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# UNIVERSITY OF CALIFORNIA, IRVINE

### Rethinking Civic Computing in China

#### **DISSERTATION**

submitted in partial satisfaction of the requirements for the degree of

#### DOCTOR OF PHILOSOPHY

in Information and Computer Sciences

by

Yubo Kou

Dissertation Committee: Professor Bonnie Nardi, Chair Professor Gloria Mark Associate Professor Yunan Chen

# **DEDICATION**

To

my wife, Xinning Gui, who has loved and supported me
my cats, Teemo and Melon, who have accompanied us in the simplest yet sincerest way

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Yubo Kou, Yukun Li, and Xiaofeng Meng. (2010). DSI: A Method for Indexing Large Graphs Using Distance Set. International Conference on Web-Age Information Management (WAIM), Jiuzhaigou, China.

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#### ABSTRACT OF THE DISSERTATION

Rethinking Civic Computing in China

By

#### Yubo Kou

Doctor of Philosophy in Information and Computer Sciences

University of California, Irvine, 2016

Professor Bonnie Nardi, Chair

Civic computing research has accumulated a systematic body of knowledge about Western societies. However, little attention has been paid to China, a non-Western, non-democratic society. I study how information and communication technologies (ICTs) affect civic participation in China. I have conducted a qualitative study of how Weibo users understood and discussed the Umbrella Movement, Hong Kong's pro-democracy protest from September to December 2014. Weibo is one of the most common micro-blogging services in China.

Drawing on Foucault's work on *care of the self*, I analyze how my participants cultivated their own knowledge through civic participation. Participants faced challenges in comprehending numerous competing narratives and discourses from information sources, such as the Hong Kong media, the mainland media, Western media, and social media. They

were determined to study a variety of sources on their own. They focused on improving their own understanding and analytic skill. ICTs mediated their practices of care of the self.

I argue that the choice of care of the self was conditioned in China's unique context.

Particularly, the notion of care of the self resonates with the teachings of Confucianism,

China's traditional philosophical and ethical system. I argue that the notion of care of the self is of special value to civic computing research.

# **Chapter 1. Introduction**

Information and communication technologies (ICTs) play an increasingly influential role in civic participation in the world. They help citizens acquire and process information, voice and debate opinions and beliefs, and take actions (Mark et al., 2012; Starbird & Palen, 2012; Gordon et al., 2013; Nardi, 2015). Social movements such as Occupy Wall Street (DeLuca, Lawson, & Sun, 2012), the Arab Spring (Stepanova, 2011), and the same-sex marriage movement (State & Adamic, 2015) have adopted social media to facilitate communication, coordination, and organization. Researchers have found important connections between civic participation and everyday use of digital technologies such as online games (Hirsch, 2010; Ferguson & Garza, 2011) and social networking sites (Bimber, 2000; Zhang et al., 2009). They reported that frequent use of technologies was positively associated with the tendency to participate in civic activities.

Civic computing concerns the relation of ICTs to civic participation. Understanding how citizens use digital technologies during civic participation is crucial to the knowledge of human-computer interaction (HCI) and the design of efficient civic computing systems (DiSalvo, 2009; DiSalvo et al., 2010). Researchers have accumulated a systematic body of knowledge of Western, democratic societies. Studies of the West have ranged from the deployment of novel technological systems supporting civic participation (Rheingold, 2007; Kriplean et al., 2012), to empirical studies of online and offline civic activities (Mark

et al., 2012; Semaan et al., 2014). Studies have taken place at different scales, from local communities' civic discussions (Kim et al., 2011; Parker et al., 2012) to presidential elections (Carty, 2010).

However, research on non-Western, non-democratic societies is limited in terms of topical diversity and scale. Much research has focused on radical forms of participation that often involve clashes between citizens and governments, such as color revolution (Shirky, 2011; Lysenko & Desouza, 2012) and the Arab Spring (Lotan et al., 2011; Wulf et al., 2013).

Researchers in civic computing must closely attend to the unique technological practice and characteristics of different contexts, because technological practice in each locality is unique (Kow, 2011; Nardi et al., 2011). Much research is still needed to reveal the distinct relation of ICTs to civic participation in different cultures and societies. In this dissertation, I will examine civic computing in China—a non-Western, non-democratic society.

China is renowned as an authoritarian society with strict censorship and sophisticated control of the Internet (MacKinnon, 2007, 2011). As opposed to the Middle East, which is more widely studied, China's society remains stable. It is challenging, if not impossible, to trace every aspect of China's distinct society, culture, and policy that may influence citizens' technology use during civic participation. In this dissertation, I take an observational approach, using in-depth, semi-structured interviews to examine complex

and emerging social practices. Focusing on my participants' adoption and appropriation of ICTs, I attempt to reveal the role of ICTs in civic participation.

#### 1.1 Scope of the Research

My investigation of civic computing starts with Chinese mainland citizens' online civic practices during the Umbrella Movement in Hong Kong. Hong Kong is a Special Administrative Region (SAR) located on China's south coast. Its specific location and history influenced the emergence of the movement.

On July 1, 1997, Hong Kong ended its 150-year history as a British colony and returned to the People's Republic of China (PRC). The joint declaration between Britain and the PRC states that Hong Kong comprises a special administrative area with high levels of social, political, and economic autonomy. Paragraph 3.5 of the joint declaration writes:

The current social and economic systems in Hong Kong will remain unchanged, and so will the life-style. Rights and freedoms, including those of the person, of speech, of the press, of assembly, of association, of travel, of movement, of correspondence, of strike, of choice of occupation, of academic research and of religious belief will be ensured by law in the [HKSAR]. Private property, ownership of enterprises, legitimate right of inheritance and foreign investment will be protected by law. (Zhao & Thatcher, 1984)

In contrast to the joint declaration, since its return, Hong Kong has undergone a series of social, political, and economic changes, because of the change of sovereignty and frequent social, economic, and cultural exchanges between Hong Kong and the mainland. A 2012 news report commented:

Fifteen years after the handover, Hong Kong faces a wide set of challenges, analysts say: property prices have soared to their highest levels since 1997; the gap between rich and poor, already the greatest in Asia, is at its highest level in four decades; air pollution continues to worsen; and no clear path has been presented to usher in a system to allow the public to directly elect leaders. Beijing has said that direct elections of the chief executive may be held as early as 2017, but it has not given any guarantees. (Drew, 2012)

On August 31, 2014, the National People's Congress (NPC) of the PRC proposed a reform for the 2017 Hong Kong Chief Executive election. The proposal stated that a 1200-member committee of Hong Kong citizens would elect two to three candidates for inclusion in an ordinary voter ballot.

Hong Kong's pro-democracy citizens perceived the proposed reform as a failure to fulfill key commitments under the joint declaration (Davis, 2015; Lam, 2015). They believed the reform failed to achieve universal suffrage, which would allow every citizen to nominate and vote. The frustration and disappointment over Hong Kong's democratic development

grew. Many citizens believed that universal suffrage could help improve Hong Kong's economic and political autonomy (Fung, 2015).

Striving for universal suffrage and democracy in Hong Kong, the Umbrella Movement began on September 28, 2014. One of the most common slogans of the movement was "We need real universal suffrage!" Thousands of citizens occupied the main streets in several central business districts for 79 days. The movement adopted the term "umbrella" in its title because the movement participants used umbrellas against pepper spray and tear gas from the police (Zhao & Liu, 2015). University professors and students organized class boycotts for nearly a month in support of the Movement. Hong Kong Legislative Council decided to stop, and delayed the legislative process of a number of bills (Lam, 2015). The movement officially ended on December 15 when the authorities arrested key leaders and cleared remaining protesters in streets (Zhao & Liu, 2015). The movement did not achieve its goal to stop the NPC's proposed political reform. However, it left a legacy, and pro-democracy activists continued to strive for real universal suffrage in varied forms (Phillips, 2015). Lam noted that the movement introduced a new style of political participation (the occupation of central business areas) and the concept of deliberative democracy, and potentially educated the public and strengthened civil society (Lam, 2015).

Since Hong Kong is one of China's most economically and politically developed areas, the Umbrella Movement held special and important political relevance to the mainland citizens. It was also the largest pro-democracy social movement in China since the Tiananmen Square protests of 1989. As one mainland citizen commented online, "Today's Hong Kong protest shares many similarities with the Tiananmen Square protests more than 20 years ago. Today's Hong Kong is a weather vane, indicating the future direction of China's politics. 现在的香港和二十多年前的场广[天安门广场运动]有相象的地方。今日香港,是一风向标。"

This dissertation concerns how mainland citizens used digital technologies to understand and discuss the Umbrella Movement. My study focuses on Weibo, the largest Chinese micro-blogging service. My study participants were mainland Chinese who cared about the Umbrella Movement and engaged in discussions on Weibo. Due to the international border between Hong Kong and the mainland, most participants did not have direct, physical access to the movement on the ground.

Participants faced a complicated media context, containing social media, the mainland media, the Hong Kong media, and Western media. While censorship constrained information diversity on China's websites, social media such as Weibo provided abundant, competing narratives. Domestic mass media sources tended to report biased news to discredit the movement, and Western media sources often covered stories in favor of pro-democracy activists. Not trusting one single information source, participants used technologies to study a variety of information sources on their own. They chose many

domestic, Hong Kong, and Western media sources that provide diverse opinions, circumventing censorship by adopting software tools such as virtual private networks.

Studying a number of sources and using a variety of technologies enabled participants' opinion expression and civic discussion on Weibo. Their discussions revealed thoughtful expectations of how a person should behave toward others and the nation.

In this dissertation, I draw on Michel Foucault's work on care of the self to analyze how participants cultivated their thoughts and reflected on their relation to the world (Foucault, 1988a). As a prominent thinker and philosopher of the 20<sup>th</sup> century, Michel Foucault is known for works that analyze knowledge and power, such as *Madness and Civilization*, *The Birth of the Clinic*, *Discipline and Punish*, and *The History of Sexuality*. Care of the self comprised the core concern in the third volume of *The History of Sexuality* (Foucault, 1988a). In this dissertation, I use Foucault's concept to frame my analysis of participants' practices, closely attending to their deep roots in China's cultural and historical circumstances. I argue that the notion of care of the self is of special value to civic computing scholarship.

#### 1.2 Care of the Self

"Care of the self" refers to "an exercise of the self on the self by which one attempts to develop and transform oneself, and to attain to a certain mode of being" (Foucault, 1998c). The certain mode of being includes "a certain state of happiness, purity, wisdom,

perfection, or immortality" (Foucault, 1998b). Care of the self's ultimate goal is to transform one's mind and thought by gaining deeper understanding of the self and the world. Foucault argued that "the main interest in life and work is to become someone else that you were not in the beginning" (Foucault, 1988c).

Care of the self does not denote a certain mode of being that a person has already achieved. Rather, it refers to the constant practices a person carries out to cultivate the self. Care of the self involves not only the self, but also the relation of the self to the world. Through cultivating knowledge of the self, a person is more capable of recognizing her "rightful position in the city, the community, or interpersonal relationships" (Foucault, 1998c). Care of the self thus indicates care of others.

Practices of care of the self, according to Foucault, date back to ancient Greek philosophers such as Socrates. Socrates used dialogue to examine the thought and conduct of the Athens citizens (Foucault, 1988b, 1998c; Robinson, 2015). Foucault pointed to three causes for Scorates' actions:

- (1) His mission was conferred on him by the gods, and he won't abandon it except with his last breath;
- (2) For this task he demands no reward; he is disinterested; he performs it out of benevolence;

(3) His mission is useful for the city - more useful than the Athenians' military victory at Olympia - because, in teaching people to occupy themselves with themselves, he teaches them to occupy them with the city. (Foucault, 1998b)

Socrates' case demonstrates Foucault's argument that care of the self does not only involve attention to oneself. Care of the self involves the care for both the self and others (Foucault, 1998c). Socrates was willing to dedicate his own life to spurring reflection among Athens citizens.

Care of the self was Michel Foucault's last important notion in a trajectory of thoughts regarding how a person develops into a certain mode of being. In his early, more renowned writings such as *Madness and Civilization*, *The Birth of the Clinic*, and *Discipline and Punish*, Foucault wrote extensively on how power and knowledge regulate and discipline personhood (Foucault, 1977, 2001, 2003). Power, or power relation, refers to "a relationship in which one person tries to control the conduct of the other" (Foucault, 1998c). Power is always present in human relationships, such as in communication and in sexual, institutional, and economic relationships. For example, schools discipline students into docile bodies through careful control of time, space, and activity, and comprehensive surveillance (Foucault, 1977).

Power relations exist at different levels, in different forms. They are mobile, modifiable, and flexible (Foucault, 1998c). Both sides in a power relationship have certain degrees of

freedom, allowing the possibility of resistance. Individuals can transform power relations through practices. For example, in Al-Ani et al.'s study of citizens' blogging practices during the Egyptian revolution (Al-Ani, Mark, Chung, & Jones, 2012), the local government produced a set of narratives about the uprising on its controlled media. Dissatisfied with the government's version, politically aware Egyptian citizens used blogs to produce and publish their own narratives, many of which countered the government's account. In this way, Egyptian citizens' civic practices altered their power relations with political elites.

In his late thoughts, Foucault loosened his emphasis on the influence of the pervasive power relations that discipline and coerce people into certain mode of being. He began to attach importance to a person's agency in transforming himself or herself, while noting this transformation still occurs within certain power/knowledge structures (Foucault, 1988a). A person obtains another mode of being under the influence of complex power relations and through practices of care of the self (Foucault, 1998a). For example, a person is not born an engaged citizen. He becomes one through both the influence of power relations such as familial civic traditions (Andolina, Jenkins, Zukin, & Keeter, 2003) and civic education at school (Galston, 2007), as well as through internalizing civic values on his own.

In this dissertation, I analyze complicated media context as system of power relations, which influence participants' understanding and interpretation of the Umbrella

Movement. Drawing on the notion of care of the self, I discuss participants' resistance to the influence of these power relations.

#### 1.3 Technologies of the Self

Foucault identified four types of technologies that train and modify a person:

- (1) Technologies of production, which permit us to produce, transform, or manipulate things;
- (2) Technologies of sign systems, which permit us to use signs, meanings, symbols, or signification;
- (3) Technologies of power, which determine individuals' conduct and submit them to certain ends or domination, objectivizing of the subject;
- (4) Technologies of the self, which permit individuals to, by their own means or with the help of others, perform certain operations on their own bodies and souls, thoughts, conducts, and ways of being, so as to attain a certain state of happiness, purity, wisdom, perfection, or immortality. (Foucault, 1998b)

Technologies of the self are a set of procedures individuals use to care for their selves. While Foucault's investigations focused on Western practices, he maintained that technologies of the self exist in every civilization. They are "suggested or prescribed to individuals in order to determine their identity, maintain it, or transform it in terms of a

certain number of ends, through relations of self-mastery or self-knowledge" (Foucault, 1998a). We could find similar thoughts in China's culture. Confucianism, China's traditional philosophical and ethical system, emphasizes self-discipline and morals (Chaibong, 2001). The Analects of Confucius (Confucius, 2006) writes:

The superior person, extensively studying all learning, and keeping himself under the restraint of the rules of propriety, may thus likewise not overstep what is right.

君子博学于文,约之以礼,亦可以弗畔矣夫!

Learning and obeying "the rules of propriety" are typical procedures that a person undergoes to transform into "the superior person," a higher mode of being.

Digital technologies have enriched technologies of the self, enabling new socio-technical practices. Sociologist Barbara Schneider analyzed a homeless writer's practices of care of the self (Schneider, 2012). She reported that the man used blogs to disclose his addiction history, transforming himself by telling truth to and interacting with an audience. Royse et al. studied female gamers' understanding of video games (Royse, Lee, Undrahbuyan, Hopson, & Consalvo, 2007). They found that playing video games deeply associated with gender identity.

In the wake of crises such as war and natural disasters, technologies such as Facebook enabled people to care for others. Semaan and Mark's qualitative study of Facebook use

among Iraqi citizens experiencing the Gulf War reported that people used Facebook to reconstruct social networks and develop new social practices (Semaan & Mark, 2012).

Foucault's term of technology broadly denotes all the methods a person uses to obtain specific goals. However, in this dissertation I focus on information and communication technologies that a person utilizes in her practices of care of the self.

#### 1.4 Method

My observation of participants' behaviors and discussions on Weibo was a dynamic and developing process. I started to pay attention to news about Hong Kong's protest in July 2014. Both traditional media and social media reports about Hong Kong citizens' movements in the streets became prevalent. I watched television news coverage of the protests in Greater Los Angeles Area Chinese restaurants. I read news reports from newspapers distributed near Asian grocery stores that I regularly visited. My Facebook friends shared articles and reports on a daily basis. My Weibo friends regularly updated numerous posts about Hong Kong. Topics such as "universal suffrage" and "occupy central," two keywords in the movement, frequently appeared in Weibo's recommended trending topics. This widespread media coverage intrigued me academically. I wanted to understand how Chinese citizens used social media, particularly Weibo, to understand the movement.

My data collection started by first finding renowned Weibo accounts of news agencies, scholars, and celebrities that frequently posted micro-blogs about the Umbrella Movement and spurred discussions among ordinary citizens. I located these accounts by using Weibo's search function based on a variety of keywords such as "umbrella 雨伞," "occupy central 占中," "student union 学联," "Joshua Wong 黄之峰," "Hong Kong government 港府," and "Hong Kong protest 香港抗议." When examining the returned results, I selected Weibo accounts whose micro-blogs attracted more than one hundred replies. Such criteria allowed me to filter out a majority of returned accounts, leaving a number of "famous Weibo accounts" that could often trigger heated discussions about the Umbrella Movement. To find more accounts, I employed a strategy similar to "snowball sampling." I examined the micro-blogging history of accounts I had already found to check whether they had reposted micro-blogs from accounts that I had not yet paid attention to. I added these newly found accounts to my watch list. In the end, I selected 20 famous Weibo accounts. Table 1 shows information about these accounts.

Table 1. 20 Famous Weibo Accounts.

Account Name	Occupation	Number of Followers
程鹤麟	Television Anchor	94935
许子东	Chinese Literature Professor	167304
周保松	Philosophy Professor	159244
JohnRoss431	University Researcher	414628
亥时热评	Media Critic	3969808
大鹏看天下	Media Worker	603777
环球时报	Chinese News Agency	3813898
胡锡进	Editor in Chief	4346892

茅于轼	Economist	2481158
封新城	Editor	4125742
贺卫方	Law Professor	1742467
袁莉 wsj	Editor in Chief	2037076
闾丘露薇	Journalist and Anchor	3712029
杨锦麟	Media Worker	1621708
小弟王晶	Movie Director	7360741
戴旭	News Commentator	621803
孔庆东	Chinese Literature Professor	2845201
SCMP_南華早報	News Agency	668075
梁海明	News Commentator	30549
头条新闻	News Agency	45019933

By following these accounts, I could read their latest micro-blogs about the movement. The micro-blogs' reply fields provided a venue for civic discussions (Rauchfleisch & Schäfer, 2014; Yang, 2013). Some popular micro-blogs gathered thousands of comments from ordinary Weibo users (see Figure 1).

During the study period, I observed and archived hundreds of Weibo discussions that took place in the reply area of the 20 famous Weibo accounts' micro-blogs. I analyzed the content to find ordinary mainland citizens who frequently used Weibo, were interested in the Umbrella Movement, and actively engaged in Weibo discussions. I contacted these citizens and asked them for an interview.



Figure 1. A Micro-blog about the Umbrella Movement.

I conducted 35 semi-structured interviews with Weibo users. My interview questions included how they learned about the Umbrella Movement, whether they sympathized with the movement's appeal, what tools they used to obtain information about the movement, where they discussed the movement, and how discussions on Weibo affected their perception and understanding of the movement.

The interviews took place through Skype or Weibo's private messaging function. Most interviews lasted between 30 minutes and 1 hour. The private message-based interviews could span two or three days, because my informants often left Weibo for work or school, but were willing to continue the interview afterwards. Among the interviewees, 20 were male and 15 were female. Their ages ranged between 18 and 53.

My data collection strategy was informed by multi-sited ethnography (Boellstorff, Nardi, Pearce, & Taylor, 2012; Marcus, 1995). During my investigation, I discovered that the reply area was not the only place where people engaged in civic discussions and gained knowledge about the movement. Discussion and information seeking occurred at multiple online venues, such as Weibo, other social media platforms, and Chinese online forums. My online fieldwork was "embedded in a world system," which generated "the circulation of cultural meanings, objects, and identities in diffuse time-space" (Marcus, 1995). George Marcus suggested that to find the logic of association or connection among sites, ethnographers should follow the people, the thing, the metaphor, the plot, story, or allegory, the life or biography, and the conflict. I followed my interviewees from discussions to their own Weibo homepages, observing their micro-blogs and interaction with friends. I followed links mentioned in Weibo discussions, which pointed to information sources outside Weibo. I followed participants' instructions to visit other websites that they frequently used.

All of the original data is in Chinese, since I study the Chinese Internet and all my interviewees' native language is Chinese. I translated the interviews from Chinese to English. When reporting data, I use pseudonyms to anonymize and protect my participants. However, I retain the original name of well-known, public Weibo accounts.

#### 1.5 Dissertation Outline

In this chapter, "Introduction," I have discussed the limitations of civic computing research on non-Western, non-democratic societies. I have proposed my dissertation project as a contribution to the field by presenting a case study of the Umbrella Movement in China, a non-Western, non-democratic society. I have described Michel Foucault's concept of care of the self as a framework for analyzing my participants' civic practices.

In Chapter 2, "The Chinese Internet," I introduce the development and status of the Internet in contemporary China, describe the Internet penetration rate and Internet habits among Chinese citizens, and provide a detailed account of Weibo usage. I discuss studies of censorship in China.

In Chapter 3, "On Micro-blogging and China," I review the human-computer interaction (HCI) literature on micro-blogging. I review research on the Chinese Internet from other related disciplines, such as information science, communication studies, cultural studies, political science, and social science.

In Chapter 4, "A Complicated Media Context," I describe participants' complicated, challenging perception of their media context and how they interacted with it. I analyze how the specific context influenced participants' attitudes and actions when they learned about the Umbrella Movement.

In Chapter 5, "Understanding the Umbrella Movement as Care of the Self," I present an account of participants' practices of care of the self. I discuss the relationship between the complicated media context and participants' practices. I describe how participants studied a variety of media sources on their own in order to understand the Umbrella Movement.

In Chapter 6, "Care of Others," I describe my participants' care of others as a critical component of care of the self. I provide details about how my participants care for other Weibo users, Hong Kong's people, and their country.

In Chapter 7, "Technologies of the Self," I analyze the role of technologies in mediating the practices of care of the self. I describe the different functions of Weibo and other technologies in participants' practices.

Chapter 8, "Rethinking Civic Computing," is my dissertation's final chapter. I build on previous chapters to discuss how participants' practices of care of the self and technology choice were conditioned in China's specific social, cultural, political, and historical context. I discuss how participants' practices were related to Confucianism, China's traditional ethical and philosophical system. I explore how care of the self characterized participants' conscious and responsible approach to online civic participation. My analysis suggests that the notion of care of the self might be of special value to the civic computing scholarship, as a person must care for the self before he can truly care for the society. I

discuss how the notion of care of the self can contribute to the civic computing research paradigm.

# **Chapter 2. The Chinese Internet**

### 2.1 The Internet in China

On September 20, 1987, Yunfeng Wang, a professor in Beijing, sent an email entitled "Go beyond the Great Wall to the World" to Karlsruhe University in Germany (Hu, 2009). The email was the first attempt to use the Internet from the mainland. Since then, the Chinese government, the Chinese scientific and technological community, and the global academic community have worked together to connect China to the Internet. On April 20, 1994, China officially joined the Internet when it opened a 64K international dedicated circuit through the Sprint Corporation of the United States (CERN, 2001).

China has achieved important milestones in Internet development. By 1999, five years after China obtained Internet connection, more than 200 cities had commercial Internet access; Over 300 Chinese universities and more than 200 Chinese research institutes could connect (Franda, 2002). The government keeps investing in China's broadband infrastructure in the last two decades (Yee & Carsten, 2013).

Through two decades of rapid development, the Internet has become ubiquitous in China. According to the 2014 Internet report by the China Internet Network Information Center, a government institute in charge of Internet affairs, by December 2014, 649 million Chinese citizens were Internet users, with an Internet penetration rate of 48%, (CNNIC, 2015). CNNIC's survey of 76,000 people revealed that the majority of Chinese Internet

users ranged between 10 and 39 years old, constituting 78% of the whole Internet population (see Figure 1). Most have middle school or high school education (see Figure 2). The most common occupations are student, freelancer, and corporation staff (see Figure 3).

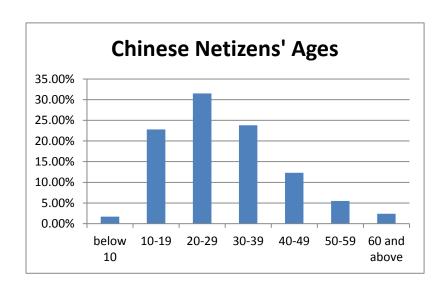


Figure 2. Chinese Netizens' Ages.

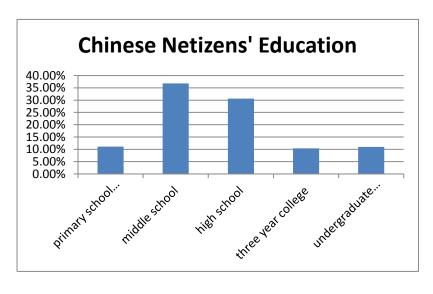


Figure 3. Chinese Netizens' Education.

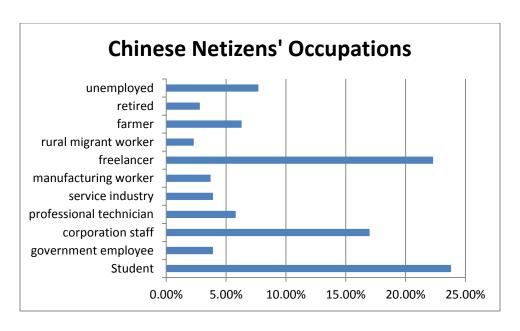


Figure 4. Chinese Netizens' Occupations.

### 2.2 Weibo in China

Social media are one of the most common Internet tools in China: 588 million Chinese Internet users used instant messaging tools; 248 million used a micro-blogging service; 129 million used online forums; and 109 million used blogging services (CNNIC, 2015). A McKinsey survey in 2012 reported that China had the most active social media population in the world, with 91 percent of respondents saying they visited a social media site in the previous six months, compared with 30 percent in Japan, 67 percent in the United States, and 70 percent in South Korea (Chiu et al., 2012). The study pointed out that Chinese Internet users spent more time (46 minutes per day) on social media than Japanese Internet users (7 minutes per day) and U.S. Internet users (37 minutes per day).

Weibo, launched by Sina in August 2009, is one of the most important micro-blogging services in China (Canaves, 2011). In September 2014, Weibo had reached 77 million daily active users and 167 million monthly active users. Among the monthly active users, 61% were male while 39% were female (Weibo, 2014). 94% of Weibo's site traffic comes from mainland China, according to Alexa Internet, a US-based company providing commercial Internet traffic data (Alexa Internet, 1996).

Compared to Twitter, Weibo has several distinct characteristics. Both Weibo and Twitter limit post length to 140 characters. However, users can express a lot more with 140 characters in Chinese than in English (Ding, 2011; Chen et al., 2011; Sullivan, 2013; Yeo & Li, 2012). As the renowned Chinese artist and dissident Weiwei Ai once said, "In the Chinese language, 140 characters is a novella" (Rosen, 2011). A news report compared a post's two versions (Millward, 2013), as shown in table 1. The Chinese version needs 140 characters, while the English one requires 465.

Table 2. a Comparison of Chinese and English posts.

	Chinese	English
Content	【苹果第二财季净利 95 亿美	[Apple's second-quarter net profit fell
	元 同比下降 18%】苹果今天	18% to \$9.5 billion] Apple today
	公布了截至 3 月 21 日 2013 财	unveiled a report for the second quarter
	年第二财季财报。报告显	earnings of the fiscal year ending March
		21, 2013. According to the report, the

	示,该季度苹果实现营收 436	company obtained quarterly revenue of
	亿美元,同比增长 11%;实现	\$43.6 billion, up 11% year on year. The
	净利润 95 亿美元,同比下降	company gained a net profit of \$9.5
	18%,十年内首次出现季度利	billion, down 18% year on year. This was
		the first quarterly profit shrinking within
	   收益 <b>10.09</b> 美元,同比增长	a decade. Diluted earnings per share
	23.0%。	were \$10.09, up 23.0% year on year.
Character	140	465
count		

Long micro-blog (长微博), a post with pictures of text rendered in a bitmap, is a frequently used feature supported by third-party applications. This feature allows users to type many more than 140 Chinese characters. Figure 5 shows an example of long micro-blog. The micro-blog contains a Chinese sentence in regular characters and one attached image displaying a substantial number of Chinese characters. Readers can click on "view less" to minimize the image and "full size" to expand it. Researchers have found that long micro-blog effectively circumvents censorship, because Weibo's sensitive word filtering mechanism cannot examine characters shown in images (Li, 2013).



Figure 5. An Example of Long Micro-blog.

Weibo encourages user interaction through many distinct features (Yang, 2012). Figure 5 compares Weibo and Twitter's posting functions in two screenshots from June 3, 2015. Whereas Twitter only allows users to add images to its text-based tweets, Weibo provides many content enrichment options, such as emoticon, photo, and video. The "topic" button allows users to create a hashtag. The "blog" button enables users to write a long micro-blog. Users can determine the audience of a micro-blog by selecting from a dropdown menu that includes "public," "friend circle," and "only me." The "public" option

means all Weibo users can view the micro-blog. The "Friend Circle" limits the audience to users who both follow and are followed by the author.



Posting on Weibo



**Posting on Twitter** 

Figure 6. A Comparison of Posting function on Weibo and Twitter.

While Twitter supports micro-blogging as its core function, Weibo integrates a variety of online services, such as music streaming, video sharing, and shopping. Figure 6 shows its

video sharing service. This single platform's myriad of services attracts Chinese Internet users and contributes to its user base's rapid growth (Yang, 2012). In 2014, Weibo users shared videos 521 thousand times between 7AM and 10AM, and watched videos 1 million times between 8PM and 11PM (Weibo, 2014).



Figure 7. Weibo's Diverse Functions.

When the Chinese government tightly controls traditional media such as newspaper and television, social media such as Weibo provide citizens with alternative venues for expressing opinions and critical debates. In an analysis of Weibo discussion topics,

Rauchfleisch and Schäfer found that users discuss a wide range of public issues, from environmental issues to local protests (Rauchfleisch & Schäfer, 2014). They pointed out that these discussions varied in longevity, participant number, and government attitude towards them. For example, environmental issues are a more open and less regulated topic on Weibo. The Chinese government acknowledges such issues and tolerates related debates and criticisms. Open debates that include a strong degree of criticism towards local authorities' misconduct are possible on Weibo.

## 2.3 Internet Censorship in China

China's sophisticated and rigorous Internet censorship has evolved into a comprehensive system that regulates Internet infrastructure, commercial and social use, and legal domains (Liang 2010).

The Great Firewall is the primary technical means of restricting information access at the infrastructure level. The Great Firewall blocks undesirable foreign websites such as Facebook and Twitter, regulates access and content, and monitors Internet use. At the national level, the government controls the gateways to international networks and licenses the operation of Internet service providers. At the bottom level, ordinary users must register with Internet service providers (Li, 2010; Liang & Lu, 2010; MacKinnon, 2011). A special Internet police force enforces the government's censorship regulations (Liang & Lu, 2010; Tsui, 2003).

MacKinnon, a renowned Internet freedom advocate and former journalist, described a range of government tactics:

Cyber-attacks against activists, dissidents, and Chinese exiles could compromise their computer networks and email accounts. Device and network controls involve pre-installing information filtering and tracking mechanisms in computers and routers sold in China. Domain-name controls prevented ordinary individuals from registering Internet domain names ending in ".cn." Localized disconnection and restriction referred to shutting down connections in specific locations entirely to ensure that locals cannot use the Internet or mobile phones to organize protests. Surveillance works through identity registration for Internet usage, monitoring software, and the compliance of Internet companies. The government proactively steers online conversations through party members, government officials, and "fifty-cent party," people paid to write posts in favor of their employers. (MacKinnon 2011)

The censorship laws and regulations are pervasive yet ambiguous. Businesses and individuals face difficulties in complying. Margaret Roberts, a professor from University of California at San Diego studying censorship and propaganda in China, noted:

It is illegal in China to write or distribute any information online that "harms the interest of the nation," "spreads rumors or disturbs social order," "insults or defames third parties," or "jeopardizes the nation's unity." Punishments are similarly

ambiguous and unevenly administered—violating online information laws could result in punishment as severe as jail-time to as trivial as having your account shut down or simply removing one offending social media post. The wide range of information that could qualify under these laws keeps online users in China guessing as to what types of information are indeed off-limits and what types of punishment could be meted out for spreading the information. (Roberts, 2015)

By providing only highly abstract terms such as national interest, social order, and national unity, the government affords itself more flexibility of interpretation and manipulation (Cheung, 2006; Liang & Lu, 2010). Attempting to comply with this ambiguous regulation, many businesses adopted even more sweeping self-censorship mechanisms (Human Rights Watch, 2013; Liang & Lu, 2010).

The government's high pressure enables such self-censorship among businesses and individuals. Both domestic and foreign Internet corporations such as Google and Yahoo altered their products to accommodate censorship requirements. A case study of keyword blocking on Weibo during the 2012 National Congress election reported that Weibo actively manipulated and filtered the search results of certain government officials' names (Ng, 2013). In a close examination of Weibo's self-censorship mechanisms, Lee reported four systems:

Security check group is a team focusing on manually checking micro-blogs. Its members can delete problematic content and warn the authors.

User verification team monitors celebrities' accounts and communicates with them in case of content deletion.

Negotiation system is in charge of interpreting the government regulations.

Silencing system sends out account suspensions or account deletions. (Li 2013)

The government has developed nuanced censorship strategies that vary across different regions. Bamman et al. studied China's content deletion practice on social media and reported stricter censorship in outlying provinces such as Tibet than in eastern areas (Bamman 2012).

Censorship targets content perceived to potentially spark collective action. King et al. conducted a large scale, multiple source analysis of deleted social media content on the Chinese Internet (King, Pan, & Roberts, 2013). They documented that the censorship system silenced comments that represent, reinforce, or spur social mobilization, regardless of content. Such censorship's purpose is not to suppress government or party criticism. In an analysis of the Internet's political impact, Givens and MacDonald explained that online exposure of corruption and malfeasance at lower level governments can help the central government to monitor its local agents (Givens & MacDonald, 2013). The

government tolerates frustrated citizens' online debates as long as they do not develop into offline actions, which could cause societal instability.

Citizens have various means to circumvent censorship. They can adopt technical methods such as proxy servers and email to access restricted information (Cherry, 2005; MacKinnon, 2007). They can discuss sensitive topics using substitutes for blocked keywords (Jiang, 2014; Mina, 2014). For example, "harmony 和谐" refers to the ideology of social harmony proposed during Hu Jintao and Wen Jiabao's administration (2003-2013). People use "river crab 河蟹," a homophone of "harmony 和谐," to circumvent the list of sensitive words (Yang & Jiang, 2015).

No consensus has formed regarding how Chinese citizens view and accept censorship. Wang and Mark's survey reported that people with longer Internet usage experience tended to accommodate censorship (Wang & Mark, 2015). They suggested that more and more people would accept censorship as a normal consequence of Internet use. Roberts' study of blog censorship found that censorship does not deter the spread of information or induce self-censorship (Roberts, 2015). Instead, awareness of censorship motivates more writings about politics.

# 2.3 Summary

The Chinese Internet has rapidly developed over the last two decades. The explosion of social media marked a new era in which Chinese citizens gained enormous freedom of

speech and rich information sources. Yet, the Chinese Internet remains a highly regulated online environment for civic participation, influencing citizens' civic discussions and Internet practices.

# Chapter 3. On Micro-blogging and China

My dissertation builds on the HCI research on micro-blogging and studies of the Internet in China from HCI and related fields, such as communication studies, social science, political science, and cultural studies. I review the literature in this chapter.

## 3.1 HCI research on micro-blogging

This section describes major topics in micro-blogging research from the HCI community.

Topics include motivations, privacy, credibility, and micro-blogging for civic purposes, such as online political deliberation, social movements, and coping with crises.

### 3.1.1 Motivations behind Micro-Blogging

People write micro-blogs to focus on themselves and/or share information. Java et al. analyzed 76 thousand Twitter users and their posts (Java et al., 2007). They observed four primary user intentions. Most Tweets talked about daily routine or activities, such as eating lunch. One eighth of all posts collected by this study contained a conversation between users. 12% shared a URL. The rest reported the latest news or commented on current events. Naaman et al. confirmed that a large amount of content that Twitter users shared focused on themselves (Naaman, Boase, & Lai, 2010). They explained that these self-focused messages helped maintain relationships with their friends by enhancing the

authors' presence. Users who tended to share information were more conversational through posting mentions and replies to other users.

People prefer to read informative content on micro-blogging platforms. André et al. used a website to invite Twitter users to rate a select set of tweets (André, Bernstein, & Luther, 2012). Users reported that 36% of the collected tweets were worth reading, 25% were not worth reading, and 39% were neutral. They showed that people strongly disliked uninformative tweets such as conversation, presence maintenance (e.g., "Hullo twitter!"), and current activities (e.g., "Having dinner right now!"). A study respondent explained, "sorry, but I don't care what people are eating." The respondents were interested in reading informative tweets that introduced new content, such as URLs or breaking news. Receiving daily mundane details is a major reason for un-following behavior on Twitter, according to a study of Korean users (Kwak et al., 2011). As a correspondent in this study commented, "I think Twitter is a place to exchange ideas of certain quality, while it can also be a place to express personal feelings. ... They [some tweets] are really about mundane details. 'Oh, meat is good' is completely useless to me."

Ordinary users engage in micro-blogging services differently than professionals such as celebrities, organizations, and journalists. De Choudhury et al. analyzed Twitter posts and users involved in discussions about eight news events, including localized events such as a music festival, and national events such as the 2011 Egyptian revolution (De Choudhury et al., 2012). They found that localized events attracted a large number of ordinary

individuals to post a large portion of the content. National events such as the WikiLeaks news involved many professionals. Ordinary individuals tended to reflect more on their personal experiences and sentiments, while professionals were prone to sharing information by pointing to external information sources via URLs.

#### 3.1.2 Privacy Concerns about Micro-Blogging

Social media users have privacy concerns regarding their posted information. In a Twitter user survey investigating social media ownership issues, Marshall and Shipman found that people held varying understandings of what they considered private and publishable online (Marshall & Shipman, 2011). While some users published posts about everything from eating to sleeping, some meticulously limited personal information.

Privacy concerns influence user behaviors on Twitter. Sleeper et al. conducted a survey of Twitter users' regrets (Sleeper et al., 2013). They pointed to revealing too much information as the most common regret, constituting 25% of all regrets. Regrets can lead to deleting tweets. Hecht et al. studied behaviors with regard to Twitter user's location profiles (Hecht et al., 2011). They found that 34% of the users did not provide real location information, either inputting fake locations or sarcastic comments. Even when users entered the location information, they almost never specified it at a scale more detailed than their city.

#### 3.1.3 Credibility of Micro-Blogging

Traditional media enjoys a higher level of trust than social media. Thomson et al. studied information shared on Twitter regarding the Fukushima Daiichi nuclear power plant disaster in Japan(Thomson et al., 2012). They found that the majority of relevant tweets referred to external sources. Among these sources, the highly credible ones were established institutions, traditional media outlets, and highly credible individuals. Johnson and Kaye conducted a survey of U.S. citizens' perceptions of political information credibility for social media and traditional media (Johnson & Kaye, 2015). They reported that all traditional media except Fox News were considered more credible than social media sites. Fox News and Twitter were the least credible, yet Twitter still attracted many political information seekers. Johnson and Kaye explained that people used traditional media and social media with different motivations. They used traditional media for credible information. They stressed social media as a means to avoid traditional media bias.

Users judge information credibility based on heuristic features, most of which relate to author credibility. Morris et al. conducted an experimental study of how Twitter users perceived credibility (Morris et al., 2012). They reported that features associated with low credibility included non-standard grammar and punctuation, and using either the default profile image or a cartoon or avatar. Following a large number of users also lowered credibility. Morris et al. listed several features that could enhance a tweet's credibility,

such as the author's influence, expertise, and reputation. Thomson et al. found that during the Fukushima disaster, journalists, academics, professionals, and locals had high credibility, while unidentified sources, non-locals, and conspiracy theorists had low credibility (Thomson et al., 2012).

Twitter users can collectively verify rumors. Interviewing social media users in the aftermath of the 2013 Boston Marathon Bombings, Huang et al. found that rumors spread when individuals attempted to make sense of incomplete information (Huang et al., 2015). They reported the perception among their interviewees that sharing was helping. Once their interviewees realized that they had shared a rumor, they deployed different strategies to deal with it, such as retracting or deleting the message. Mendoza et al. studied Twitter user activities related to the 2010 earthquake in Chile (Mendoza et al., 2010). They reported that false rumors received significantly less re-tweets and confirming tweets, and more denying tweets and questioning tweets, when compared to confirmed truths.

Culture influences people's credibility perception. Yang et al. experimented with U.S. Twitter users and Chinese Weibo users, finding that Chinese users showed relatively high trust in and dependence on micro-blogs as information sources, and greater acceptance of anonymously and pseudonymously authored content (Yang et al., 2013). They hypothesized that more social media forms might cater to Chinese people's collectivist

cultural orientation. Such peer-produced social media content can counteract traditional media's information deficiency resulting from censorship.

### 3.1.4 Micro-Blogging for Political Deliberation

Micro-blogs have become an important online venue for political activities. Hemphill et al. examined congressional representatives' Twitter activities (Hemphill et al., 2013). They showed that congress members used Twitter as a broadcast channel rather than an engagement tool. They frequently used Twitter to advertise their political positions and to release information. However, they rarely requested political actions from their supporters.

Scholars differ in opinion regarding the influence of Twitter over ideological polarization. Semaan et al. reported in a study of U.S. social media users' political discussions that people actively sought diverse information and discussants (Semaan et al., 2014). Some social media users changed their political views after these interactions. Morgan et al. reported similar findings in their study of news sharing behavior on Twitter (Morgan et al., 2013). They showed that Twitter users shared news in similar ways regardless of the outlet's perceived ideology. Users who shared more news content tended to quickly include outlets with opposing viewpoints. However, a statistical study of Twitter content in the aftermath of the 2013 Egyptian revolution found that Twitter users tended to have

stable opinions (Borge-Holthoefer et al., 2015). Switching opinion rarely occurred in their study.

### 3.1.5 Micro-Blogging for Social Movements

Local members of social movements can create original, critical information on social media. Monroy-Hernández et al. studied local individuals attempting to aggregate and disseminate information to a large social media audience in the Mexican Drug War (Monroy-Hernández et al., 2013). They found that some individuals emerged as social media curators who selectively identified and shared content from traditional media and their followers, because of the government's concealment of information. Wulf et al. described how local protestors adopted social media for information diffusion during the Tunisian revolution in December 2010 and January 2011 (Wulf et al., 2013). Social media more effectively publicized local events to the whole country than traditional media such as satellite television programs.

In social movements, information dissemination through micro-blogs relies on the work of local participants and social media users. In an analysis of Twitter data during the 2011 Egyptian uprising, Starbird and Palen divided Twitter content into original information, which appeared for the first time, and derivative information, which was already available (Starbird & Palen, 2012). Retweets, one form of derivative information, constituted nearly 60% of tweets. Primarily remote Twitter users retweeted these messages, which Starbird

and Palen argued did not constitute noisy output. Helping in information filtering and recommendation, retweets played an important role in expressing social solidarity to both local activists and broader Twitter users, which in turn sustained retweeting itself.

### 3.1.6 Micro-Blogging in Crisis

Micro-blogs facilitated information dissemination during crises such as natural disasters and political unrest. Vieweg et al. conducted a statistical analysis of Twitter content during the April 2009 Oklahoma Grassfires and the March and April 2009 Red River Floods (Vieweg et al., 2010). They categorized the broadcasted tweets by geo-location information and situational updates. Geo-location information includes clearly identifiable location. Situational updates refer to time- and safety-critical information, such as warning, fire line location, and evacuation messages. They found that Twitter could help enhance people's situational awareness. Qu et al. studied Weibo content during the 2010 Yushu earthquake (Qu et al., 2011). They found that Chinese used the site for four major purposes: situational updates, opinion expression, emotional support, and calls to action.

Micro-blogs allow remote users to consciously volunteer information-related work beyond re-tweeting. Starbird and Palen studied Twitter users after the 2010 Haiti earthquake (Starbird & Palen, 2011). They reported two types of volunteer work. Some volunteers translated important information into TtT tweets, a special syntax designed

for improving Twitter communications' efficiency for disaster events (Palen, 2009). Others worked to move information between sources, such as victims and response agencies. Sarcevic et al. studied medical organizations' Twitter behaviors during the 2010 Haiti earthquake (Sarcevic et al., 2012). They found that although small medical organizations only used Twitter to broadcast, Twitter users might volunteer to make connections when these organizations possess resources that potential partners might need.

Micro-blogs support citizens to support each other and express emotion in response to crises. De Choudhury et al.'s study of emotions on social media during the Mexican Drug War showed that Mexican citizens used Twitter to express their emotion, such as frustration, grievances, and anger about their situation (De Choudhury et al., 2014).

#### 3.2 Research on the Internet in China

This section analyzes relevant work on the Internet in China. Topics cover motivations, public discussions, activism, and civil society.

#### 3.2.1 Motivations behind Internet Usage

Researchers have shown that entertainment, education, and socializing are the primary motivations for Internet use in China (Leibold, 2011; Shen et al., 2009; So & Westland, 2009). Zhu and Chang reported a survey study of motivations for using social media (Zhu

& Chang, 2014). They identified major motivations as networking, learning, seeking entertainment, and seeking social support. In a study of Internet news consumption in Shanghai, Shen and Liang reported that residents paid more attention to entertainment and finance and economy news than to social and political news (Fei Shen & Liang, 2014). These studies show that the Chinese Internet does not represent a revolutionary force initiating radical social and political changes.

Information seeking and social networking were the two major motivations for using Weibo, according to a study conducted by Zhang and Pentina (2012). Their online survey of 234 users reported that Chinese users utilized Weibo to seek information related to news, entertainment, and career, and to connect to their friends and colleagues.

Western counterparts. Yu et al. analyzed trending topics on Weibo and Twitter by selecting the top 20 influential accounts (Yu et al., 2011). They reported that Weibo's largest trends comprise media content such as jokes, images, and videos. Among the 20 accounts, two were fashion-related, one was an online travel magazine, one was a Chinese celebrity, and the remaining sixteen focused on collecting user-contributed jokes, movie trivia, quizzes, and stories. The majority of the 20 Twitter accounts belonged to popular news sources such as CNN, CBS news, and Washington Post. This difference between Weibo and Twitter highlighted Weibo as an entertainment-oriented microblogging service.

#### 3.2.2 Social Media for Public Discussions

Social media provide Chinese citizens an unprecedented opportunity for civic discussions, challenging traditional media's official narratives. Zhou conducted a content analysis of blogs discussing the 2006 dismissal of Shanghai's former mayor (Zhou, 2009). She reported that Chinese bloggers quickly responded to the event, with relatively high political sensitivity. These bloggers demonstrated a strong tendency to produce original posts rather than share posts. The blogs generated diverse opinions about the event, as opposed to the unanimous voice expressed across traditional media. Wu analyzed discussions in an entertainment-based online community (Wu, 2014). She found that after community members became familiarly acquainted, entertainment conversations might develop into serious societal discussions.

A wide range of civic discussion topics occur on Weibo. Rauchfleisch and Schäfer studied the topics of Weibo discussions (Rauchfleisch & Schäfer, 2014). They argued that open and critical debates could occur under specific circumstances despite strict censorship They reported ongoing, lengthy, and often intense debates about issues that the government acknowledges, such as environmental issues, food security, or climate change. Breaking news events could trigger temporary discussions, involving large numbers of discussants. However, censors would closely monitor these discussions. Citizens used encoded discussions, including linguistic transformations of sensitive words, to talk about sensitive topics and circumvent censorship. Citizens may publicize local

incidents and initiate open debates with strong criticism against local authorities. Political events in foreign countries, such as the US presidential election, often inspire open debates among Weibo users. Such discussions enable citizens to debate sensitive questions such as democracy and criticize their own government under the camouflage of commenting on a foreign phenomenon.

Massive online discussions and protests can reconfigure the relationship between citizens and the government. Hung studied a highly publicized wrongful conviction in 2010 (Hung, 2010). In 1999, the local court sentenced Zhao Zuohai, a local resident, to imprisonment for murdering his neighbor. However, the supposed victim returned home alive in 2010. Both traditional media and the Internet reported and discussed this incident and criticized China's court system. Under the unprecedented pressure, the Chinese government acquitted Zhao of all charges, and released him within a week after his resident's reappearance. Three days later, Zhao received state compensation and a formal government apology. Six days later, judges in charge of Zhao's case received suspension. Less than two months later, the court system implemented new evidence rules to prevent coercion during forensic process. Hung argued that the Internet empowers citizens by creating a more responsive, transparent, and accountable government. In a case study of online discussions regarding local authorities forcing a late-term abortion, Shi reported how widespread social media condemnation forced local authorities to apologize to and

compensate the victim (L. Shi, 2013). Shi noted that social media supports citizens to seek justice against unlawful government practices.

#### 3.2.3 Social Media for Activism

Social media enable large numbers of citizens to participate in online activism. For example, human trafficking is a serious social problem in China. Wang conducted a survey of participants in SNAPSHOT, an anti-child trafficking activism initiative on Weibo (Wang, 2012). SNAPSHOT encouraged people to take pictures of street children suspected to be a trafficked victim, and to share these pictures on Weibo. The goal was to reunite trafficked children and their families, and to facilitate police in combating this crime. By the end of February 2012, participants uploaded over 7,000 pictures. Wang reported that an overwhelming majority of the informants believed that sense of responsibility motivated them.

Successful activism sometimes relies on carefully framing the government's role. Fedorenko and Sun studied how environmental non-governmental organizations (NGOs) and activists led a 2011 online air pollution campaign (Fedorenko & Sun, 2015). Their activism resulted in government-mandated air quality industry standards. Fedorenko and Sun found that Weibo provided an important platform for NGOs and activists to gain social influence and raise public awareness. However, to mobilize Chinese citizens, "framing cannot be confrontational." Expressing appreciation of governmental efforts

and avoiding harsh critique was critical to the campaign's success. NGOs and activists widely acknowledged, publicized, supported and thanked the government for its efforts.

Scholars have not formed a consensus regarding the degree to which technologies can empower Chinese citizens. Pessimistic views insist that Chinese Internet users are becoming more inclined to pursue entertainment and social rather than civic purposes (Damm, 2007; So & Westland, 2009; Leibold, 2011). Optimistic scholars suggest that the Internet's liberating power will eventually contribute to China's democratization (Yang, 2003; Tai, 2006).

### 3.2.4 The Internet and Civil Society

The Internet facilitates the emergence of civil society in China (Moore, 2001; Shieh & Deng, 2011; D. D. H. Yang, 2004). According to Anheier:

Civil society refers to the set of institutions, organizations, and behaviors situated between the state, the business world, and the family. Specifically, this would include voluntary and nonprofit organizations of many different kinds, philanthropic institutions, social and political movements, forms of social participation and engagement, the public sphere, and the values and cultural patterns associated with them. (Anheier, 2000)

The Internet facilitates civil society activities. Yang analyzed the impact of the Internet on civil society development in China through survey and case studies (Guobin Yang, 2010).

He noted that the Internet had given rise to open critical debates and facilitated the articulation of social problems that could attract the attention of more citizens. Internet tools such as blogs and micro-blogs allowed citizens to discuss public issues in a less restricted environment (Rauchfleisch & Schäfer, 2014; Zhou, 2009).

Existing social organizations have developed online presence through Internet usage (Yang, 2010). The Internet have shaped social organizations by expanding old principles of association, facilitating existing organizations' activities, and creating a new associational form, the virtual community. Environmental organizations in China, as Liu reported (Liu, 2011), were able to mobilize citizens to effect social changes.

### 3.3 Summary

In this chapter, I reviewed related work on micro-blogging and the influence of digital technologies in China. I argue that a gap exists between HCI and other disciplines' research with regard to the use of technologies in civic participation in China. HCI research on micro-blogging has demonstrated the instrumental value of micro-blogging in different civic contexts. However, little discussion is about micro-blogging in China.

Most of the research on the influence of technologies in China comes from the humanities and social sciences, primarily investigating and interpreting content as well as the cultural, historical aspects of practices. This body of research largely views technologies as a venue

for online activities or a communication channel, lacking dedicated analysis of the function and role of technologies in socio-technical practices.

In this dissertation, I attempt to contribute to the knowledge about technologies in China by bridging the gap between HCI studies and other disciplines.

# **Chapter 4. A Complicated Media Context**

Chinese citizens had few information source choices from the 1950s to the early 1980s (Ding, 2002; Fang, 2002). A small number of state-owned television channels, magazines, newspapers, and radio stations dominated people's means for learning about their country and the world (Akhavan-Majid, 2004; Keng, 1994; Yu, 2006). Mass media was dedicated to state propaganda and ideological control (Ding, 2002; Goldman, 1994; Hood, 1994; Stockmann & Gallagher, 2011). Fang depicted the state of journalism during the 1970s:

News was highly politicalized. Everything such as news report and commentary reports was about politics and served political purposes. To construct the perfect role models, journalists would fabricate nonexistent details. When reporting news, they would make allusive remarks or accusations to disparage political figures. They would edit news photos or even historical photos to serve as weapons of political struggles. (Fang, 2002)

新闻严重政治化,新闻报道,报纸评论一切都从政治出发,为政治服务。塑造典型人物可以任意虚构细节,报道新闻事件可以含沙射影,指桑骂槐,对新闻照片可以动手脚,甚至对历史照片也可以任意涂改,为我所用。

China's media has drastically changed over the last three decades. Many commercial mass media outlets have emerged because of China's transition from a planned

economy to a market one (Lee, 1994; Wei & Pan, 1999). These outlets compete for consumers by producing diversified opinions and content. Reporters and journalists have become increasingly adroit at evading government censorship (Yu, 2007; Liu & McCormick, 2011; Bei, 2013). The Internet's introduction marked a new era in which citizens can easily access a variety of mainland and Western media at an unprecedented level (Tai, 2006; Shirky, 2011; Wallis, 2011; Pang, 2013).

Like their Western counterparts, Chinese citizens now have access to countless information sources. Unlike their Western counterparts, citizens have only recently left an era when all the mass media content comprised carefully crafted government narratives. Even today, citizens still face strict censorship.

Chinese citizens live in a complicated media context shaped by market forces, government, culture, and history. In this dissertation, "media context" refers to the totality of methods for people to acquire information, including mass media and social media. A related notion is American media theorist Neil Postman's "media ecology." For Postman, the term refers to media's structure, content, and social impact. Study of media ecology "tries to find out what roles media force us to play, how media structure what we are seeing, why media make us feel and act as we do" (Postman, 2015). The term represents a deterministic view of technology in regulating and shaping people (Strate, 2015). This concept is unsuitable in this dissertation, as it suggests that media

completely control people's minds and actions. My primary focus is media's role in interacting with people and transmitting information.

The complicated media context presents people with challenges in understanding the Umbrella Movement, a remotely located political event. My dissertation project explores interaction between people and their media context, and social media use during the process of understanding the movement.

#### 4.1 Information about the Umbrella Movement is Pervasive

My participants frequently visited social media sites such as Weibo, QQ, and WeChat<sup>1</sup>, using smart phones to stay connected to them. They received frequent notifications from the mobile devices.

For many of my participants, social media initially drew their attention to the Umbrella Movement. Shuishang, a 24-year-old female Weibo user, told me how she learned about the movement from Weibo:

Yubo Kou: Can you please tell me how you started to pay attention to the Umbrella Movement?

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<sup>&</sup>lt;sup>1</sup> Both QQ and WeChat belong to Chinese company Tencent Holdings Limited. Tencent's report in November 2015 pointed to 860 million monthly active accounts on QQ, and 650 million on WeChat (Tencent, 2015).

Shuishang: Yeah, I paid attention to the event last year. At that time, I often saw information about the movement show up on the first page of Weibo [because she followed Weibo accounts sharing such information]. Sometimes, the information was right in Weibo's recommendation list of trending topics. Honestly speaking, it is impossible to ignore the movement.

Shuishang's answer underlined the significant role of social media in bringing a wide range of information to users. Shuishang was uninterested in Hong Kong before the movement. She did not pay particular attention to remote political events. However, the movement's information still reached her because of two particular functions of social media. The "following" function delivered information from individuals or news agencies that cared about the movement. Shuishang could manage this function by carefully determining whether to follow specific persons. On the contrary, the "trending topics" function autonomously and hourly updated Shuishang on the latest topics. She eventually started to notice the Umbrella Movement.

Similarly, Baozi, a 20-year-old male college student, pointed to social media as his initial information source. He explained:

I have friends who were studying in Hong Kong's universities when the movement happened. They often posted topics related to the movement in WeChat's Friend Circle.

WeChat is a common social media tool in China. It is available on both mobile devices and computers. Its Friend Circle is similar to Facebook, in that people can read friends' posts.

As opposed to Weibo, WeChat primarily supports connection and communication among relatives and friends who already have offline social connections.

Similar to Shuishang's experience, Baozi received information about the movement from followed social media accounts. In contrast to Shuishang's case, WeChat delivered much latest information from Baozi's friends and relatives, rather than less familiar accounts on Weibo. On social media people were more inclined to trust information from people with offline connections (Morris et al., 2010). Baozi's story of WeChat signified social media's ability to aggregate and present information at an unprecedented pace.

Shuishang's last comment that the Umbrella Movement was "impossible to ignore" did not suggest she meant to ignore the movement's information. Instead, the comment stressed an important attribute of contemporary media context — information pervasiveness. Important information such as news about the Umbrella Movement could rapidly reach a large audience.

Regarding the characteristics of information and its transmission, the American writer Stewart Brand famously commented at the first Hackers' Conference in 1984 that:

Information wants to be free. Information also wants to be expensive. Information wants to be free because it has become so cheap to distribute, copy, and recombine—

too cheap to meter. It wants to be expensive because it can be immeasurably valuable to the recipient. That tension will not go away. It leads to endless wrenching debate about price, copyright, 'intellectual property', the moral rightness of casual distribution, because each round of new devices makes the tension worse, not better. (Brand, 1987).

Stewart Brand addressed this comment to media and publishing industries, pointing to the tension between the low cost of information transmission and the interests and attitudes of corporations and institutions who own the means of distribution. My findings about how social media drew participants' initial attention echoed Stewart Brand's statement on the low cost of information transmission. Information about the movement indeed wanted to be free. Yet my findings stressed that information originated from multiple sources. It is challenging, if not impossible, to absolutely block information transmission in the contemporary media context.

When my participants began to pay attention to and wanted to know more about the Umbrella Movement, they encountered information challenges. Their media context presented much contradicting information from multiple information sources. Information, particularly valuable information, "wants to be expensive," because of the tremendous amount of false or misleading information. In the following sections, I will detail my participants' tensions and struggles with their complicated media context.

#### 4.2 The Mainland Media and Censorship

Participants obtained most of the Chinese content from the mainland media, including both mainland mass media and mainland-based news websites. Many of these outlets owned social media accounts. By the end of 2013, 37 thousand news agencies had opened Weibo accounts (The People's Daily, 2013). They frequently posted news at the same speed as their primary punishing venue such as newspaper and news website.

Almost all my participants have undergone the time when several major party newspapers dominated their news consumption. Remembering the government's monotonous voice permeating the media, they acknowledged the fast development of the mainland media in recent years.

Sihao, a 36-year-old male factory worker, described the diversity of available mass media sources in his life. He said:

Every morning there are numerous newsstands along the path from my home to the workplace. The newsstands sell at least 40 newspapers, besides several major party newspapers such as the People's Daily. In terms of television channels, my province has seven and my city has six. Some districts in my city have their own channels. I can also watch satellite channels from other provinces and cities. To sum up, my television provides almost 300 channels. Many of these channels are commercial ones. China Central Television (CCTV) does not have to worry about market share because it is

state-owned and the central government makes sure that every television receives its signal. However, the commercial channels need to compete for market share. They report a lot of news that the central government is not happy to see.

Sihao expressed appreciation of the many choices of mass media outlets. He knew that state-owned media such as CCTV would carefully follow the instructions from the government. He also knew that market-oriented media outlets would provide diverse voices, some of which would not meet the government's interests. Maifei, a 29-year-old engineer, offered additional details about the mass media's opposing stances:

I often read the newspaper of China Youth Daily. I remember many times this newspaper reported stories in an opposite viewpoint from party newspapers such as the People's Daily. Do you know the Southern Daily Newspaper Corporation? It has several popular newspapers that express different opinions.

Maifei was familiar with mass media that were different from the party newspapers. He valued the opposing stances among mainland mass media.

However, my participants were not completely satisfied with mainland mass media, recognizing the limitations. Cangqing, a 34-year-old engineer, expressed his disappointment with mainland television news. He said:

Mainland news television channels have been vague about the Umbrella Movement.

They only briefly mention it. So far, I have not seen one in-depth report on television.

It seems to me that these channels have some unspoken concerns and do not dare deliver all the information in a clear, straightforward way. When the term "occupy central 占中" first appeared in mainland news, I could hardly understand what it meant! I did a lot of online research to understand the context and causes of this event.

Cangqing's explanation highlighted how Chinese journalists struggled to balance with government agenda. They paid close attention to the tone, details, and volume of news report on the movement in order to comply with government's ambiguous agenda and news report regulations. Although the central government has never officially responded to the Umbrella Movement, the People's Daily, one of the major party newspapers, delivered a clear and firm message about the government's attitudes. In an article published on October 5, the People's Daily noted:

Hong Kong's prosperity and stability are hard-won and should be treasured, while Hong Kongers' free will shall not be held hostage to those organizers of the Occupy Central movement who have ulterior motives, critics appealed. (Xinhua, 2014)

To the central government, the movement represented a malicious plan to manipulate ordinary students and citizens, aiming to divide Hong Kong from China. The central government worried that spreading the movement's information would harm China's

stability. Because of the government's attitudes, mainland news only delivered vague information about the movement.

Unsatisfied with this limited information, Cangqing looked to his Internet tools. Mainland news drew Cangqing's initial attention to the movement, but traditional and Internet means worked together to meet his information needs.

As my interviews deepened, many participants began discussing how censorship constrained mass media and social media. They questioned the credibility of mainland media. Mingyue, a Weibo user and graduate student, talked about her perception of tailored information from mainland media. She said:

I am concerned about the Umbrella Movement. However, I do not really know much about it, because news media will always selectively report on political events. This is particularly severe for mainland media. Reports from ifeng.com (a Hong Kong-based news website) provide more insight. I have heard many rumors; however, credible information is scarce. I feel I can hardly know the truth behind political events.

For Mingyue, mainland media failed to provide sufficient information for understanding the movement. She did not trust it. She perceived a deep information gap that mainland media could not bridge. Another participant, Luzhe, a 21-year-old college student, expressed sentiment against censorship:

I cannot really confidently express either support or opposition to the Umbrella Movement. I feel I know little about it, mostly because the central government had largely limited my right and ability to obtain information. If the government does not allow transparency, there is no truth.

Luzhe's dislike of censorship signified the common perception of mainland media. People were well aware of censorship's existence and its influence over their information access.

They wanted to access to rich information sources as a basic right of Chinese citizens.

Recognizing censorship's negative influence, my participants emphasized the need to search beyond mainland media in order to understand the movement. Zhelu, a 37-year-old writer, pointed to the necessity of utilizing other offline and online methods. He said:

I have long noticed that some people tend to rush to comment on certain events after getting just a small amount of biased information from CCTV. However, they often do not really know the truth. What they know sometimes is the opposite of facts. I consider this phenomenon a severe consequence of China's long-term censorship. If a person wants to comment on the Umbrella Movement, she should at least read the major newspapers from Hong Kong. She should also climb the wall<sup>2</sup> to read some posts on Facebook. Only in this way can a person know the history, context, and

<sup>&</sup>lt;sup>2</sup> "Climb the wall 翻墙" refers to the action of circumventing the Great Firewall.

causes of the movement! It is simply stupid and ignorant when a person knows almost nothing about the movement and is still determined to side with the central government.

Zhelu criticized how long-term censorship shaped the attitudes, minds, and actions of some citizens. He was particularly concerned with the resulting narrow-mindedness, yet acknowledged the difficulty in rejecting its influence. Wang and Mark observed that users might gradually accept Internet censorship as normal, which was dangerous to the free exchange of information (Wang & Mark, 2015). Zhelu's case echoed such concern.

Aware of the negative influence of censorship, Zhelu emphasized the importance of taking advantage of a diverse media context, instead of only mainland media. He pointed to the Hong Kong media as an importance source of credible information.

I often encountered sharp criticisms of censorship when observing people's online discussions on Weibo. This excerpt is from a conversation between two users:

Joe: I visited more than ten provinces in China when I did voluntary work. I have met a number of people who experienced unjust government treatment. I have a question for you. Do you really know China? Are you a keyboard warrior sitting in your comfortable, air-conditioned room? If Google and Facebook can easily cause instability to China, as the government thinks, then China is probably too vulnerable.

Wenqiang: ... I know how mainstream media and people in the West view China. It is helpful to block certain foreign websites. For China, stability is the top priority. In China, you can criticize the government every day. Some people even live on this. Do you know that China has more so-called public intellectuals than Hong Kong's population? I also want to ask whether you really know China.

Joe: This is hilarious! Is there any evidence that websites such as Facebook and Google will destabilize China? Is there any evidence that China has more than seven million public intellectuals? To be honest, China would be much better if it did have so many public intellectuals. Last year, hundreds of thousands of citizens went to Beijing to report local governments' illegal actions. China's spending towards reaching stability has already exceeded its defense spending. Have you ever seen the villages where those citizens reside? Have you ever visited the psychiatric hospitals that were used to control those people?

The fierce exchanges between Joe and Wenqiang covered many aspects, ranging from national policy to personal knowledge. However, all the exchanges involved their opinions on censorship. They were aware of censorship, actively reflecting on it rather than passively accepting it. They cited other information sources in their media context that were not government censored. Despite their different stances towards censorship, both underlined the ability to access uncensored information.

Participants had developed mixed feelings about mainland media and criticism of censorship. They did not trust mainland media for delivering complete and credible information about the movement. They pointed to censorship as one of the primary causes. They realized that they should turn to other information sources.

#### 4.3 Weibo

My participants often obtained information from Weibo. However, they did not view Weibo as the primary information source for understanding the Umbrella Movement. They considered Weibo as a venue for the circulation of second-hand information—information that has undergone heavy edit and censorship and is often difficult to verify. Leiyu, a 21-year-old college student, explained Weibo's quality as an information source:

I visit Weibo every day. I follow more than one hundred accounts, which gives me many posts to read. However, I think I just read them for entertainment purposes. I glance through Weibo when I am having lunch alone. ... I think it is perhaps because I do not fully trust the information in the posts. The government or Weibo's administration team have censored and tailored a lot of it. If I were interested in particular topics, such as the Umbrella Movement, I would rather check out original information in other venues.

Leiyu's explanation suggested his perception of information quality on Weibo. He highlighted Weibo's role in drawing his initial attention, a phenomenon I discussed in

chapter 4.1. However, he did not consider Weibo's information sufficiently credible and objective, because it lacked originality. He perceived that censorship had severely damaged Weibo's originality and credibility. His coping strategy was to lower his expectation of Weibo's information and to highlight its entertainment value. He wanted to look for original information beyond Weibo.

Besides second-hand information, Weibo contained a large number of narratives, opinions, and sentiments towards the Umbrella Movement. Such content facilitated my participants' knowledge of the standpoints of different individuals, groups, institutions, and the government. Mingming, a 26-year-old programmer, talked about his view of the opinions on Weibo:

Part of the reason I enjoy reading Weibo is that I can read and analyze a variety of standpoints. In China, people's opinions and motivations are extremely diverse. There is the 50-cent party,<sup>3</sup> which works hard to speak for the government and the party. There is the half dollar party,<sup>4</sup> which works for the Western governments. There are public intellectuals who only criticize the government and our country. There are liberals who only speak in terms of freedom and democracy. There are conservatives

<sup>&</sup>lt;sup>3</sup> "50-cent party" refers to paid online commentators that speak in favor of the government. A 50-cent party member receives 50 cents for each pro-government post. Scholars estimated that the Chinese government hired more than 250,000 commentators (Calingaert, 2010).

<sup>&</sup>lt;sup>4</sup> "Half-dollar party" is a term derived from 50-cent party. It means paid online commentators who worked for the Western governments such as the United Kingdom and the United States.

who miss the Mao era. These people have very different interpretations of the Umbrella Movement.

Mingming's summary of the ideas circulating on Weibo could never be complete. However, he pointed to the emerging pluralism of political ideas in the Chinese Internet. Such phenomenon resonated with scholarly opinion that technologies would enhance pluralism in China (Tai, 2006; Taubman, 1998; Yang, 2003). Mingming acknowledged the diversity of political opinions. He refused to take these opinions for granted. He stressed this as an opportunity to "analyze" the information for his own understanding.

My participants encountered different opinions on Weibo every day. Their attitudes towards those opinions influenced their interaction with the Weibo information source.

Xuanwu, a 24-year-old graduate student, expressed his understanding and tolerance of a common sentiment against the movement. He said:

Most mainlanders I see on Weibo oppose the movement. Nationalism is perhaps the major cause. Nationalism can blind people. For example, a few years ago, there were patriotic and anti-Japan marches on the streets. During those events, people destroyed several stores that sold Japanese brands and damaged vehicles made in Japan. It seemed that nothing was more important than nationalism. Besides nationalism, the mainland media played a role in influencing people. When people rushed to criticize the movement, they neglected the movement's most basic causes,

such as Hong Kong society's ever-increasing wealth inequality. At this point, nationalism is everything. For them, the movement's appeals no longer matter. For them, the movement represents the betrayal of China. For them, nationalism is everything. I consider this as a common flaw in thinking among the Chinese netizens. This leads to some popular Internet slang, such as the 50 cent party and the half dollar party. I think this phenomenon is also related to the educational level of the public. I believe that as time goes by, people will become more and more rational and cautious. At least some of my classmates are rational and critical about political events. They do not easily believe the opinions from any source. I believe that there will be more and more people like this in the future. I do not agree that we mainlanders have been brainwashed, as Western media and the Hong Kong media claim. I think we just have different information about the movement and we interpret it differently. Everyone is capable of sympathy. I think the movement does not deliver accurate information about the difficulties that Hong Kong citizens face in their life. Instead, the movement focuses on resisting and objecting the Hong Kong government. We see the antipathy instead of sympathy among most Chinese mainlanders.

Xuanwu's thoughtful explanation pointed to many causes behind the mainlanders' antipathy to the movement. Importantly, he did not simply approve or disapprove of the antipathy, however common it is. He attempted to understand how the public generated this opinion and tried to sympathize with the movement.

Xuanwu's account indicated a sophisticated way of processing information and opinion from Weibo. He did not view the movement or the mainlanders' attitude as an isolated event. He utilized his historical knowledge of previous events, such as the "patriotic, anti-Japan marches," and his observation of the mainland media's bias to explain the social and historical context for the opinions on Weibo. He analyzed the socio-economic causes behind the movement and pointed to the misunderstandings between Hong Kong citizens and the mainlanders. The complicated nature of Weibo motivated Xuanwu to choose this analytical approach.

Participants frequently mentioned several types of people fueling Weibo's complex nature. They expressed discontent with the 50-cent party, the half-dollar party, and public intellectuals who did not express genuine opinions and only spoke to manipulate the general public.

No one publicly self-identified as a 50-cent party member or a half-dollar party member, possibly due to the insidious nature of this kind of job. However, participants mentioned paid commentators both in my interviews and in Weibo discussions. In interviews, participants claimed that they often encountered paid commentators. In Weibo discussions, I frequently observed accusations that someone was a paid commentator whenever they showed strong support for the government or exaggeratedly praised Western countries.

When discussing opinions on Weibo during the interviews, criticism of "public intellectuals," or "公知" in Chinese, became a recurring theme. The original meaning of the term refers to intellectuals "contributing to critical debates on major issues of public concern" (Marinelli, 2012). During the early developmental phase of social media in China, people enjoyed reading sharp criticism of China, the government, and the party. One of my participants used to find those opinions "refreshing" and "quite different from the mainland media." At that moment, the term public intellectual retained its original meaning.

However, the public has gradually dismantled the term in recent years (Jiang, 2014). People found that many self-proclaimed public intellectuals who had a large number of followers on Weibo, such as news commentators, scholars, and lawyers, were deeply biased. They often distorted information in order to attack China and praise democratic societies. "Public intellectual" became a Chinese Internet slang word for biased individuals.

Leizi, a company accountant, expressed his distaste for public intellectuals' opinions. He said:

Some of my friends like to repost content from public intellectuals without careful consideration. The content is sometimes ridiculous. Honestly speaking, I am not a big fan of those public intellectuals' Weibo posts. They laud the U.S. every single day. Any

information about the U.S. serves as evidence of the advantages of democracy and freedom of speech. Even mass shootings can demonstrate that U.S. citizens enjoy the right and freedom to own guns, which Chinese citizens do not have. I am tired of seeing such stances. Nothing is different when it comes to the Umbrella Movement. Those public intellectuals just extol the pro-democracy movement. They keep telling the same old narrative that Hong Kong and China deserve true democracy and the central government is evil and repressive. However, I doubt they know much about the movement's details.

Leizi pointed to public intellectuals' prevalence on Weibo and stated his caution towards them. He observed that their opinions were often baseless and should receive careful scrutiny. He distrusted public intellectuals. By criticizing public intellectuals, Leizi denounced the mode of thinking that always analyzed everything based on a predetermined ideology. He stressed the importance of analyzing events on a case-by-case basis. Jusi, a 29-year-old government employee, expressed a similar stance:

I will un-follow anyone who speaks like a public intellectual. I am simply disgusted with the sweeping ideas that everything from the government is wrong and everything that confronts the government is right. Yesterday I had a quarrel with a friend of mine on Weibo regarding the movement. He acted like a public intellectual. He kept telling me how evil the government is and how sincere the movement is. When I pointed out to him how much damage the movement had done to Hong Kong's society and economy,

he said it does not matter and it was just inevitable loss. I was astonished. How could he dismiss this as a trivial issue?

Jusi's story reflected his familiarity with the procedures and the logic of reasoning public intellectuals used to produce opinions. He gained this knowledge through his long-term engagement on the Chinese Internet. He chose to avoid the influence of such opinions on Weibo. However, even when he un-followed accounts deemed as public intellectuals, he could not avoid the prevalent "public intellectual" opinion his friend held.

Weibo is a complicated venue containing large amounts of information and many different opinions. Wang and Mark's comparative study of trust in social media news and official news showed varied perception of and attitudes towards these two types of media, highlighting the complex news information environment in China (Wang & Mark, 2013). My participants' accounts showed the perception of the Chinese and Western governments' penetration into the Weibo space, further complicating the information environment.

Abundant second-hand information and biased opinions might not really provide facts about the Umbrella Movement. However, they raised the awareness of my participants. The familiarity with the complexity of information and opinions on Weibo allowed my participants to understand the different biases, ideologies, and powers attempting to exert influence.

#### 4.4 The Hong Kong media

Hong Kong's media received little impact from censorship given Hong Kong's high autonomy. The Hong Kong media presented my participants an alternative method for knowing the movement. Yet they held complex feelings regarding it.

Participants understood that the Hong Kong media enjoyed greater freedom in journalism.

Hong Kong's media often presented more diverse content and opinions than the mainland media. A large number of my participants had watched Hong Kong's television channels for many years.

Hong Kong's media allowed my participants to obtain valuable information, such as first-hand reports about the movement, that was missing in mainland media. Dazhi, a 38-year-old government employee, told me his experience with Hong Kong's television channels. He said:

I watch Hong Kong's television channels a lot. I am a loyal consumer of several television programs from Phoenix Television and TVB jade (Hong Kong-based broadcasting companies). Recently there has been a lot of news coverage of the Umbrella Movement on these programs. I cannot say I totally agree with their opinions. However, their reports are indeed more vivid [than the mainland media]. I have seen pictures taken during the movement. Many of them were about student strikes. I feel those students are very sincere about their struggles and they truly care

for the future of Hong Kong. I have watched videos documenting some incidents during the movement. I can still remember the one recording police throwing tear gas into the crowd. I was shocked and worried about those innocent students.

Dazhi did not live in or near Hong Kong. He knew about Hong Kong primarily through Hong Kong's television channels. Original information containing pictures and videos from the Hong Kong media motivated him to sympathize with the movement participants. Dazhi's story showed that rich, credible information was more powerful and compelling than scarce information in engaging citizens.

While appreciating the valuable pictures and videos from Hong Kong's media, my participants maintained their doubt of those source's objectivity. Laoli, a 26-year-old graduate student, clearly expressed his doubt:

I usually read Hong Kong's newspapers and watch Hong Kong's television news channels. I even use Weibo to follow several television reporters, news anchors, or talk show hosts. I love their sharp, and sometimes critical, viewpoints. However, I began to have some doubt about their accounts of the Umbrella Movement. In fact, the more I see what they say about the movement, the more doubt I have. From what I have seen, their stances are similar. They always imply that the movement is genuine and represents Hong Kong, and that the Hong Kong and central governments are repressive and violent. I believe there are certain truths in these statements. However,

I think there must be some problems or weaknesses in the movement, since political events are messy. Unfortunately, I am not able to find that kind of information from those people.

Laoli had developed his own habit of information choices based on his interests and preferences. The shortcomings of the mainland media motivated him to choose more Hong Kong media outlets. However, he was critical of the Hong Kong media as well, hinting at its hidden bias. When participants perceived one-sided narratives, they became cautious.

My participants raised doubts about several primary Hong Kong media venues they frequented. For some participants, the doubt escalated into criticism. Jingji, a software group manager, complained about perceived bias:

I get information about the movement from ifeng.com, a Hong Kong website, and political debates from the television channels in Hong Kong and Taiwan. If you have ever watched those political debates, you know how endless and meaningless they are. They ignore basic historical facts. In the debates, politicians claim to pursue universal values such as freedom. However, they just want to manipulate ordinary citizens to strike and protest for Hong Kong's independence. Many of their activities are illegal and non-democratic.

Politicians' debate did not exist on the mainland media. Mainland citizens were able to watch such phenomenon from Hong Kong's and Taiwan's media. However, participants did not think highly of this democratic procedure. Instead, Jingji perceived the convoluted relationships between politicians and ordinary citizens. She was suspicious of elites' manipulation of citizens' on-the-ground activities. Similarly, Yanyan, a Weibo user, expressed criticism of the bias in Hong Kong's media:

I am not sure why some news media can be so cynical. ... Apple Daily, for example, is not professional at all. [It is] always trying to encourage people to protest.

Yanyan discovered the political tendency within Hong Kong's media. She hinted on the values of journalism ethics such as objectivity and impartiality (ASNE, 2015). A third participant said, "I feel something is not quite right when many outlets reason about the movement in the same logic." My participants expressed their dissatisfaction with the Hong Kong media's standpoint.

The Hong Kong media were located close to the Umbrella Movement. They had the unique opportunities to present valuable information not seen in the mainland media. My participants acknowledged this unique advantage, and viewed the Hong Kong media as a precious information source in their media context. However, they noticed the hidden bias behind the Hong Kong media's reports and narratives, and felt they should not entirely trust it.

#### 4.5 Western Media

During my interviews and in civic discussions on Weibo, people frequently referred to Western media. "Western media" broadly refers to Western, democratic societies' media. It contains a great diversity of standpoints. In this dissertation, however, my participants used the term to denote the primary and most renowned Western media outlets, such as the Cable News Network (CNN), the British Broadcasting Corporation (BBC), the British news agency Reuters, the Wall Street Journal, and the New York Times.

My participants were frequent Western media consumers who valued it as an important information source. Leiyu, a 21-year-old college student, compared the difference between Weibo and Western media.

On Weibo, I can find some banned photos. These photos often provide information that is different from the mainstream media. On Weibo I can find the opinions of domestic groups, institutions, and the government. They do not necessarily have the same opinion. Reading through their opinions allows me to understand the tensions between different domestic forces. Western media's news reports have a much greater diversity. Some are good stories. They use concrete evidence such as pictures and videos to support their arguments. However, some Western reports are really biased, using double standards to judge China and Western countries.

Leiyu expressed his favor of Western media in terms of information quality. He underscored the importance of pictures and videos to news reports, because they are less vulnerable to distortion and manipulation than texts. He considered them as solid data that could support an argument. Compared to the mainland media, Western media could deliver information that was more complete, detailed, and objective.

However, my participants were also cautious in coping with Western media. During interviews, they claimed that they identified Western media's major flaws in helping them understand the movement. For example, they thought they could only obtain partial facts because Western media selectively reported political events.

Yuming, a 23-year-old female college student, commented on this selective reporting phenomenon. She said:

Today I went to BBC's website to browse news. The top news was about the Umbrella Movement and it attracted my attention. I read the news and was quite surprised. The whole article was about the persistence of the protestors and the hardship they experienced. The journalist concluded that this movement was a legitimate objection to the Hong Kong government and expressed reasonable appeals. However, the article never mentioned the other side of the story, such as Hong Kong's economic loss during these days and how it affected citizens' lives. It did not even include an

interview with a single outsider who did not protest. There is no objectivity in the news report. Many friends of mine have a similar opinion about Western media.

Yuming wanted to see both the upsides and downsides of the Umbrella Movement. She was not satisfied with only knowing the virtues and values of the event. She understood the movement as a complex event, containing both strengths and weaknesses. This disposition urged her to pursue a balanced report about the movement. However, Yuming observed selective reporting among Western media and thus questioned its objectivity. When I interviewed Citiao, a 25-year-old programmer, he expressed a similar opinion in a more emotional way:

I have always disliked the hypocrisy of Western media! When the movement was at its peak and the victory seemed close, Western media published lengthy reports in headlines. When polls showed that most Hong Kong citizens objected to the movement and the movement was ending, Western media only reported the event in brief news. Such bias resulted from either the hypocrisy or their wish to harm China. Western media does not accept a diverse world.

While continuing to consume Western media content, Citiao was unsatisfied with the perceived selective reporting. For him, information from the Western sources was valuable but flawed. He did not trust Western media to present complete information.

Participants pointed to media bias as the primary cause for selective reporting on China. Yuming noted:

Western media organizations such as BBC and ABC all have their given ideological standpoints. They will seldom allow the publication of news reports that do not align with their standpoints and interests. For example, media organizations always take sides in presidential elections. The ideological bias is a common practice in every country. Perhaps it is more severe in China. Because of ideological bias, Western media is always waiting for chaos in China. The Western journalists really hope for a Chinese version of the Arab Spring. The Umbrella Movement indeed took place in favor of Westerners, and they certainly seized the chance to criticize and mock China.

My participants perceived Western media's ideological bias against China. Western scholars have extensively studied media bias (DeLuca et al., 2012; Dickson, 1994; Eisinger et al., 2007; Entman, 1993; Kressel, 1987). They found that Western media framed news stories in favor of Western values and traditions, such as individualism, capitalism, and democracy. Such bias might appeal to the imaginations and expectations of the general Western audience, but had become particularly noticeable for my participants that were born and raised in a vastly different society. Participants' distrust of and resistance to the ideological bias of Western media influenced their way of dealing with Western information.

Western media played a distinct role in my participants' media context. It provided important factual content not circulated in the mainland media, which maintained its value for my participants who continued consuming it. However, such information came at a price—incomplete and biased information.

### 4.6 Summary

In Foucault's examination of power relations in prisons, schools, and psychiatric hospitals (Foucault, 1977, 2001), institutions controlled people through carefully designed procedures and mechanisms such as time tables, rules, and punishment. Institutions governed the production, circulation, and distribution of knowledge and imposed such knowledge on people. Scholars of media, communication, and sociology have written extensively on the relationship of media to power relation. Media scholars McLuhan and Lapham argued that media itself has the power to shape people by influencing how the message is perceived (McLuhan & Lapham, 1994). Sociologist Manuel Castells (2007, 2013) noted that modern power relations were structured around the control of media. Social media thus have the potential to empower citizens to resist the power of the state. In my study similarly showed how media mediated modern power relations. Power relations existed as influential individuals, such as "public intellectuals," institutions, and countries who attempted to shape how ordinary people thought of the Umbrella Movement. Their vehicles were a variety of media. Media controlled people through the production of convincing narratives. However, in my study I attempted to present a nuanced, complex

picture of the relation of media to power. I showed that any single type of media was not affiliated with certain power. Weibo was a contested ground for a number of competing narratives. Traditional media such as television and newspapers were under the government's tight control, but new voices were emerging, some of which were not necessarily appealing to the government. My participants were experiencing the drastic transition of media in China. Their dynamic, evolving media context played an important role in shaping their media practices. Participants' media context reflected the complex power relations and the important role of technologies. Participants reported their awareness of and cautious attitudes towards the complicated media context. They experienced tensions and struggles in the course of using the media context to learn about the Umbrella Movement. They developed diverse attitudes and opinions towards the different tools.

Technologies were a double-edged sword in these media power relations. Technologies enabled global powers to distribute their versions of stories to the world, like what the mainland media and Western media did to my participants. However, by exposing participants to radically different ideas and opinions, technologies actually motivated cautious people to think on their own. The next chapter will present a detailed account of my participants' practices of coping with information about the movement. I will analyze how these practices exhibited the notion of care of the self.

# Chapter 5. Understanding the Umbrella Movement as Care of the Self

Behind the complicated media context were numerous individuals, organizations, and countries attempting to exercise power over ordinary people. However, participants were not passively consuming media content. Participants' perception of media's complicated nature influenced their mind, choices, and actions in concrete ways.

My participants engaged in several practices of care of the self to cope with this complexity. In this chapter, I discuss the primary practices to show how participants worked on the self and cultivated their knowledge about the Umbrella Movement.

## 5.1 Obtaining Diverse, Original Information

My participants expressed the idea that a person could not make proper judgments unless he had successfully obtained sufficient original information. They relied on their media context for achieving such goal.

Foucault once claimed that care of the self occurs only through the concern for truth (Foucault, 1980). Many of my participants expressed the wish to figure out "what is really going on in Hong Kong," or "truth" in Foucault's term. My participants preferred original to second-hand information. They reported a distaste for many Weibo posts lacking necessary links to detailed reports.

Yangguo, a 24-year-old master student in Beijing, stated that he craved original information:

I really want to know what is happening in Hong Kong. Unfortunately, I do not have any friends in Hong Kong. I wish I were there to witness the whole event myself...I can only know the movement through different media. In terms of information quality, I do not like the mainland media or Weibo. They have too much similar, second-hand information that is difficult to verify. I guess I just do not trust the domestic media. I think Facebook is better, and I sometimes use virtual private network tools to visit the Umbrella Movement pages. I see student protestors posting there, which feels genuine and original.

Yangguo criticized the mainland media and Weibo for lacking originality. Stressing the credibility of personal experience of the movement, he wished to witness the movement or to have offline connections from Hong Kong. He chose to observe the student protestors' Facebook activities. He considered this experience original and trustworthy. By visiting Facebook, Yangguo cultivated his own knowledge of the movement, which could contribute to his analysis and understanding of Hong Kong.

Wangyuan, a 32-year-old news editor, offered her opinion about information originality.

She said:

The Umbrella Movement is a sensitive topic. I have friends who work in Hong Kong. The reports they send back often need heavy editing before publication. During the editing, the interpretation of certain facts changes a lot. This happens all the time. Western media is a better source for learning about the movement. They have a large number of Western journalists in Hong Kong. They provide many pictures, audios, and videos with less distortion.

Wangyuan thought the mainland media could not provide credible reports about the movement. She favored Western media for original news containing particular types of information, such as pictures, audios, and videos. However, she was cautious about considering Western media as absolutely truthful. Wangyuan thought that Western media were more developed and more trustworthy than the mainland media in terms of presenting facts.

My participants generally agreed that Western media's information was credible. They preferred Western sources for verifying rumors circulated on the mainland media. However, they refused to fully trust Western media because of the perceived selective reporting and bias, which I reported in Chapter 4.5. Participants attached great importance to the diversity of information sources. As one of my participants said, "I cannot trust any single source alone." Here is an excerpt of an interview with Xingxi, a 22-year-old senior college student:

Yubo Kou: What means did you use to learn about the Umbrella Movement last

Xingxi: The major ways were climbing the wall, Weibo, Googling news from

Western media, and the Hong Kong media. I often visited forums to find out what

people were thinking.

year?

Yubo Kou: Why did you use so many sources?

Xingxi: There is an old saying, "Listen to both sides and you will be enlightened;

heed only one side and you will be benighted 兼听则明偏信则暗." I surely do not

wish to be benighted.

Yubo Kou: Did climbing the wall contain particular benefits?

Xingxi: Yes. If I wanted to know what the Hong Kong students thought, I needed

to see the Facebook pages. I knew the movement had Facebook pages.

Xingxi was resourceful in finding essential information about the movement. She would

access many sources, inside or outside the Great Firewall. She pointed to the benefits of

obtaining information and opinions from different sides in constructing her own

understanding. Liangli, a 29-year-old novelist, often read the English Internet, and

listened to the Voice of America and the Taiwanese Eastern Broadcasting Company. She

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told me that, "I use many channels to acquire information to enrich my knowledge. It is a good way to eliminate my own bias. It allows me to be more understanding."

My participants stressed the originality and diversity of information. They believed this was the only way to construct a solid knowledge base for improving their understanding of the Umbrella Movement.

This information-seeking practice was unique and personal. Participants all had distinctive methods and preferences for obtaining information. For example, Yangguo, Xingxi, and Liangli all chose different information sources. Yangguo mostly used the mainland media, Weibo, and Facebook. Xingxi visited Weibo, Western media, the Hong Kong media, and certain forums. Liangli chose the English Internet, the Voice of America, and a Taiwan-based television network. The totality of their obtained information was hardly the same. However, they all agreed upon the necessity to utilize multiple sources to construct their knowledge.

Semaan et al.'s interview study with U.S. citizens showed that they actively chose different social media platforms to meet people with different ideas and diverse information (Semaan et al., 2014). In my study, participants sought diverse opinions and information from different types of information sources. However, they perceived that their media context contained rumors that they could not easily trust. They attached

more importance to the originality of information. Thus many of them emphasized the critical role of circumventing censorship.

Participants' diverse information-seeking strategies exhibited their wish to take care of themselves. Embedded in a complicated media context, participants actively sought diverse, original information with the aid of technologies. Rather than simply believing one information source, they emphasized their determination and capacity in selecting and filtering information. Through this practice of care of the self, they improved their own understanding of the Umbrella Movement.

## 5.2 Configuring Weibo

Weibo, as a commercial social media platform, was not designed for civic purpose. Many of its functions aim to encourage users to spend more time on Weibo, follow more accounts, and consume more content of all sorts. This commercial strategy sometimes contradicted my participants' desires to understand the Umbrella Movement. They actively configured Weibo to determine the timing and means of obtaining information.

In chapter 4.3, I discussed how Leizi chose to un-follow Weibo users who only expressed one-sided, baseless opinions. Leizi resisted passively receiving low-quality information by altering his following choices. Citiao, a 25-year-old programmer, explained his following strategy:

I only follow my friends, classmates, and relatives on Weibo. I do not follow the popular accounts of celebrities, scholars, and news agencies. They tend to post too much information, and I do not have time to consume it. If I do want to get information from Weibo, I use its search function. During the Umbrella Movement, I searched several keywords such as "占中" ("occupy central") and "学联" ("student union") to get updates.

Citiao paid close attention to whom to follow on Weibo. Citiao's following strategy might be uncommon. It did not exactly work in favor of Weibo's commercial agenda. However, configuring Weibo in such a way indicated his determination to control his own information-seeking strategy. He understood the strengths and weaknesses of the "following" and "searching" functions, and utilized them to his advantage.

Guizi, a 29-year-old graduate student, described her Weibo strategy. She said:

I have un-followed many popular accounts in the past few years, because they posted a lot of irresponsible content. Their criticism lacked evidence, and their shared information was unverifiable. I often find new accounts to follow. For example, when the Umbrella Movement first started, JohnRoss431 became famous for his comments on and insights into Hong Kong. I followed him to learn about the latest news. I read the comment area of his posts to know what other Weibo users thought. However, I

un-followed him as soon as the movement ended, because I was not interested in his other posts about economy and finance.

By un-following many accounts, Guizi rejected being a passive content consumer. She actively configured her Weibo functions based on different conditions, such as the timeframe of the movement and the significance of received content. She cared for herself through careful following decisions.

Participants configured Weibo in order to take advantage of Weibo while abandon its shortcomings in information originality. Sometimes configuration involved other technologies. Mingli, a 23-year-old accountant, offered insights into her management of the media context. She explained:

Weibo serves as an easy entry into a particular event. After all, it provides abundant information for me to browse through on a daily basis. However, I do not completely trust the information. Weibo's information only gives me a hint of what might be happening. To know what has really happened, I will go to other venues such as forums, Facebook, and Twitter.

Mingli assigned different roles to the information-seeking tools in her media context. Weibo enabled her to know the existence of certain event, while other tools satisfied her information needs. In this way, she deliberately configured her media context. The steps she used to seek credible information manifested the care of her own knowledge.

Participants' efforts to configure Weibo and obtain diverse, original information demonstrated their desire to cultivate themselves with trustworthy information about the movement. Their obstacles included the prevalence of low-quality information, hidden biases, and social media platforms' commercial agenda to encourage content consumption. They attempted to overcome these difficulties by paying special attention to the procedures of obtaining information. They cared for themselves by caring for the information that reached them.

## 5.3 Critical Thinking

Simply obtaining diverse information was not sufficient for my participants to understand the movement. They emphasized that a person should critically reflect on collected information in order to form their own thoughts.

Reflection meant that a person should be aware of information sources' biases. Leiyu, a 21-year-old college student, said:

Each media source has its own way to tell stories and sell opinions and ideologies. Most importantly, a person should know that news reports, particularly political ones, always contain truths and lies. They should never easily trust all the parts of a news report. I think a general principle is to reflect on a person's own bias. People ought to have certain biases, but those biases might drive them to trust or distrust some news

articles without thoroughly reading them. This is not good for really understand political events.

Leiyu stressed that information could substitute for a person's own thinking. A person should study a variety of information sources on his own. Leiyu pointed to the difficulty in coping with media bias in political information. He realized that a person's own beliefs and opinions presented challenges to cognition. A person should work on the self to detect his bias and mechanisms and procedures that produced it. Only through such a process could one person comprehend their gathered information.

During the observation of Weibo discussions, I found similar ideas expressed by common Weibo users. Here is an excerpt from a Weibo conversation:

Gangli: Mainlanders are confined in cages. We know nothing besides what the government wants us to know.

Yuyi: How would you define cage? In fact, the government does not confine people. Only people can confine themselves. How do you expect a person to jump out of the box if he only reads party newspapers every day? If you cannot think for yourself, how can climbing the wall help? It does nothing except put new biases into your head.

Gangli expressed pessimistic sentiment towards the status quo of censorship in China.

Yuyi admitted that censorship limited information diversity, narrowing people's

information options. She believed that only accessing state-controlled media narrowed people's mind. She was concerned about whether censorship shaped a person's mind with biases. However, she denied that censorship had deciding influence over a person. She highlighted human agency in utilizing social media to obtain more information beyond the control of censorship. Yuyi believed that resistance to censorship and Western media bias was possible only when people engaged in active, critical thinking. Otherwise, people would be easily subjected to varied opinions across diverse sources.

My participants cautioned against making immediate, rash conclusions about the movement. Kuanyi, a 25-year-old freelancer, described her strategies in processing media information. She said:

I used to be emotional, especially when I read political news. I used to type many angry words online. However, when I looked at these words several years later, I found them both shallow and silly. Now I know that when emotions take control of a person, they are no longer able to make fair judgments. I will no longer listen to the stories from one side; I will try to see as much of the world as I can, in order to enrich my own brain. I will calm down when reading political information, because the world is never that simple.

Kuanyi's "calm down" meant avoiding making impulsive, irresponsible comments online.

To calm down, a person should be able to comprehend the message embedded within

political information. They should avoid easily believing the message without critical thinking.

Kuanyi suggested the close relation of "enrich my own brain" to the ability to "calm down."

To enrich the brain was to occupy the self with knowledge about the world. When a person became knowledgeable and rational, she became more capable of processing information in a calm manner.

My participants valued online discussions as a way to deepen their understanding. Situ, a 23-year-old government employee, explained that Weibo discussion was a rewarding experience. He said:

I met some narrow-minded people through Weibo discussions recently. They quickly reached conclusions about what I was thinking, and accused me of being a 50-cent party member when I pointed out a possible flaw in the movement's slogan. However, even this could be beneficial. The clash of opinions could result in novel ideas. I feel I have learned a lot from those discussions.

Situ enjoyed encountering different ideas, even when he received offensive remarks. He considered meeting different ideas as a precious learning opportunity. Qingliu, a 40-year-old accounting manager, stated a similar opinion that, "reading Weibo discussions is a fun experience. Sometimes the discussion becomes tense and the discussants need to provide evidence for their opinions. They often share links to good online resources such

as documentary videos of the movement." My participants learned about the movement from Weibo discussions, which comprised a kind of self-cultivation work.

A person's education and experience conditioned his capacity to reflect. Xiaotu, a 32-year-old female editor, recalled how she changed through years:

I used to be a student. I fully understand that students are emotional and do not apprehend public issues in an objective and comprehensive way. When I was in middle and high school, I admired Western societies a lot. I thought every aspect of Western society was better than that of China. Whenever there was certain terrible public issue, I blamed the Chinese government...I am grateful to my college education. I learned a lot about our history and society during that time. Now I have a mature mind. I try to understand those issues rather than rushing to blame China. I see many Weibo users speak in the exact same way I did as a high school student. They easily make accusations that someone is part of the 50-cent party or that they are brainwashed. Their minds are still immature, but they will eventually grow up in the future.

Xiaotu showed sympathy with some "irrational" Weibo users by drawing on her own experience when she was a student. Her life experience contributed to her understanding and grasp of her media context. Her education and experience allowed deeper reflection.

Gushi, a 46-year-old stock manager, commented on the same issue in a similar vein. He said:

Young people are relatively reckless and idealistic. When they have lived for more than 40 years, they will gain a comprehensive understanding of both society and life. At that point, they will begin to think about public issues in a mature way. They will be able to stand in the other side's shoes.

Xiaotu and Gushi were tolerant of people who expressed rash, immature opinions on Weibo. Reflecting on themselves, they identified the causes of such phenomenon as the lack of both education and life experience. They highlighted the role of these two elements in the process that a person improved and changed the self.

My participants pointed to recognizing media bias, making careful and cautious conclusions, and learning through Weibo discussions as the primary components of processing information with reflection. Access to diverse information, education, and life experience all influenced their capacity to care for themselves through learning and thinking.

## **5.4 Summary**

The awareness of a complicated media context motivated my participants to overcome challenges in order to understand the Umbrella Movement. Through seeking and

processing information on their own, participants cultivated their knowledge and thought about the movement. These practices resonated with Foucault's notion of care of the self. Deeper understandings of the movement helped my participants to view the movement from other perspectives. They started to rethink the relation of the self to the world, an important component of care of the self. In the next chapter, I will discuss how participants externalized their thoughts about the movement as a form of care of others.

# **Chapter 6. Care of Others**

During the process of understanding the Umbrella Movement through their media context, my participants constantly encountered different opinions. This challenged them to view the movement from alternative perspectives. For them, understanding the movement came to mean recognizing the vastly different concerns, interests, and beliefs of people, organizations, and institutions.

When a person better understood different perspectives about the movement through care of the self, he started to care for people with different perspectives and backgrounds. Such development toward care of others was reasonable and anticipated in the conceptualization of care of the self. For Foucault, care of the self means continuous work reflecting on and improving one's relations to family, community, and society (Foucault, 1988a). In the remainder of this chapter, I analyze people's care for other Weibo users, for Hong Kong, and for the country.

#### 6.1 Care for other Weibo users

The care of other Weibo users occurred during Weibo discussions. People spoke in a constructive manner, showing their care and respect for other Weibo users.

In Chapter 5.3, I described Xiaotu and Xuanwu's attitudes towards Weibo users conveying ideas in an emotional, combative manner. They would not engage in online quarrels with

those Weibo users. However, Xiaotu and Xuanwu showed understanding toward those Weibo users, optimistically projecting they would eventually improve their thinking.

Weibo discussants frequently shared "sensitive" information for others' reference. In China, the government determination of information sensitivity is, to some extent, arbitrary, because of the ambiguity of regulations. The government does not publish a list of sensitive topics or sensitive keywords. The government could suddenly block certain foreign websites because they contained specific information deemed sensitive. Strict censorship contributed to the rise of the practices of sharing sensitive information in private channels, through which Weibo users helped each other build knowledge about the movement. Zhongfeng, a 27-year-old designer, detailed such practice during an interview. He said:

In Weibo discussions, I often come across novel and insightful ideas that I have never heard before. Some of the ideas refer to sensitive information, such as the relationship between Hong Kong's capitalists and high-ranking central government officials. There will never be reports like this in the domestic media because of censorship. If I am interested in that piece of sensitive information, I will send a private message to the user and ask for it. Most of the time, the user is willing to share it. I do the same thing if I have certain sensitive information and another person asks for it.

Zhongfeng found that sensitive information contributed to novel ideas and insights. Some of the information was key to building links between people and incidents. When key information like this was missing and difficult to obtain, Weibo users helped each other through information sharing. Their care of others was a collective action to counter censorship.

I have observed instances of sharing sources of sensitive information in Weibo discussions.

Here is an excerpt from a conversation between Feitu and Wuhui, two Weibo users:

Feitu: You are very knowledgeable. I will have to admit that I know little about the movement. Can you send some information to me through private messages if it is convenient for you? I want to know more.

Wuhui: You should follow a Weibo account titled "huaxia 华夏." This person often publishes precise analysis, and I believe he knows a lot of sensitive information. However, Weibo often bans his account, probably because he leaks too much information. To counter account suspension from Weibo, he has created a primary Weibo account that regularly publishes his newly registered accounts. Once you have followed this account, he will tell you the name of his primary account in private messages. If you can follow his primary account, you will always know his latest Weibo account for leaking sensitive information.

Rather than merely sharing sensitive information, Wuhui informed Feitu of a means to obtain it. The means was complicated, utilizing Weibo's following mechanisms to circumvent censorship. Wuhui showed his care for Feitu in the detailed instructions for Feitu to configure Weibo. Wuhui and Zhongfeng's sharing activities characterized care for others against the backdrop of China's strict censorship.

During Weibo discussions, care of others manifested itself in constructive communication, tolerance, and cooperation. These activities all encouraged a person to deepen his understanding of the Umbrella Movement.

## 6.2 Care for Hong Kong

Recent years Hong Kong and mainland China have experienced increasing tensions due to their different political system, language, and culture (Laignelet, 2012). For example, the Hong Kong media criticized mainlanders for visiting Hong Kong to purchase milk powder, which resulted in extended shortages for Hong Kong babies (Ngo, 2014). These tensions fueled mainlanders' common online antipathy to the Umbrella Movement. Participants reflected on these tensions and pointed to tolerance as the key remedy. Bangu, a 35-year-old government employee, shared his opinion about the Hong Kongmainland relationship:

I understand why some Hong Kong citizens do not like us mainlanders. Sometimes the mainlanders visit Hong Kong and exploit the local medical and educational resources.

I remember seeing mention of this by some Hong Kong protestors. However, the mainlanders have contributed to Hong Kong's economy through consumption and shopping. A Chinese ancient poem wrote, "We were originally grown from the same root; why should we hound each other to death with such impatience" (本是同根生,相煎何太急). Some mainlanders act uncivilized in Hong Kong. I really hope that Hong Kong people can be more tolerant. At the same time, they are welcome to come back to the mainland and have a look at where their ancestors come from.

The Umbrella Movement allowed Bangu to reflect on the intensified relationship between Hong Kong and the mainland. He did not simply view Hong Kong and the mainland as enemies. He knew the deep, intertwined relationship should develop in a harmonious way, pointing to their "same root." He cared for Hong Kong and hoped that people from both sides would care for each other. Xuanwu expressed a similar view that, "Everyone is capable of sympathy. I think the movement does not deliver the accurate information about the difficulties that Hong Kong citizens are facing in their life. Instead, the movement focuses on resisting and objecting the Hong Kong government. In this we see the antipathy instead of sympathy among most Chinese mainlanders." While Bangu stressed the necessity for mutual understanding, Xuanwu pointed to how to build mutual understanding between Hong Kong and the mainland. He suggested that mutual understanding relied on the communication of accurate information about the problems rather than chanting political slogans.

Dingli, a 28-year-old writer, elaborated on the significance of mutual understanding. He said:

The most important thing for Hong Kong and the mainland is mutual understanding. The Hong Kong citizens think they are fighting for democracy. The mainlanders deem they are fighting for independence. The compelling movement slogans such as "universal suffrage" and "democracy" have actually buried the real socio-economic issues Hong Kong people want to solve. If the movement focused on real problems such as income inequality, high house prices, and corruption, it could easily resonate with the mainlanders.

Dingli observed misunderstandings between Hong Kong and the mainland regarding the Umbrella Movement. Hong Kong citizen and mainlanders tended to frame the event differently. The opposite framings prevented Hong Kong and the mainland to understand each other. Dingli highlighted the importance of focusing on actual socio-economic issues. He thought this was the only way to establish common ground between Hong Kong and the mainland as a more effective communication means.

My participants understood the background and history of the movement. They criticized the rigid dichotomy of "support/oppose" attitude. They cared for and wanted to have mutual understanding with Hong Kong people.

## 6.3 Care for the Country

Knowing and discussing the movement gave participants an opportunity to reflect on a person's relation to the country. They sought answers to how one should balance personal and national interests.

My participants acknowledged the many flaws in China, and particularly in its government and political system. Shangguan, a 22-year-old office worker, discussed his understanding of the flaws and the relation of a person to his country:

I know China currently has many problems, such as an economic bubble, government corruption, and censorship. Just a few days ago, I could not even search the term "umbrella" on Weibo. I didn't like that! However, China has its unique advantages. If you look back in history, you will find out that China has improved a lot. I disagree with some Hong Kong protestors' claims that China is worthless, the government and the party are repressive, and Hong Kong should be independent. Hong Kong's success largely relies on its geo-political advantage and its capacity to connect China to the West. If Hong Kong is a blooming flower, then the mainland is its fertilizer. A country is like a person's family member. The person should admit both the beauty and the ugliness of the family member and try to change what she does not like. She should not abandon her family member.

Shangguan used the metaphor of "family member" to refer to his country. Such metaphor suggested a multi-dimensional relationship between a person and their country, including emotional attachment and mutual experience. Shangguan did not object to changes in China. He rejected the denial of the real, existing relationship between a person and his country. He expressed his care for the country through discussion of the Umbrella Movement. Similarly, Leiyu said:

I understand the context for the movement. However, I do not agree with its means of street protests and student strikes. These means will only make Hong Kong's society and economy worse. I often think about the bigger picture. China is already facing many internal and external challenges such as economic slowdown and the island dispute with Japan. Confrontation like the Umbrella Movement does not help. It only serves Western countries' purpose to destabilize our society.

Leiyu suggested understanding the global context for the movement and the Hong Kong-mainland relationship. Through the interpretation of the Umbrella Movement, he suggested how he should behave in civic activities such as protests and strikes. He suggested that a person should think about the consequences before action.

The Umbrella Movement prompted many discussions about democracy in China. Haoyu, 24-year-old female office worker, expressed her opinion:

My friends and I will probably never participate in activities like the movement. Our life focus is to work hard and become a stronger person. This makes the country stronger—not the color revolutions. I do not believe that democracy is the solution to every societal, political, or economic problem. If you ever read international news, you should be familiar with the failure of the U.S. style democracy in Syria, Iraq, Ukraine, Tunisia, and Taiwan. Each society is complex, with its own culture and systems. Fast democratization is too idealistic and does not solve real problems.

Haoyu did not agree with the movement's ultimate goal of obtaining democracy. She was aware of the global scale of recent years' political revolutions, movements, and uprisings. She was worried that democracy, the movement's appeal, was too simple a solution to deeply entrenched socio-economic issues. She disagreed with the radical, combative approach to civic participation. With regard to personal choice and behavior, she believed in "working hard" to strengthen the country, not disturb it. She expressed her care for the country through her thoughts on the movement, democracy, and China.

Participants' reflection on the movement engaged them in thinking about their own relations to the country. In interviews and Weibo discussions, people talked about what they deemed as the appropriate means to contribute to the Chinese society. They sympathized with the movement but disagreed with the movement's action forms such as protests and strikes.

## 6.4 Summary

Care of others was a critical component of care of the self for my participants. Sympathy and compassion emerged when people knew more about others' situations, difficulties, and struggles. They started to view the movement from different perspectives.

Care of others involved people thinking deeply about the fundamental issues in their relations to family, community, and society. In this chapter, my participants described how they understood the current problems of other Weibo users, Hong Kong, and China.

Care of others allowed people to reflect on what constituted proper actions to effect changes in these relations. In this chapter, I discussed how my participants reflected on how to help other Weibo users, how to understand Hong Kong people's concerns, and how to improve the country. Care of others nurtured the possibility of taking actions for others.

# **Chapter 7. Technologies of the Self**

In previous chapters, I have analyzed how participants engaged in practices of care of the self with the aid of digital technologies. Participants' civic technical practices exhibited complex, nuanced relationships between people and technologies. Foucault's analysis does not contain much discussion of how modern digital technologies influence practices of care of the self. However, it is important to understand how digital technologies can support modern-day care of the self in civic contexts. Mediation has been a useful concept to explain how people use technologies in human activities. In this chapter, I will use the idea of mediation to analyze the relation of digital technologies to care of the self.

In activity theory, mediation refers to the varied mechanisms that human beings use to influence their environment and shape their internal activities, such as mental processes (Kaptelinin & Nardi, 2006). Tools have developed over the history of society, carrying cultural knowledge and social experience (Nardi, 1996). A classic understanding of mediation from activity theory is that a subject uses a tool to access an object and affect changes (see Figure 8). For example, a participant (subject) used his laptop (tool as mediator) to access Weibo (object).

The subject-mediator-object system can successfully explain simple activities, such as participants using Weibo to obtain information related to the Umbrella Movement. However, human activities are often complex, involving multiple mediators. My

observation included complex phenomena. For example, my participants used VPN software to visit Facebook pages and obtain information from student protestors. VPN software and Facebook complexly mediated participants' activities, requiring further theoretical discussion.

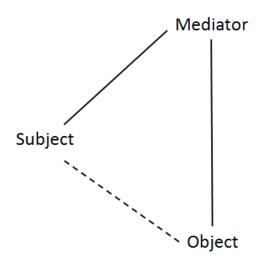


Figure 8. Activity System Diagram.

However, my study showed that participants used various technologies to achieve their civic goals, which is more complex than the one-mediator scenario. I have categorized the technologies into seven groups: Chinese social media, popular Chinese forums, Chinese news websites, specific Chinese forums, foreign news websites, foreign-based social media, and circumvention tools. My study revealed that participants' practices were closely related to the frequency and difficulty of using a specific technology. Frequency of use indicates how often my participants used a specific technology, indicating their technology habits. Chinese social media such as Weibo and WeChat fit into participants'

everyday use. Participants relied on these social media to connect with friends and family and to view second-hand reports of the latest information. They frequently visited popular forums. When they needed to find specific, yet scarce information, they used circumvention tools to "climb the wall." Difficulty of use refers to how challenging my participants deemed the use of a particular technology. English language and technical knowledge necessary to "climb the wall" were two primary elements contributing to difficulty of use.

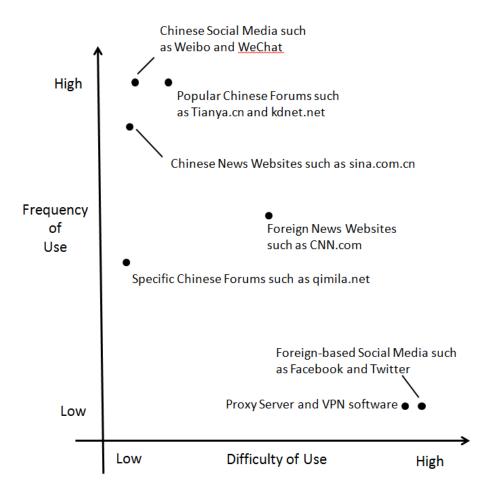


Figure 9. A Variety of Technologies.

Figure 9 showed the frequency and difficulty of using a variety of technologies within participants' media context. The difficulty of accessing foreign news websites varied a lot because of Chinese censorship's arbitrary nature. Participants reported that they were occasionally unable to visit foreign news websites such as CNN.com and BBC.com. They would only realize that the government had blocked certain websites when they saw others talking about the issue online. They would not know exactly why, because there would be no official explanation. However, they also knew such blocks were temporary; they would be able to visit those sites again in the future. "Specific forums" were crowdsourcing platforms where grassroots users shared original materials. For example, qimila.com was a Chinese video sharing forum where people shared downloaded news videos from blocked foreign websites such as YouTube. These videos often involved sensitive topics in China. Another powerful website was 龙腾网(www.ltaaa.com/), where Chinese citizens voluntarily translated and shared many countries' reports about China, Hong Kong, and Taiwan. Although less widely known, such forums provided a large amount of original information that the mainland media and Weibo failed to supply.

Participants' use of a wide range of digital technologies requires more discussion than just claiming that these technologies mediated participants' activities. Drawing on the idea of mediation and complex mediation, I attempt to analyze the complex relationships among technologies, and between technologies and people. I will discuss how complex mediation might contribute to the understanding of civic technologies.

## 7.1 Complex Mediation

Activity theory's subject-mediator-object model does not explain how multiple mediators work together to mediate human activities. Bødker and Andersen suggested we understand activities by combining activity theory and semiotics, building a basic mapping between the two (Bødker & Andersen, 2005). In semiotics, the basic concept is a sign, which includes three aspects: representation, object, and interpretation. A representation can refer to an object under a particular interpretation; interpretation mediates the relation between representation and object. Bødker and Andersen mapped activity theory's mediator to semiotics' representation. Subject and interpretation both guided activities (see Figure 10).

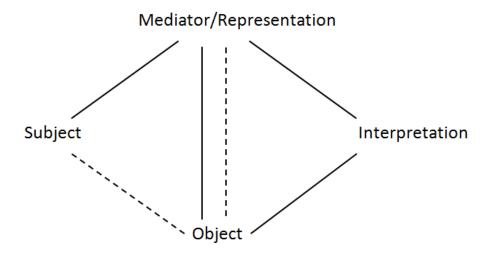


Figure 10. Activity System Diagram Informed by Activity Theory and Semiotics.

For example, a person uses Weibo to obtain information. According to activity theory, Weibo (as mediator) mediates the person's obtaining of information (activity). According

to semiotics, when other people observe the person, they interpret Weibo as an indication that that the person intends to obtain information. Weibo is instrumental, but also functions as a representation of an information source.

Bødker and Andersen's proposed model offers a new explanation of activities: "a thing that mediates the subject's manipulation of the object and simultaneously plays the role of representing the (intended) state of the object" (Bødker & Andersen, 2005). Weibo simultaneously represented information and mediated participants' information acquisition.

According to Bødker and Andersen's model, an activity can be either instrumental or semiotic, and either descriptive or constructive. The instrumental/semiotic distinction relies on whether the activity intends to transform a material into an outcome, or aims at establishing a shared interpretation of the object. The descriptive/constructive distinction relies on whether the mediator relies on the state of the object, or vice versa.

The model has four expectations. First, a single object occupies more than one role at the same time and changes roles over time. Therefore, structures of mediators (several tools working together) may exist at the same time. Second, subjects will always try to assign interpretations to all processes, even when certain ones are operated by other people or technologies. Third, given that instrumental and semiotic activities are "variants of the same basic pattern but with different kinds of emphasis," they can smoothly interchange.

For example, a participant could open the laptop himself (an instrumental activity), or ask a friend to do it for him (a semiotic activity). Fourth, such a model allows for mixed forms that are instrumental and semiotic, as well as constructive and descriptive.

In the next two sections, I use the concept of complex mediation to analyze two common patterns of complex technology use among my participants.

#### 7.2 Leveled Mediation

The use of a complex media context is an example of leveled mediation, or "a set of cohering activities with their subjects, purposes, objects, mediators, actions, operations, and interpretations" (Bødker & Andersen, 2005). Leiyu, a 21-year-old male college student, visited a large number of information sources to obtain diverse, original information. He said:

I often use a number of channels to obtain information. For example, search "龙腾网" on the Internet. This is a translation forum. Many people voluntarily translate other countries' news reports on China, Hong Kong, and Taiwan. I know many powerful websites like this. Therefore, I do not rely on Weibo for information. However, Weibo is a platform for me to express my opinions. It is very important that I have enough information. This is why I am not afraid to voice my opinion on Weibo.

Leiyu's ultimate goal was to confidently express proper, insightful opinions on Weibo. To do so, he relied on his numerous information seeking activities such as visiting mainland news websites, the Hong Kong media, Western media, and many specific Chinese forums. He needed to think critically about a large volume of collected information. Figure 11 illustrates the leveled mediation among Leiyu's tools.

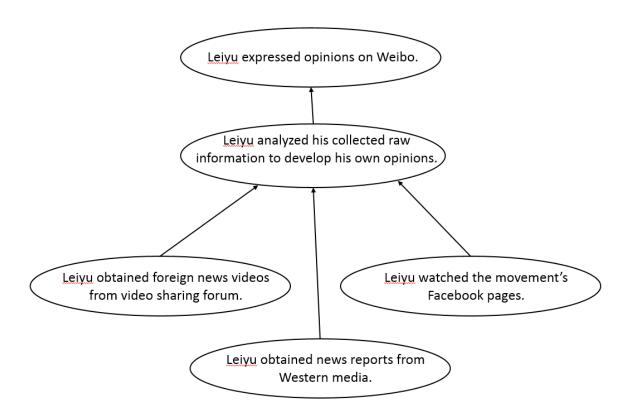


Figure 11. Leveled Mediation.

Leiyu's complex activity relied on multiple tools and contained several levels. The toplevel activity was opinion expression on Weibo, which Weibo mediated. However, this activity did not function alone. Leiyu's opinions about the movement emerged from analyzing collected raw information from many platforms. Such analysis comprised a mental process in which he was the mediator. In this example, Leiyu could only reach his ultimate goal of opinion expression through a series of activities and a variety of tools.

The example of leveled mediation shows that no single technology was perfect in meeting participants' need. Weibo was easy to access but did not provide sufficient original information. Western media was more original but also biased. Each had unique weaknesses and strengths. Care of the self in this context indicated participants' effort to take advantage of the strengths while be aware of the weaknesses. Care of the self is to coordinate a variety of technologies to a person's own advantage.

#### 7.3 Chains of Mediation

Chains of mediation refer to a series of artifacts that together help fulfill the overall purpose of activities. My participants often relied on an assemblage of technologies that functioned in a specific order to circumvent censorship and obtain desired information.

For example, they used proxy servers or VPN software to obtain desired information on Facebook (see Figure 12).

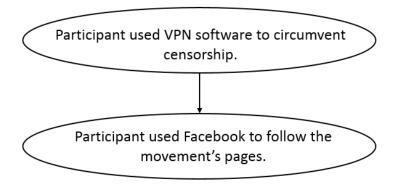


Figure 12. Chains of Mediation.

In Figure 12, Facebook played the role of both object and mediator in participants' information-seeking activities. Participants used VPN software to circumvent censorship and visit Facebook; Facebook was the object in these activities. After successful circumvention, participants used Facebook as a tool for following the movement's pages and learning latest news. Participants reached their goal of viewing the Umbrella Movement's updates through two connected activities.

Chains of mediation were common in China's highly regulated information environment. In section 7.2.2's example, Leiyu used a Chinese forum for other countries' news reports on China. However, he could not achieve this goal on his own. Numerous users were needed to obtain and translate information from foreign websites. Information traversed a chain of sites before reaching Leiyu, including foreign websites, voluntary translators,

and the Chinese forum. As another example, in a conversation related in section 6.1, Wuhui instructed Feitu that, in order to obtain latest sensitive information, he must follow a Weibo account, receive information about a primary account from the former account, follow the primary account, receive information about newest accounts from the primary account, and follow the newest accounts. This case represented a long chain structure that involved multiple people, artifacts, and tools.

The example of chains of mediation shows that in China's complex media context, the use of one technology (e.g., VPN) could be the prerequisite of the use of another (e.g., Facebook). Each technology alone might not be meaningful. Care of the self required that participants recognize the functionality of available technologies and to use them in a meaningful sequence.

## 7.4 Mediating Care of the Self

According to activity theory, participants were both the subject and object of their activity. Through constant engagement with technologies, they obtained the goal of becoming more knowledgeable about the Umbrella Movement. These activities were instrumental because participants aimed to change themselves, and semiotic because participants endeavored to interpret the movement.

In a complex media context as reported in my study, technologies had unique strengths and weaknesses. Sometimes, a technology itself could not fully satisfy participants. For

example, each media platform was limited and imperfect as an information source. Sometimes, a technology itself alone is not helpful in any way. For instance, a VPN software alone did not bring information to participants. In such context, the coordination of multiple technologies, in either leveled or chained manner, became necessary to mediate certain activities.

The coordination of multiple technologies relied on certain level of education and technical savviness. A person needed to be aware of the presence of these technologies, have the desire and the knowledge to utilize them, and sometimes, understand another language such as English.

However, complex mediation was a critical component of participants' care of the self. Numerous technologies have permeated contemporary daily life and dominated the way people obtain information and acquire knowledge. Media shapes the message it delivers (McLuhan & Lapham, 1994). By controlling information, digital technologies have enormous influence over how a person cultivates the self. Complex mediation thus counters the influence of a single technology and helps the accumulation of a more complete, diverse body of knowledge. Better knowledge contributes to a person's care of the self.

# **Chapter 8. Rethinking Civic Computing**

I have presented an account of a group of Chinese mainland citizens who, concerned about the Umbrella Movement, attempted to understand it, and discussed it on Weibo. Without direct physical access to the movement, participants relied on a variety of digital technologies and traditional media to obtain relevant information.

Previous HCI research on social media has shown how ordinary citizens utilized digital technologies to help both the self and others navigate through difficult situations, such as wartime, political unrest, and natural disasters (Mark & Semaan, 2008; Al-Ani et al., 2012; Semaan & Mark, 2012; De Choudhury et al., 2014). For example, Al-Ani et al. showed that Egyptian citizens used blogs to document their own understandings and interpretations of political events during the Egyptian revolution, thereby countering the narratives from state-controlled media (Al-Ani et al., 2012). During the Gulf War, Iraqi citizens used Facebook to keep track of their friends and family, help each other, and find ways to improve their country (Semaan & Mark, 2012). During the Mexican Drug War, individuals used social media to aggregate and disseminate information to large numbers of people (Monroy-Hernández et al., 2013). My study showed similar social media practices among participants. For example, they sought information through various social media platforms. They wanted to express their own opinions which might be different from the official media. My participants wanted to cultivate

their own thinking by obtaining diverse, original information and through critical thinking.

While previous studies often emphasized how powerful digital technologies were in aiding ordinary citizens in different situations, most of my participants expressed a cautious, and sometimes suspicious, attitude towards digital technology. They rejected fully trusting the content from any single media platform, pointing to the hidden biases they observed. They often attempted to reconfigure technologies to proactively manage the incoming information.

Care of the self is an abstract term. However, in the civic context in my study, it manifested as concrete, constant practices of obtaining original, diverse information, configuring technologies, and critical thinking. Each practice specified a different set of socio-technical activities with varied goals. However, all of these practices pointed to participants' constant work on the self to resist contemporary power relations and construct their own political knowledge.

Care of others naturally derived from care of the self. My participants actively shared information with other citizens after they obtained such information themselves. They developed sympathy with Hong Kong citizens after gaining more knowledge about the movement's socio-economic context.

Foucault's notion of care of the self offers a pertinent perspective to understand how a person reacted to his environment and actioned to cultivate himself in order to resist the influence of his environment and determine his own knowledge. Such perspective offers insights into understanding how a person should behave in a civic context. A person is, after all, not born an engaged citizen. She transforms into an engaged citizen as she gradually identifies with the values of civic participation. This study thus centers on how a person transforms oneself into a citizen. In this case, a person became knowledgeable about the Umbrella Movement and engaged in Weibo discussions. Some participants were knowledgeable about Hong Kong before the movement, whereas others had never paid attention to it. The Umbrella Movement spurred both types of people to question the self with regard to whether she was content with her knowledge about Hong Kong, and whether she wanted to improve.

As a small-scale qualitative study, the dissertation project has several limitations. It cannot present an accurate account regarding how Chinese mainland citizens reacted to the Umbrella Movement. Neither can the project depict a complete picture of all the Weibo users' actions and choices for civic participation. Rather, my study participants tended to have higher education and a certain level of technical savviness. They knew sophisticated ways to find valuable information and conveniently circumvent censorship.

However, my study points to a consistent pattern across participants' thoughts and practices — an attention to the self. The emphasis on the self represents an alternative, critical perspective on the relationship between the self, society, and technologies. This does not mean that the self is more important than society; rather, it suggests that before a person can truly contribute to society, she should first develop knowledge of the self and society. Such perspective helps rethinking civic computing research in several ways. In this chapter, I discuss the relationship between care of the self and civic participation. I explore how China's distinct cultural and historical conditions, especially Confucianism, influenced the choice of care for the self. I analyze how the notion of care of the self may be of special value to civic computing scholarship.

## 8.1 Care of the Self as Civic Participation

Political events such as the Umbrella Movement happen locally, but they are inherently global because of the explosion of social media. "Political opportunities, mobilizing structures, framing processes and collective action of social movements are no longer confined to national political contexts," commented political scientists Della Porta et al. (Della Porta et al., 2009). From a media perspective, advanced technologies allow minimal-cost global circulation of local events' information. My participants could obtain lots of latest information from social media despite the presence of rigorous censorship. From a political-economic perspective, Hong Kong, a global trade hub and financial center, was geo-politically significant in Asia and the world. Many countries want to exert

influence in order to reach their desired outcomes. For instance, that Hong Kong becoming democratic matches the United States' foreign policy of exporting democracy (Lowenthal, 1991). From an ideological perspective, the Umbrella Movement's prodemocracy nature echoed the ideological beliefs of many individuals and Western media. For instance, it challenged a country that was widely deemed "authoritarian" and "undemocratic." As a global event, the Umbrella Movement triggered media news reports, government statements, and public discussions across the world (lyengar, 2014).

Political events are inherently complicated, in sharp contrast to their often clear-cut, compelling slogans. The Umbrella Movement successfully delivered the message "We need real universal suffrage!" to its global audience. Behind the slogan, however, was a massive amount of work carried out by individuals, organizations, and countries with vastly different interests, capabilities, visibilities, and strategies. When my participants deepened their understanding of the movement, they obtained knowledge beyond the slogan. They understood the movement's socio-economic causes, learned about differences of opinion among Hong Kong citizens, and observed Western media's perspectives. Knowing the complicated political events to some extent helped participants to find their media context's complicated nature.

Participants' complicated media context represented complex systems of power relations.

Multiple competing entities attempted to control how ordinary people thought about the

Umbrella Movement. China's central government and the mainland media wanted them

to believe the movement aimed to separate Hong Kong from China. The Hong Kong media pictured the movement as a genuine effort for autonomy and democracy. Western media emphasized the challenges the movement brought to the Chinese society's stability and the Chinese central government's legitimacy.

Power relations attempt to persuade and control people through the production of what Foucault called "truth." Truth denotes "a system of ordered procedures for the production, regulation, distribution, circulation and operation of statements" (Foucault, 1980). The mainland media, the Hong Kong media, Western media all had different procedures, as well as distinct cultural and ideological logics, for talking about the Umbrella Movement. As Foucault noted:

Each society has its regime of truth, its 'general politics' of truth: that is, the types of discourse which it accepts and makes function as true; the mechanisms and instances which enable one to distinguish true and false statements, the means by which each is sanctioned; the techniques and procedures accorded value in the acquisition of truth; the status of those who are charged with saying what counts as true. (Foucault, 1980)

The differences between the mainland, Hong Kong, and Western societies signified sharp distinctions between their manufactured truths about the movement. The mainland media sharply criticized the event by citing harmony, stability, territorial integrity, and

national sovereignty. The Hong Kong media often referred to autonomy, democracy, and freedom of speech. Western media consistently framed the event in favor of democracy, civil disobedience, and the potential collapse of the P.R.C. When technologies delivered these various truths to my participants, they faced enormous cognitive challenges in making sense of the movement.

Care of the self could only occur through the concern for truth, as Foucault noted (Foucault, 1998c). The vast differences between these truths both challenged and energized my participants. The "concern for truth" emerged through struggling with diverse information about the movement. Participants refused to believe information from any single information source. They wanted to explore truths, or "what is really happening in Hong Kong."

Care of the self emphasizes the process to find truth, rather than the result. My participants eventually reached different understandings of the movement. Among my participants, some sympathized with Hong Kong people and supported the movement, while others denounced the movement as destabilizing. However, all of them reported continuous, dedicated work on information seeking, analysis, and self-reflection.

Through the concern for truth, participants' care of the self constituted an active choice of resistance amongst the power relations. The resistance could influence the outcomes of power relations (Foucault, 1982). The critical role of technologies in "supporting new

voices" (Nardi, 2015) can potentially empower participants in current power structures. For example, DeLuca et al.'s comparative study of social media and mass media discussions on the Occupy Wall Street movement showed that political blogs became the frontline for citizens to express alternative interpretations and criticize the mass media (DeLuca et al., 2012). My participants engaged in Weibo discussions to express their thoughts and meet other concerned citizens. Such practice helped them resist the influence of traditional media outlets and institutions.

Care of the self is fundamental to civic participation. Civic participation speaks to a key principle that people care for the society and engage in public issues in a serious, constructive, and responsible manner (Burtt, 1990; Robinson & Morrison, 1995; Tocqueville, 1839). Many deem civic participation as vital to the success of democracies (Dewey, 1969; Fiorino, 1990; Rogers, 2010). A person could not truly engage in civic activities until he gained enough knowledge about, and understood his relation to, the public issues. Practices of care of the self prepared my participants for civic discussions on Weibo. My participants were confident in talking about Hong Kong after consulting multiple information sources and self-reflection. Leiyu, for instance, said "I am confident to talk on Weibo because I have read and analyzed a lot of sources." Participants paid attention to the potential consequences of speaking on Weibo—lots of people would be able to read their opinions. They wanted to be serious and responsible about what to say.

Foucault noted that care of the self must come before care of others (Foucault, 1998c). For my participants, their care of the society derived from the care of the self. They cared for the society because they learned to understand the same issue from different perspectives, and because they valued and respected those with whom they formed relationships. They cared for other Weibo users because they sympathized with other users who faced similar challenges to information-seeking. They cared for Hong Kong people because they shared the same Chinese origin and sympathized with Hong Kong's current socio-economic problems. They cared for their country because they felt connected to it, despite perceiving its many obvious problems.

Care of the self signifies consciousness in civic participation. Participants were aware of the large number of information sources available to them. They knew the power of censorship when they browsed the mainland media. They were conscious of each information source's hidden bias. Their consciousness originated from their constant self-reflection. Many philosophers and thinkers emphasized self-reflection in a person's life. Socrates noted that, "The unexamined life is not worth living" (Plato, 2013). A person should constantly scrutinize their thoughts and behaviors through the practices of care of the self. Without doing so, a person with good intention risks doing harmful things. Hannah Arendt, a political scientist who escaped Europe during the Holocaust, wrote in her book *the life of the mind*:

Where does this leave us in regard to one of our chief problems-the possible interconnectedness of non-thought and evil? We are left with the conclusion that only people inspired by the Socratic Eros, the love of wisdom, beauty, and justice, are capable of thought and can be trusted. In other words, we are left with Plato's "noble natures," with the few of whom it may be true that non "does evil voluntarily." Yet the implied and dangerous conclusion, "Everybody wants to do good," is not true even in their case. (The sad truth of the matter is that most evil is done by people who never made up their minds to be or do either evil or good.) (Arendt, 1981)

For Arendt, without self-reflection, people risk doing harm even with good intent. She suggested that a person engage in critical thinking and self-reflection. These philosophical thoughts have important implications for civic participation. Caring about society and intending to "do good" is not enough for civic participation. A person should engage in critical thinking and not make rash decisions about action.

Care of the self denotes a responsible attitude towards civic participation. Rational, critical thinking allows a person to choose to participate or not to participate when a movement or a revolution emerges. Participation can be dangerous if a person has not gone through careful thinking about her actions and the consequences. Choosing not to "go with the flow" can sometimes be an active choice and carry civic values (Shortall, 2008). What determines the nature of participation are the procedures and thinking a

person have engaged before taking actions. When the Umbrella Movement began, my participants did not make immediate conclusions about it. Their endeavors represented the sense of responsibility for civic participation.

Care of the self bridges an ordinary person and the grand narratives of civic actions. Grand narrative refers to "a global or totalizing cultural narrative schema which orders and explains knowledge and experience" (Stephens & McCallum, 2013). For example, the grand narrative of the Umbrella Movement emphasized real universal suffrage and democracy as the only solution to Hong Kong's current social and political problems (Fung, 2015; Lam, 2015). However, an ordinary citizen would meet tremendous difficulties in apprehending and following these grand narratives, given political events' complicated and global nature, and the danger of participation without consciousness and thinking. Foucault discussed his thoughts on the relation of the self to grand narratives:

I've always been a little distrustful of the general theme of liberation, to the extent, that, if one does not treat it with a certain number of safeguards and within certain limits, there is the danger that it will refer back to the idea that there does exist a nature or a human foundation which, as a result of certain number of historical, social or economic processes, found itself concealed, alienated or imprisoned in and by some repressive mechanism. In that hypothesis it would suffice to unloosen these repressive locks so that man can be reconciled with himself, once again find his nature or renew contact with his roots and restore a full and positive

relationship with himself. I don't think that is a theme which can be admitted without rigorous examination. I do not mean to say that liberation or such as such a form of liberation does not exist. When a colonial people tries to free itself of its colonizer, that is truly an act of liberation, in the strict sense of the word. But as we also know, that in this extreme precise example, this act of liberation is not sufficient to establish the practices of liberty that later on will be necessary for this people, this society and these individuals to decide upon receivable and acceptable forms of their existence or political society. That's why I insist on the practices of freedom rather than on the processes which indeed have their place, but which by themselves, do not seem to be able to decide all the practical forms of liberty. I encountered that exact same problem in dealing with sexuality: does the expression "let us liberate our sexuality" have a meaning? Isn't the problem rather to try to decide the practices of freedom through which we could determine what is sexual pleasure and what are our erotic, loving, passionate relationships with others? It seems to me that to use this ethical problem of the definition of practices of freedom is more important than the affirmation (and repetitious, at that) that sexuality or desire must be set free. (Foucault, 1998c)

Foucault was suspicious of liberation discourses happening at high levels of abstraction, or grand narratives, such as the liberation of sexuality. Grand narratives are highly contextual, subject to diverse social, political, and historical conditions. A same grand

narrative might be appropriate to one society while be unsuitable to another. Without individuals' self-reflection, liberation might end old repressive power relations only at the cost of opening up new ones. Foucault called for a focus on individual practices through which people critically examine their own thinking and action. Foucault suggested that individuals build new relationships with grand narratives through practices of freedom, such as self-reflection, civic discussions, and writing.

The Umbrella Movement distributed to the rest of the world its grand narrative of democracy being the solution to Hong Kong's problems. Universal suffrage, to the movement participants, could liberate Hong Kong people from government repression. Aligned with the Hong Kong media and Western media, the movement was a powerful force using media to wage battle against the old political system. It opened up new power relations within the Hong Kong society. The movement leaders became influential public figures. For example, Joshua Wong, the student leader, has been represented as an internationally famed hero (Rauhala, 2014). It remains unknown how the new powers will shape Hong Kong's political landscape in the future.

My participants did not take the Umbrella Movement's grand narrative for granted. They drew on their own experience and knowledge to assess the appeal for democracy. They reported seeing both successes and failures of democracy across the world. They recognized the advantages of democracy but remained suspicious of rapid democratization. Similarly, in a political attitude survey, Shi and Lu reported that Chinese

citizens started to endorse the tradition of liberal democracy (Shi & Lu, 2010). However, Chinese citizens have realized that China must develop democracy with Chinese characteristics rather than fully adopt Western-style democracy (Barme, 1995; Liu & Chen, 2012; He, 2013). Participants' complex attitudes towards democracy was the result of both personal work on the self and the influences from external forces. Importantly, participants were cautious of such conditions and made sincere effort to gain more agency in their context.

The notion of care of the self is critical to civic computing research that often stresses how technologies support people to action for society (Starbird & Palen, 2012; Lee & Hsieh, 2013; State & Adamic, 2015). Political events' global and complicated nature, the seriousness and responsibility of civic participation, and the danger of utilizing grand narrative all point to the importance of care of the self. Civic participation is never an easy task, because a person needs to think deeply and critically about how to make a better society. He needs to stay away from following the clear-cut, seemingly appealing grand narratives, and starts to pay more attention to the actual social, economic, and political circumstances. In doing so, he can truly understand the appropriate forms of civic participation for his own culture and society.

#### 8.2 Care of the Self in the Context of China

# 8.2.1 Understanding China's Unique Context

China's distinct cultural and historical conditions shaped my participant's practices of care of the self. Care of the self, according to Foucault, was common among ancient Greek philosophers. Such notion resonates with Confucianism, China's ancient ethical and philosophical system. Confucianism underlines self-cultivation.

The doctrines of Confucianism became the national standards for education and civil service during the Tang dynasty (618 – 907 A.D.). Since then, Confucianism has enjoyed a prominent status in the Chinese society throughout history. For example, the *Great Learning*  $\not$  $\not$  $\not$  $\not$  $\not$ , a classic text for Confucianism written before 300 B.C., described one of the general principles of self-cultivation:

The ancients, who wished to illustrate illustrious virtue throughout the world, first governed well their own states. Wishing to govern well their states, they first regulated their families. Wishing to regulate their families, they first cultivated their persons. Wishing to cultivate their persons, they first rectified their hearts. Wishing to rectify their hearts, they first sought to be sincere in their thoughts. Wishing to be sincere in their thoughts, they first extended to the utmost of their knowledge. Such extension of knowledge lay in the investigation of things. Upon the investigation of things, knowledge became complete. When their knowledge

became complete, their thoughts were sincere. When their thoughts became sincere, their hearts were then rectified. When their hearts became rectified, their persons were cultivated. When their persons became cultivated, their families were regulated. When their families became regulated, their states were rightly governed. When their states became rightly governed, the entire world was at peace. From the emperor down to the mass of the people, all must consider self-cultivation as the root of everything. (Confucius, 2013)

古之欲明明德于天下者,先治其国;欲治其国者,先齐其家;欲齐其家者, 先修其身;欲修其身者,先正其心;欲正其心者,先诚其意;欲诚其意者, 先致其知,致知在格物。物格而后知至,知至而后意诚,意诚而后心正,心 正而后身修,身修而后家齐,家齐而后国治,国治而后天下平。自天子以至 于庶人,壹是皆以修身为本。

The *Great Learning* highlighted self-cultivation as the essential practice for a person to transform into a state characterized by complete knowledge and sincere thought. Such practice motivated and enabled a person to care for the self, his family, and his country. The self, family, and country constitute a coherent system that unites everyone.

Confucianism has a lasting impact over contemporary Chinese citizens' minds and actions.

During my interviews, participants frequently referred to Confucius quotes to answer my questions. When I asked whether they enjoyed encountering different opinions in Weibo

discussions, they answered with "The exemplary person is harmonious and open-minded to difference. The petty person can group easily but they do not stay together for long.君子和而不同,小人同而不和" (Confucius, 2006). When I asked about the ideal relationship between Hong Kong and the mainland, they often referred to the quote: "one should not impose on others what he himself does not desire. 己所不欲勿施于人" (Confucius, 2006). The philosophical legacy of Confucianism was strikingly noticeable in my study.

From a developmental point of view, the fundamental changes in the means of information-seeking in the last three decades have influenced participants' practices. The more people could access diverse information sources, the more they began to question credibility of previously dominant sources. They perceived that the mainland media spoke in a monotonous voice. They discredited those so-called "public intellectuals." However, denying the old ones did not necessarily mean completely abandoning them and embracing new ones, such as Western media. Instead, participants recognized each information source's advantages and disadvantages and insisted on studying a variety of them.

China's strict censorship conditioned participants' choices. They met difficulties in finding desired information about the Umbrella Movement. They sometimes relied on multiple mediators in order to achieve their goals. However, censorship could be energizing and inspiring. My participants reportedly evolved their practices to deal with censorship. They

started to be suspicious of the domestic sources and put more efforts in processing information. The awareness of censorship partially motivated participants to care for the self.

Participants criticized censorship for limiting information access. However, many of my participants did not see censorship as a purely repressive practice. For instance, Xiaoli, a 24-year old graduate student, said:

We do not have complete information about the movement due to censorship. However, I doubt it is always beneficial to have all the information. People tend to focus on negative information and develop negative emotions such as anger and hatred. These emotions do not help resolve the real issues. The Umbrella Movement is about "democracy." The protestors can use all the fancy, politically correct language. However, in reality, the government cannot always tell the truth. Therefore, I think that censorship is sometimes necessary. However, I think a person with a mature mind can circumvent the censorship, obtain information, and take care of their own knowledge.

Xiaoli's explanation emphasized the value of care of the self in the face of censorship. No single individual, organization, or country could provide all the trustworthy information.

A person should take care of her own thoughts. While studies of China often portray censorship as an overwhelming, deciding condition in the Chinese Internet (Li, 2010;

MacKinnon, 2011), my participants considered censorship as one of the many elements of their media context. They emphasized skills and tools that could help deal with censorship.

Participants' choice of care of the self was deeply conditioned in China's unique context. China's distinctive culture, history, and politics influenced how participants thought and behaved when they attempted to understand and discuss political events. Participants were aware of these conditions, particularly censorship, and accepted them as a normal component of their society.

### 8.2.2 Studying Civic Computing in China

While research on technologies in China has taken place across disciplines, a gap exists regarding how much importance scholars attach to technologies in civic participation. HCI scholars tend to acknowledge technologies' power in any given social movement or political uprising. However, scholars of humanities and social sciences often stress the influence of local cultural and socio-economic elements. This raises a critical question of how to bridge the knowledge gap between HCI and other disciplines in order to deepen our understanding of technologies. My dissertation shows that when technologies appeared in a particular locale, they became part of the local culture and history, constituting important components of a broad media context, including various skills,

knowledge, and experiences. Participants' culture, history, and socio-economic conditions influenced their technological practices.

This dissertation provides an alternative to the dominant discourse about technologies in China, which has generally taken place in disciplines outside HCI and at Western institutions or universities. "Each society has its regime of truth," as Foucault noted. The Western academic institutions govern the production and circulation of knowledge about China in the English world.

In 1978, renowned Palestinian literary theorist Edward Said published his seminal work *Orientalism* (Said, 1979). Orientalism refers to "a manner of regularized (or Orientalized) writing, vision, and study, dominated by imperatives, perspectives, and ideological biases ostensibly suited to the Orient" (Said, 2001). The Orient includes Middle Eastern, Asian, and North African societies. The book analyzes how Orientalist scholarship produces, maintains, and reproduces a static view of Oriental culture. Orientalism gradually became the source for the West's patronizing perceptions and depictions of the East. The West developed cultural representations of the Orient as its contrasting image, idea, personality, and experience. The West represented the Orient as undeveloped, irrational, stagnant, and inferior. The contrasting representations of the West and the Orient have dominated common Western discourses about the cultural, political, and economic orders in the East. Reflecting on the formation of the Orientalist view, Said noted that:

The Orient and Islam have a kind of extrareal, phenomenologically reduced status that puts them out of reach of everyone except the Western expert. From the beginning of Western speculation about the Orient, the one thing the Orient could not do was to represent itself. Evidence of the Orient was credible only after it had passed through and been made firm by the refining fire of the Orientalist's work. (Said, 2014)

He argued that, "Orientalism is after all a system for citing works and authors" (Said, 1979). Said highlighted Western hegemony within the existing academic writings. Orientalist scholarship established its status and influence through systematic academic production.

Orientalist thinking has manifested in research on technologies in China in several major ways. Democracy-related issues have occupied the central place of most research on China. The democracy/authoritarianism dichotomy was a recurring theme in many works (Yang, 2014). Scholars assign superiority to democracy, deeming China's authoritarianism as inferior and antithetical to democracy in every possible way. Presuming democracy to be the next governmental form following authoritarianism, numerous academic discussions have occurred regarding whether and how China will democratize (Friedman & McCormick, 2000; Hsieh, 2003; Liu & Chen, 2012; Su et al., 2012; Nathan et al., 2013; Chen & Kinzelbach, 2015). In Orientalists' accounts, the Chinese government is evil, stubborn, autocratic, and repressive. Since the founding of the People's Republic of China (PRC), a large amount of research has studied and reported Chinese repression in the areas of law, finance, and the Internet (Paust, 1977; Cohen, 2004; Wright, 2009; Howard

et al., 2011; Deng & O'Brien, 2013). Such an extensive body of research has reaffirmed the existing repressive image of the Chinese government.

Because of the repressive image of the Chinese government, the Orientalist scholarship has generally developed sympathy for Chinese citizens. Scholars have represented Chinese citizens as a group of repressed, angry, and rebellious people craving democracy. In their narratives, democracy is an important dimension to interpret Chinese citizens' civic participation. Many studies inquire into Chinese citizens' attitudes towards democracy (Wang, 2007; Harmel & Tan, 2011).

The rise of technologies over the last few decades has gained wide attention within Orientalist discourses. Research that concerns the relationship between the Chinese government and technologies has emphasized Chinese government control of the Internet (Hachigian, 2001; Kalathil & Boas, 2001; MacKinnon, 2007, 2011), and whether the Internet can democratize China (Taubman, 1998; Hachigian, 2001; Shen et al., 2009; Rosen, 2010; Mou et al., 2011; Coutaz, 2012; Shirazi, 2012; Soriano, 2013).

Reflecting on the Orientalist expectation, Jens Damm, a scholar at Free University in Germany, commented:

When writing about the West, commentators today do not assume an essential role for the Internet in fostering democracy and citizen participation, but they do assume

such a role to be vitally important for China and for other "authoritarian third world states." (Damm, 2007)

The Orientalist view has produced a static and narrow perspective to examine whether Chinese citizens, the Chinese government, and technologies meet predetermined expectations. Their tendencies towards democracy become the single, most important metric. Stressing technologies' revolutionary potential, some scholars remain confident that technologies will eventually democratize China (Zheng, 2005). Emphasizing the sophisticated, tight control and Chinese citizens' seemingly passive political attitudes, some scholars foresee a bleak, hopeless future (Li, 2010; Sullivan, 2013).

The Orientalist thinking that pre-assigns roles and functions to technologies is dangerous to the civic computing research, especially work involving another society or culture.

Confucianism and its focus on care of the self provide an alternative perspective to understand, analyze, and interpret civic computing phenomena in China. Compared to the Orientalist thinking that judges China based on the values, beliefs, and traditions of the West, my approach involves close examination of the cultural and historical context for the technological practices.

Participants expressed interest in democracy. However, they held similar, skeptical opinions about democracy. They knew most developed countries were democracies. However, they often referred to the failures of democratization in developing countries.

Similarly, a survey study reported that Chinese citizens support the idea of democracy. However, the majority are not yet ready for a major effort towards democratization. They still see economic growth and social stability as more important than freedom of speech, political participation, and other democratic rights (Wang, 2007).

Participants were not content with the central government because of issues such as corruption and censorship. However, they did not consider revolution or uprising as the proper way to resolve public issues. They rejected disturbing ordinary societal order as a proper means of civic participation. Such idea matches the teachings of Confucianism. Confucianism emphasizes the steady hand of elites for delivering good governance. The Confucian tradition leads to a belief that, in a true democracy, leaders will safeguard the people's wellbeing, using superior wisdom to secure public benefits (Shi & Lu, 2010). Confucianism limits the scope of ordinary citizens' political participation, mainly their ability to convey their concerns to political leaders (Shi & Lu, 2010). Chinese citizens have realized that China must develop a democracy with Chinese characteristics rather than fully adopt Western-style democracy (Barme, 1995; Liu & Chen, 2012; He, 2013). For many Chinese citizens, a decidedly paternalistic idea of government that denies political competition is consistent with their conception of democracy (Shi, 2008).

## 8.3 Rethinking Civic Computing

I have discussed the relations of the notion of care of the self to civic participation and to China's unique context. In this section, I argue that this notion is of special value to civic computing scholarship. It provokes reflection on the relation of technologies to social good and the relation of people to technology.

#### 8.3.1 Rejecting the Means/End Dichotomy

The "means/end" dichotomy refers to the modernist thinking that defines and solves problems in a rational, calculated, and economic manner. This perspective yields an instrumental view that technologies, if properly designed, can effect desired social changes. Such view prevails in various explicit or implicit forms. For example, many scholars have openly debated whether technologies can democratize or liberate China (Qiu, 1999; Friedman & McCormick, 2000; MacKinnon, 2007; Meng, 2010). In its subtle forms, the view inspires people to design technologies to solve societal problems such as sustainability (Hanks, Odom, Roedl, & Blevis, 2008) and war (Hourcade & Bullock-Rest, 2011). In civic computing, the view manifests in research on the promotion of civic participation, such as designing interactive public displays to encourage civic discussions (Schiavo et al., 2013; Valkanova et al., 2014).

While designed technologies might achieve desired outcomes, the view risks reducing the complex relationship between humans and technology to a mechanistic level. In their

book *Information Ecologies: Using Technology with Heart*, Bonnie Nardi and Vicki O'Day commented on the danger of this view:

Technology goes far beyond the notion of device-used-by-an-individual-to-get-something-done, which is the way we think it in everyday terms...We know that technological tools are embedded in a larger context, and that this context is important to understanding how tools are designed and used.... We would like to move beyond the human-machine dyad, expanding our perspective to include the network of relationships, values, and motivation involved in technology use. (Nardi & O'Day, 2000)

Nardi and O'Day argue for understanding technology in context. At any point in history, technology does not only involve its user and the result of its use. Technology has its own origin, relationships with people and other technologies, values that designers hope to impose, values that emerge through its use, dynamics with user agency, and expected and unexpected consequences.

My study showed that Weibo intertwined with participants' daily lives. Participants did not always have a specific, clearly defined purpose for using Weibo. They frequently mentioned that they used smart phones to browse Weibo for entertainment when they were eating lunch, commuting in public transportation, relaxing during coffee breaks, watching television shows, or lying in bed before sleeping. They did not specify which type

of information to browse, since Weibo presented all the updates from accounts they followed, including news agencies, celebrities, movie stars, singers, sports stars, entrepreneurs, and scholars. They did not pay special attention to the content. Such practice was not multitasking, which refers to "a combination of switching among different tasks and also switching between solitary work and communication with others" (Su & Mark, 2008). Their Weibo use did not have specific purpose or user attention, compared to multitasking at work. In this scenario, the consumption of Weibo content became an operation, 5 according to activity theory (Kaptelinin & Nardi, 2006). Such operation routinely occurred when people wanted to relax or to kill time. The Umbrella Movement's information attracted many participant's initial attention only because of its frequent appearance over a short time. Weibo became a routine component of participants' lives. Weibo use deeply intertwined with participants' other mundane activities, such as sleeping, eating, working, and commuting. There was no clear separation between means and end in this type of use.

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<sup>&</sup>lt;sup>5</sup> Activity theory analyzes each activity as a three-layer hierarchical structure. The top level is the *activity* itself, oriented towards a motive. An activity may be composed of a sequence of *actions*. Each action may not be immediately related to the motive. An action consists of *operations*. Operations are "routine processes providing an adjustment of an action to the ongoing situation" (Kaptelinin & Nardi, 2006). Operations function in order for people to achieve the goal of an action. People are typically aware of their activity and actions, but not operations. Activities, actions, and operations can transform into one another. An action may change into a routine operation when people become experienced and adroit. An operation may transform into an action when the operation needs attention from people.

When participants consciously used Weibo, it alone could never satisfy their information needs. Participants always employed a variety of technologies to achieve their goals. Even when participants highlighted Weibo as a venue for opinion expression and civic discussions, they frequently used other venues, such as Chinese online forums. When they used Weibo, they found it necessary to configure Weibo, as I discussed in chapter 5. Weibo's design could not meet their information needs. The dichotomy perspective failed to acknowledge the interdependence between technologies, and thus over-emphasized the capacity of one single technology.

The instrumental view separates technology and outcome as two ontologically different types of reality, ignoring technology's consequences and people's agency during the technological processes. Latour problematized such separation in his writing *Morality and Technology: the End of the Means*. He argued:

The relation of technology to morality is somewhat modified as soon as we renounce the idea of putting the first on the side of means and the second on the side of ends. Each of these modes of existence upsets in its own distinctive way the relations between means and ends: technology by dislocating the relations between entities in such a way that they open towards a series of new linkages that force the constant displacement of goals and multiply intermediary agents whose collective sliding forbids any mastery; morality, by constantly interrogating aggregates to make them express their own aims and prevent a too hasty agreement about the definitive

distribution of those that will serve as means and those that will serve as ends. (Latour & Venn, 2002)

For Latour, the technical and the social always intertwine, coexist, and co-develop. He implies that there is no clear separation between means and end. Any given digital technology consists of many varied procedures and functions, each of which might involve specific concerns and consequences. My participants' experiences illustrated how their knowledge and experience intertwined with the use of technologies. No single technology could meet their needs. They needed to keep accessing alternative information sources, such as a Chinese forum or a foreign website, to achieve a goal, such as verifying a rumor. Each time participants finished using one mediator, they obtained new knowledge, which, in Latour's terms, transformed their "mode of existence." Gaining new knowledge allowed participants to continuously adjust their goals and expectations. For example, a participant might determine to visit Facebook for more information after hearing from Weibo users about Facebook. The new knowledge gained through Weibo users thus became a trigger for the participant to change their further actions. Participants' experiences showed no definite path for how people would use certain technology for a specific purpose.

Rejecting the means/end dichotomy means to reject the simplistic idea that a properly designed technology can result in desired social changes. When a technology is used, it enriches and alters a person's context in both prominent and routine ways that designers

cannot fully anticipate. The person's technological behaviors and routines change accordingly.

The notion of care of the self emphasizes how a person changes the self through the course of technological use, rather than how she uses a certain technology as means to obtain a certain end. This emphasis is meaningful as it is the only way for a person to advance her capacity to engage in civic issues. Without constant practices of self-cultivation, a person can neither truly identify the public issues nor readily adapt to the ever-changing society.

### 8.3.2 Enhancing Autonomy in Interaction with Technology

Autonomy refers to "volition, to having the experience of choice, to endorsing a person's actions at the highest level of reflection" (Deci & Ryan, 2006; Ryan & Deci, 2000). A highly autonomous person can use technologies to engage in civic activities in a conscious and responsible way. My participants cherished the autonomy when interacting with technologies, which manifested in their endeavors to identify media bias and configure technologies.

However, contemporary commercial technologies, such as Google, Facebook, Twitter, and Weibo, are not designed to enhance people's autonomy. They have their own business agenda and commercial purpose that rely entirely on enticing or persuading people to consume more content and spend more time and money (Introna &

Nissenbaum, 2000). Such situation limits users' own options of what to read and what to see. Citiao, one of my participants, chose to only follow accounts of his offline connections in order to counter Weibo's high information volume. However, he could still receive many recommendations, such as the hourly, daily, and weekly trending topics and famous accounts that his friends were following. Citiao inevitably consumed much unwanted content whenever he logged onto Weibo.

Existing commercial platforms are not neutral (Maxwell & Bourreau, 2014). They promote popular opinions and suppress minority voices. Google, for example, discriminates against minority voices through its PageRank algorithm (Introna, 2006; Introna & Nissenbaum, 2000) and manipulates results for advertisement purposes (Edelman, 2011; Laidlaw, 2008). Search engines cooperate with governments' regulatory actions such as censorship (Shade, 1996) and surveillance (Greenwald, 2014), threatening the privacy and safety of citizens engaged in civic activities which authorities find unfavorable. Because of the Great Firewall and Weibo's strict self-censorship mechanisms enforced through algorithms, my participants needed to spend much time and energy studying how to circumvent government regulations.

Technologies are becoming increasingly powerful and efficient at tracking, analyzing, and predicting people. Sophisticated algorithms informed by the knowledge of artificial intelligence, data mining, and big data analysis ever more successfully present content that people will enjoy. "Echo chamber," personalization, and recommender systems are

pertinent examples. The former refers to a situation in which people only communicate with like-minded others, amplifying or reinforcing their shared opinions and beliefs ( Key & Cummings, 1966; Jamieson & Cappella, 2008). Personalization (Mobasher, Cooley, & Srivastava, 2000) and recommender systems (Resnick & Varian, 1997) automatically tailor incoming information for people, limiting the opportunity to engage with diverse values and opinions. Civic computing researchers have begun to examine whether social media use increases political polarization (Semaan, Faucett, Robertson, Maruyama, & Douglas, 2015; Semaan et al., 2014). My participants sought to avoid reading distorted information by reading from a variety of media.

Technologies are opaque to ordinary people. People could only infer the mechanisms of technologies through interacting with simple user interfaces. Latour commented:

When we say there is a technical problem to resolve, we precisely wish to introduce the addressee to the detour, to the labyrinth that he will have to confront before pursuing his initial objectives. When we admire the technique of a specialist, we rightly recognize in it the passage that no one can master, except him, and specifically him, who besides does not know what he is doing (all the specialists in systems of expertise recognize this to their cost). How far we are from the function, from domination, from instrumentality! We find ourselves unexpectedly placed in front of what permits us (without understanding why) or

what prevents us (without understanding that either) to have direct access to the goals. (Latour & Venn, 2002)

Latour illuminated users' powerlessness in the face of modern sophisticated technologies. The mechanisms and states of technologies are often hidden from people. People can only make sense of large, sophisticated systems through their simplified interactions with them and sometimes with user manuals. Only a few exceptions exist for technically savvy users, such as open source software (Weber, 2005), reverse-engineering (Chikofsky & Cross, 1990), and theory-crafting in online gaming (Nardi, 2010). With little control over and little knowledge about technologies, people could hardly know whether technologies function as expected. My participants recognized their little control over one single technology. They had little power when a previously common word suddenly became a sensitive word and was no longer searchable in a platform. They thus chose alternative technologies to remedy this issue.

When technologies become ever more successful at entertaining, and at the same time remain opaque, awareness and critical thinking become ever more important in interacting with technologies. My participants attempted to gain control over their media context through diverse strategies, such as utilizing and re-appropriating technologies.

Care of the self represents a human effort to enhance autonomy in human-computer interaction. It seeks to renegotiate a person's relations with technologies by emphasizing

a person's own thought, knowledge, and understanding. In so doing, a person can better discern his capacity and knowledge. He is more capable of observing and managing computing tools' advantages and disadvantages.

The enhancement of autonomy eventually empowers individuals. When a person is more proficient and autonomous at using technologies, he can contribute more to civic participation.

# 8.3.3 Care for the self through Technology

Thinkers have long been concerned with modern people's declining attention to care of the self. Foucault traced the exclusion of care of the self in modern thought. He noted that modern thought has generated a fundamental misconception of care of the self as merely a necessary epistemic condition for gaining knowledge of things (Foucault, 1998b). This misconception leads to the denunciation of care of the self as amoral—akin to selfishness, egoism, and narcissism. However, modern thought missed the key point that care of the self aims at transforming the self into a truthful existence (Robinson, 2015).

Jacques Ellul, a French philosopher, discussed how technologies have changed the focus of people from the self to material life over the last few centuries. He noted:

In our days, we are unable to envisage comfort except as part of the technical order of things. Comfort for us means bathrooms, easy chairs, foam-rubber mattresses, air conditioning, washing machines, and so forth. The chief concern is to avoid effort and

promote rest and physical euphoria. For us, comfort is closely associated with the material life; it manifests itself in the perfection of personal goods and machines. According to Giedion, the men of the Middle Ages also were concerned with comfort, but for them comfort had an entirely different form and content. It represented a feeling of moral and aesthetic order. (Ellul, 1964)

For Ellul, technology is a broader term that refers to "the totality of methods rationally arrived at and having absolute efficiency in every field of human activity" (Ellul, 1964). Technologies that aim at maximizing the efficiency of production have oriented people towards material consumption rather than their selves. Technologies have conveniently occupied people in modern days, driving the desire for more content consumption. A recent survey by Common Sense Media reported that American teenagers spent an average of nine hours a day on media, with 39% on passive consumption of music, videos, television, and text, 25% on interactive consumption of video games and websites, and 26% on social media and video chatting (Common Sense Media, 2015). In my study, participants reported frequent Weibo use for entertainment on a daily basis. They quickly browsed all sorts of information on Weibo whenever they could "spare a hand" to hold a smartphone. Consequently, the movement's information could be so pervasive and easily reached them.

Technological advancements are permeating our modern life. Many scholars share the vision that everyone can stay connected and informed anytime, anywhere (Makinson et

al., 2012; Perry et al., 2001; Watkins, 2009; Wei, 2008). However, people only have limited time, attention, and energy. When technologies attempted to occupy a person's mind and thoughts, care of the self constituted a form of resistance by asking a person to use her own active thinking to occupy the self. Such resistance was liberating, because it represents a person's cautious interactions with her environment.

Care of the self denotes a person's self-transformation in order to transform society. Such actions are serious, conscious, and responsible. They are more profound than slacktivism, which refers to low-cost, low-risk online actions that supports a social or political cause, such as a "like" or "re-tweet" (Lee & Hsieh, 2013).

Technologies support care of society through care of the self. Care of society was not a conscious, ultimate purpose of participants' practices. Rather, it emerged naturally out of participants' care of the self, because care of the self exhibited an attitude towards not only oneself, but also towards others and the world (Robinson, 2015). For my participants, care of the self was consistent with care of the society.

Care of society is not an easy practice. A person needs to carry out a great degree of work on the self in order to understand the relations with his community and society. During this process, technologies are not tools for obtaining certain definite goals. Rather, technologies are a dynamic, complex condition that continuously influence both the methods people use and the goals of civic participation.

## 8.4 Conclusion

Civic computing scholarship has rarely focused on China, and studies from the humanities and social sciences often lack a technological focus. In this dissertation I attempted to fill this knowledge gap by presenting an account of how Chinese citizens used technologies for civic participation.

I adopted the notion of care of the self to analyze participants' civic practices. The notion originates from Foucault's investigation of Western philosophical traditions, but resonates with the classic teachings of Confucianism, China's traditional philosophical and ethical system. I showed how Confucianism and other unique circumstances, such as drastic media development and government censorship, conditioned participants' thoughts, choices, and practices.

The notion of care of the self provides an alternative, critical perspective for understanding civic participation and civic computing. My analysis showed that each locale has its unique form of civic participation, embedded in local circumstances. Civic computing researchers should pay special attention to these local conditions, especially when studying a foreign event.

While current scholarly and media discussion on civic computing has often emphasized how technologies can promote collective action for society, I draw on Foucault's work to reflect on the three critical components: "collective," "action," and "society." I argue that,

even in the context of civic participation, individual precedes collective, thinking precedes action, and the self precedes society.

Care of the self is a critical process that transforms a person from the state of not knowing about public issue to the state of civic participation. A person may become aware of a public issue by chance or through a friend. However, they make conscious decisions about whether and how to participate. When they do commit to a public issue, they endeavor to cultivate their understanding of it. This self-cultivation eventually drives a person to care for society and engage in public issues.

When a person determines to take a role in civic participation, she is immediately situated in complex power relations that impose different narratives, discourses, and truths to herself. Care of the self is the active, conscious choice to construct one's own knowledge about public issues. The person will face enormous cognitive challenges. No other individual, institution, organization, or country can do this for her.

Technology is powerful. However, it does not directly promote civic participation in a mechanistic way like a hammer to a nail. Technological practice is a dynamic, complicated process that involves participants' life experiences, knowledge, and histories. Technology is an important part of the necessary conditions for citizens to recognize and understand public issues and determine their own means of participation.

While civic computing researchers often embrace the capacity of technologies to engage, mobilize, and organize a large number of people, I point to the necessity to examine a person's work on the self during the course of civic participation. I argue that the notion of care of the self is of special value to civic computing because it engages fundamental questions regarding what constitutes civic participation for a person and why a person participates. I argue that care of the self is the essential path to serious, conscious, and responsible civic participation. Civic computing researchers and designers should pay attention to how technologies can help people with the practices of care of the self.

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