 2016).</p>

		<p>Keynote Speech at World Internet Conference, promotes internet sovereignty (“President Xi Delivers Keynote Speech”, 2015)</p> <p>-5 World Internet Conferences (2014-2018) to showcase China’s technological power and improve connections w/ world (“World Internet Conference”, n.d.)</p>	<p>featuring allegedly pornographic and obscene content, arrested 15,000 people (“China vows to clean the Internet”, 2015)</p> <p>-SIIO director Lu Wei introduce 7 Baselines for online opinion leaders (Creemers, 2017)</p> <p>-Xi Jinping gives secret speech at national conference of propaganda and ideology where he called upon cadres to “unsheathe the sword” (Creemers, 2017)</p> <p>-In August 2015, the Ministry of Public Security announced ‘punishment’ of at least 197 people for spreading online rumors, and had to shut down 165 ‘online accounts’ (“China vows to clean the Internet, 2015)</p> <p>-Made in China 2025 Initiative (“Made in China 2025”, 2018)</p> <p>-Internet Plus Initiative introduced by Li Keqiang (Sharwood, 2015)</p> <p>-China International Import Expo in Shanghai, first hosted</p>	
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			<p>in 2018 (China International Import Expo, n.d.)</p> <p>-New Cybersecurity Law in 2016 (“China’s new cybersecurity law is rattling businesses”, 2017)</p>	
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This chart analyzes China’s Internet governance initiatives across three different periods. Each phase is aptly described as (1) early Internet governance, (2) integration into WTO and rise of capital players, and (3) the restructuring of governance, groups that reference the main shifts that distinguish each. In describing each phase, I will build upon the notion that 1) China’s vision for Internet governance relies on a “flexible cyber-sovereignty model”. To support this claim, I give evidence for how China’s strategy is more dynamic than the “cyber-sovereignty model” anticipates, and involves both an acceptance and rejection of the existing regime, along with the domestic development of new standards. Additionally, I find that Chinese businesses have gained a larger role in internet market-based initiatives and conferences. However, it is important to qualify that the Chinese government still maintains strict control over their public viewpoints expressed. This has little effect on the robustness of the “flexible” cyber-sovereignty model however, as the model does not claim that businesses have gained a power equal– or close to– that of the Chinese government.

I. Jiang Zemin (1989-2002): Early Internet governance

China's early Internet development came about during a time of rapid economical and political change. During the late 1980s and 1990s, China was responding to the second wave of economic reforms that were designed to promote privatization, reduce price controls and regulations, and encourage the nascent entrepreneurship sector to develop (Krug, 2004). As China slowly shifted to a socialist market economy, it also opened itself, selectively, to transnational and international influences. Indeed, in 1992, Deng Xiaoping's Southern Tour further opened China's domestic market, bringing in a swatch of transnational corporations that pressed for modernized telecommunications services and advanced information networks (Shen, 2016). It was in this period of societal reform and growing, global integration that China's nascent Internet policy took shape.

In the beginning, China participated in Internet governance through a) selectively interacting with existing, Western institutions, notably ICANN and IETF and b) developing the architecture and standards for China's version of the Internet. At this time, the Internet was in an early stage of development, and international Internet governance was limited solely to governance of technical issues by a niche technical community (consisting of ICANN, IETF, and IAB).⁵ To avoid lagging behind in developing this vital infrastructure in this early stage, China focused on establishing its infrastructure network through establishing four main networks under state control. In addition, China made initial forays into ICANN, registering its country-code top-level domain name in 1990. However, tensions soon arose between China and ICANN over the Maya vs. CNN case in 2001, in which a Virginia court ordered the Hong Kong- and Shanghai-based company

⁵ refer to glossary or earlier section for explication of each

Maya to give up its ownership of the CNNews.com domain name to CNN although it had been obtained legitimately from an accredited Chinese domain name registrar. As Ermert and Hughes (2003) argued, the case extended beyond Maya versus CNN, but it indicated that anyone who registered a domain name on the global Internet somehow “comes under United States jurisdiction, regardless of whether they go through a Chinese, German or South African ICANN accredited registrar” (Shen, 2016).

This case sparked a period of discontent between China and ICANN, particularly over US unilateralism and hegemonic control over the Internet, which were issues raised at the future World Summits. In this early stage, however, China did not try to assert its Internet governance vision on the international stage. What we observe under Jiang Zemin’s regime is a two-fold pattern by the government: a) establishing the fundamental structure of the Chinese Internet in infrastructural areas it is able to retain control of and b) participating selectively in areas in which an international system of governance already exists (i.e. DNS). In essence, the government had a desire to structure the Chinese Internet according to the Chinese will within the constraints of the existing, international institutions for technical governance. While China has not yet released any public statement or expression regarding its official vision for internet governance, we can see that China has potential cyber-sovereignty leanings conveyed through the ICANN conflict, as they want China’s domain name registrar to remain within Chinese borders, and not fall to US jurisdiction.

II. Hu Jintao (2002-2012): Integration into WTO and the rise of capital

The time period of Hu Jintao was characterized by two notable events: a) China entered the World Trade Organization, and became increasingly integrated into a global market, and b) China's three Internet Giants: Baidu, Alibaba and Tencent, originating in the early 2000s, indicated the emergence of capital players with growing scopes of influence over government policies. With the integration into WTO, the accelerated opening of China's domestic market, and a burgeoning market economy, China entered a new period in its Internet policy growth. This period was characterized by an increase in domestic technical initiatives, a growing presence in shaping the norms of Internet governance, and sets of conflicts with existing international regimes and Chinese corporate players.

Under Hu Jintao, the Chinese government both selectively participated in IETF and established new domestic protocols outside of IETF. Indeed, the Chinese government selectively interacted with IETF through publishing "Requests for Comments", which were documents on Internet standardization and technical development procedures and protocols that IETF would adopt as Internet standards after a lengthy period of review (Shen, 2016). Beginning in 2004, China increased the number of RFC publications submitted to the IETF. That year, in collaboration with the Japan Network Information Center and the Korea Network Information Center, the CNNIC published China's second RFC. China then published three RFCs in 2006, two in 2007, six in 2008 and six by the end of June 2009, illustrating that China was increasing its role in the established institution in Internet standardization (Shen, 2016). However, at the same time, China was also promoting a series of domestic initiatives, including the development of the Internet Protocol version 6 (IPv6) in 2010. This was intended to "rectify the glaring

disparity in the distribution of IP addresses” currently in place under IETF (Zhao, 2010). Furthermore, the Chinese government also launched official Network Access Points (NAPs) in Beijing, Guangzhou, and Shanghai to enable better interconnectivity in China.

In addition to technical initiatives, China’s vision for Internet governance started to formulate on an international scale. We first see the idea of “cyber-sovereignty” officially stated in the 2010 Government White Paper, which stated that the Internet should be ruled primarily within national borders, and should fall to the jurisdiction of sovereign, independent countries. If international coordination is required, such as for the domain name system, Internet governance should rely on traditional multilateral cooperative efforts and intergovernmental institutions (Sonbuchner, 2008). This cyber-sovereignty mode of thinking manifested through a variety of actions the Chinese government took during this time period. For instance, at the first World Summit on Information Society, China actively campaigned to transfer control over the DNS to a more formal, international organization such as the ITU (Shen, 2016). The Chinese government argued that the Internet was a public resource, and should be jointly governed by intergovernmental organizations and states, and not by a private US organization with ties to the US Department of Commerce. In addition, in 2011, China worked with Russia, Uzbekistan, and Tajikistan under the Shanghai Cooperation Association to create the “International Code of Conduct for Informational Security”. This was seen as a deliberate attempt to undermine US unilateralism and affirm the need for state sovereignty over technology (Cyberspace and the Rise of BRICS, 2016). Furthermore, at the US-China Internet Industry Forum, Xiong Chengyu, Tshinghua Professor gave a speech on Internet governance, calling for “bilateral or multilateral

mechanisms for intergovernmental coordination and cooperation” (“US-China Internet Industry Forum”, n.d.). This body of evidence suggests that the Chinese government advocated for a cyber-sovereign model approach to Internet governance.

However, information from this time period starts to suggest that China’s vision is more complicated, suggesting a better model is needed. Indeed, while it is easy to follow the familiar narrative of China as a repressive, authoritarian, and controlling state infringing upon Western ideals of Internet freedom and openness, the reality is less reductive and one-dimensional. China’s stance on the Internet was marred by an escalating series of conflicts and the appearance of new, multiple stakeholders, most prominent and influential of which were the rising, private Chinese corporations in this time period that started to exert forms of influence in China’s internet policies. Two notable cases illustrate the effects of businesses: the Wireless Local Area Network Authentication and Privacy Infrastructure (WAPI) case, and the ICANN crisis. What we can draw from these illustrations, in essence, is that while the theoretical idea of cyber-sovereignty guides China’s vision, the reality is complicated by complex dynamics between the Chinese state— which itself is also anything but homogenous— and the Chinese internet private sector. Consequently, perhaps a “flexible” cyber-sovereign model is a more accurate and nuanced way to consider China’s approach.

The WAPI initiative was issued in 2003 by the Chinese Standardization Association (CSA); it was designed as a new, national standard that could improve security weakness in Wi-Fi standardization (Shen, 2016). This standard required all wireless products sold in China be connected with WAPI, and for foreign companies entering the Chinese market to either partner with WAPI-linked Chinese firms or produce

WAPI-compatible products (Lee & Oh, 2008). The CSA submitted the standard to the International Standardization Organization (ISO) for official international recognition, about the same time another standard, IEEE 802.11, was submitted for approval. In 2006, ISO rejected WAPI, citing there were technical and protocol issues, approving IEEE 802.11 instead. The Chinese government later re-submitted the proposal in 2009, and later withdrew it in 2011 after disputes in the standardization process. After the ISO disputes, the Chinese government never officially mandated it the standard, and now it is rarely used.

What led to this outcome? On the surface, it appears ISO disputes were over technical and processing issues, which is one part of the explanation. When the Chinese government appealed the 2006 decision, it also cited “unethical” behavior in the standardization process at play (Lee & Oh, 2008). Outside of ISO, many foreign companies resisted the new WAPI terms of compliance. For instance, Intel and Broadcom stopped selling Wi-Fi chips to China in 2004 because they would have had to make their chips WAPI-compliant or partner with a local, WAPI-approved company (Kanellos, 2004). These terms seemed unfavorable to foreign companies, and were the center of a US-China trade dispute from 2004 to 2006.

Chinese Internet companies, and intragovernmental resistance also played significantly important roles. Within the Chinese government, the standard supported the military and security divisions more than the trade and commerce divisions (Shen, 2016). Furthermore, well-established domestic Internet companies Huawei and ZTE had little interest in supporting the standard, whose patent rights belonged to the small, local Chinese firm Jietong. While these actors may not have held political decision-making

power in the ISO, they elucidate how both internal government conflicts and external domestic and international pressures from foreign governments, corporations, and other non-state actors can undermine certain government policies.

In particular, the WAPI case was an early example of how Chinese capitalistic companies could affect government policies, albeit indirectly and circumstantially. Although Chinese corporations are often considered arms of the government, the WAPI case elucidates that corporations do not always play by the rules of the government, especially when rules of the market (i.e. market forces) fail to align with government objectives.

Indeed, the ICANN crisis of 2001 to 2009 also conveys this idea. From 2001 to 2009, the Chinese government cut off relations with ICANN due to ICANN's recognition of Taiwan as an independent nation (Galloway, 2015). However, Chinese Internet companies and non-governmental agencies remained active in ICANN through obtaining leadership positions and hosting ICANN events; acts that the government was aware of, but did not directly interfere with (Shen, 2016). The CNNIC and the Internet Society in China (ISC), two prominent non-government institutions, even jointly hosted ICANN's 2002 meeting in Shanghai (Shen, 2016). Comparatively, we see how they react differently in two circumstances: either *negatively*, as in the WAPI case, by a refusal to indicate support of the government initiative, or *positively*, in the ICANN crisis, by actively participating in ICANN to express their disapproval.

In essence, under Hu Jintao, China experienced radical changes as the development of its nascent private sector and integration into the WTO led to new complications for Internet governance. China started to push for more intergovernmental

and state control systems, develop new domestic technical initiatives, and pushed (successfully and unsuccessfully) for changes to the status quo. However, the Chinese government's position is complicated by complex dynamics between the Chinese state—which is anything but homogenous—and the Chinese Internet private sector. China is not simply pushing for cyber-sovereignty, and considering conflicts as a battle between authoritarian states and liberal democracies, in which China falls into the former, is an oversimplification of the truth (Althaus, 2017). As the WAPI and ICANN case illustrate, a flexible cyber-sovereign model—one that accounts for not just state control, but also the rising influence of businesses—may better capture the complex dynamics within China.

III. Xi Jinping (2012- Present): Restructuring of Governance

When Xi Jinping took power in 2012, there were multiple structural inefficiencies with the current cyber-governance institutions. Many administrative turf battles arose, since multiple organizations shared similar, overlapping functions, and no centralized organization for cyber governance existed (Creemers, 2017). In addition, the government had weak coordination with provincial and regional governments levels, especially over data censorship. Lastly, the state did not consider effects of novel characteristics of the Internet on traditional policies. For instance, while the Central Propaganda Department used a repertoire of traditional censorship techniques to control online content, many of these did not work for the new social media and microblogging platforms that changed the nature of communication online. Thus, a mix of bureaucratic overlap, regional and provincial coordination weakness, and struggles to adapt to the Internet caused inefficiencies in the system of Internet governance (Creemers, 2017).

To reduce these structural inefficiencies, the Xi Jinping administration formed two new institutions: A ministry-level agency, the Cyberspace Administration of China (CAC), was established, which consolidated the Internet content regulation functions that were previously spread across often-competing governmental branches (Creemers, 2017). In addition, President Xi Jinping formed a leading group on Internet governance called the Central Cyber Security and Informatization Leading Group in 2014, composed of high-ranking officials from different ministries. This centralization of control greatly helped reduce structural problems; consequently, under Xi Jinping a more assertive Internet policy took shape on the domestic and international stages.

On the domestic stage, this assertive policy took place through tougher censorship and surveillance mechanisms. Indeed, at a secret speech at a national conference of propaganda, Xi Jinping called upon cadres to “unsheathe the sword” (Creemers, 2017). In 2015, as part of the “Clean Internet” campaign, the Ministry of Public Security announced the punishment of at least 197 people for spreading online rumors, and had to shut down 165 ‘online accounts’ (“China vows to clean the Internet, 2015). As part of the campaign, the government closed down tens of thousands of websites with alleged pornography and arrested 15,000 people (“China vows to clean the Internet, 2015). This harsh discipline also targeted top Chinese Internet companies to make sure they stayed in line with government policies. Indeed, when Wujie News (jointly owned by SEEC Media Group and Alibaba) published a scathing editorial against Xi Jinping, accusing him of becoming an autocrat, the state television station CCTV ran a documentary that slammed Alibaba for fake goods on its website (Lopez, 2016). In addition, government representatives sit on the boards of Tencent, Alibaba, and Baidu to

check their actions (Lopez, 2016). As Mueller indicated however, this form of control could be negative, and restrictive for free market growth. Indeed, as he said, “while the rise of BAT had the potential to create a Chinese Internet sector that was competitive, transnational in perspective, and somewhat autonomous of government, I believe that the unchecked power of the CCP in the domestic environment is eliminating that potential” (Milton Mueller, personal communication, June 20, 2018).

However, while it is certainly true that Xi Jinping’s policies were more restrictive for corporations, it is also true that corporations gained a larger role in formulating and taking part in Internet policy discussions. We see this saliently through five World Internet Conferences and two government initiatives: the Made in China 2025 Initiative and Internet Plus campaign. Indeed, top business leaders such as Jack Ma headed the opening speeches for the World Internet Conference, and participated in forums including the annual “Dialogue between Business Tycoons”, in which top internet corporate CEOs could discuss their visions and expectations for Internet governance (Mengxi, 2017). In addition, the Made in China 2025 Plan also emphasized the necessity of market mechanisms and corporate involvement over pure state control, differing from previous plans, like the Medium and Long-Term Plan on the Development of Science and Technology by Hu-Wen. Indeed, as Scott Kennedy, from the Center for Strategic and International Studies said,

“Although there is a significant role for the state in providing an overall framework, utilizing financial and fiscal tools, and supporting the creation of manufacturing innovation centers (15 by 2020 and 40 by 2025), the plan also calls for

relying on market institutions, strengthening intellectual property rights protection for small and medium-sized enterprises (SMEs) and the more effective use of intellectual property (IP) in business strategy, and allowing firms to self-declare their own technology standards and help them better participate in international standards setting” (Kennedy, 2018).

In addition to the Made in China 2025 Plan, the Internet Plus campaign, raised by Premier Li Keqiang, gave corporations a huge role in restructuring China’s economy and promoting market-growth. The campaign aims to integrate mobile Internet, cloud computing, big data and the Internet of Things with modern manufacturing (“Ten key words...”, 2018). The business response has been largely positive. As Pony Ma, founder and CEO of Tencent, said “The internet has opened new frontiers including internet finance, medical services and education that didn’t exist before. It should also be extended to traditional industries like manufacturing, energy and agriculture” (Chen, 2015). Already, businesses have taken a role in implementing this plan: Alibaba and China Mobile have forged alliances to cooperate on Internet Plus. They aim to work together in four major sectors, including emerging technology fields, basic communications service, information infrastructure, and marketing cooperation (“ChinaTechNews...”, 2016).

As both these plans exemplify, the government has shifted toward loosening market forces and giving Internet corporations the freedom to shape international standardization and promote growth on the Internet. This goes to support the flexible “cyber-sovereignty model”, as there are stakeholders outside of government who are starting to play a role in Internet governance. Despite this however, it seems that

government still remains the key player, as businesses are greatly controlled to ensure they stay aligned with government objectives. As businesses grow more powerful, will the government need to add on more layers of control? The tension between freedom and control could be an intrinsic characteristic of a socialist market economy, as Mueller argues in *Access Contested*. Whether freedom and constraint are inherently compatible, or not, however, remains uncertain, and this answer could have implications for how sustainable a socialist market economy is in the long run.

Analysis of Three Time Periods

Above, I have described the breakdowns of each period, and how notable events led to shifts in China's internet governance approach: from the early stages of network building, to the integration into WTO, from the rise of capital players to the restructuring of cyber-governance. Within this narrative, I have introduced the claim that China's vision for Internet governance relies on a "flexible cyber-sovereignty model". Indeed, I describe how China's vision includes both a rejection and acceptance of the Western regime, and how China seems to be increasing the role of the Chinese private sector in Internet governance. The next section will further develop this notion of flexible cyber-sovereignty through analyzing two Internet conferences.

Section V: China: Analysis of Two Conferences

In this section, I conducted an in-depth analysis on the five world internet governance conferences: one that started during the Hu Jintao time period, and one that started under Xi Jinping, to further refine the new “flexible cyber-sovereignty model”, and see how successful it is in explaining China’s behavior in internet governance.

Conferences:

A. World Internet Conference/ Wuzhen Summit [2014- Present, held annually]

Introduction

The World Internet Conference, also called the Wuzhen Summit, is an annual event co-hosted by the Cyberspace Administration of China and People’s Government of Zhejiang province. Each Conference is structured similarly: notable events include an opening ceremony, forums and talks on Internet issues, and the “Light of the Internet Exposition”, a showcase of China’s updated technological prowess (Xinyu, 2017).

Themes

2014- “An Interconnected World Shared and Governed by All”

2015- “Cyberspace Community of Shared Destiny”

2016- “Innovation-driven Internet Development for the Benefit of All- Building a Community of Common Future in Cyberspace”

2017- “Developing digital economy for openness and shared benefits – building a community of common future in cyberspace”

2018- “Creating a digital world for mutual trust and collective governance

Attendees

ICANN:

From the first World Internet Conference, ICANN members have been in attendance, advocating and educating conference participants on ICANN’s mission and the principles such as the multi-stakeholder model (Costerton, 2017). As Sally Costerson, Senior Advisor to the President of ICANN, said, “While the ICANN Chinese community has grown, given China’s 751 million Internet users, more participation in ICANN is needed. Furthermore, China has the second largest domain name market in the world. China’s developments in the domain industry will have an impact on the world” (Costerton, 2017).

ICANN has participated in the World Internet Conferences through accepting leadership positions and hosting forums. Indeed, at the second World Internet Conference, ICANN CEO Fadi Chehade announced he was leaving ICANN, and accepted the role of co-chair of Wuzhen Summit’s high-level advisory committee. The news was shocking for many in ICANN; he did not announce this decision to the ICANN Board prior to the public announcement made by China. Some members in ICANN felt that Mr. Chehade’s involvement in WIC “threatens to draw ICANN back into the very multilateral power politics that US relinquishment of IANA sought to terminate” (“ICANN Hugs China’s Multilateral Internet Governance Initiative”, 2018). Former

ICANN staff member Kieren McCarthy echoed this sentiment; in a blog entry, she wrote “ICANN takes a very dim view of efforts to limit or censor the internet, so Chehade's decision to align himself with the Chinese government, which runs the world's the most sophisticated censorship program, has come as a surprise and disappointment to many” (McCarthy, 2015).

In addition to this controversy, ICANN also hosted forums to clarify their mission, promoting the multi-stakeholder vision and perspective on Internet governance. At the third WIC, for instance, ICANN spoke at the Global Internet Governance sub-forum, briefing the audience about the globalization of the DNS and the multi-stakeholder governance model (Zheng, 2016). At the fourth WIC, leaders within ICANN spoke at the Internet Talent Development and Exchange Forum, organized by the China Association of Science and Technology, and the Internet Society of China. Furthermore, representatives spoke at the International Rules in Cyberspace: Consensus and Outlook, in 2017 (Zheng, 2016).

Technical Community:

Representatives from IETF, IEEE, Regional Internet Registries, especially the Asia Pacific Network Information Centre (APNIC) and Asian Pacific Top Level Domain Association (APTLD) came to speak in various forums in the WIC. They worked alongside ICANN to speak about the benefits of the multi-stakeholder model and one, universal global Internet (Costerton, 2017).

Countries:

At the World Internet Conference, officials from developing countries, such as Tongo, Congo, and Guinea, were the bulk of the 21 state participants. There were no government representatives from major countries in attendance, apart from the prime ministers of Russia, Pakistan, Kazakhstan, and Kyrgyzstan (Goldkorn, n.d.).

Western Internet Companies:

Notable representatives from top Western companies have always had a presence at the conferences, including Mark Zuckerberg from Facebook, Wikipedia founder Jimmy Wales, Tim Cook from Apple, Sundar Pichai of Google (Goldkorn, n.d.; Zhong, 2018). Western companies participate through headlining events, giving talks, and participating in events such as the annual *Dialogue Between Internet Tycoons* that features speakers such as Jack Ma, Ma Huateng, and Tim Cook (Mengxi, 2017). However, the presence of Silicon valley representatives has gradually declined throughout the World Internet Conferences (Zhong, 2018). While in 2017, Chief Executive Officer Tim Cook and Alphabet Inc.'s Google CEO Sundar Pichai headlined the event in the town of Wuzhen (Ramli, 2017), in 2018, the sole Western tech executive to give a keynote address was Steve Mollenkopf, the chief executive of the chip maker Qualcomm (Zhong, 2018). In addition, in 2018, only 4 out of 15 firms on a "World Leading Internet Scientific and Technological Achievements list" from the Conference were American companies: Tesla, Amazon, Microsoft, and Qualcomm. The remaining 11 companies were all Chinese, including Tencent Holdings' WeChat mini program, Huawei Technologies' Ascent 310 chip, Alibaba Group Holding financial affiliate Ant Financial Services' blockchain platform, Baidu's driverless platform Apollo, Xiaomi's

artificial intelligence platform for smart homes, and 360 Group's security-distributed intelligence cybersecurity protection system ("Call for world leading...", 2018).

Chinese Internet Companies:

Around 500-600 Chinese entrepreneurs have been invited to the conferences annually (Zeng, 2015). These representatives from Chinese Internet Companies have often played prominent roles. As Shi Liang, ChinaNET Business Analyst who has participated at a World Internet Conference before, said, "At these world internet conferences, governments take smaller roles usually. Big businesses typically run the conferences and hold discussions on internet-related topics. The conference is organized by the government, but the companies are the ones who make and further initiatives" (Shi Liang, personal communication, June 20, 2018). Notable speakers such as Jack Ma have participated each year in the conference, giving talks in forums, dinners, and big events. Ma gave the opening speech at the 4th World Internet Conference ("Jack Ma: Embrace Technology...", 2017). In his speech, he argued for the necessity of increased global cooperation to tackle technological problems, further emphasizing the "greater responsibility" that corporations now bear, considering they have now "been endowed with such opportunity and such wealth" ("Jack Ma: Embrace Technology...", 2017). Jack also argued for the necessity of cooperation between businesses and the government, saying, "It is impossible for one country, or one company, to solve all the world's problems. We need to work together, jointly build a shared future, embrace technology and share innovations and achievements" ("Jack Ma: Embrace Technology...", 2017). At the fifth session, Pony Ma, founder and CEO of Tencent, spoke in a forum on "Media

Change and Communication Innovation”, discussing the future trends for social media, as it is becoming mobile, social, and intelligent. As he said, “The evolution and transformation of the media is just beginning and has a broad future. New technologies such as Big Data and cloud computing will help the media make digital changes” (Ma Huateng: the total number of media public fans...”, 2018). Companies also display their newfound technologies, such as Baidu, which showcased their autonomous minibus at the Light of the Internet Expo Exhibit (“Baidu autonomous minibus...”, 2018). Furthermore, Chinese businesses also participate in the annual *Dialogue Between Internet Tycoons* event, as stated in the previous section.

Absent Attendees and Backlash:

No data could be found that indicated the US Government, or representatives from the government, were present at the World Internet Conferences. Many reports have said that the conference has been shunned by Western nations (Zeng, 2015). Some Western organizations were also denied entry, such as New York Times (Makinen, 2015). In addition, the conference faced backlash from Amnesty International. Roseann Rife, an East Asia research director at Amnesty International, said in a statement, "Under the guise of sovereignty and security, the Chinese authorities are trying to rewrite the rules of the Internet so censorship and surveillance become the norm everywhere. This is an all-out assault on Internet freedoms" (Makinen, 2015). Furthermore, Reporters Without Borders has called for an international boycott of the Wuzhen conference, calling China the "enemy of the Internet" (RSF calls for boycott...”, 2016). The group

denounced the conference as a farce whose real aim is to "ensure that Internet companies wanting to operate in China fall into line" (RSF calls for boycott...", 2016).

Notable Events

Several notable events happened at the World Internet Conference. In the first WIC, attendees woke up to draft joint statement affirming China's concept of 'Internet sovereignty' that had been slid under their hotel doors, around midnight before the first day of the conference. Participants were encouraged to sign it, but the initiative did not succeed. The origin of the draft was not clear, but some argued the views and language reflected those of Xi Jinping (Aredy, 2014). The draft was not mentioned during the conference, or in the WIC opening or closing speeches.

At the second World Internet Conference, Xi Jinping gave in speech in which he outlined 'four principles' and 'five propositions' for International Internet governance, based on the idea of "respecting Internet sovereignty" (Gady, 2016). As he said, the world should "respect each country's Internet sovereignty, respect each country's right to choose their own development path and management model of the internet" (Gady, 2016). This speech was praised by Jack Ma, who said "After listening to Chairman Xi's speech today... I think sharing, multilateral, open, harmonious – these principles will be very impactful in the global cyberspace in the future. Open, sharing and transparent, these are the keys to [the] future administration [of the internet]. This is not only the government's responsibility but everyone's responsibility" (Zeng, 2015).

At the Fourth World Internet Conference, China released two blue books, for the first time, to explain development trends for the Internet in China: China Internet Development Report 2017 and World Internet Development Report 2017 (Xinyu, 2017).

At the Fifth World Internet Conference, international elements became more prominent. Unlike the first four conferences, this conference was co-organized by five international organizations such as the United Nations Department of Economic and Social Affairs and the International Telecommunication Union. In addition, a New Internet Gadgets and Applications Promotion Salon was held to encourage internet companies from around the world to launch outstanding new products and new applications. There was also a salon for international guests to exchange ideas. In addition, like the previous year, the conference issued "Report on World Internet Development 2018," "Report on China Internet Development 2018" and "Wuzhen Outlook 2018" ("SCIO briefing...", 2018).

B. US-China Internet Industry Forum

The US- China Internet Industry Forum was first hosted in November 2007, and has been hosted annually since then. It is sponsored by the Chinese State Council Information Office, the Internet Society of China, and Microsoft, and has been a platform to facilitate better communication and cooperation between Chinese and American Internet companies (Xiaoqian, 2018). Conference locations alternated between the US and China: it was hosted in Shanghai in 2008, San Francisco in 2009, Beijing in 2010, Washington D.C. in 2011, Beijing in 2013 and Washington, DC in 2014 (Brownlee,

2015). It's intent is to a) review Internet trends in the two largest Internet-using nations in the world b) discuss Internet technology, business, policy, and social developments that will shape the future, c) discuss candidly a few of the big challenges the Internet faces, d) build confidence, understanding, relationships, and a platform for dialogue that will thrive beyond this meeting (“Welcome Remarks of Ya-Qin Zhang”, 2008).

Attendees

High-tier Chinese government officials, notably Xi Jinping and Lu Wei, before he was charged with corruption in November 2017, appeared at these events. In addition, members of the US State Department and government officials were present, including Robert D. Hormats, U.S. Under Secretary for Economic, Energy and Agricultural Affairs, who gave the keynote address in 2011 at the conference. Furthermore, the forum attracted over 140 representatives and experts from major Internet companies. Notable Western company representatives, such as Larry Page and Sundar Pichar from Google, Tim Cook from Apple, Chuck Robbins from Cisco, Mark Zuckerberg from Facebook, Ginni Rometty from IBM, and Satya Nadella from Microsoft were present. Chinese companies present included Alibaba, Sina.com, Sohu.com, and China.org.cn (“US-China Internet Industry Forum”, n.d.).⁶

Notable Events

At the 2008 conference, Xiong Chengyu, Tsinghua Professor, gave a speech about China's stance of Internet governance, which may, to some extent, reflect the intentions

⁶ For full list of participants, go to: http://www.china.org.cn/china/internetForum/2008-11/06/content_16720168.htm

of the government. In his speech, he sketched the importance of a) multilateral consultations within the framework of the UN in internet-governance discussions b) bilateral or multilateral mechanisms for managing infrastructure and strategic resources, (here referring to the DNS and IP/TCP protocols), c) cooperation with other nations, including the US, and the development of intra-regional multilateral consultations to discuss region-specific issues. In addition, he expressed discontentment with the IGF, “At present the IGF is defined as an agency for proposals and a platform to discuss issues, but not as a policy-maker or a body for the implementation of agreed measures. Hence, states are forced to apply bilateral or multilateral mechanisms for inter-governmental coordination and cooperation; otherwise governance remains a theoretical principle” (“US-China Internet Industry Forum”, n.d.)

Backlash

Human Rights Watch, an international non-governmental organization and monitors and reports human rights abuses, wrote a letter to the Western CEO’s of technology firms participating in the forum. As Kenneth Roth, Executive Director, said in the letter, “We write now regarding your participation in the forthcoming US-China Internet Industry Forum and related meetings with Chinese President Xi Jinping and Director of Cyberspace Administration Lu Wei taking place in Seattle on September 22-23, ahead of their state visit in Washington, DC later that week. We urge that you use this occasion to ask President Xi to reverse his government’s expansion of surveillance, censorship, and data collection, and urge him and other leaders to protect privacy and other human rights online” (Roth, 2015).

C. Analysis of Two Conferences

Both the World Internet Conference and US-China Internet Industry Forum, are, on a broad level, new efforts for China to attempt to set the norms and culture around Internet Governance, while also promoting positive collaborative and cooperative efforts with other nations and foreign businesses. In both conferences, we see a compilation of backlash from Western news sources and organizations. Indeed, for the WIC, ICANN staff were unhappy with Fadi Chedale, the previous head of ICANN, accepting a leadership role in WIC. As ICANN staff member, Kieren McCarthy, wrote this after Fadi Chedale, the previous head of ICANN, accepted a role on the advisory board of the conference: “ICANN takes a very dim view of efforts to limit or censor the internet, so Chehade's decision to align himself with the Chinese government, which runs the world's the most sophisticated censorship program, has come as a surprise and disappointment to many” (McCarthy, 2015). The US-China Forum, furthermore, experienced backlash from Western human rights organizations, such as Human Rights Watch. Additionally, while US government officials were present at the US-China Internet Industry Forum, they were notably lacking at the WIC, perhaps because the WIC was considered a larger and more powerful conference by China to assert norms on Internet governance, and the US government did not want to publicly indicate support of the Chinese view.

From these conferences, we can tease out a more nuanced view of China's vision of cybersovereignty, further supporting the “flexible cybersovereignty” approach. While the

cyber-sovereignty model was promoted at the WIC conference, seen in the anonymous draft of 2014 and Xi's speech in 2015, it is also true that the Chinese government has attempted to foster, through speeches and invited attendees, opportunities for globalization, collaboration, and cooperation. Western institutions such as IETF, IEEE, RIR, and even ICANN, were granted active roles in hosting and speaking at the conferences, usually about globalization of the DNS and the benefits of the multi-stakeholder model (Zheng, 2016). The annual themes of the conference stress ideas of "mutual trust", "collective governance", and "governed by all", which is favorable and aligned more to the current multi-stakeholder model than the cyber-sovereignty model. While it is hard to determine how much of China's views at this conference were biased to cater toward Western ideas, it is still surprising that a considered to be "cyber-sovereign" nation would be giving Western institutions ample talk time, attempting to foster open-dialogue, and using words that suggest multi-stakeholderism.

Therefore, we see a flexible cyber-sovereignty model, in which China advances cyber-sovereign notions while also promoting with open dialogue, collective governance, cross-cultural communication and collaboration. However, was this dialogue successful? As Mueller said in a personal interview, "the Chinese don't know how to foster the kind of open debate and dialogue that can persuade people and exert soft power of the sort that the multi-stakeholder advocates have" (Mueller, personal interview, Nov 29, 2018). Furthermore, the amount of Western institutes that speak at the conferences has declined. Indeed, "the first session was large in size and high in size. But each year, it's international influence tends to decline, perhaps because of the impact of the trade situation in US and China, or because of the global economic downturn, so few US

companies will participate in this year's meeting" (Cheng Buo, personal communication, June 10, 2018). This suggests that perhaps China's attempts to foster this dialogue are failing with Western audiences.

Similarly to the WIC, the US-Internet Industry Forum also called for collaboration and openness with the West. At the forum, a prominent professor, Xiong Chengyu, gave a speech about China's stance on Internet governance, and advocated for the need for increased collaborative efforts between China and the US. He discussed the importance of multilateral governance mechanisms, and that cooperation between the US and China is more necessary than ever; as he said, they "need to coexist in a spirit of mutual respect and complement each other based on coexistence" ("US-China Internet Industry Forum", n.d.). Like at the WIC, western businesses gave conference speeches, and China emphasized the need for collaboration and dialogue. This could suggest that China is, at least publicly, making an attempt to show a more "softer side" of cyber-sovereignty to Western audiences. Again, however, it is hard to draw conclusions whether these talks on "cooperation" represent the true stances of China; perhaps their true vision is more of a hard-lined cyber-sovereign model, but they mask it in these conferences so as not to offend the invited audiences.

While the Chinese government gave Chinese corporations a larger speaking role at conferences, their public language was never out of line with government objectives, and no incidences of large conflicts between state and Chinese corporations could be found at these conferences. This is similar to the results found through the historical analysis, and go toward supporting the "flexible cyber-sovereignty model". It is necessary to note that the flexible cyber-sovereignty model does not imply that Chinese

businesses are more powerful than government, only that businesses have now exerted a discernible effect in the internet governance realm, which is a truthful claim considering their roles in market-based initiatives, and now in these conferences. Overall, government is still the one in control, and while China's government has relaxed certain controls on businesses (giving them prominent speaking roles), it has also tightened control on the content of their speech. As drawn from these conferences, most of corporate public language reflected an approval of government policies, such as when Jack Ma praised Chairman Xi's speech at the WIC. As he said, "After listening to Chairman Xi's speech today... I think sharing, multilateral, open, harmonious – these principles will be very impactful in the global cyberspace in the future. Open, sharing and transparent, these are the keys to [the] future administration [of the internet]. This is not only the government's responsibility but everyone's responsibility" (Zeng, 2015). Ma, furthermore, gave the opening speech at the 4th WIC, viewing the Chinese government favorably, and calling for the necessity for cooperation between corporations and government to jointly tackle internet governance problems. Similarly at the Internet Forum, businesses played a role in fostering positive dialogue about China and stayed in-line with government views. As the Wujie incident, mentioned earlier, suggests, costs would most likely be high for Chinese corporations were they to speak out against the government, particularly at these high-profile events.

Overall, we see that the "flexible cyber-sovereignty model" is in-line with China's behavior at these conferences. The surprising nature of China's ideas of openness and collaboration raised at both conferences is better explained under the the flexible cyber-sovereign model than the traditional cyber-sovereign model. One may can argue that it is

still possible to explain these ideas under a traditional model, if we assume that China's views are still staunchly cyber-sovereign, and these conferences did not reflect its accurate views, (that it was the large proportion of Western audiences that shifted China's views from their true leanings). This is certainly plausible, but appeals to multi-stakeholderism and mutual governance are still rare ideas under a cyber-sovereign model, and contextual concerns will always be a problem. As Chinese businesses continue to rise in power, it seems China's government is forced to adapt to a more cooperative Internet governance strategy. While these Chinese businesses have many public speaking roles at these conferences though, they publicly cooperate with the government, suggesting the government still has the upper hand.

Section 6: Conclusions.

In this paper, I suggest that China's vision for Internet governance incorporates a "flexible cyber-sovereignty model". Cyber-sovereignty is a term that has often been associated with China, and means that the Internet should be ruled primarily within national borders, and should fall to the jurisdiction of sovereign, independent countries. If international coordination is required, Internet governance should rely on traditional multilateral cooperative efforts and intergovernmental institutions (Shen, 2016; Sonbuchner, 2008). However, I believe this model is too reductionist to capture China's governance complexity, and a new model could better explain China's behavior. Indeed,

how does a traditional cyber-sovereignty model explain the complexities of China's strategy, which includes a mix of rejection and acceptance of the current regime? How does a traditional cyber-sovereignty model explain China's appeals to ideas of "mutual trust" and "governance by all" at the conferences, which do not seem to suggest state governance and multilateral efforts? And most of all, how does a traditional cyber-sovereignty model account for the increasingly dynamic relationship between rising, powerful Chinese corporations who have increased the amount of private sector involvement in China's Internet governance? Businesses have played a huge role in new initiatives, such as Made in China 2025 and Internet Plus, and the shift toward using market-based solutions will only grow as China becomes more of a market economy.

Therefore, I advocate for a new model to reconceptualize China's approach, and shift it away from the one-dimensional, reductionist state-centered governance model. While it is true that the Chinese government still remains the key authority in governance, that businesses are still highly censored, that China has advanced cyber-sovereignty ideas in its White Paper of 2010, that China has initiated campaigns to shift control to ITU in the WSIS, it is also true that China is a more complex nation with important stakeholders outside of the government. While it is hard to predict what China wants, I believe this model can get us closer to the "truth", through incorporating more stakeholders in Internet governance and considering that China is different than how we anticipate it to be.

China is a complex nation and this thesis has only begun to attempt to parse apart the subtleties of China's position on the Internet. Future areas of research could look into how specific Chinese Internet corporations interact with the Chinese government, or

explore differences between the Chinese government's approaches with Chinese corporations vs. Western corporations. In essence, China's rise will have huge implications on the future of the world cyber-order. What will the future look like? Will it be based on ideas of democracy, freedom, or will the rise of China bring a different idea for how international Internet governance works? Only time, and continued research, can give us a glimpse into possible answers.

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