Commercial-State Empire: A Political Economy Perspective on Social Surveillance in Contemporary China

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Abstract

In order to demystify the complexities of the social media and surveillance systems in China, this article offers a case study of Tencent. It also discusses the historical context, political agendas, and cultural productions of the technological sublime that obscure the political-economic realities of China's rapidly evolving internet industry. Tencent's conglomeration is situated within the context of China's social surveillance infrastructure as well as the historical development of science and technology. Tencent's effort in content generation, comprehensive multi-platform connection strategy and ecosystem building encapsulates the construction of a commercial surveillance infrastructure that embodies a surveillance capitalism logic. In addition, this article examines the mutually constitutive relationships between the state and Tencent in the process of the latter's conglomeration. In general, the technological sublime fabricated by various political and economic forces have hidden Tencent's conglomeration, its entanglement with the state sector and the establishment of a commercial surveillance infrastructure. By demystifying this process, it is possible to depict contemporary China as a commercial-state surveillance complex, wherein the state and tech-giants like Tencent work hand-in-hand to engineer user behavior and public discourse.

On March 26, 2018, a week after the blast of Facebook's data scandal with Cambridge Analytica that alerted Americans to concerns about online data privacy and democratic rights (Meredith, 2018), Yanhong Li (also known as Robin Li), the co-founder and CEO of China's monopolist search engine Baidu, put himself under the spotlight by saying that "if they [Chinese] are able to exchange privacy for safety, convenience or efficiency, in many cases, they are willing to do that, then we can make more use of that data" (EJ Insight, 2018). Only a few months earlier, another high-tech giant and monopolist in China – Tencent – was publicly questioned on its use of users' data (Yang and Liu, 2018). In an era of the internet, big-data, cloud computing and artificial

intelligence (AI), the public constantly faces the struggle between a technophilic discourse in which people live a futuristic life with technological advantages and conveniences and a discourse concerned about data privacy and the manipulation of public information. Robin Li's controversial assertion - along with the overall societal panic around data privacy - indicates a global crisis of data security that puts users in an inescapable position. This process is also a consequence of the *technological sublime,* which presents technology as the ultimate positive means for achieving a better life.

The concept of technological sublime was extensively discussed by David Nye (1994). Ten years later, Vincent Mosco (2004) employed the term 'digital sublime' in his analysis of cyberspace. In their book, *Greening the Media*, Richard Maxwell and Toby Miller (2012: 4) presented the technological sublime as the ideological tendency to overstate the superiority and excellence of technology by attaching "a totemic, quasi-sacred power" to high-tech industry and products. The technological sublime explains the resistance to the critical view of technology, and it exemplifies an embedded ideology that attributes to technology goodness, novelty, positivity, convenience, futurism and utopia. In this context, the pages which follow will reveal a surveillance complex in contemporary China that hides under the technological sublime which pervades the media industry. By examining the historical context and development of the digital monopoly Tencent Holding, I delineate a mutually constitutive relationship between high-tech monopolies and the Chinese government. By calling this a *commercial-state-surveillance-complex*, I elucidate how private sector interests benefit from state support both financially and politically in the establishment of a commercial-surveillance-infrastructure. Both the state and high-tech giants are woven into a new system of social governance wherein the online-offline boundary collapses, and the old mode of passively surveilling populations is replaced by active behavioral engineering and the incubating of cultural life.

Studies regarding the internet and social media in China have been proliferating. On the positive side, Professor Guobin Yang, with other scholars, has made considerable contributions to the discussion of online activism and social media in China [1]. On the other side, many studies focus on censorship from the Chinese government. Research on China's cyberspace indicates a few problematic positions. First, scholarly discussions regarding internet surveillance in China too often focus on censorship and internet blocking (for example, see Sullivan, 2013; Stockmann and Gallagher, 2011). Second, the discussions of liberatory potential are too dependent on one or a few social media platforms, and often reflect the political climate or government regulations of a particular period without taking into account historical contexts. Third, many studies examine a single social media platform or one type of social media. Such a perspective isolates the research object without interrogating the connections and interrelations among platforms, state and private sectors, and the complex power relations behind the social media system (for example, see Svensson, 2014; Schlæger and Jiang, 2014).

In order to demystify and unpack the complexities of the social media and surveillance systems in China, it is critical to take a political economy of communication (PEC) perspective. Vincent Mosco (2009) defines political economy as "the study of the social relations, particularly the power relations, that mutually constitute the production, distribution, and consumption of resources" (24). Hence, from a political economy standpoint, it is important to examine the production process of a media system and who gets to decide what is and is not produced. Robert McChesney (2013) cites the importance of studies that bring communication into the conversation about capitalism and democracy. Using such a PEC framework, this article examines the making of one high-tech giant

in contemporary China and how it has conglomerated across different industries and businesses and formed mutually constitutive relationships with government institutions to create an overarching commercial-state surveillance complex.

Surveillance and Cultural Construction

Before proceeding with the analysis, it is important to briefly define the term *commercial-state surveillance complex* in relation to China's unique political and economic conditions. In this regard, social surveillance in China should not be seen as a pure authoritarian style of state dictatorship. One should also challenge the stereotypical western view that private corporations in China are puppets of the state. Instead, it is critical to examine the historical conditions that made possible the emergence and conglomeration of giant corporations. It is just as important to see the relationship between the state and private corporations as one which involves changing and persisting negotiations, competitions, conflicts of interest, as well as collaborations and struggles over power.

Thus, the term *commercial-state surveillance complex* refers to a system that embodies a set of relationships whereby the state supports and utilizes the commercial surveillance infrastructure built by private high-tech giants, while private high-tech giants heavily rely on state authority to develop and maintain their conglomeration. The construction of the commercial surveillance infrastructure is not a planned-economy style arrangement in which the state functions as the puppet master and simply dictates the operations and productions of private corporations. Instead, it is a process that emerges out of the complicated and historically contingent development of China's digital industry, which has been influenced by multiple political, economic and social forces. A commercial-state surveillance complex should be understood as a comprehensive and sophisticated means of governing the public through behavioral and ideological manipulation, online and offline. This framework draws scholarly attention away from censorship, single-platform studies, and oppressive online opinion control, to consider a distinctive system of governing and engineering Chinese society and individuals.

In this context, recent scholarship and popular attention have been drawn to China's on-going implementation of a social credit system (SCS). This is often portrayed as representing China's digital dictatorship and as an upgrade of its oppressive censorship. Thus, popular western depictions of the SCS typically connect it to a total surveillance system that concentrates on spying and *rating* the individuals. For example, in a recent *Washington Post* article, discussion of the SCS referred to "an Orwellian dystopia" and mentioned the *Black Mirror* episode wherein individuals were compelled to live within a digital rating system (Kostka, 2019). Botsman (2017) also wrote about the SCS and called it a Big Brother that is "already getting underway in China where the government is developing a system to rate the trustworthiness of its 1.3 billion citizens" (133). Academic research has also discussed the SCS. For example, Creemers (2017) argues that the implementation of SCS is part of a "reconfiguration of Internet governance [that] entails a proactive approach to harness the power of information technology" for propaganda purposes such as "maintaining stability, ensuring Chinese Communist Party (CCP) dominance, preventing organized opposition and enhancing intra-Party discipline" (88).

There is no doubt that these discussions all reflect, accurately, certain aspects of the SCS and that they represent one way of looking at the social surveillance situation in China. However, as the extensive study of the SCS conducted by Meissner (2017) argues, "despite much international attention on the impact of the system for individuals, the core motivation behind the Social Credit

System is to more effectively steer the behavior of market participants" (p. 4). In other words, though the monitoring and rating of individuals does happen, the SCS was first and foremost created to regulate market participants including public institutions and corporations. One-sided analyses of the SCS presume an authoritarian or even oppressive style of state control, whereas, in reality, collaborations between the state and private sectors are pivotal (Meissner, 2017; Botsman, 2017). Thus, Bostman (2017), in discussing the involvement of tech giants such as Alibaba and Tencent with the SCS, assumes an almost perfectly smooth collaboration between the state and these private corporations and ignores the negotiations and conflicts that might occur within those collaborations. For example, the SCS relies heavily on the private sector for technological support (as was the case in its collaboration with Alibaba's Ant Financial for consumer credit scores). Yet, Beijing ceased to grant licenses to the private sector in developing some pilot programs for the SCS because of the regulator's concerns about possible conflicts of interest (Hornby, 2017). To put it simply, the SCS is more of a market regulatory tool than a 'big brother' that purely spies on and controls individuals. There are more complicated negotiations, conflicts, as well as collaborations between the state and the private sector than is suggested by a simplified depiction of an Orwellian dystopia.

In reality, the establishment of China's surveillance infrastructure is a distinctive historical construct; it was not designed at birth to be a big brother for political oppression, and it emerged earlier than the official adaptation of digital technology as a central method of governing public opinion. In fact, as Creemers (2017) has pointed out, it was only during the 2010s that the Chinese state started to implement internet governance in a more systematic and organized way for the purpose of indoctrination. Throughout the 2000s, national internet policy was relatively fragmented as bureaucratic agendas were never unified under a single central plan (89). In this regard, the development of the commercial surveillance infrastructure did not start as a political agenda, but rather as a commercial strategy. As I will later indicate, the multi-platform data ecosystem developed by Tencent is primarily a commercial surveillance infrastructure that aims to maximize profit. The emergence of a commercial-state surveillance complex did not happen until relatively recently when the state positioned the internet and digital technology as important parts of its governance.

The commercial agenda of surveillance infrastructure should be understood as an outcome of what Shoshana Zuboff (2019) defines as surveillance capitalism, which "unilaterally claims human experience as free raw material for translation into behavioral data". Such data is treated as "a proprietary behavioral surplus" taken from the people for free in order to predict and intervene in people's behavior for another's profit (8). The establishment of such a system, as I mentioned above, precedes the national strategy of internet governance. Thus, I will examine the construction of the commercial surveillance against the backdrop of Tencent's conglomeration as a tech giant corporation whose primary goal is to make profit. However, the state's adaptation of digital technology and internet governance is not an accident; it is rooted in China's long history of technicism or scientism that "focuses not just on how technology determines things but on how it becomes the singular source of solutions to problems" (Mosco, 2014: 111). Therefore, it could be argued that the emergence of the commercial surveillance infrastructure is a logical result of the globalization of surveillance capitalism *and* that the later adaptation of this infrastructure by the state and its support for Tencent's conglomeration. The emergence of the commercial-state surveillance complex - is deeply rooted in a longstanding technological sublime culture. Surveillance, in this sense, is not total cybernetic control, but a means of cultural construction that

involves both a commercial logic and a political agenda. In the following section, I will consider the historical conditions of the technicism that defines the conditions of possibility for Tencent's emergence.

The Emergence of Tencent in Historical Context

China's economic development in the past four decades and the neoliberal ideology of personal entrepreneurship generated by global transnational flows of consumer culture have masked the deep-rooted relationship between monopolistic private enterprise and the state. As Chen (2015) points out, "when the society is flooded with success stories of entrepreneurs and how they revolutionize industries, people pay less attention to the issue of monopoly." In addition, the fact that high-tech giants and institutions are civic organizations often blurs their dependency on government actors (Segal, 2003). Thus, it is important to realize that in China's last four decades of development, its high-tech market has been heavily dependent on government actions; it is exceedingly difficult for high-tech companies to succeed in China without some sort of government support (Segal, 2003). Both central and local governments assist private enterprises in the areas of finance, marketing, human resources, price control, property rights and the blocking of foreign competitors (Segal, 2003; Kraemer and Dedrick, 2001). It is critical to realize that the Chinese government not only supports, but also functions as a key stakeholder in the internet industries. More recently, according to a 2017 report, it even considered taking a seat on the board of dominant high-tech giants (Casanova, Cornelius and Dutta, 2018).

Since the early 1980s, the Chinese government has taken strong initiatives in the establishment of high-tech markets, investment in high-tech education and the creation of both a suitable financial system and Special Economic Zones (SEZ). All this has occurred under the leadership's vision of a high-tech economy. In the early 1980s, the state started a series of comprehensive plans to establish the market. In 1985, *The Science and Technology System Reform Act* started a top-down process of reform (Casanova, Cornelius and Dutta, 2018). As a result, the state first pooled intellectual resources to develop key technologies under the *863 Project.* Then the *Torch Plan* initiated a series of policies that encouraged scientists who worked at public institutions to leave their tenure track and become entrepreneurs with their own businesses. This was an indication of the free market and was manifest in SEZs (Segal, 2003; Kraemer and Dedrick, 2001). The mother company of Lenovo - Legend Group - for example, was established by a group of scientists from the China Academy of Science (CAS). The latter is still a major shareholder of the Legend Group (Segal, 2003). In the 1990s, the internet was first developed by state agencies as an internal network for scholarly use (Harwit and Clark, 2001). The 1996 *Act of Promoting Commercialization of S&T Discoveries and Inventions* and the 1999 legislation *Decisions on Strengthening Technological Innovation, High Tech Development and Industrialization* (Casanova, Cornelius and Dutta, 2018) enacted by the Central Committee of Chinese Communist Party and State Council (Ministry of Science and Technology, 2002) initiated economic reforms and policy changes to support the development of science and technology plus the internet. These measures advanced the marketization and commercialization of digital technologies. Education was also central in providing the young population with the necessary training and understanding in science and technology and the internet. In addition to encouraging such learning in the 1980s, computer education was made mandatory in elementary and secondary schools during the 1990s (Kraemer and Dedrick, 2001).

The *986 Initiative* expanded this mandate into higher education (Casanova, Cornelius and Dutta, 2018).

As well as mandating technology education, the Chinese government also developed cities and regions as technology centers. For example, in 1979, Deng Xiaoping initiated the establishment of Shenzhen as China's first SEZ with full support from the central and local government (Salem, 1981; Chen and de'Medici, 2009). The Chinese government transformed the city from a small fishing village to a thriving SEZ by providing all possible support including open markets, a new banking and financial system, pilots for venture capital and foreign investments, high-tech infrastructure, new wage and benefit systems, and a lower tax rate. Shenzhen's GDP grew from 1979's RMB 0.196 billion (approximately US$30 million in 1979) to RMB 1,450 billion (approximately US$223 billion) in 2013 (Chen, 1994, 1995; Shen and Kee, 2017). In 2017, Shenzhen GDP surpassed $338 billion, exceeding Hong Kong and Singapore's growth (South China Morning Post, 2018). All these cases demonstrated the state's efforts in "rejuvenating the nation's economy with science and education" (Casanova, Cornelius and Dutta, 2018a, p. 72). This, in turn, spurred further intervention in the high technology industry.

It was precisely under the above conditions that Tencent was founded in Shenzhen in 1998. Thanks to the education initiatives, most of the company's founders - including the CEO Huateng Ma (also known as Pony Ma) and four of his friends - had education backgrounds in IT and computer science (Casanova, Cornelius and Dutta, 2018). Once the company started, it received US$2.2 million in venture capital investments from companies in Hong Kong (PCCW Limited) and the United States (International Data Group). Today, Tencent's products and services include social media, entertainment, gaming, banking, food delivery, text hailing, municipal services, AI, big data and cloud computing, and other private and public services online and offline. Twenty years on from its establishment, Tencent is now the world's largest social media and gaming company, and it is also one of the largest investment, internet, and technology companies. After having an annual growth rate of more than 40% from 2011 to 2016 (Buche and Cantale, 2018), Tencent temporarily surpassed Facebook's market value in late 2017, and was worth US$540 billion as of January of 2018 (Chen, 2018).

Tencent is not only gigantic, it is also one of the world's most promising high-tech companies in terms of potential revenue growth. Importantly, Tencent diversifies revenue streams: while Facebook and Google/Alphabet generate 95% and 92% of their revenue from advertising, respectively; advertising only contributes to 17% of Tencent's revenue because it has been focusing on revenue streams from other areas of its business such as gaming (Casanova, Cornelius and Dutta, 2018b). With huge market valuations and cash in hand, Tencent is still growing. Even if one considers how powerful Facebook or Google are in the United States and other western countries, it is still not even close to what Tencent means in China.

To provide a brief illustration of Tencent's dominance in China (and the world in some respects), it is helpful to look at its involvement in key products and companies. Tencent divides its own business into seven categories: social networks, payments, entertainment, information, utilities, platform, and artificial intelligence (AI) (Tencent, 2018). Together they cover critical and profitable online and offline services that incorporate production, distribution and consumption. Tencent owns China's first and second largest social media platforms, WeChat and QQ. The former passed one billion monthly active users (MAU) in March 2018 (Technode, 2018) and the latter reached 889 million MAU in 2017 (Tencent, 2018). Tencent owns China's largest online literature group and has more than a 50 percent market share in China's e-reading market (Wang, 2017b). Tencent News

is China's largest mobile news app, and WeChat Official Account is China's largest self-media [2] platform. Tencent also owns China's second largest search engine, Sougou (Wang, 2017b). Tencent Music Entertainment Group, a subsidiary of Tencent, owns the top four music apps in China; it went public in December 2018 with a valuation of approximately US$21.3 billion (Salinas, 2018). Tencent also has stakes in DiDi, the world's largest taxi hailing platform, which bought Uber China in 2016 and is defeating Uber in many countries. It also owns China's largest food delivery app, and has stakes in China's second largest e-commerce company and largest online classified advertisement platform (Hong, 2016). More importantly, Tencent owns one of the two largest virtual payment systems in China, offering online banking, B2B (business-to-business), B2C (business-to-customer) and C2C (customer-to-customer) financial services. Internationally, Tencent owns the entire gaming company Riot, the majority of Supercell, and owns stakes in Tesla Motor, Snap, Spotify, Epic Games, Activision Blizzard, as well as a handful of investment companies in Silicon Valley. Tencent Pictures was behind quite a few Hollywood major productions such as *Warcraft, Kong: Skull Island,* and *Wonder Woman* (Wang, 2017a).

Throughout its horizontal and vertical integrations across a wide range of businesses in the past 20 years, Tencent has established a *commercial surveillance infrastructure*. In order to explain its construction, the following section discusses Tencent's products and services in three major categories: content generation, connection strategy and ecosystem.

Content Generation

Tencent's commitment and capacity to generate and manage content enables it to be both the creator and the gatekeeper that decides what people see and how they see. The following discussion unpacks Tencent's content generating and managing capacity by looking at online literature, self-media, and news media.

China's first online literature site and first subscription-based e-reading site, *Qidian,* was founded in 2002 and boosted enthusiasm in e-reading. In 2004, Qidian was purchased by Shanda Interactive which was China's largest gaming company at the time (Gao, 2017). In 2014, after more than a decade of development, China's online literature market was dominated by three oligopolies - Baidu, Tencent and Shanda. However, the balance was tilted when Tencent announced its purchase of Shanda in November 2014 (Tao, 2014). Tencent Literature and Shanda Literature combined and formed China Literature Group, which owns about 50% of China's e-reading market (Wang, 2017b). With 6.4 million writers and over 9.6 million works, China Literature generates revenue in e-reading, subscription, publishing, physical book selling, and most importantly, intellectual property (IP). Its strong profit-making capacity was evident when its stock price soared by 100 percent on its initial public offering (IPO) (Ming, 2017).

With its many IPs and distribution outlets, it is not difficult for Tencent to commodify some of the most popular IPs emerging from its literature empire. *Fighter of the Destiny*, for example, is an online novel published by China Literature in 2014. It accumulated its original fan-base and popularity as an e-book; Tencent then started cross-media promotion and adaptation of this IP by making it into a television series, a movie, and a mobile phone game. Without any surprise, the TV series topped the charts and made famous a couple of new celebrities. The mobile phone game had over 10 million sign-ups for the pilot version before the formal release. It is estimated that *Fighter of the Destiny* will bring Tencent over US$4.5 billion by the middle of 2018 (Wang, 2017b). This is just one of many cases where Tencent incubates a big IP from many different content generating platforms, and then commodifies and monetizes the IP into a multi-media and online-offline

cultural blockbuster. Tencent owns enough content generators to produce IPs, it owns enough social media, mobile apps, marketing agencies and other media outlets to distribute and promote those IPs, and it has enough resources to adapt IPs into other kinds of products such as games and films. Crucially, all of this happens within Tencent and its subsidiaries.

Another important content generator for Tencent is self-media (or WeMedia), which refers to content produced by independent individuals or entities that work outside of the traditional media system. As Liu puts it, this is "akin to 'citizen journalism'" (Liu, 2016). WeChat Official Account (referred to as Official Account), as a built-in function of Tencent's social media product WeChat, is one of the largest self-media platforms in China. WeChat, as previously mentioned, owns over 1 billion MAU. Thus, as a built-in function, Official Account did not encounter many challenges in terms of marketing and promotion. The logic goes like this: any individual or institution opening Official Account in WeChat potentially has all WeChat users as their subscribers and viewers. Debuted in 2013, Official Account accumulated over 10 million accounts by 2016; if an Official Account is able to generate over 100,000 views, its business and advertisement valuations soar (Liu, 2016). In fact, many self-media have received venture capital investments ranging from thousands to millions of dollars (Sohu, 2015). Top Official Account has the ability to generate millions of views for a single article, and any influential Official Account can easily produce something that attracts over 100,000 views. A survey in 2016 reveals that over 66 percent of respondents are willing to set up individual Official Accounts, and 27.2% say they already have one. Self-media were portrayed by major party press outlets, such as *Xinhua* and *China Youth Daily*, as a force that would take over traditional media, and offer liberation, diversity and individual expression (Xinhua, 2016).

On the surface, the individualist and self-expressing style of self-media seems opposed to the concept of opinion control; however, this becomes irrelevant when self-media are constantly managed and censored by a single monopoly that controls distribution and exposure. WeChat alone functions both as China's largest social media and one of its largest self-media platforms, which puts significant power in Tencent's hands. In fact, Tencent has a system that inspects all the contents of Official Account, and staff are fully authorized to delete an article or an entire account. As an independent writer, I have had two of my articles deleted by Tencent in my individual Official Account for being politically-sensitive - the first was a rhetorical analysis of president Xi Jinping's speech on the Chinese Dream, and the second delineated the historical development of China's household registration system. Tencent also passed a regulation in 2014 to prevent Official Accounts from discussing or reporting politics and controversial issues without the government's endorsement (Liu, 2016). It is clear that Tencent applies strict regulations in censoring, inspecting and managing the content produced by Official Accounts. This demonstrates its capacity to build platforms and channels and to decide what can be produced and distributed.

Online literature and self-media platforms are not the only ways Tencent generates and manages content, but they reveal how the company's concentration enables the management of content production and distribution at every level. In its operation of a multi-channel, multi-media, multi-industry model that monetizes and commodifies certain content in order to maximize profit, Tencent controls who can create content, what content they can create and the means of distribution for that content. In addition, Tencent's control over the production, distribution and consumption of particular content is also demonstrated by its power to intervene in news consumption.

In an era of mobile phones, wireless connections and multi-screens, digital media are taking over television, newspaper and radio news reporting (Millward, 2016). The increasing dominance of

mobile usage means that traditional news reporting is in crisis. Even though there are still large numbers of traditional news reporting outlets, the mobile news app and other online or mobile platforms such as news portals and built-in news applications are increasingly emerging as gatekeepers. They provide individualized and customized content, and sometimes pre-selected and filtered content based on a particular political agenda without public awareness. Such was evident in 2016 during the 'two sessions' (plenary sessions) of the People's Congress and Chinese People's Political Consultative Conference devoted to issues of economy and people's livelihood. A list of 21 forbidden topics issued by the Central Publicity Department was leaked by whistleblowers. This revealed specific policing of what can be shown to the public, such as "do not report on doctor-patient dispute," which was a popular topic of the time due to several major incidents that caused severe injury and death (of both doctors and patients). As a result, without being aware of the pre-selection, people were not able to see news about selected topics ("Minitrue," 2016; Tatlow, 2016).

Tencent's concentration in digital and mobile news outlets makes it one of the most critical partners for the state in news control. Without a doubt, the capacity to select and push news reports among multiple platforms can be used for both political and commercial purposes. With enough control over popular mobile or digital clients for news consumption, Tencent would have the power to establish a closed proprietary system wherein users only receive two kinds of news: that which serves consumer interests pushed by algorithms; and that which Tencent decides to emphasize on its platforms.

Though not a complete monopoly yet, Tencent's leverage over mobile news consumption is nevertheless significant. In 2016, the state authority Xinhua News reported that news portals and mobile news apps were the primary sources of news for 63 percent of netizens (Xinhua, 2017); mobile news app users exceeded 620 million in mid-2017 (iResearch, 2017). In addition to these users, a report also shows that 62.4% of respondents use only two to three mobile news apps, and that 25 percent of respondents only use one mobile news app (Xinhua, 2017). Given that China has over one billion internet users, these reports show that a large segment of the population heavily rely on news portals and mobile news apps to access news. Tencent, in the business of news programming, owns a system of products and services that select and push news across a wide range of platforms, including Tencent News mobile app, TianTianKuaiBao mobile app, WeChat add-in news, QQ add-in news, QQ browser news and QQ web portal. The Tencent News mobile app alone, for example, has almost a 50 percent share of the mobile news app market (Xinhua, 2017), which amounts to hundreds of millions of users. More importantly, dominance in social media, news, browsers, and other services has established a system in which regardless of the platform, users receive news pushed by Tencent based on Tencent's algorithm: all user data among these platforms goes to one place - Tencent.

Tencent's system of generating and managing content does not stop at e-reading, self-media, and news reporting. It also owns exclusive broadcasting licenses for HBO, NBA, Sony Music, Paramount Pictures, and NFL in China. Tencent has also purchased more self-interest-oriented news pushing apps such as TianTianKuaiBao (Tencent, 2016). Nonetheless, the areas of e-reading, self-media platforms, and news reporting demonstrate Tencent's capacity in concentration and synergy. It has established a system that generates and distributes content and controls every layer of the process. Due to the breadth of Tencent's products and services, it is difficult for an individual user to realize how one company stands behind most of those products. Ultimately, it is a handful of Tencent-like companies that collect user data from numerous platforms, and they produce, select and feed that content to users according to algorithms, along with political and commercial agendas.

Users no longer get to decide what they see and how to see, because everything is pre-selected and pre-determined based on profitability, risk management and political objectives. Users are all the while being told they are exercising freedom of personal choice.

Connection Strategy: social media and payment system

Tencent's system of content generation and management highlights some core research questions: how does Tencent manage to connect all its products and services in a coherent, dynamic manner so that it not only minimizes cost and maximizes profit but also establishes a closed system from which it is almost impossible for users to escape? If there is anything about corporations and capital that is obvious, it is the tendency to achieve concentration and monopoly; such a tendency does not allow users and consumers to escape from a corporation's realm of products and services, and Tencent is no exception. In order to advance this trend, Tencent started its 'Connection' strategy in 2014 (Tencent, 2015).

Tencent's 2014 Annual Report describes the Connection strategy as a way to link users with contents and hardware; "leveraging our core communication and social platforms," it says, "we made significant progress in…[providing] our users with an expanding range of products and services, taking advantage of our strengths such as unified login, users' social graphs, multi-platform marketing capabilities, infrastructure support, payment solutions and insights into user needs" (Tencent, 2015: 6). In other words, Tencent leverages its dominance in social media platforms and payment systems in order to create boundless connections among its wide range of products and services so that a closed and proprietary framework is made.
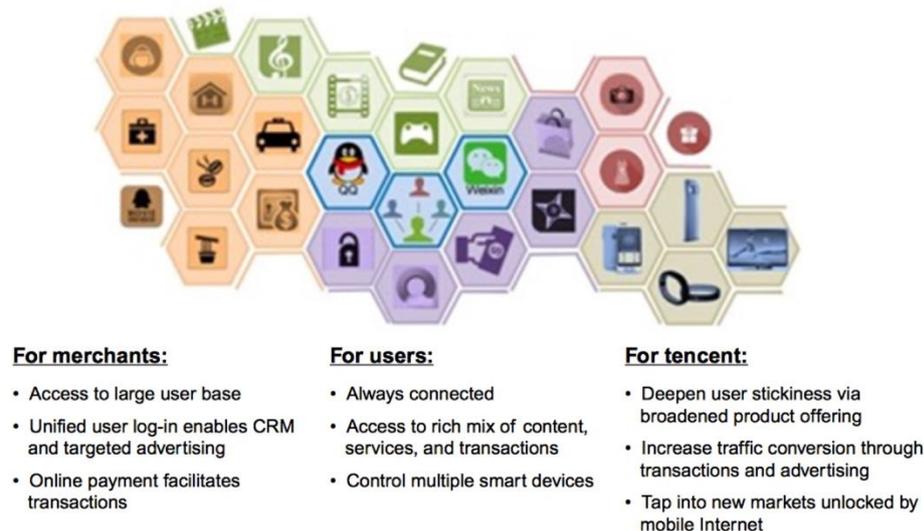

Figure 1. Tencent's Connection strategy. (Source: Tencent 2015 Annual Report)

The Connection strategy not only sets the parameters for program developers, it also establishes a universe where "users never have to leave" (Cendrowski, 2015). On the social media side, Tencent owns WeChat and QQ, which are China's largest and second largest social media platforms, respectively. Added together, they have almost two billion users, and WeChat alone has over one billion users (Technode, 2018). The huge user-base allows Tencent to create a unified login method whereby users can log into any Tencent and its partner's platforms and services. In using WeChat,

for example, one can log into platforms that provide taxi hailing, gaming, ticket selling, online shopping, and countless mobile apps and online services.

Imagine a normal day with Tencent's products: chatting with friends and family using WeChat, hailing a taxi to go to work using DiDi or the built-in DiDi in WeChat and QQ, listening to favorite songs using QQ Music on the way to work while reading a novel on one of China Literature's sites, sending email via QQ Mail, logging in with QQ to participate in group chats and file transfers at work, reading morning news on Tencent News or WeChat/QQ News and sharing the content to WeChat Moments or Qzone, logging in with WeChat to check reviews for local restaurants and order lunch, taking pictures of the lunch and sharing it on WeChat Moments, playing mobile games and using WeChat for login, paying all expenses using WeChat Pay - the list goes on. Clearly, Tencent's products and services penetrate every aspect of an individual's life. With this system, it is not surprising to see that over 50 percent of WeChat users spend more than 90 minutes a day on it (Lucas, 2017). One can live in contemporary China without a credit card, but not without WeChat. WeChat and QQ are just two social media platforms, but because Tencent creates a boundless system that connects all products and services with these two social platforms, they are no longer just social platforms. Complementary products may not dominate their own market - though quite a few of them do - but they function together as a combination of WhatsApp, Facebook, Instagram, Gmail, Yelp, Uber, UberEats, Skype, Kindle, Spotify, Blizzards, etc. They are boundlessly connected with each other by social media platforms and login accounts—some of them are built in the same platform—and they are owned by the same gigantic corporation.

An equally important tool of the Connection strategy is Tencent's payment system. By utilizing its banking and financial services and products, including TenPay, WeChat Pay and QQ Wallet, Tencent offers payment solutions which incorporate online shopping, P2P transfer, corporate financial and banking services, personal loans, and day-to-day payment solutions at grocery stores, supermarkets, farmer's markets and convenience stores. Tencent's payment system is able to depict precise footprints for any individual, and the footprints bridge disparate platforms together regardless of their similarities or differences. In other words, the payment system serves as a key component in the evolution from building connections among like platforms - for example, between different types of social media or between social media and a mobile game - to connections between behaviors and elements that have no intrinsic linkage (one combination might be social media usage and visits to the local farmer's market, eating habits and video preferences).

These developments represent an important and evolutionary upgrade of individual surveillance. A company now traces every penny an individual has spent on almost everything with 100 percent accuracy rather than profiling an individual using incomplete information based on certain preferences or interests. Tencent's payment system offers a wide range of financial services on B2B, B2C and C2C bases. In 2015, a personal micro-loan feature was added into WeChat to allow individuals to borrow small amounts of money from Tencent for emergency uses. Tencent added a Visa Travel Document application function to WeChat that allows users to pay their application fee from WeChat (Tencent, 2016); municipal services such as electricity bills and gas bills can also be paid inside WeChat, not to mention day-to-day purchases such as restaurant bills, borrowing/returning money between friends, paying rent, and so forth. Thus, Tencent knows how much money people spend on their living expenses, as well as how much money they use for in-app purchases such as gaming and live-streaming.

Internet data mining companies extract user data from, for example, online searches, shopping history, social media posts, and browsing history. The 'digital profiling' process relies on

algorithms to do the calculations and predictions based on information gathered by the aforementioned methods (Turow, 2013). However, Tencent's profiling - what Tencent calls "users' social graphs" - is based not on guessing, but on accurate and precise information about an individual. The scale and accuracy of Tencent's profiling makes the guess-based 'digital profiling' look like a children's toy. When the guessing based on uncertain information or unpredictable patterns is replaced by 100 percent accurate tracking, this is no longer profiling; it is watching, recording and surveilling. In a word, Tencent knows people better than they know themselves because it has data from all digital payment transactions and all of a user's behavior on all platforms, and it can locate those data for each individual.

Ecosystem: online and offline

Amazon built its first smart grocery store in Seattle in 2016 and purchased Whole Foods in 2017. Tarnoff (2017) sees this as the dawn of a new form of data extraction which extends from online to offline. He says that Amazon will demonstrate how to make more profit by watching what people do offline. Tarnoff explains that the business model used by Silicon Valley tech companies based on data extraction is like oil extraction to oil corporations, and he concludes that Amazon's strategy shows how Silicon Valley's surveillance-based model is being extended into physical space. Tarnoff notes that the way tech giants make money depends on maximizing the amount of user data they collect, and there are two ways to do this: first, keeping the users online as long as possible; second, making offline behavior additional sources of data extraction. The system that Tarnoff describes has already been deployed in China by tech giants even more extensively and comprehensively.

The discussion of Tencent's content generation and Connection strategy matches Tarnoff's description of Amazon and Silicon Valley, except that Tencent is one company and it establishes this online-plus-offline surveillance system in a more comprehensive way. In short, Tencent is an *ecosystem*. To be clear, this ecosystem is not like, for example, Apple's ecosystem of iTunes and App Store where users can only shop for applications and products within Apple's platforms and operating systems. Nor is this an Amazon-like system which leverages core businesses in e-commerce and retail and extends this to other platforms. Rather, Tencent's ecosystem is at once nowhere and everywhere. Nowhere means that it is sort of hidden: users literally ignore the system because its web is so large and they are immersed in it for so long. It is hard for an individual to look at sections of different products and recognize the whole picture. Everywhere means that it is virtually and physically ubiquitous in all aspects of an individual's life, as my previous observations have revealed. Tencent, by leveraging its extensively diversified products and services, concentration in content generation and synergy capacity among platforms, as well as its inter-connected infrastructure of social media and payment systems, has established an ecosystem that fulfills most users' online needs and while surveilling offline behavior. The scale of offline surveillance is massive.

Unlike Facebook (a giant social media company), Amazon (a dominant retail and wholesale corporation both online and offline) and Apple (which dominates the digital devices and ancillary services based on their devices and systems), Tencent resembles a combination of all. Concentration in content generation equips Tencent to control what content is produced, distributed, and consumed; control over news and self-media platforms guarantees Tencent the gatekeeping ability to filter, diminish, and promote particular content. Although it seems that these are online controls, Tencent's capacity for synergy among multi-media platforms, cross-media marketing,

licensing products in retail and wholesale, and so forth extends such control from online to offline. The Connection strategy is a roadmap for Tencent to create a proprietary system that consists of extremely diverse products and services. While Amazon is still trying to track what the user who bought a shirt online last week bought in the smart grocery store today, Tencent already knows every single meal a user ordered via MeiTuan, how many packs of cigarettes were purchased by the same user at their local convenience store, how much they spent at local farmer's market, how much they have left to pay on a loan and their living expenses - including all utility bills. Users need their mobile phone number (which is registered with a government-issued ID) to register with WeChat and Tencent's other social media. Consequently, Tencent can monitor life identities and behavior.

There are several features of Tencent's ecosystem that are unique from others. First, Tencent's concentration in content generation means that it decides what can be produced, distributed, and consumed. Second, Tencent owns a portfolio that is diverse enough that individual users can hardly recognize the connection among platforms. Third, absolute dominance in social media and payment systems functions to link platforms, enabling a diverse range of offline services to be integrated into the online-offline data system. McChesney (2013) explains the making of digital monopoly and the significance of setting up the technical standards. He argues that those who established the technical standards of the internet, with massive bargaining power, have inbuilt advantages and therefore gradually take larger shares of the market. The profitability of the digital giants, McChesney argues, is therefore dependent on the construction of a proprietary system wherein tech giants "control access and the terms of the relationship" (135). Thus, Tencent's dominance in social media platforms, such as WeChat and QQ, showcases its bargaining power: whenever Tencent releases a new service, as long as it is connected with WeChat, the promotional cost is minimal because the service is instantly promoted to over one billion WeChat users. Both users of WeChat and publishers such as individual Official Account owners like myself have to play by Tencent's rules if they want the benefit of Tencent's service or if they want users to see their articles. As such, Tencent's conglomeration and its ecosystem aims to establish a proprietary system much like the one McChesney describes. This makes it increasingly difficult for users to even recognize the system, let alone escape it.

Commercial Surveillance Infrastructure

After examining Tencent's products and services from the perspective of content generation, connection strategy and ecosystem, it is necessary to discuss what this proprietary ecosystem means. To borrow a term from Matt Crain and Tony Nadler (2017), *commercial surveillance infrastructure* refers to a system in which technologies, companies, and public policies enable behavioral engineering over digital networks. They point out that digital marketers have been trying to utilize user data in order to identify and manipulate their decision-making processes, both commercial and political. Technologies such as big data and cloud computing along with other tools developed by tech giants in past decades aim to maximize the surveillance of each user and to engineer their behavior. Numerous examples demonstrate different aspects of practices that seek to shape individual behavior using digital technologies. Firms such as Ogilvy Change apply behavioral science to marketing, so that marketers can use the "digital mediascape as an expansive laboratory for testing and applying theories about how to influence our decisions" (Crain and Nadler, 2017). Cambridge Analytica, according to its CEO Alexander Nix's speech "The Power of Big Data and Psychographics," extensively applied behavioral science and psychographic metrics to target and

influence people's actual behavior (Vaidhyanathan, 2018: 150-155). Vaidhyanathan (2018) also discussed how Facebook turned users' personal data into political propaganda, and successfully discouraged a considerable number of people from voting on election day. In a word, by heavily investing in behavioral sciences and behavioral economics research, marketers seek to establish tools and models that will influence and manipulate consumer behaviors in a subtle but effective way.

Tencent's proprietary ecosystem tracks user data from online to offline, from single platform to multi-platform, and the diversity of platforms is unprecedented. By articulating connections among these aspects, it would not be difficult for Tencent to understand the micro-processes of a user's decision making. With big data and cloud computing, users become increasingly vulnerable because Tencent, as discussed previously, knows users better than they know themselves. Data and behaviors are not only collected and studied, but also, in some cases, used against consumers. For example, DiDi—China's largest taxi-hailing platform—is a Tencent-invested unicorn [3], whose service is also a built-in function of WeChat; it deployed AI to perfect its user experience by predicting demand (Prasad, 2016). However, DiDi was accused of using big data and algorithms to conduct unfair price discrimination; new users would often get cheaper quotes than old users for the exact same route at the same time. DiDi does this by identifying users' daily routine including their everyday travel route between work and home, what time they call the taxi, what types of car they request, and so forth. Because the communication channel between users and DiDi is exclusive, and DiDi claims to use algorithms to calculate price based on demand, others cannot find out about this price discrimination (Xinhua, 2018). Studies have shown that human decision-making is largely dependent on contextual cues, thus controlling these means the manipulation of decision-making (Crain and Nadler, 2017). Tencent's proprietary ecosystem evidently demonstrates such contextual controlling. For example, their content generation, as discussed previously, subtly constructs an online context over which Tencent has strong control. More importantly, the complexity and diversity of Tencent's vertical and horizontal integration make it hard for individuals to recognize Tencent's manipulation of media contexts.

The crucial significance of the commercial surveillance infrastructure is its ability to engineer behavior. All the factors so far discussed contribute to the ultimate goal of manipulating what consumers do. Turow considers secret data tracking to be a serious social problem: a corporation can engineer individual behavior by constructing "personalized 'reputation silos' that surround us with worldviews and rewards based on labels marketers have created reflecting our value to them" (Turow, 2013: 8). In other words, individuals are placed into artificial contexts and subjected to behavioral and psychological manipulation. This means it is almost impossible to think about the society and the mediated social environment critically, let alone escape it. Pre-selecting what is presented to individuals intrudes into people's information consumption in subtle ways and enables the marketing of particular types of news, products, ads, services and so forth to individuals. In other words, it imposes a calculated image of the self onto individuals by telling them what they should buy, how much they are worth, and who they are. Escaping the system would mean "abandoning social connections" within social media platforms, a cost that many people cannot afford in today's digital age (Crain and Nadler, 2017). The commercial surveillance infrastructure allows tech-giants to maximize profit by offering an infrastructure to control and manipulate on a massive scale, to an extensive degree, and in an inconspicuous manner. This influences what people see, where they see, what to see, what they do, what they think, and ultimately, what and how they purchase.

Commercial-State Surveillance Complex

The vitality of Tencent's commercial surveillance infrastructure is more than set of commercial practices. As Crain and Nadler's concept indicates, such infrastructure involves policies and regulations and has political implications. As mentioned earlier, it was no coincidence that one of China's largest high-tech giants emerged in the late 1990s when the state had devoted over two decades advancing research and development, science and technology, education and market building. Nor was it a coincidence that Tencent grew from a small start up to be one of world's largest internet and high tech corporations just as China's technological and internet-related industries took off at an unprecedented rate with strong state initiatives. It is therefore crucial to interrogate Tencent's entanglement with the state, to reveal the structural and political arrangements that have allowed Tencent to achieve a monopoly and to maintain this position. By so doing, we can outline the making of a *commercial-state surveillance complex*. The state supports the establishment of commercial surveillance infrastructure and monopoly in various and subtle ways, and fully utilizes such infrastructure in combination with other supplemental surveillance methods. As well, commercial entities heavily rely on the state to maintain their monopolist or oligopolist position. Conceptualizing the surveillance phenomenon as a complex thus rejects a linear perspective, in favor of one which grasps the mutual constitution between private enterprises and the state.

Contemporary China's prosperity tends to make observers overestimate the rapidity of China's economic growth, especially in technology and the information industry (Segal, 2003). China's approach to economic transition in the past few decades is a path-dependent one, and it would be unwise to neglect China's history of planned economic and government intervention. McChesney (2015) describes a critical juncture [4] in regard to communication as a rare historical moment when a society has far greater options than usual to address the shaping of communication and media. When the new system is entrenched, the critical juncture is over, and any challenges to such a system are virtually unthinkable. This is path dependency: a fundamental structural entrenchment upon which the social order depends until the next critical juncture. Hence, when looking at China's state-initiated economic transition and the establishment of technological, information, and internet-related industries from the late 1970s to 2000s, one can define this period as a critical juncture during which fundamental infrastructure and the digital system were established by the state.

Looking closely at Tencent's development, one can hardly ignore the interventions by and collaborations with the state. In the year following its establishment in 1998, Tencent launched its first social media product QICQ (later changed to QQ due to copyright issues). However, even with its rapid user growths as China's first online chatting and messaging platform, QQ struggled with profitability. In 2000, during the emergence of the mobile internet, China Mobile, a state-owned ISP and mobile network provider, spun off from China Telecom in order to broaden the mobile network service. It launched the Monternet Project in order to provide a standard mobile internet platform, and it promised its partners—Service Providers (SPs)—an "all-round upgrade net system, accounting, WAP platform and short-message platform" (People's Daily, 2000). Several founding members of Tencent had worked in state-owned informational enterprises before they founded Tencent, and Tencent worked with China Telecom as a subcontractor for outsourced projects. Thus, it was not a surprise that Tencent was one of the first to obtain the information associated with the Monternet Project. Given Tencent's user base at that point and its founding members' background, it was able to obtain an exclusive contract with China Mobile and deployed QQ into the Monternet

Project. This, as one of the most critical moments in Tencent's history, not only saved profitability, access to largely state-initiated and controlled internet infrastructure was made available. This gave Tencent a huge advantage for future development (Wang, Wei and Hua, 2014; Sina Tech, 2001).

In addition to co-operation with the state that allowed Tencent to increase market share, Tencent was treated favorably on major issues. As Hong (2016) argues, the state often "bend(s) its own policy to create leeway" (348) for tech giants. For example, in 2010, the People's Bank of China published a regulation that required licenses for all third-party payment service providers (like Tencent's WeChat pay and TenPay). The regulation specifically indicated that foreign control over service providers would not be acceptable. Tencent, with 34% of its stake owned by South African-headquartered Naspers Group, still obtained the license shortly afterward in 2011 (Hong, 2016). In 2014, China started piloting the possibilities of private banking—all banks were state-owned up to this point, and Tencent (along with Alibaba, another tech-giant in China) was one of the first to receive a license. WeBank was then established under Tencent's finance branch. The parent company expanded its payment system services to create a full-scale banking operation that includes B2B, B2C, and C2C financial services (BBC News, 2014). More importantly, the fact that China's Premier Li Keqiang attended the opening ceremony of WeBank demonstrates state endorsement of the initiative (Smith, 2015).

Another key demonstration of the commercial-state complex is the Internet Plus project, a state initiative first introduced by Premier Li Keqiang. It is a formal national strategy, which extends from central to local governments with full force. The purpose is to effectively connect the public to different levels of government and public services (State Council of People's Republic of China, 2017). Creemers (2017) argues that this was one of China's most important steps in developing an organized framework of internet governance. However, because building software and new internet platforms and systems for the entire country would be extremely costly, the state decided to utilize existing services such as WeChat (Liao, 2018). One of the outcomes of such commercial-state co-operation is that users can now use WeChat to access municipal services. This includes the paying of bills for electricity, water, gas, cable, traffic tickets, fines and gasoline debit cards. WeChat also allows individuals to make doctor appointments, manage health insurance, call an ambulance, as well as pay company registration fees, notary and mailing. It is even possible to apply for a visa and attend public hearings. By the end of 2016, over 30 percent of Chinese netizens had used government services offered by WeChat and AliPay (Alibaba's payment method), according to the China Internet Network Information Center (2017).

Tencent also contributes to many government projects both financially and operationally, which further indicates a tight relationship between the two entities. They and a few other tech-giants, agreed to invest US$12 billion into China Unicom, which is a state-owned telecom operator lagging behind in its competition with another duopoly, China Mobile (in mobile services and the ISP market) (Lucas, 2017). After the state initiative to establish Guizhou Province—a relatively poor and undeveloped province in southwest China—as one of China's new centers for cloud computing and big data, Tencent signed a strategic agreement with the Guizhou government in 2015 and opened Tencent Western Lab in Guizhou in 2016. This was followed by the construction of Tencent's big data center in 2017. Not only did Tencent actively participate in the government initiatives, Apple also built its first iCloud data center in China in Guizhou, and tech giants such as Huawei and ISPs also followed the state initiative (Sohu, 2017). In 2017, the Chinese government even expressed interest in becoming a shareholder in tech giants like Tencent. This would allow government representatives a seat on the board of such corporations, and strengthen commercial-

state solidarity (McLauchlin, 2017). Previously, in 2010, Tencent had won seats in the People's Congress, which is China's top legislative institution (Hong, 2016). Thus, legislatively, Tencent's CEO is able to further access political resources and leverage.

These examples supplement previous discussion of Tencent's conglomeration and its endeavors in building a closed proprietary ecosystem. They also indicate the need to investigate the political functions and utilization of Tencent's commercial surveillance infrastructure. The demystification of Tencent's conglomeration reveals how the state has been actively involved in the building of a commercial surveillance infrastructure. The next question is, if Tencent can use such an infrastructure to engineer consumer behavior and maintain monopoly, what would the state be able to achieve by using the same infrastructure? One thing is sure: the state didn't support this surveillance system without reason. When looking at the commercial surveillance infrastructure and the commercial-state collaborations from a more political perspective, a new horizon emerges. With increasingly intertwined collaboration between the state and Tencent, the commercial surveillance infrastructure is put to work with other state-owned surveillance tools. This has created a supervening surveillance complex in which the state and the private sector work hand-in-hand to engineer, manipulate and govern the mass public.

To reiterate, the state-commercial collaboration not only serves to maximize commercial profit or maintain monopoly, it also works in ways that favor state control over the public. For example, in 2017, as part of the Internet Plus initiative, the local government of Guangzhou province issued the first WeChat ID card, which was promoted to the entire country from early 2018 (Sun, 2017). With recognition and endorsement from the Ministry of Public Security, WeChat ID functions as an electronic ID that is no different from a physical state-issued ID card. This means that the ID is fully connected with local police and security systems, and is filed into the national security data system (Xinhua, 2017, December 26). Given this state-commercial collaboration, it would be very difficult for Tencent to deny the accusation that WeChat data is shared with the state. In fact, WeChat's censorship has been researched by The Citizen Lab at the University of Toronto. One study illustrated how WeChat uses different censoring methods to filter out certain politically sensitive content within accounts registered in China and other countries (Ruan, Knockel, Ng, and Crete-Nishihata, 2016). Clearly, WeChat functions not merely as a social media platform; given its extensive integration with the commercial surveillance infrastructure, WeChat and WeChat Pay are the bridges that connect all segments and make the whole system possible. So when WeChat registration becomes a citizen's ID card, it means that the state and the security department have gained full access to every corner of the commercial surveillance infrastructure.

In addition, the state has established its own surveillance infrastructure in a more traditional but massive way—through a system of security cameras that works hand-in-hand with the commercial surveillance infrastructure. With the technology of facial recognition, an unprecedented and comprehensive surveillance complex that has extremely high accuracy has emerged. *Tian Wang,* or sky-net in English, is a national security system deployed by the Chinese state; it includes over 170 million security cameras in public spaces nationwide, with about 400 million more to be installed in the coming three years. On one occasion, a BBC reporter tested the sky-net. A staff member at the security center uploaded his picture after which he tried to escape from the system. After only seven minutes, he was recognized by a security camera at a subway station and found himself surrounded by police. The sky-net system not only recognizes human faces, but also the color of clothing, an individual's gender, vehicle plates plus the make and colour of a particular vehicle (Ma, 2017). In another case, individuals who jaywalked were instantly captured, and their names and pictures were

displayed on the screens before they even finished the jaywalking (Chin and Lin, 2017). Tech giants, not surprisingly, work closely with the state to develop facial-recognition technology and computing systems. They also function as the 'sky-net' of cyberspace: companies like Tencent are required to work with the state to hunt down criminal suspects and political dissenters (Lin and Chin, 2017). The sky-net system, facial recognition, cloud computing technologies from tech giants and the WeChat ID system secretly bridge the state surveillance system and the commercial surveillance infrastructure in a massive and historically unprecedented way. It is not a traditional surveillance system the public is facing: it is a commercial-state surveillance complex that is more sophisticated, comprehensive, and powerful than anything that has been used before.

In order to comprehend the commercial-state surveillance complex, it is critical to acknowledge that the commercial surveillance infrastructure is centered around behavioral engineering. This is not a passive mode wherein the watchers observe, censor and guide public opinion, but a complex that is interactive, actively disciplining and governing. During the Party's Congress in 2017 when President Xi Jinping was elected as the Chief Secretary of Communist Party of China for his second term, an in-app game was released on WeChat where users clapped for the President by tapping the screen of their cellphone at a given time. The amount of claps could be shared to WeChat Moments or friends to show off. Over one billion claps were generated, which exemplified the public support for President Xi's new term and his ideology of the Chinese Dream that serves to rejuvenate the party and the nation (Abkowitz, 2017). This case demonstrates a kind of soft propaganda that deviates from the traditional linear and authoritarian models. This is only one of many examples; such soft propaganda can be conducted among all platforms available, online and offline, with customized content and personalized experiences.

Now, it is clear that China's social credit system (SCS) has emerged in the context of the commercial-state surveillance complex. While it is true that all online and offline behavior of a particular individual is surveilled and accounted for in the state-run SCS (Wall Street Journal, 2015; Chin and Wong, 2016), it is also the case that this surveillance infrastructure was primarily designed to a commercial logic. It was not until the Internet Plus project that the state added its own surveillance technologies to the existing structure. Therefore, instead of treating the SCS as a pure censorship program or Tencent's success as pure entrepreneurship, I would point to a process of convergence. This occurs both within the commercial world where surveillance capitalism prevails and between the commercial and political entities that embody a commercial-state complex. When we examine phenomena such as Tencent and Alibaba's establishment of smart cities using AI, algorithms, big data, cloud computing, and credit systems such as Alibaba's Sesame Credit, one must acknowledge that these are first and foremost commercial projects that would provide infinite data for a surveillance capitalism. With the emergence of a commercial-state surveillance complex, it could be argued that the state is seeking to utilize this complex as much as possible. However, the surveillance infrastructure is not primarily designed for pure state surveillance and dictatorship. It is the mutual constitution of the political and the commercial that is the driving force.

Fabricating the Technological Sublime

The previous discussion obviously demonstrates the logic of a planned economy with state intervention. At the same time, the profit-making goal of private corporations also lies at the center of commercial surveillance infrastructure. However, these political and commercial realities are often hidden by technological sublime discourse which obscures the deeply entrenched

interrelationships between the state and tech-giants like Tencent. The technological sublime is both a political ideology and a commercially articulated public culture that simultaneously overshadows the profit-seeking nature of commercial entities and legitimizes the commercial-state complex. In this final section, I conclude the article by discussing a few examples that explain how this discourse obscures political and commercial realities and complexities.

The technological sublime is a myth that functions as the rhetoric or "a system of communication" (Barthes, 1957/2012: 217) that obscures, in this case, the political-economic realities of the commercial-state surveillance complex. This myth is given life from various different perspectives. A comprehensive discussion of the construction of the technological sublime is beyond the scope of this article; here I discuss the process from one particular perspective: speeches and texts from influential figures. Barthes (1957/2012) argued that written and non-written discourses such as "photography, cinema, reporting, sport, shows, publicity, all of these can serve as a support to mythical speech" (218). Following Levi-Strauss's usage of the word, Mosco (2004) describes a *bricoleur* as "someone who…pulls together the bits and pieces of technology's narratives, to fashion a mobilizing story for our time" (36). Therefore, the influential figures who constantly talk about and articulate the mythical vocabularies of technologies—in our case, Tencent—are bricoleurs who served to fabricate the technological sublime. Here I consider particular speeches delivered by the Founder and CEO of Tencent—Pony Ma—in order to illuminate the cultural productivity of these speeches as myth-making messages.

Since 2015, Tencent has been hosting a grand industrial summit forum called SHIFT Tencent Cloud+Future. It invites industrial leaders, participants, government officials, media, and the public to discuss the future of internet technology. The conference is hosted in multiple cities every year, although the main venue of the conference has always been in Shenzhen where Tencent's headquarters are located. Pony Ma delivers speeches at the opening of these summits, and these are often circulated on the internet as videos, texts and selected highlights with various media interpretations. Here I discuss the speeches from 2016, 2017 and 2018 (unless specified otherwise, all quotes from these three speeches are hereafter cited from Ma, 2016, 2017, and 2018, respectively). I reveal how the rhetoric in these speeches aligns with Tencent's commercial strategy while presenting Tencent's empire as a public good.

These speeches all focused on the term 'cloud'; a magic force that would guarantee a better future not only for Tencent, but for the entire society. Without actually talking about the cloud as a technology, Ma presented it as a culture, a future and as exemplifying the inevitable progress of human society. The cloud is everything but Tencent's profit-seeking product. In the 2016 speech, Ma declared that Tencent had been promoting the Internet Plus strategy and observed that the entire trend of the industry was going to the cloud. For him, the cloud was synonymous with the shared-economy. Cited examples included the shared-economy in transportation, housing and mailing as indicating "cloudification of productivity". Every enterprise and every individual's productivity was seen to emerge from the cloud. He then argued that in the future, most of scientific innovation will be realized through the cloud. In his 2017 speech, Ma further extended his articulation of 'cloudification' by making "cloud usage" a unitary measurement for the industry and economy. He said that just as "electricity usage" is a measure for the economic development of cities and nations; in the future, "cloud usage" will be a measurement unit that exemplifies the digital economy. He concluded that "The cloud is the power of industrial renovation". In 2018, Ma elevated discussion of the cloud by referring to "three nets": the net of people, the net of things, and the net of

intelligence. These could be seen as Tencent's imagination or its plan for the cloudification of the society. Ma offered examples to illustrate his vision.

"Digitizing Guangdong" is an important project wherein Tencent closely works with the government of Guangdong province. The project aims to establish a single yet gigantic cloud infrastructure as the digital platform for all governmental departments and services. The platform provides technological support for "the government's decision making, managerial innovation, and services"; it also provides administrative platforms and tools that extend to every level of the government and every official. In the 2017 speech, Ma talked about the cloud as a social governing platform. He provided examples such as "cloud+electric ID," which embeds personal ID and driver's license information into WeChat, and connects it to the government database. Although these examples from Ma's speech were promotional, he presented all these cloud projects as if Tencent is working on them just to provide a better future for society. Ma primarily talked about the cloud as something mythical, and he inserted Tencent's services and products as examples. However, the associated rhetoric of how the cloud is bringing a better future for the society obscures the fact that Tencent provides the second largest cloud services in China. In this respect, Tencent Cloud has surpassed Google to become the fourth largest cloud service provider in Asia Pacific region (Yun Tou Diao, 2019).

When Pony Ma promotes Tencent's services, he also obscures the commercial surveillance infrastructure beneath a rhetoric that sees such a system of surveillance as pure technological progress. For example, in the 2016 speech, he claimed that Tencent's cloud solution is unique and different from others, because Tencent's cloud service and platform "is not an independent service, but a strategic platform." He further noted that when people take Tencent's cloud solution, they are "taking Tencent's entire platform, regardless of social network or Tencent", stating that their support "is established on all platforms and experience from more than a decade." In particular, Ma explained that "90% volume of data streams come from mobile clients, and Tencent's ecosystem is the most used ecosystem in mobile internet usage; including WeChat, QQ, web browser, video, mobile app store, and so forth, we cover over 50% of Chinese netizen's internet usage time. That is to say, this is not one of the most powerful settings, but *the* most powerful setting that everyone can embrace." This particular passage from Ma's speech vividly illustrates the official story of Tencent's surveillance infrastructure. Without even slightly acknowledging negatives of surveillance, Ma purely presents Tencent's ecosystem of data mining and tracking as a better solution for business and the society.

Another example of this official depiction of Tencent's ecosystem is Pony Ma's speech at the University of Hong Kong in 2015. The university was holding an innovation and entrepreneurship forum entitled Dream Catchers, and Pony Ma was invited as a guest speaker. At the forum, Ma talked about Tencent's history, Tencent's development in big data, its relationship with the government and its big data and cloud computing initiatives. He also remarked upon establishment of WeBank as China's first private online bank (discussed previously). Two critical observations are noteworthy here. First, Ma specifically talked about how the state-owned banking system occupied a different position from that of the online banking system. This points to the need for negotiations between private entities and the state system. However, he presented the story in a very optimistic way and said that the public banks eventually realized that banking can be incorporated with the internet. Second, he talked specifically about the small-amount personal loan service provided by Tencent. In one instance, a truck driver applied for a personal loan, and received it after providing the required documents. Tencent did not know who he/she was, Ma claimed. He further

explained that location-based services allow Tencent to keep track of the driver's everyday life, including their driving routine. "If one day the driving routine stops," Ma said, "then we know that a bad debt is possible, then we will reach out and push for payments" (Ma, 2015).

Again, Ma's speech presents a surveillance technology without addressing the nature of surveillance. Instead, he tells a story of technological progress that is already bringing better services, better products, and a better society. Tencent's infrastructure for surveillance, such as the location tracking of the truck driver, feeds the logic of surveillance capitalism obtaining the user's personal data and real-time behavior patterns to enable the development of profit-seeking products. In addition, this data and real-time surveillance technology can also intrude into people's decision-making process and shape future behavior. Zuboff (2019) discusses how insurance companies can use real-time data tracking technology and telematics to "set specific parameters for driving behavior" ranging from "fastening the seat belt to rate of speed, idling times, braking and cornering, aggressive acceleration" and so forth. He noted that "These parameters are translated into algorithms that continuously monitor, evaluate, and rank the driver, calculations that translate into real-time rate adjustments"; in other words, "insurers can eliminate uncertainty by shaping behavior" (215-216). Based on Tencent's technology of tracking the truck driver's everyday routine to decide when to push for loan payments and to rate this individual's personal financial credit, the behavioral shaping power that Zuboff describes would not be hard for Tencent to develop.

These speeches of Pony Ma delineate a rhetoric of the technological sublime that obscures the nature of a commercial surveillance infrastructure. And, he plays down Tencent's involvement with the state so that the complicated negotiations and collaborations with political authorities are rendered invisible. Most importantly, the presentation of the cloud, the new IT technologies, and Tencent's comprehensive ecosystem implies zero concern about issues such as data privacy, behavioral engineering, commercial hyperbole and so forth. Instead, Tencent's multi-platform, super-interlocked, online-offline, data tracking and data mining commercial surveillance infrastructure is presented as advancing business and society; Tencent's tracking of individual users at an everyday-level is simply a means for making an individual's life more convenient. This rhetoric is only a small portion of the discourse of technological sublime in contemporary China, but through just a few speeches by Pony Ma, we can see how the system of surveillance infrastructure escapes critical scrutiny.

I am not suggesting that the commercial-state surveillance complex is exclusive to Tencent or even that such a similar complex is exclusive to contemporary China. My point is that the case of Tencent usefully directs attention away from the traditional linear, single-platform and online-only approach to explaining the technological and economic realities of contemporary China. These new realities are evident at every level of the state, in commercial and individual realms. Behavioral and psychological sciences are employed to engineer public behavior and ideology in an inconspicuous way. Here, viewing the surveillance system in China as a pure state dictatorship or positioning private corporations as puppets of the state leads to oversimplified accounts. Instead, the process of Tencent's conglomeration and the making of the commercial surveillance infrastructure show the deep mutual relationship between the state and Tencent that includes negotiations and collaborations. In the emergence of the commercial-state surveillance complex, state and commercial entities have a mutually constitutive relationship. The state supports and relies on the technologies and commercial surveillance infrastructure established by tech-giants while the latter relies on the state to maintain monopoly and profitability. This complex is still at an early stage of

deployment, but there is no doubt that contemporary China is entering a new phase of surveillance that involves complex, ongoing negotiations between the state and corporations.

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Endnotes

[1] See Yang, 2003, 2009; Zhang, 2014; Hassid, 2012; Qiang, 2011.

[2] Self-media refers to content produced by independent individuals or entities that works outside of the traditional media system.

[3] Unicorn is a word used by the industry to describe start-up companies and companies that have not gone public but achieved high valuation.

[4] McChesney defines *critical juncture* as "rare [and] brief periods in which dramatic changes are debated and enacted drawing from a broad palette of options, followed by long periods in which structural or institutional change is slow and difficult" (McChesney, 2015: 66-67).

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