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The Great Firewall of China: Implications of Internet Control for China Post-Tiananmen Square Massacre to Present Day

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Abstract

This research analyzes the Chinese Communist Party's (CCP) political motives behind its control of the Internet in China by exploring the restrictions and actions taken regarding a historical event that directly conflicts with the Party's interests: the Tiananmen Square protests and massacre of 1989. To obtain answers and a fuller understanding of this crucial event, my research pursued an in-depth look at internet restrictions established by the CCP in four key areas: law, architecture, market forces, and social norms. By analyzing each of these areas in some detail, my research answers the following questions: (1) What methods are used by the CCP to control information flow, as exemplified by actions taken vis-à-vis the annual anniversaries of the Tiananmen Square Massacre? (2) Is it possible for an authoritarian government to put forward and control a specific version of history in today's era of the internet? (3) What are the short- and long-term implications for China as a result of its effort to control the internet domestically, using the 1989 Tiananmen Square annual anniversary as a case study?

The key findings from this analysis show how the current methods of control by the CCP have an impact on the historical facts and the legacy of the Tiananmen Square protest and massacre of 1989, and whether that legacy will prevail, waiver, or be obscured through manipulation of the domestic Chinese internet.

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Chapter I

Introduction

The Tiananmen Square Massacre of 1989 is arguably one of the most important political events in recent Chinese history. However, it is an event that the Chinese government is trying with great vigilance to erase from history books. The Chinese Communist Party (CCP) wields vast control within the country's borders and uses its political influence to control information beyond its borders. The government also controls the national media and the education system, which means no Chinese news outlet carried reports about the events at Tiananmen Square, either at the time, or today at the thirty-year anniversary of the massacre. Due to the CCP's efforts, millions of Chinese people have no idea that this major event happened in their nation's capital 28 years ago. However, outside of China there are still many witnesses, survivors, multiple media testimonies, and annual vigils, all striving to keep alive and to commemorate the events that took place on June 4, 1989.

One invention, however, could undermine all of the CCP's efforts to erase or deny this history: the internet. No government in the world pours more resources into patrolling the internet within its borders than does China, carefully monitoring more than 618 million web users—the largest online population in the world.[1] Control of the internet in China is closely linked to matters of politics. As the strongest entity in the

[1] CNNIC, "CNNIC released the 33rd Statistical Report on Internet Development in China," Chinese Internet Network Information Centre, 17 Jan. 2014. Available from: http://cnnic.com.cn/AU/MediaC/rdxw/hotnews/201401/t20140117_43849.htm. Accessed 15 February 2018.

authoritarian government of China, the CCP welcomes the internet for educational and economic purposes, yet it carefully monitors the flow of information from the web, looking to quell anything that conflicts with the CCP's political interests.

The Tiananmen protest of 1989 is a sensitive topic for the CCP because the movement mobilized citizens to act against the government's control. As the largest collective pro-democracy movement in recent history, the CCP's handling of the rise and outcome of the Tiananmen Square protests of 1989 reveal the Party's thinly veiled desire to control internet access and behavior among its citizens. Each June 4 anniversary generates yet another effort by the Party to heavily patrol and censor the flow of information on the Chinese web.

Control of traditional forms of media such as newspapers, books, television, and radio has always been the norm for the CCP, from the Cultural Revolution (1966-1976) to the present. However, with the introduction and rapid spread of the internet in the mid-1990s, traditional measures for controlling the media in China were not sufficiently effective to edit or erase mention of the Tiananmen Square anniversary. In fact, the internet actually provided an avenue for enhancing the legacy of that anniversary. The Chinese government found that the more it censored any mention of the massacre around June 4, the more pushback it received from internet sources outside of China that are determined to keep alive this historically important event.

Research Problem

The aim of this empirical research is to provide a fuller understanding of the CCP's political motives behind its efforts to control the internet. I will explore

restrictions and actions taken online regarding this event that directly conflict with the Party's interests. Specifically, I seek to answer these questions:

1. What methods does the CCP use to control information flow, as exemplified by its actions vis-à-vis the annual anniversary of the Tiananmen Square Massacre?
2. Is it possible for an authoritarian government to control its history in the age of the internet?
3. What are the short- and long-term implications for China as a result of its efforts to control the internet in China, using the 1989 Tiananmen Square protest anniversaries as a case study?

To begin testing these hypotheses, I studied the impact of the internet on politics in an authoritarian country in order to gain a deeper understanding of the mobilizing effects of a new technology and what it could mean for the future. Second, I perused accounts of the Tiananmen Square protests written from the perspectives of the CCP, the protesters, and foreign media outlets, hoping to identify a variety of perceptions of the event. As I was not at Tiananmen Square in 1989, it was necessary for me to interpret others' accounts of what occurred there. Third, I identified and researched characteristics of China's control over the country's media—television, radio, and newspapers—to determine if the characteristics reflected on the internet are consistent, or if constraints are apparent specifically on the internet. China utilizes three methods of internet control: (1) the so-called "Great Firewall," (2) filtering, and (3) manual blocking, and I examined each method by consulting scholarly journals that provided detailed research.

In 2013, a group of Harvard researchers in China discovered that their monitoring did not necessarily filter out content that expressed negative views of government officials:

> They seem to recognize that looking bad does not threaten their hold on power so long as they manage to eliminate discussions associated with events that have *collective action potential*—where a focus of power and control, other than the government, influences the behaviors of masses of Chinese people. With respect to this type of speech, the Chinese people are individually free, but collectively in chains.[2]

In China, the events of June 1989 are intimately linked to the continued future of the CCP's rule since it was marked by the collective action of Chinese citizens to mobilize and protest the government. King, et al., stated: "The surprising empirical patterns we discover may well be a theoretically optimal strategy for a regime to use the internet and social media to maintain a hold on power."[3]

A large number of Chinese people are still alive today who were directly affected by and lived through the Tiananmen Square protests. I sought to learn whether the internet could act as a catalyst to mobilize Chinese citizens to speak out against CCP controls on the internet, particularly the extra censorship put in place in the days and weeks surrounding every anniversary date. It could be suggested that an authoritarian entity like the CCP can maintain some level of content control within the country's borders, however, internationally it appears the opposite effect may occur. This phenomenon has been described as the "Streisand effect," defined as an attempt to hide, remove, or censor information which then has the unintended consequence of publicizing

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[2] Gary King, Jennifer Pan, and Margaret E. Roberts, "How censorship in China allows government criticism but silences collective expression," *American Political Science Review* 107, no. 2 (May 2013): 5.

[3] King, et al., "How censorship in China allows government criticism," 5.

that information even more widely.[4] Once people are aware that something is being k from them, their motivation to access and spread the information increases. My research considers this effect and suggests that the unintended consequences may undermine all of the CCP's efforts to minimize or downplay the event's significance in history.

Research Methodology

I conducted my research using Lawrence Lessig's theoretical framework of four modalities of behavior in the "real world," which collectively act as a constraint on action in the cyber world. In his book, *Code and Other Laws of Cyberspace*,[5] Lessig outlines a groundbreaking way to view government power over interactions in cyberspace. He developed a model of four major forces that interact to create a regulatory environment. They are:

1. Law: The starting point of Lessig's argument is a legislation-centered view of regulation. Over the course of the argument, he fits the legislative agents of regulation into the larger system, as they are influenced by the three forces below.
2. Social norms: Regulation is ineffective if nobody enforces it. Regulation is more effective if disobedience results in social ostracization and legal penalties.
3. The market: Regulation is largely a numbers game. One hundred percent compliance is unobtainable, so the goal is to change general behaviors. Since

[4] Dean Burnett, "Why government censorship [in no way at all] carries greater risks than benefits," *Guardian,* May 22, 2015. Available from: https://www.theguardian.com/science/brain-flapping/2015/may/22/government-censorship-psychology-theresa-may. Accessed 15 December 2017.

[5] Lawrence Lessig, *Code and Other Laws of Cyberspace.* 2nd revised ed. (New York: Basic Books, 2006).

money is a prime motivator for human endeavors, one large determinant of behavior is the market.

4. Architecture: Lessig's system wraps the basic constraints of the world into the category "Architecture." In the physical world, architecture is often overlooked since it is usually fixed: there is no need for a regulation that prohibits one from walking through a locked door. The virtual world is more fluid. For example, some networks automatically tie comments to an identity, whereas others allow anonymity.

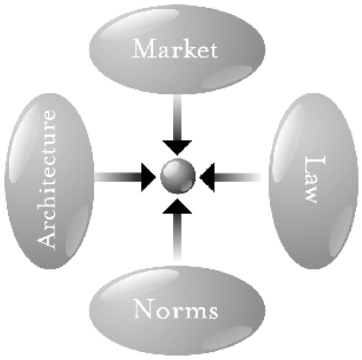

Fig. 1. Diagram of the interaction of the four forces.

Source: Lessig, 1998.

Using Lessig's four forces of behavior, holistic observation and analysis can be conducted on the methods used by the CCP to control information flow on the internet and to assess "real-world" implications. By analyzing the internet restrictions set by the CCP in their laws, architecture, market, and social norms, one can determine the effectiveness of CCP methods of media control prior to each annual Tiananmen Square anniversary, as well as explore the consequences of that control. Vasileios

Karagiannopoulos suggests that it is important to look at these four modalities in sum.[6] However, there is also value in looking at each individually when analyzing internet control and China's effort to erase the Tiananmen events from Chinese memory.

Thus, applying Lessig's framework, the following became clear in my research:

- By monitoring the CCP's continual tailoring of national internet control *laws*, researchers can identify methods used to suppress media content related to June 4, 1989; discover underlying implications of what such actions mean to the CCP; and determine whether those actions could trigger a government overthrow, loss of power for the CCP, or require some moderation of policies in order to appease the masses.
- An analysis of *social norms* through social media and microblogging reveals that mass collective expression by the Chinese population, especially expression of negative views regarding the CCP, has the potential to gain worldwide attention due to the global nature of the internet, which in turn leads to repercussions on a global scale. King found, "The surprising empirical patterns we discover may well be a theoretically optimal strategy for a regime to use social media to maintain a hold on power."[7] This is an important implication to my research and how it gives added significance to the Tiananmen Square anniversary, including what the movement stood for and its power and legacy on the internet, which could stymie the CCP's efforts to erase this event from Chinese history.

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[6] Vasileios Karagiannopoulos, quoted in *SCRIPTed* , "China and the internet: Expanding on Lessig's regulation nightmares," vol. 9, no. 2 (2012): 1-23. Script-ed.org, Aug. 2012. web. 15 July 2017. <http://codev2.cc/>

[7] King, et al., "How censorship in China allows government criticism," 5.

- By analyzing the methods of control through *market forces*, I sought to demonstrate how the CCP uses China's strong economy to influence foreign companies to comply with its censorship policies. A major implication is that China could indirectly influence other key regions, such as Hong Kong or the US, to comply with censoring or to downplay what it considers to be sensitive topics, like the Tiananmen Square massacre.
- By analyzing the methods of control within the technical *architecture* of the internet, such as blocking (IP, keyword and manual) searches related to the anniversary date, they determined that the outcome of these actions is the censoring of all reminders of the Tiananmen Square event, hence obscuring the reasons why the protests took place.

Research Limitations

Before proceeding to analysis, some clarifications and limitations must be addressed. The first concerns the sources used and their potential for bias. It is a common concern that research about non-English speaking, non-Western regimes, like China, which are based on sources written in English, could give a biased view of facts, analyses, and sources. To clarify, this research involves an unavoidable language barrier, as I do not speak, read, or write Chinese, which made it impossible to use sources written only in Chinese. To cope with this hurdle, I included sources that have direct references to Chinese research that was translated into English, or research authored by Chinese academics, especially where views are expressed. This allows for facts and analyses to originate indirectly from Chinese sources.

Another difficulty related to the precise problem this thesis examines extensively: that sources from China may be censored and filtered. Any reporting of views about freedom of information, regime oppression, and other related content would be hindered due to the media censorship controls in China because such views would be considered controversial with limited access to sources. With this methodological difficulty in mind, I made extensive efforts to include sources written from China or by Chinese sources beyond the national borders. My hope is that the research limitations and barriers are minimized as much as possible and, to some degree, render the research as objectively written as possible under these circumstances.

Chapter II

Background of the Tiananmen Square Protests

The Tiananmen Square protests of 1989 were the largest collective action by Chinese citizens since the CCP came to power at the end of the Chinese Revolution in 1949. These protests were a pointed reminder to the CCP that the Chinese population was more than capable of mobilizing and speaking out against some of the policies of their authoritarian, hierarchical political system. The student-led protests in Tiananmen Square, calling for freedom of speech, government accountability, and democracy, were favorably received by Beijing residents who joined in the movement, quickly increasing the number of peaceful protesters from a few thousand in April to an estimated one million by June.[8] The CCP's customary tactic of ignoring such protests in the hope they would cease, instead met with multiplying, enthusiastic participation at Tiananmen Square, and it appeared threatening to CCP power. The Party broke its silence on June 4, 1989, confronting the unarmed protesters with approximately 200,000 soldiers armed with assault rifles and tanks. The offensive turned Tiananmen Square into a horrific bloodbath with a death toll estimated in the thousands.[9] The brutal response from the

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[8] Amnesty International, "China's Tiananmen anniversary blackout," Global Human Rights blog, May 20, 2014. Available from: http://livewire.amnesty.org/2014/05/20/chinas-tiananmen-anniversary-blackout/. Accessed 18 July 2017.

[9] Kelly Barth, *The Tiananmen Square Massacre* (Farmington Hills, MI: Greenhaven Press/Thomson Gale), 2003.

government marked the June 4 date in history as the Tiananmen Square Massacre of 1989.

Following the massacre, widespread shock erupted around the world, and uncensored international media reports of the massacre immediately and negatively impacted China's global reputation. Reactions ranged from Australia granting temporary asylum to Chinese citizens, to Chinese-Canadians picketing at the Chinese embassy in Toronto, to victims mounting an art exhibition in Vancouver.[10] Hong Kong (still under British rule in 1989) evoked perhaps the strongest response when the largest rally in Hong Kong history gathered to mourn the dead and protest CCP corruption and brutality.[11] China's leaders, in an attempt to salvage their reputations, "actively downplayed the event's prominence and gave multiple reassuring public speeches." [12]

However, if one were to consult newspapers, radio, and television programs circulated in mainland China in 1989 to learn more about this event, the only information to be found would be minimal evidence of a protest and no mention of a massacre. According to the state-controlled Chinese media, nothing of any real importance occurred at that time. This could be attributed to the CCP's belief that this event was a threat to the government, or perhaps it was a moment when the CCP appeared vulnerable and indecisive. This interpretation is supported by Terril Yue Jones, who believes this is what concerned China's leadership the most: if disaffection unites any group of Chinese by

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[10] Paul Gecelovsky, and T. A. Keenleyside, "Canada's international human rights policy in practice: Tiananmen Square," *International Journal* (1995): 564-593.

[11] Harrison E. Salisbury, *Tiananmen Diary: Thirteen days in June* (New South Wales, Australia: Unwin Paperbacks, 1989), 15.

[12] Wu Hung, "Tiananmen Square: A political history of monuments," *Representations* (1991): 89.

class, region, income, victimization, ethnicity or other ties, there could be another wave of protests that could threaten the stability, even the existence, of the Communist Party.[13]

The CCP has traditionally controlled the media inside China's borders, and since 1989, it has made certain there would be no reports of the events in Tiananmen Square. The CCP clamps down on media coverage prior to every June 4 anniversary of Tiananmen, according to the Committee to Protect Journalists,[14] and the Chinese government "prohibits all forms of discussion or remembrance of the events since."[15] Therefore, it is not surprising that much of the general Chinese population (beyond Beijing) remains unaware of the event. The Chinese media mentions virtually nothing about the June 4 anniversary, even refusing to print media commemorations from mourning family members who lost a loved one during the confrontation. Foreign media in Beijing are warned not to meet with dissidents or to report on issues related to the anniversary.

Controlling the Internet and Media in China

It is not unusual for an authoritarian government to take extensive measures to monitor and censor the flow of information. The Chinese government is a good example,

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[13] Terril Yue Jones, "Tiananmen Square at 25," *Wilson Quarterly* (Fall 2014). Available from: <http://wilsonquarterly.com/stories/tiananmen-square-at-25/>. Accessed 15 February 2018.

[14] Committee to Protect Journalists, "China - Committee to Protect Journalists." December, 2013. http://www.cpj.org/asia/china/.

[15] Ezra F. Vogel, *Deng Xiaoping and the Transformation of China* (Cambridge, MA: Belknap, 2011).

as it has taken an increasingly aggressive stance against any behavior in cyberspace that it believes violates real-space norms.[16]

Many academics, historians, and researchers have conducted research into China's vast internet network and associated filtering mechanisms. My research seeks to contribute more to what is already known and to explore further meanings of the historic legacy of the Tiananmen Square Massacre. To add context, general background information about China's internet filters, as well as literature available on the internet regarding the 1989 Tiananmen event, will be discussed.

China's Internet Filters

As Jonathan Zittrain, et al., noted in an extensive internet filtering study conducted in China:

> The filtering regime is among the most sophisticated effort of its kind in the world. While it is difficult to describe the widespread filtering with precision, their research has documented a system that imposes strong controls on its citizen's ability to view and publish content. Unlike the filtering systems in many other countries, China's filtering regime appears to be carried out at various control points and also to be dynamic, changing along a variety of axes over time. This combination of factors leads to a great deal of supposition as to how and why China filters the internet. These complexities also make it very difficult to render a clear and accurate picture of internet filtering in China at any given moment.[17]

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[16] Lawrence Lessig, "The laws of cyberspace." Paper presented at Taiwan Net '98, Taipei, Taiwan, 1998. Available from: https://cyber.law.harvard.edu/works/lessig/laws_cyberspace.pdf. Accessed 14 March 2018.

[17] Jonathan Zittrain, John G. Palfrey, Ronald Deibert, Rafal Rohozinski, Nart Villeneuve, and Derek Bambauer, "Internet filtering in China, 2004-2005: A country study, " DASH, Harvard University (April 14, 2005): 32. Available from: http://nrs.harvard.edu/urn-3:HUL.InstRepos:12211482. Accessed 15 February 2018.

The OpenNet Initiative (ONI),[18] a collaborative partnership that included Harvard, Oxford, and Cambridge universities, sent a large team to investigate the depth of Chinese censorship, with a specific focus on subjects known to be sensitive in China. In conducting tests, the team ascertained ways in which information about the Tiananmen Square Massacre was blocked. Figure 2 identifies some key words and phrases that were blocked.

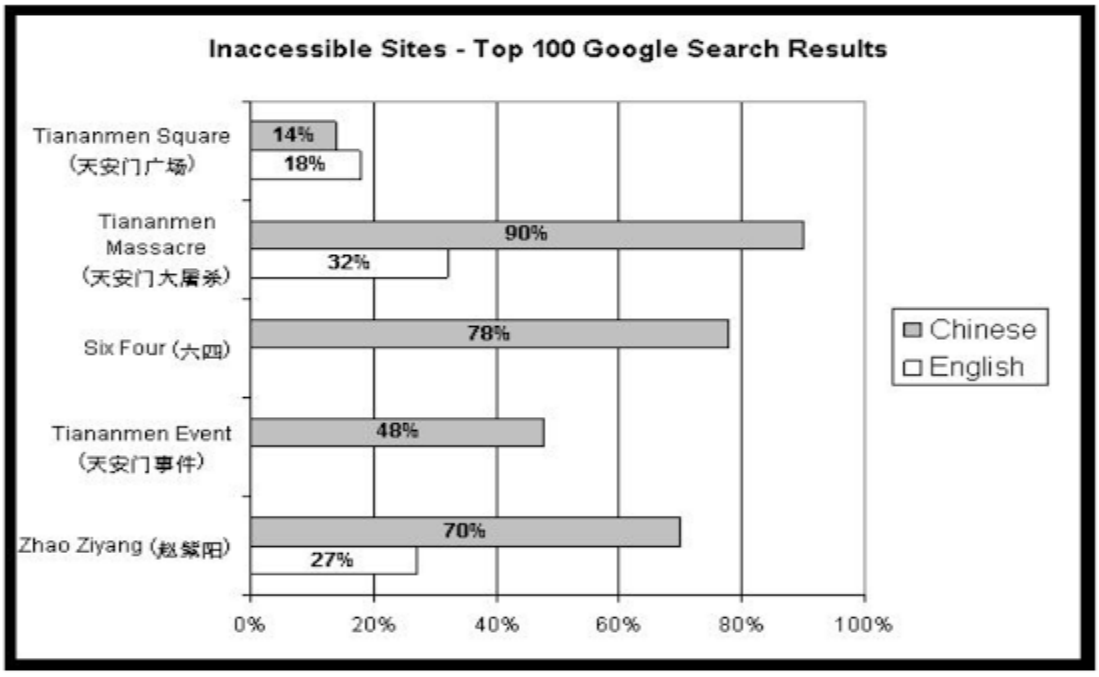

Fig. 2. Google search results for "Tiananmen Square."

Source: Zittrain, et al., 2005, p. 14.

The ONI testing found widely varying accessibility to websites that contained information on the Tiananmen Square incident, depending on the search term used. For instance, they note:

[18] OpenNet Initiative website. See: https://opennet.net/. Accessed 8 March 2018.

Searches on politically sensitive descriptors, such as “massacre” and “six four,” returned virtually nothing during testing on Chinese language sites. We found moderate levels of inaccessibility for English language sites pertaining to the search term “Tiananmen massacre” (we did not test the terms “six four” or “Tiananmen event” in English since they generated too many unrelated sites). We found filtering of 70% of Chinese language sites related to a search for Zhao Ziyang, the former leader of China’s Communist Party who was removed from his post for opposing the repression of the Tiananmen demonstrations. Surprisingly, URLs listed in response to a search for “Tiananmen Square” itself were only moderately inaccessible for both Chinese and English language sites.[19]

[19] Zittrain, et al., “Internet Filtering,” 32.

Chapter III

Law

The first of Lessig's modalities is Law.[20] In this section, I discuss the legal aspects of cyber laws in China and how the CCP uses these to control information flow on the internet and to prosecute those they believe have breached these laws. Legal statements on the subject of censorship contain broad ambiguities that are subject to interpretation by the CCP, and, even before the internet, were forced upon all traditional media outlets.

Historians regularly note variations in what China considers acceptable historical content both before and after 1949. According to Jeffrey Wasserstrom, a modern Chinese historian, Chinese history books rarely face serious censorship because there is relatively little pre-1949 Chinese history that is off limits for debate in China. However, after 1949, Chinese history is more heavily censored.[21] This has an important implication for research: the laws are filled with vague provisions, and are structured and interpreted according to CCP cultural and political principles across all media. This creates an expectation that internet content related to post-1949 history will be interpreted similarly. According to Beina Xu, China's constitution affords its citizens freedom of speech and press, but Chinese media regulations also include vague language that allows authorities

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[20] Lessig, *Code,* 1-16.

[21] Jeffrey Wasserstrom, quoted in: David A. Walsh, "The banal reality of censoring books in China." Quoted on *History News Network.* October 24, 2013. Available from: https://historynewsnetwork.org/article/153706. Accessed 14 March 2018.

to crack down on news stories by claiming that they expose state secrets and thus endanger the country.[22]

As with print, visual, and audio media, internet content in China related to the Tiananmen Square protests is interpreted by the CCP to be illegal and subject to strict enforcement. State Council Order 292 contains an injunction against "content that could harm the dignity and interests of the state or disturb social order."[23] While internet users in China are not made aware of what topics are considered damaging to the state, the CCP has absolute authority to determine any Tiananmen Square content as harmful and punishable by law. Gillian Wong found that the term "state secrets" could be interpreted loosely to cover a wide range of information and data—even items such as maps, GPS coordinates, and economic statistics.[24] This creates a baseline policy of that traps all regulatory actors into strengthening the goals of the CCP, including the erasure of June 4, 1989, and all Tiananmen Square references.

Continual adoption of new guidelines for internet regulation is an effective method that enables the CCP to maintain its interests and control information flow. According to Xu, the regime itself makes use of the internet, not only to extend its control but also to enhance its legitimacy.[25] For example, in January 2001, as a result of the

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[22] Beina Xu, "Media Censorship in China." In: *Council on Foreign Relations*, "Media Censorship and Law," vol. 2, no. 14 (Sep. 2014). Available from: http://www.cfr.org/china/media-censorship-china/p11515. Accessed 8 March 2018.

[23] Teh Eng Koon, "The list: The 10 worst Chinese laws," *Foreign Policy,* August 18, 2008. Available from: http://www.foreignpolicy.com/articles/2008/08/17/the_list_the_10_worst_chinese_laws. Accessed 18 July 2017.

[24] Gillian Wong, "China set to tighten state-secrets law forcing internet firms to inform on users," *Washington Post,* April 27, 2010. Available from: http://www.washingtonpost.com/wp-dyn/content/article/2010/04/27/AR2010042704503.html. Accessed 2 August 2017.

[25] Xu, "Media censorship in China," 2-4.

imminent publication of a collection of documents about decision making by senior Chinese officials vis-à-vis the student protests of 1989, the Supreme People's Court set the ultimate punishment: "Those who illegally provide state secrets or intelligence for units, organizations and individuals outside the country through internet with serious consequences will be punished according to stipulations of the Criminal Law . . . "[26] The publication was a direct conflict of interest with the aims of the CCP, so adoption of this legal guideline served to further validate their censorship practices.

Another prominent example of enforcement of this law occurred in 2005 when Chinese journalist Shi Tao was sentenced to 10 years of imprisonment for emailing foreign media about a government order to deny reference to Tiananmen Square in the media. According to Amnesty International, Shi used his Yahoo! email account to send a message to a U.S.-based, pro-democracy website in which he summarized a government order directing media organizations in China to downplay the then-coming 15th anniversary of the 1989 crackdown on pro-democracy activists.[27] Karagiannopoulos found that the Chinese government, primarily the Information Office of Beijing (or in other cities), frequently issued lists of forbidden keywords and lists of incidents that could not be reported or news that could not be put on homepages.[28] Given the fluid, sometimes volatile ebb and flow of what is legally acceptable and what is forbidden, it is difficult to know the specifics of laws at the Senior Party level that govern internet content. In any case, however, the determination of relevant content that pertains to the

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[26] Ramesh Chandra, *Information Technology in the 21st Century* (New Delhi: Kalpaz, 2003), 60-61.

[27] Amnesty International, Case: Shi Tao. Available from https://www.amnestyusa.org/cases/shi-tao/. Accessed 8 March 2018.

[28] Karagiannopoulos, "China and the internet," 22-28

Tiananmen Square protests and massacre is often enforced under the Guarding State Secrets law.

In July 1997, Hong Kong became a Special Administration Region (SAR) of China and is regulated under the jurisdiction of the Basic Law, or Hong Kong Law. That law specifically protects the basic freedoms of Hong Kong citizens, including freedom of the press, freedom of speech, and freedom of mass assembly.[29] Thus, controlling the internet in Hong Kong, China's newest region, presents a different challenge of content regulation as it pertains to the Tiananmen Square anniversary. The CCP cannot adopt the same legal methods of internet control as it uses throughout the mainland but instead has to use indirect methods, such as leveraging its economic power, to coerce Hong Kong media companies into censoring content that the CCP considers sensitive. This issue will be explored in greater detail in the chapter on market forces.

In summary, while China has cyber laws, rules, and guidelines that govern the use of the internet and the flow of information, the lack of detail and the ambiguous terminology used, together with the multitude of various public departments tasked with monitoring and enforcing these laws, allow the CCP significant freedom to prosecute those they believe are acting against CCP or national interests. In contrast, the CCP has no such direct legal influence in Hong Kong. Rather, the CCP must use indirect methods to influence foreign companies to abide by its internet laws, rules and guidelines. In order to enforce these loosely defined laws and guidelines, the CCP has adopted a range of methods within the technical architecture of the internet to (a) monitor, (b) collect information for the purposes of prosecution, and (c) censor specific content on the

[29] Zhianchao Sun, "International legal personality of the Hong Kong Special Administrative Region." *Chinese Journal of International Law,* July 1, 1997. Available from: http://chinesejil.oxfordjournals.org/content/7/2/339.full. Accessed 18 July 2017.

internet. These methods and their implications are discussed in the next chapter: Architecture.

Chapter IV

Architecture

This chapter uses Lessig's second modularity, Architecture, to discuss one of the key topics of this paper, namely, the methods used by the CCP to control information flows leading up to the anniversary of the Tiananmen Square protests on June 4 every year. As China's internet laws, rules, and guidelines allow the CCP to prosecute those they believe are disobeying these laws, the methods of internet architecture give the CCP an advantage to identify and collect information within the country's national borders.

Karagiannopoulos points out that Lessig focuses on code as a dominant element of online regulation, arguing that the nature of internet architecture is crucial to the regulation of certain behaviors. He thought the regulation of cyberspace might have seemed more difficulty initially due to the basic open-ended nature of the internet architecture and the functions of various applications, which did not differentiate between types of information and also promoted a decentralized model of communications.[30]

Before the advent of the internet, traditional forms of media in China, such as print (newspapers, magazines and books), radio, and television, were controlled centrally by the CCP. Information flowing through these forms of media were more simple to control, because the architecture or distribution channels (e.g., publishers, book stores, radio, and television stations) were owned by or licensed through the CCP.

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[30] Karagiannopoulos, "China and the Internet," 22-28.

A different challenge appeared with the transmission of information online, as it moved much faster and required rapid regulatory response. One of the first structural laws the CCP put into effect regarding internet content requires internet service providers to be licensed and for internet traffic to go through official channels: ChinaNet, GBNet, CERNET, or CSTNET.[31] The architecture and code of the internet in China is set up by an extensive multi-layered, filtering network. This positioning hierarchically at the top as a checkpoint of internet content flow is no different than the structural "pecking order" the CCP has enforced over traditional media outlets. However, architectural measures, as well as the nature of the internet and its inherent ability to quickly spread content globally, could tarnish many of the CCP's efforts to silence or erase the June 4, 1989 event on mainland China.

Blocking Methods

The CCP continues to adapt its regulatory methods to the technological changes brought by the internet. The three methods commonly used by the CCP to suppress and censor any memory or reference of Tiananmen on the internet are: (1) IP blocking: preventing a user from connecting to websites deemed in breach of national internet laws; (2) keyword blocking: filtering out and removing content based on blacklisted words; and (3) manual blocking: human monitoring to locate and block content that is not identified through the other methods.

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[31] Jesse Russell, and Ronald Cohn, *Internet Censorship in the People's Republic of China*. Books on Demand, 2012. Available from: https://books.google.bs/books/about/Internet_Censorship_in_the_People_s_Repu.html?id=gIOeMQEACAAJ. Accessed 8 March 2018.

IP Blocking of Websites

In the annual lead up to the June 4 anniversary, internet users in China are met with a suspiciously high number and frequency of disconnected websites, slower connections, and mass online shutdowns. Yu Jianrong states:

> One of the biggest tests of the Chinese government's attitude towards social networking sites came in June 2009 when the state chose to officially ignore the 20-year anniversary of the crackdown on the Tiananmen Square democracy movement. The verdict for social media was not promising. In the days leading up to the anniversary, Facebook and Twitter, which had been intermittently available in China, were cut off, apparently for good.[32]

The decision to use IP blocking of websites like Facebook and Twitter—both of which are remote content sources beyond China's control—is influenced by the desire to suppress content related to each upcoming June 4 anniversary and to prevent it from appearing in China. Chris Hoffman notes: "By blocking foreign social networking sites like Twitter and forcing their citizens to use alternatives like Sina Weibo, China is able to control social-networking sites, gaining the ability to censor posts on them."[33] In addition, Google, Skype, and YouTube in China often face limited or no access as the CCP suppresses discussion of the historic anniversary. C. Custer found, "In 2009, Chinese net users counted more than 300 services down for 'maintenance' around June 4."[34]

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[32] Jianrong Yu, "China's social networking problem." Artificial Intelligence Laboratory, Eller College of Management, University of Arizona, June 2011: 3. Available from: http://www.webmail.icadl.org/mis510/other/China's%20social%20networking%20problem.pdf. Accessed 18 July 2017.

[33] Chris Hoffman, "HTG explains how the great firewall of China works," May 2, 2013. http://www.howtogeek.com/162092/htg-explains-how-the-great-firewall-of-china-works/. Accessed 18 July 2017.

[34] C. Custer, "What to expect on June 4, China's 'Internet Maintenance Day,'" *Tech in Asia,* June 3, 2013. Available from: http://www.techinasia.com/june-4-china-unofficial-orwellian-internet-maintenance-day/. Accessed 18 July 2017.

The flaw in this method of using internet structure to suppress content lies in the resulting attention that is drawn to the censorship of information regarding the June 4 anniversary. Dozens of domestic websites become inaccessible or report they are undergoing "routine maintenance" during the week of June 4, causing critics to mockingly refer to the anniversary as "Chinese Internet Maintenance Day."[35] The heightened censorship practices seeking to prevent history from resurfacing foster enough criticism and ridicule that "Internet Maintenance Day" has been added to the list of a censored phrases blocked on the Chinese internet because, indirectly, it too acknowledges the Tiananmen anniversary.

Keyword Blocking

Key words such as "Tiananmen Square," "tomorrow," "that day," "64," and "tank man," in addition to numerous combinations of phrases that relate to the anniversary date, are blocked from domestic and foreign websites.[36] The list of words and phrases, added to the keyword blocks, has increased annually. Even cryptic expressions that allude obliquely to June 4 can be found on the block list, including "35th of May," "March 96th," and "8 squared." This demonstrates that as long as the CCP continues to enforce censorship through keyword blocking, Chinese internet users will continue to push the boundaries through creative and cryptic methods of speech that could become difficult to suppress in the future.

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[35] Oiwan Lam, "China: Chinese Internet Maintenance Day," *Global Voices Advocacy,* June 3, 2009. Available from: http://advocacy.globalvoicesonline.org/2009/06/03/china-chinese-internet-maintenance-day/. Accessed 14 July 2017.

[36] Lam, "Chinese Internet Maintenance Day," 1-2.

Manual Blocking

The third method, manual blocking, requires the CCP to use large numbers of people in various government departments to manually monitor the flow of information through social media sites. In the lead-up to the annual June 4 anniversary, micro-blogging sites such as Weibo are heavily monitored and edited. According to reporter Chris Luo, the ratio of censored postings—over twice as many as an average day—also surpasses that of 64.5 posts out of each 10,000 made on June 4.[37]

The effectiveness of these control procedures in suppressing discussions regarding Tiananmen in fact sometimes prove counteractive for the CCP due to piqued interest and curiosity from domestic and international web users regarding the censorship measures taken by the government. Lam observed: "With all the blocking and system maintenance measures, June 4th has occupied the third most searched key term in google.cn (June 3 10:09pm), although netizens could not get much information from the result list."[38] Notwithstanding the lack of search engine results and information in China, the annual high-tide maintenance, censorship, and exaggerated blocking measures around June 4 have all contributed to magnified domestic attention to the date.

During the week of June 4, 2010, China severely disrupted and disabled some of Google's services. Eric Blattberg said: "In early 2010, Google announced it was no longer willing to censor searches in China, and moved its Chinese operations to Hong Kong. China condemned the decision and blocked many of Google's services, including

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[37] Chris Luo, "Weibo more heavily censored during Hong Kong's July 1 march than on Tiananmen anniversary," *South China Morning Post,* 3 July 2014. Available from: http://www.scmp.com/news/china-insider/article/1545652/chinas-government-pursues-more-censorship-july-1-it-did-june-4. Accessed 14 March 2018.

[38] Lam, "Chinese Internet Maintenance Day," 1.

video streaming site YouTube."[39] Internationally, the CCP's annual blocking measures regularly catch the attention of news agencies with large readerships: *New York Times, CNN, Times of India, Guardian,* and *TIME* magazine, each widely reporting on Chinese censorship prior to the June 4 anniversary, followed by a recounting of the Tiananmen Square protest event to their international audiences, thus drawing even more awareness and attention to it.

In summary, the combination of IP blocking, keyword filtering, and manual blocking has been effective in controlling internet content related to Tiananmen Square and June 4, thereby preventing the Chinese masses, who have never heard about the 1989 massacre, from learning about it. However, evidence also shows that the extra censorship put in place to hide or remove the June 4 anniversary content actually attracts more domestic and foreign attention, which runs contrary to the CCP's intentions.

Internationally, the CCP has drawn worldwide condemnation for its heavy censorship of the Tiananmen Square anniversary, one result of which was the public announcement by Google that it would move the company from the mainland. However, in the long term, the CCP censorship methods regarding the June 4 anniversary have in fact resulted in magnified international attention and pressure on the CCP to allow greater freedom of speech.

In order for the CCP to implement its censorship methods, significant investment has been made in technology infrastructure and applications, most of which are provided by the private sector. As Lessig argues, "Code creation is synonymous with power, and

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[39] Eric Blattberg, "China reportedly blocks Google as Tiananmen anniversary looms," *VentureBeat*, June 2, 2014. Available from: http://venturebeat.com/2014/06/02/china-reportedly-blocks-google-as-tiananmen-anniversary-looms/. Accessed 18 July 2017.

this power is now mainly in the hands of commercial enterprises."[40] However, China's allure is the prospect of huge economic benefits and access to one of the largest markets in the world, which is a major inducement for many private companies to align with CCP and government policies. Karagiannopoulos found that in the long term, China would maintain its strong censorship while gaining economic benefits through global proliferation of its filtering and monitoring techniques.[41] In the case of internet censorship in China, Lessig's second modularity, architecture, is central among the other modularities of law, market forces, and social norms.

[40] Lessig, "Code," 5-10.

[41] Karagiannopoulos, "China and the Internet," 2-28.

Chapter V

Market Forces

Lessig's third modularity, market forces, is a key element that enables the CCP to maintain its strict internet censorship policies. Because China has such strong influence on market forces because of its economic strength, the CCP also has the power to coerce domestic and foreign companies to abide by its policies. Lessig wrote that commerce has a purpose, and a government can exploit that purpose to its own end. Increasingly and more frequently that exploitation occurs, and when it does the character of the internet changes radically.[42] Traditionally, China has maintained a strongly regulated business environment that favors local indigenous companies over foreign-owned companies. According to Karagiannopoulos, foreign corporations, like Yahoo, Google, and Cisco have colluded with the CCP to partake in China's markets by filtering search engine results and blogs, and even disclosing data about dissidents to the government—actions that subsequently provoked international condemnation and even US Congressional hearings.[43] Promoting local businesses allows the CCP to more easily control and influence these businesses via central government bodies.

In another use of economic influence, the Chinese government has successfully persuaded international media companies to censor internet content related to the annual June 4 Tiananmen Square anniversary, with especially prominent efforts in Hong Kong.

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[42] Lessig, *Cyberspace*, 15-20

[43] Karagiannopoulos, "China and the internet," 2-26.

Companies aiming to do business with China and access its substantial market and population pool often elect to comply, to some degree, with the CCP's information control policies. This practice has become entrenched since 1989, although censorship influence that extends beyond China's borders has been viewed suspiciously. In the lead-up to the June 4, 2014, anniversary, users of the LinkedIn website noticed an extended block that "accidentally" censored all Tiananmen Square content on their Hong Kong-based website. Wilson Dizard noted:

> LinkedIn typically makes a distinction between Hong Kong and China. Usually, content from outside China that the Chinese government doesn't approve will be censored only for Chinese users. Meanwhile, content posted from within China that does not conform to government censorship will be blocked for everyone, both in China and across the globe.[44]

The implication of LinkedIn censoring information beyond Chinese borders demonstrates the power of market force, used by the CCP, to suppress internet content prior to the June 4 anniversary date. Prior to the internet, China used its influence to censor written, audio and video content in outlets, but such censoring was much less noticeable due to the one-way nature of these communication mediums, as censoring simply entailed the exclusion of such content. The internet exposed the influence of Chinese censorship on internet sites such as LinkedIn, prompting organizations like Human Rights Watch to declare that "blocking content globally that's produced in a censoring country creates a troubling precedent for free speech across the internet." [45]

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[44] Wilson Dizard, "LinkedIn blocking Tiananmen Square posts in China," *Al Jazeera,* June 4, 2017. Available from: america.aljazeera.com/articles/2014/6/4/china-linkedin-internet.html. Accessed 18 July 2017.

[45] Dizard, "LinkedIn blocking Tiananmen Square posts in China."

Hong Kong has been a particular hotspot for the CCP to extend its economic influence and attempt to censor June 4 content. The "one country, two systems" policy, which went into effect at the time of the 1997 handover, implies that Hong Kong is to be governed separately from the mainland. Nevertheless, the CCP's influence over free speech in Hong Kong has been significant. Media organizations from North America, Europe, and Australia have called attention to mainland China's extended influence, apparent in filling leadership positions in Hong Kong's media industry with people who have direct affiliations to the CCP, and Chris Buckley found that "six of the ten biggest companies on the Hong Kong stock market's Hang Seng index are Chinese state-owned companies, with chief executives who are appointed by the Communist Party."[46] By filling leadership positions with people who favor CCP ideologies, the free speech granted to Hong Kong can be contained, if not controlled. Despite this covert method of economic influence, there has been little or no apparent diminution in the turnout numbers for Hong Kong's traditional ceremony honoring the victims of the 1989 massacre.[47]

Based on these examples, I observed short-term implications of the CCP's use of market forces to regulate and control free speech in Hong Kong. Furthermore, other countries show an increase in covert deals that allow the CCP to indirectly influence targeted companies, evoking international condemnation. The long-term implications of the CCP's use of economic power to censor internet coverage of the June 4 Tiananmen

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[46] Chris Buckley, "Bankers in Hong Kong join fight against mainland influence," *New York Times*, April 21, 2017. Available from: https://www.nytimes.com/2014/04/22/world/asia/in-hong-kong-some-bankers-back-an-occupy-movement.html?_r=0. Accessed 12 March 2018.

[47] Buckley, "Bankers in Hong Kong."

Square anniversary is the reality that higher exposure in fact draws more attention to the Tiananmen Square Massacre anniversary and its importance, and even more criticism of the CCP's actions to halt internet coverage.

Chapter VI

Social Norms

The fourth of Lessig's modalities, social norms on the internet, was utilized by the CCP to control information flow on the internet to the Chinese masses, which facilitated and fostered the CCP's goals in Chinese society.[48] The most prominent cause-and-effect relationship influencing social norms on the internet is that heightened sensitivity on the internet can promote an increase in self-censorship. Self censorship has been a dominant norm in Chinese society since the Cultural Revolution, and can be widely seen in former Red Guard persecutions and in controversial issues such as Tibet, Falun Gong, and the Tiananmen Square massacre. During the Cultural Revolution, continual persecution of the "bourgeois" middle class by the Red Guards led to self censorship as a way of self preservation even as fervent nationalism was strongly encouraged. While traditional media of the time did not have the same reach and impact as the internet today, self censorship was common, primarily out of fear of punishment or imprisonment or, in the case of companies, sanctions and loss of business. These actions have not changed with the appearance of the internet. Although the CCP highlights self censorship is a desirable norm,[49] other desirable norms are nationalism and materialism. "The desirable user is

[48] Lessig, *Code*, 20-25.

[49] Karagiannopoulos, "China and the internet," 1-23.

portrayed as a docile consumer/follower of CCP morals, one who avoids controversial uses of the internet."[50]

Legal provisions containing ambiguous statements, dictated by the CCP and reinforced by cyber police, inevitably give rise to and perpetuate a feeling of constant scrutiny of users and businesses.[51] Journalists who pursue information that conflicts with CCP interests are legally sanctioned by Chinese police who detain them, revoke licenses, impose huge fines, and threaten imprisonment. Today these actions rank China as the second-worst jailer of journalists, close behind Turkey, according to the Committee to Protect Journalists.[52] No surprise, then, that data reveal an increase in legal sanctions just before the annual June 4 Tiananmen Square anniversary. Andrew Jacobs found that "the days preceding June 4 often mean house arrest for vocal government critics . . . . A dozen prominent scholars and activists have been arrested or criminally detained, and even seemingly harmless gestures, like posting a selfie in Tiananmen Square while flashing a V for victory, have led to detentions."[53] Behaviors found on the internet that relate to the June 4 Tiananmen Square anniversary are punished to create a heightened sense of fear of sanctions. In 2014, Amnesty International's China team listed nearly 50 people across the country who have been jailed, interrogated, forced to travel, or placed under house

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[50] Karagiannopoulos, "China and the internet," 1-23.

[51] Karagiannopoulos, "China and the internet," 2-20.

[52] DW News, "Press Freedom Index: Turkey remains world's worst jailer of journalists," December 13, 2017. Available from: http://www.dw.com/en/press-freedom-index-turkey-remains-worlds-worst-jailer-of-journalists/a-41769715. Accessed 8 March 2018.

[53] Andrew Jacobs, "Tiananmen Square anniversary prompts campaign of silence," *New York Times,* May 27, 2014. Available from: http://www.nytimes.com/2014/05/28/world/asia/tiananmen-square-anniversary-prompts-campaign-of-silence.html?_r=0. Accessed 18 July 2017.

arrest.[54] Data regarding enforcement of self-censorship to avoid legal sanctions is inconclusive as it is difficult obtain data from journalists and businesses that become compliant. However, indicators of adaptive social norms can be observed from international news agencies that note elevated levels of fear among journalists, businesses, and citizens all seeking to be cautious around the annual June 4 anniversary. For example, a headline from the *South China Morning Post*, "Fears after mainland journalist Gao Yu fails to show up at Tiananmen Square event," indicates a collective emotional response of fear as a social norm.[55]

The CCP is able to influence social norms in China due to its ownership of online media companies. Within China's borders, the CCP

> control[s] a large percentage of the mainstream media apparatus and its extensive use of propaganda has enabled it to dominate norm-creation, since alternative online media have been and are still generally censored, while at the same time, state-affiliated, traditional media has been modernised, establishing a strong internet presence and consequently, colonising cyberspace-generated information.[56]

In addition to having full control over what the Chinese public is exposed to is the CCP's ability to censor or block information relating to June 4, 1989 from discovery the general population. The structure of the internet in China allows the CCP to monitor social media content online and quickly any censor material that refers to Tiananmen Square. This has important implications for self-censorship because according to King et al., online behavior has become such a large and important part of human life that the

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[54] Amnesty International, "China's Tiananmen anniversary blackout."

[55] Verma Yu, "Fears after mainland journalist Gao Yu fails to show up at Tiananmen Square event," *South China Morning Post*, April 29, 2014. Available from: http://www.scmp.com/news/china/article/1499485/journalist-fails-show-commemoration. Accessed on 18 July 2017.

[56] Karagiannopolous, "China and the internet," 26.

expressions observed in social media are now important in their own right.[57] By diminishing the number of online social media posts related to June 4, the CCP can lower or remove any impact spreading within mainland China.

Finally, the ability of market forces to influence social norms creates conflicting implications. For example, the CCP has utilized large numbers of internet users (the so-called "50-Cent Army")[58] who access blogs, social networking websites, and media to post pro-Party comments that directly counter dissent and deter discussions regarding any topic that CCP chooses, including June 4 and Tiananmen Square.[59] These actions likely enjoy a measure of success at counteracting negative discussions online or influencing outside opinions related to Tiananmen Square's history. However, it has also resulted in a general mistrust of the government's presence on the Chinese internet and a related negative impact on investment. Chris Burnt said: "Concerns about censorship and related issues of government mistrust continue to influence investment in China. The 16th annual China Business Climate Survey Report, conducted by the American Chamber of Commerce in the People's Republic of China indicates internet censorship is a hindrance to the majority of respondents."[60] The long-term social implications of the CCP's methods of controlling information flow in China are an attempt to erase recent history and add further to foreign investors' inability to trust the CCP.

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[57] King, Pan, and Roberts, "How censorship in China allows government criticism," 1-18.

[58] Joyce Lau, "Who are the Chinese trolls of the '50 Cent Army'?" *VOA News*, October 7, 2016. Available from: https://www.voanews.com/a/who-is-that-chinese-troll/3540663.html. Accessed 12 March 2018.

[59] Karagiannopoulos, "China and the internet," 12-14.

[60] Chris Burnt, "Nearly half of US businesses operating in China concerned with data security." *Web Host Industry Review,* March 21, 2014. Available from: http://www.thewhir.com/web-hosting-news/nearly-half-us-businesses-operating-china-concerned-data-security-study. Accessed 18 July 2017.

In summary, the three social norms most desired by the CCP as a result of internet control are self censorship, nationalism, and materialism. By using the fear of prosecution to police internet laws and rules, the CCP encourages self censorship as one means of controlling internet content. Through the use of propaganda on the internet and other traditional media, the CCP hopes to instill a strong sense of nationalism and duty among the Chinese population. Finally, through social market economic policies and the strong Chinese economy, the CCP promotes materialism as a common social norm. These three norms, when enforced and utilized together, create an ideal average Chinese internet user.

Chapter VII

Conclusions

The Chinese Communist Party's methods of controlling access to information about the anniversary of the Tiananmen Square Massacre implications both domestically and internationally. The CCP's attempts to deter, suppress, or block information on the internet has had a converse effect: even more attention is drawn to the significance of the Tiananmen Square event, thus elevating its importance. Whether or not information inside Chinese borders is censored, the interactive characteristic of the internet exposes the CCP censorship at one specific time each year: the first week of June.

Circling back to the original research questions and purpose of the thesis, several conclusions can be drawn, as follows:

(1) What methods does the CCP use to control information flow?

The CCP has exploited the ambiguities of national internet law to effectively control the flow of information to the general Chinese population on the mainland. Significant confusion arises because of numerous state departments that administer internet laws and content, thus enabling the CCP power to interpret the laws as it sees fit, and to enforce them upon citizens the CCP believes have conflicting political motives. Evidence of these strict enforcement measures can be seen in the number of journalists who are jailed annually around the date of the Tiananmen Square anniversary.

Given China's ranking as one of the top three countries with the most jailed journalists,[61] one can interpret their action as symptomatic of the primary objective of control (both physical and internet) to prevent mass collective action around the anniversary date. To control the flow of information in Hong Kong, China has resorted to economic intimidation of companies, and more covert and indirect methods such as placing high-ranking party officials in CEO roles within targeted media and internet companies. The long-term implication of these actions is to adversely affect China's standing in the international community and its human rights record. Using Tiananmen Square as an example, my research found numerous reports of growing global condemnation about how China enforces its internet laws in order to effectively prevent any mention of the Tiananmen Square anniversary, both in the mainland and in Hong Kong.

Domestic measures of censorship accomplished by utilizing the internet's physical architecture, combine IP blocking, keyword blocking, and manual blocking as some of the CCP's most effective methods for controlling information flow on the internet. The short-term implications of these techniques are two fold. First, the CCP can selectively censor information it considers to be too controversial or that conflicts with its interests. Second, CCP censoring promotes specific selected information, which gives the appearance of fostering freedom of speech. Longer term, the CCP appears to be supportive of some free speech and provides an outlet for the masses to vent—in a controlled manner and environment. This is important because the CCP's use of restrictive keyword blocking has led many internet users to circumvent the controls, such

[61] Committee to Protect Journalists, 2013.

as using cryptic messages. Taking the Tiananmen Square anniversary as an example, evidence points to an expanded list of blocked words related to the June 4, 1989 anniversary, which grows parallel with the increase of cryptic expressions of June 4. The implication is that as long as the CCP continues to enforce censorship through internet architecture measures, Chinese internet users will continue to push the boundaries through creative methods that are more difficult to suppress.

Methods of market force regulation correlate positively with furthering the CCP's control of domestic censorship. The threat of economic sanctions, looming over domestic web users and commercial technology businesses, strengthens a proclivity to self-censor. Chinese censorship methods can and do drive businesses away from operating inside the country, which has short-term negative repercussions on China's international business growth. The implication is that for the long term, international businesses either have to comply with the CCP's censorship practices in order to remain in operation, or the CCP will be forced eventually to compromise some of its censorship practices in order to remain competitive at the international level.

The combination of methods used by the CCP to control the internet within law, architecture, and market forces all serve to influence China's social norms by instilling a sense of fear and intimidation. The fear of persecution from ambiguous internet laws; fear of economic sanctions; and the intimidation of internet monitoring, blocking, and censorship, all serve to ensure that the masses will comply with the CCP's political motives.

The effects on social norms can be seen during the week prior to the annual anniversary of the Tiananmen Square protests. Leading up to and during the anniversary,

the CCP used all of the aforementioned methods together to remove all mention of Tiananmen Square from domestic social media and websites, and to censor and punish individuals and businesses that discuss Tiananmen Square. Even outside of China, the CCP attempts to influence media and businesses to avoid discussing Tiananmen Square. This means the majority of internet users will be more cautious in their online behavior, even as mistrust of the CCP increases among users and the general population.

At an international level, the methods used by the CCP to control the information flow on the internet regarding Tiananmen Square were globally condemned. This in turn weakens China's international reputation and negatively highlights its human rights record.

(2) Is it possible for an authoritarian government to control perceptions of its history in the age of the internet?

By using Lessig's four forces individually and collectively as a framework to analyze China's internet control methods, I observed a number of inconsistencies within the CCP's laws, motives, and behaviors. By using the four methods of censorship outlined above, the CCP effectively controls the flow of information on the internet, thus enabling it to suppress information related to the Tiananmen Square anniversary.

However, much of the evidence suggests that the favored methods of content control in fact magnify international attention on the June 4 anniversary, which strengthens the historic nature of the event, regardless of suppression, omission, and censorship inside China's borders. Censorship efforts by the CCP in the weeks prior to the anniversary of the massacre are reported and discussed in the international media, and that awareness has resulted in added moves to access and spread the information as a

form of resistance. Extra internet censorship applied to this historic event seems to carry more risks than benefits in this case.

(3) What are the short- and long-term implications for China as a result of the CCP's attempts to exert control over the internet?

The future of CCP's leadership in China is intimately connected to its ability to control information flow. China's internet filtering efforts are reputed to be the most sophisticated in the world, so in the short term, maintaining the status quo of censorship would be a priority, and attempts to suppress or censor information that is already available or historically significant would be futile or result in the converse effect.

Long term, the Tiananmen Square Massacre of 1989 carries a legacy that will prevail on the internet *because of* and not *in spite of* censorship. In turn, there is great irony in its historical significance: it is regarded as the largest collective action taken by Chinese citizens to protest against governmental control, as the men and women of China called for free speech, government accountability, and democracy. Only time will show whether the actions of June 4, 1989, will ultimately bring additional historic events.

References

Amnesty International. Case: Shi Tao. Available from: https://www.amnestyusa.org/cases/shi-tao/. Accessed 8 March 2018.

Amnesty International. "China's Tiananmen anniversary blackout." Global Human Rights blog, May 20, 2014. Available from: http://livewire.amnesty.org/2014/05/20/chinas-tiananmen-anniversary-blackout/. Accessed 18 July 2017.

Barth, Kelly. *The Tiananmen Square Massacre*. Farmington Hills, MI: Greenhaven Press/Thomson Gale, 2003.

Blattberg, Eric. "China reportedly blocks Google as Tiananmen anniversary looms." *VentureBeat*, June 2, 2014. Available from: http://venturebeat.com/2014/06/02/china-reportedly-blocks-google-as-tiananmen-anniversary-looms/. Accessed 18 July 2017.

Buckley, Chris. "Bankers in Hong Kong join fight against mainland influence." *New York Times,* 21 April 2014. Available from: http://www.nytimes.com/2014/04/22/world/asia/in-hong-kong-some-bankers-back-an-occupy-movement.html?_r=0. Accessed 18 July 2017.

Burnett, Dean. "Why government censorship [in no way at all] carries greater risks than benefits." *Guardian*. Available from: https://www.theguardian.com/science/brain-flapping/2015/may/22/government-censorship-psychology-theresa-may Accessed 15 December 2017.

Burnt, Chris. "Nearly half of US businesses operating in China concerned with data security." *Web Host Industry Review,* March 21, 2014. Available from: http://www.thewhir.com/web-hosting-news/nearly-half-us-businesses-operating-china-concerned-data-security-study. Accessed 18 July 2017.

Chandra, Ramesh. *Information Technology in 21st Century*. New Delhi: Kalpaz, 2003.

Committee to Protect Journalists. "China - Committee to Protect Journalists." December 2013. Available from: http://www.cpj.org/asia/china/. Accessed 18 July 2017.

CNNIC. CNNIC released the 33rd Statistical Report on internet development in China. Chinese Internet Network Information Centre. 17 January 2014. Available from: http://www1.cnnic.cn/AU/MediaC/rdxw/hotnews/201401/t20140117_43849.htm . Accessed 14 July 2017.

Custer, C. “What to expect on June 4, China’s ‘Internet Maintenance Day’.” *Tech in Asia,* June 3, 2013. Available from: http://www.techinasia.com/june-4-china-unofficial-orwellian-internet-maintenance-day/. Accessed 18 July 2017.

Dizard, Wilson. “Linkedin blocking Tiananmen Square posts in China.” *Al Jazeera,* June 4, 2014. Available from: http://america.aljazeera.com/articles/2014/6/4/china-linkedin-internet.html. Accessed 18 July 2017.

DW News. “Press freedom index: Turkey remains world’s worst jailer of journalists.” December 13, 2017. Available from: http://www.dw.com/en/press-freedom-index-turkey-remains-worlds-worst-jailer-of-journalists/a-41769715. Accessed 8 March 2018.

Gecelovsky, Paul, and T. A. Keenleyside. “Canada’s international human rights policy in practice: Tiananmen Square.” *International Journal* (1995): 564-593.

Hoffman, Chris. “HTG explains: How the great firewall of China works,” May 2, 2013. Available from: http://www.howtogeek.com/162092/htg-explains-how-the-great-firewall-of-china-works/. Accessed 18 July 2017.

Hung, Wu. “Tiananmen Square: A political history of monuments.” *Representations* 1991: 84-117.

Jacobs, Andrew. “Tiananmen Square anniversary prompts campaign of silence.” *New York Times,* 27 May 2014. Available from: http://www.nytimes.com/2014/05/28/world/asia/tiananmen-square-anniversary-prompts-campaign-of-silence.html?_r=0. Accessed 18 July 2017.

Jones, Terril Yue. “Tiananmen Square at 25.” *Wilson Quarterly* (Fall 2014). Available from: http://wilsonquarterly.com/stories/tiananmen-square-at-25/. Accessed 15 February 2018.

Karagiannopoulos, Vasileios. “China and the internet: Expanding on Lessig’s regulation nightmares.” *SCRIPTed* 9, no. 2 (August 2012): 1-23. Available from: http://codev2.cc/, Accessed 15 July 2017.

King, Gary, Jennifer Pan, and Margaret E. Roberts. “How censorship in China allows government criticism but silences collective expression.” *American Political Science Review* 107, no. 2 (May 2013): 1-18.

Koon, Teh Eng. “The list: The 10 worst Chinese laws.” *Foreign Policy*. August 18, 2008. Available from: http://www.foreignpolicy.com/articles/2008/08/17/the_list_the_10_worst_chinese_laws. Accessed on 18 July 2017.

Lam, Oiwan. “China: Chinese internet Maintenance Day.” *Global Voices Advocacy.* June 3, 2009. Available from: http://advocacy.globalvoicesonline.org/2009/06/03/china-chinese-internet-maintenance-day/. Accessed on 18 July 2017.

Lau, Joyce. “Who are the Chinese trolls of the ’50 Cent Army’?” *VOA News*, October 7, 2016. Available from: https://www.voanews.com/a/who-is-that-chinese-troll/3540663.html. Accessed 12 March 2018.

Lessig, Lawrence. *Code and Other Laws of Cyberspace, Version 2.0.* 2nd revised ed. New York: Basic Books, 2006.

Lessig, Lawrence. “The laws of cyberspace.” Paper presented at Taiwan Net ’98, Taipei, Taiwan, 1998. Available from: https://cyber.law.harvard.edu/works/lessig/laws_cyberspace.pdf. Accessed 14 March 2018.

Luo, Chris. “Weibo more heavily censored during Hong Kong’s July 1 march than on Tiananmen anniversary.” *South China Morning Post,* 3 July 2014. Available from: http://www.scmp.com/news/china-insider/article/1545652/chinas-government-pursues-more-censorship-july-1-it-did-june-4. Accessed 14 March 2018.

OpenNet Initiative website. Available from: https://opennet.net/. Accessed 8 March 2018.

Russell, Jesse, and Ronald Cohn. *Internet Censorship in the People’s Republic of China*. Google: Books On Demand, 2012. Available from: https://books.google.bs/books/about/internet_Censorship_in_the_People_s_Repu.html?id=gIOeMQEACAAJ. Accessed 15 February 2018.

Salisbury, Harrison Evans. *Tiananmen Diary: Thirteen Days in June*. New South Wales, Australia: Unwin Paperbacks, 1989.

Sun, Zhianchao. “International legal personality of the Hong Kong Special Administrative Region.” *Chinese Journal of International Law,* 1 July 1997. Available from: http://chinesejil.oxfordjournals.org/content/7/2/339.full. Accessed 18 July 2017.

Vogel, Ezra F. *Deng Xiaoping and the Transformation of China*. Cambridge, MA: Belknap, 2011.

Wasserstrom, Jeffrey. In: David A. Walsh, “The banal reality of censoring books in China.” *History News Network,* October 24, 2013. Available from: https://historynewsnetwork.org/article/153706. Accessed 14 March 2018.

Wong, Gillian. “China set to tighten state-secrets law forcing internet firms to inform on users.” *Washington Post,* April 27, 2010. Available from: http://www.washingtonpost.com/wp-dyn/content/article/ 2010/04/27/AR2010042704503. html. Accessed 2 August 2017.

Xu, Beina. "Media Censorship in China." Quoted in: *Council on Foreign Relations*, "Media censorship and law," vol. 2, no. 14 (Sep. 2014). Available from: http://www.cfr.org/china/media-censorship-china/p11515. Accessed 8 March 2018.

Yu, Jianrong. "China's social networking problem." Artificial Intelligence Laboratory, Eller College of Management, University of Arizona, June 2011. Available from: http://www.webmail.icadl.org/mis510/other/China's%20social%20networking%20problem.pdf. Accessed 18 July 2017.

Yu, Verna. "Fears after mainland journalist Gao Yu fails to show up at Tiananmen Square event." *South China Morning Post*, April 29, 2014. Available from: http://www.scmp.com/news/china/article/1499485/journalist-fails-show-commemoration. Accessed on 18 July 2017.

Zittrain, Jonathan, John G. Palfrey, Ronald Deibert, Rafal Rohozinski, Nart Villeneuve, and Derek Bambauer. "Internet filtering in China 2004-2005: A country study," April 14, 2005. Available from: http://nrs.harvard.edu/urn-3:HUL.InstRepos:12211482. Accessed 15 February 2018.