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404 NOT FOUND

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by

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ABSTRACT

404 NOT FOUND addresses an arts-based studio practice exploring how data and technology quantify and surveil the self. Specifically, in this paper, I outline my creative research practice and my interest in using my own body as a subject to create artworks that explore the expansive reach, as well as the limitations, of surveillance. This thesis support paper follows a chronological trajectory that traces my art practice throughout the two years of my MFA programme. My creative research started from using animation entitled *Black Quantified-self*, as a vehicle to engage with the concept of the "quantified-self." I created a series of hand-drawn animations to discuss the pros and cons of "quantified-self." Then, I connected "quantified-self" with big data, and created an installation called *Seeing Yourself through Technology* with my photos and self-portraits. In addition, I expanded the topic into large notions of surveillance, and created two videos, *The Blue Pill* and *We Are Walled*.

ACKNOWLEDGEMENTS

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Chapter 1: Introduction

1.1 Art Practice and Creative Research

My art practice examines how data and technology quantify and surveil the self. Specifically, I am interested in using my own body as a subject to create artworks that explore the expansive reach, as well as the limitations of surveillance. My creative research started from using animation as a vehicle to engage with the concept of "quantified-self." I created a series of hand-drawn animations to discuss the pros and cons of "quantified-self." Through these animations, I opened up a digital space which allowed me to explore technology-based topics. Then, I connected "quantified-self" with big data. In order to improve the sense of participation, I experimentally created an installation with my photos and self-portraits instead of animations. In addition, I expanded the topic into large notions of surveillance, and created two videos to demonstrate the details of my opinions on surveillance. In the first video, I applied traditional Chinese therapies as metaphors in the videos to convey my understanding of Chinese Internet policy. In the second video, I went deep into this Chinese Internet policy and discussed the influence of the Great Firewall on individuals who have both experiences of living inside and outside of it. I will specify each project separately in the following chapters, to discover the influences of the "quantified-self" and surveillance from different perspectives.

1.2 Context

In this section, I introduce the larger socio-political and artistic context of my art practice during my MFA research. I begin with the definition of "quantified-self" and move to the reasons of the formation of "quantified-self" later. Then, I clarify how I shifted my topic from "quantified-self"

to surveillance while presenting some examples of surveillance. In the end, I refer to artists who share similar concerns.

On February 10th 2018, I walked 9400 steps, slept 7.5 hours, burned 274 calories, took in 500 calories, spent about 2 hours on my cellphone, and commented my friends' posts 3 times. Of course I was not able to memorize clearly these numbers myself, but my cell phone helped me do so, and not only on this day, but everyday. My cell phone's powerful function made me feel like my life was measured. Meanwhile, I could not ignore Airbnb's pop-up advertisement on my Instagram account. After I searched the flight price from Calgary to San Francisco on Google, Instagram acquired my data and considered me as a potential customer for Airbnb. At that time, I noticed that I was surveilled. Without inputting any key words on Instagram, this application obtained my plan and destination. These two examples made me understand/feel that the technology around me quantified and surveilled me at the same time and this phenomenon elicited my initial motivation to create the project *Black Quantified-self*.

To describe the feeling of being measured, I found the term "quantified-self" works well. "Quantified-self" is a movement to incorporate technology into data acquisition of aspects of a person's daily life in terms of inputs (food consumed, quality of surrounding air), states (mood, arousal, blood oxygen levels), and performance, whether mental or physical.[1] There is also a website called "quantified-self" established by Gary Wolf and Kevin Kelly that coordinates a global set of in-person meetings for sharing personal experiences and experiments with self-tracking behaviours, moods, and activities.[2] H. James Wilson states that "quantified-self" is not

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[1] Gary Wolf, "Gary Wolf: The Quantified Self." *PsycEXTRA Dataset*, 2010. doi:10.1037/e609302010-001.
[2] Kristen Barta and Neff Gina, "Technologies for Sharing: Lessons from Quantified Self about the Political Economy of Platforms." *Information, Communication & Society* 19, no.4 (2015), 518-31.

merely to increase self-awareness but to become better at your job and more satisfied with your life.[3] Melanie Swan, a researcher from Purdue University, even predicts that in the long-term future, "'quantified-self' may become additionally transformed into the extended exoself as data quantification and self-tracking enable the development of new sense capabilities that are not possible with ordinary senses."[4]

In my research, I define "quantified-self" as a lifestyle where people rely on electronic devices to track their everyday data, and gain self-knowledge through self-tracking with technology. In other words, they trust the external-tracking more than their own embodied readings/experience. In order to explore "quantified-self," I combined the academic knowledge of it and an art project, *Black Quantified-self.* I started with the reasons for the formation of this lifestyle. On the surface, the reason for the emergence of this lifestyle is the utilization of personal activity trackers. Personal activity trackers, such as Apple watches and Fitbits, are an inexpensive and easy way for people to record their physical activity and simple biometric data. As these devices have increased in availability and sophistication, their daily use has grown.[5] Meanwhile, with the advent of wearable technologies that possess the ability to communicate, we have the capability of not only recording our information, but also transmitting it to linked devices and cloud databases, as well as social networks and other interested parties.[6]

Other than the ostensible reasons I mentioned above for why people quantify themselves, there are also deeper reasons to explain this activity. Although the practice of this lifestyle relies

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[3] H. James Wilson, "You, by the numbers," *Harvard Business Review.*
[4] Melanie Swan, "The Quantified Self: Fundamental Disruption in Big Data Science and Biological Discovery." *Big Data* 1, no.2 (2013), 85-99.
[5] Matthew B Hoy, "Personal Activity Trackers and the Quantified Self." *Medical Reference Services Quarterly* 35, no.1 (2016), 94-100.
[6] Celementina R Russo, "The Quantified Self." Foundations of Augmented Cognition Lecture Notes in Computer Science, 2015, 514-20. doi:10.1007/978-3-319-20816-9_49.

completely on technology, the deep-rooted reason for the prevalence of this lifestyle can be traced to a previous age without high technology, when people chose to write diaries to record their everyday lives.[7] Both "quantified-self" and diaries are approaches to record people's everyday lives, but "quantified-self" is a technological way. Thus, to some extent, trying to understand the reason why people write diaries can also explain the reason for seeking "quantified-self."

The personal diary had become common by the late eighteenth century.[8] In the Western tradition, diary writing began with spiritual and religious self-examination. People examine their own flaws and failures, seeing self-examination as the source for self-improvement and attaining grace.[9] Therefore, self-examination and self-improvement can also be seen as two of the intentions of "quantified-self," which is similar to Stephen Wolfram's description of "quantified-self": an effort at "self awareness."[10] To reflect the similarity between "quantified-self" and diaries, I chose to create hand-drawn animations in the project *Black Quantified-self*, as the immediacy and authenticity that the hand drawing brought me resembled writing diaries. In Chapter 2 of this thesis support paper, I discuss the details of *Black Quantified-self*.

However, because of the intervention of the surveillance, self-examination and self-improvement become difficult to achieve through "quantified-self." Today, a lot of people intend to acquire self-knowledge by tracking their personal data. But as "quantified-self" is a data collection process, "who owns the data that is being selected" becomes a question. Do people own their personal data? Do companies own the data they collected? Do governments own their citizens' data? With the participation of companies and governments, individual tracking has moved

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[7] Jill Walker Rettberg, Seeing Ourselves through Technology: How We Use Selfies, Blogs and Wearable Devices to See and Shape Ourselves. Basingstoke: Palgrave Macmillan, 2014, 7.
[8] ibid
[9] ibid
[10] Stephen Wolfram, "*Stephen WolframBlog*." http://blog.stephenwolfram.com/2012/03/the-personal-analytics-of-my-life/.

away from just being a process of self-checking, but toward a process of surveillance, especially in the ubiquitous Internet environment. Throughout my MFA research, I have explored these questions in my work as I delved further into the notion of "quantified-self" and technological information gathering. My project *Seeing Yourself through Technology* could be considered as the transition of my research practice. By introducing the concept of big data in the *Seeing Yourself through Technology*, I built a bridge between "quantified-self" and surveillance.

Edward Snowden publicized PRISM, a surveillance program, in 2013. He declared that the United States' National Security Agency (NSA) collects private electronic data belonging to users of major Internet services like Google, Facebook, Outlook and others. Information captured by PRISM includes email, documentation, visual data and telecommunication logs.[11] Citizens' personal data is collected by databases, and that data is under the control of the government. It is also really easy for the market to utilize personal data to achieve business goals. As Spiekermann, Sarah, Rainer Bohme, Alessandro Acquisti and Kai-Lun Hui state in "Personal Data Market": privacy is dead.[12] This appalling trending phenomenon is not confined to a certain country, but is present in many countries, although the ways of conducting surveillance are different. In China, for example, there is Wechat, one of China's most popular apps: it contains keywords about sensitive topics that were censored in private and group chats without users'

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[11] Barton Gellman and Poitras Laura, "U.S., British Intelligence Mining Data from Nine U.S. Internet Companies in Broad Secret Program." *The Washington Post*. June 07, 2013.
[12] Spiekermann, Sarah, Rainer Bohme, Alessandro Acquisti and Kai-Lun Hui, "Personal Data Market." *Electronic Market* (2015): 91-93.

knowledge, according to a report published by Toronto-based Citizen Lab.[13] The use of the Internet for surveillance is not new but its scope has never been greater.[14] In the Chapter 4, I discuss my concerns about Internet surveillance through the project *The Blue Pill*, which can be considered the cornerstone for my final project.

Many contemporary artists from around the world have created artworks that address this context of surveillance. *Hansel and Gretel* (2017) is Ai Weiwei's newest installation exhibiting in New York.[15] He finished this installation with the architects Jacques Herzog and Pierre de Meuron. In this installation, the audience's every move is eerily recorded from above by a grid of cameras, which registers their ghostly image beneath their feet, while a few tethered drones buzz overhead (See Figure 1.1). This installation explores surveillance with a scary, dark and negative atmosphere, which offers me inspiration for my final project *We Are Walled.* Another artist, U.S.-based Leonardo Selvaggio, developed a project *URME Surveillance* (2014)*, which aims to protect the public from facial recognition surveillance systems.[16] The artist invited the public to wear a photo-realistic, 3D-printed prosthetic of his face. When a user wore the prosthetic, camera systems equipped with facial recognition software identify that user as the artist, thus attributing all of their actions to the identity known as "Leonardo Selvaggio." (See Figure 1.2.) Canadian-based Dave Kemp's project *Data Collection* (2009) involved photographing the various identification cards carried by over 100 individuals.[17] Participants were permitted to remove any cards that they felt uncomfortable with having on display. The removed cards were indicated through

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[13] "Tracking Censorship on WeChat's Public Accounts Platform." The Citizen Lab. July 08, 2017. Accessed August 03, 2018. https://citizenlab.ca/2015/07/tracking-censorship-on-wechat-public-accounts-platform/.

[14] David Lyon, *Surveillance after Snowden.* John Wiley & Sons, 2015.

[15] Ai Weiwei, *Hansel & Gretel.* America: New York's Park Avenue Armory, 2017.

[16] Leonardo Selvaggio, *URME Surveillance.* America: Columbia College Exhibition, 2014.

[17] Dave Kemp, *Data Collection.* Canada: Agnes Etherington Art Centre, 2009.

replacement with a black "withheld" placeholder card. Kemp tried to express his concern about privacy through this artwork (See Figure 1.3).

Figure 1.1, Weiwei, Ai. *Hansel & Gretel*. August, 2017. America: New York's Park Avenue Armory, New York.

Figure 1.2, Selvaggio, Leonardo. *URME Surveillance*. January, 2014. Columbia College Exhibition, Chicago.

Figure 1.3, Kemp, Dave. *Data Collection*. April, 2009. Agnes Etherington Art Centre, Canada.

While surveillance has become more widespread and invasive in recent years, its applications are very different from place to place. As a Chinese person, I can never ignore the unique stamp marked by Chinese Internet policy on my mental world. In China, there is a surveillance apparatus that is called the Great Firewall, which blocks Internet access and controls Internet traffic. Living inside this wall means people are not allowed to go on foreign websites including Google, YouTube and Facebook. Inside the wall, there is a regulation called *Chinese Interim Provisions on the Administration of the Development of Public Information Services Provided through Instant Messaging Tools,* which is used to delete comments and articles which violate it on the Internet. Because of this regulation, a lot of information is deleted from the Chinese Internet, which leads to people who live in China being not aware of some sensitive issues and events around them. In the Chapter 5 of this thesis support paper, I present my final project *We Are Walled,* where I exploited a video to discuss my understanding of the Great Firewall.

1.3 Methodology

Through my MFA research, I combined creative art practices and academic research practices to promote the development of knowledge. This methodology is known as research creation.[18] Two professors from Concordia University, Owen Chapman and Kim Sawchuk, note that "the research-creation work must address clear research questions, offer theoretical contextualization within the relevant field or fields of literary/artistic inquiry, and present a well-considered methodological approach."[19] In my works, I mainly used myself as a subject to accomplish my research creation process. With this method, I directly showed the audience my vulnerability and had intimate conversations with them so that they could share their authentic feelings and then complete my works. As I consider audience as a very important part of my art creation, which can help define the essence of my works, obtaining their veritable feedbacks becomes very significant to me.

My research creation practice was based on my personal experience and the ongoing exploration of the self. In this thesis support paper, I mainly discuss four projects that I have done during these past two years. The first project *Black Quantified-self* focused on the concept of "quantified-self," where I used animation as a vehicle to engage with. As a cellphone user who has been being unwittingly quantified and surveilled for many years, exploring the implications of "quantified-self" was to recognize what I have been experienced during these years. I also collected data from other people. I went on various websites to survey different people's views regarding my research themes. For instance, I found a website called "Quantified-self: self knowledge through numbers." After I went on their forum, I noticed that there were countless

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[18] Canadian Social Sciences and Humanities Research Council. (2016, August). *Definition of Terms*. URL: http://www.sshrc-crsh.gc.ca/funding-financement/programs-programmes/definitions-eng.aspx#a22.
[19] Chapman Owen B. and Kim Sawchuk. creation: Intervention, analysis and" family resemblances". *Canadian Journal of Communication*, *37*(1), 5, 2012

comments from people who use electronic devices to track their everyday data. I divided these comments into different groups and analyzed them. Through observing and interviewing, I created *Black Quantified-self* to achieve in-depth exploration.

The second project, *Seeing Yourself through Technology,* implemented my photos and self-portraits reflecting my daily life as key components to show my experience of "quantified-self." Alva Noe writes, "To describe experience is to describe the experienced world."[20] I intended to reach a group of people who rely on tracking data and make decisions by data through my autobiographical work. In the following project *The Blue Pill,* I engaged with the topics in Internet surveillance, gaze and biopolitics. I took my experiences as references and expressed my understandings of these topics through a video. In my final project, *We Are Walled*, I focused on quantified and surveilled Chinese people. As a Chinese person, talking about the experience of living inside of "the Great Firewall" was talking about my own story. So, I used myself as the subject to record a video and applied some visual effects to it. By documenting myself, I better understood the influence of "the Great Firewall" on myself and extended this understanding to a greater social context.

Through this thesis support paper I am going to discuss four projects in chronological order and explain how each addresses the larger contexts I have outlined in this introductory chapter: *Black Quantified-self*, *Seeing Yourself through Technology*, *The Blue Pill* and my final thesis exhibition, *We Are Walled*.

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[20] Alva Noë, Experience and experiment in art. *Journal of Consciousness Studies*, *7*(8-9), 123-136, 2000.

Chapter 2: Black Quantified-self

2.1 Exhibition Description

Black Quantified-self was the first art work I completed in the MFA programme. This art project was exhibited in the lounge of the Department of Art in University of Calgary from January 23 to 27, 2017. The work was a series of animations screened as loops on three horizontally hanging TVs on one wall of the lounge. The hustle and bustle of the lounge ensured a steady flow of viewers for the exhibition. When people went through the hallway, they were attracted by these animations and stopped for a while and watched. My intention with this work was to portray the "quantified-self"—which I defined in Chapter 1 as a lifestyle where people rely on electronic devices to track their everyday data, and gain self-knowledge through self-tracking with technology—and to display *Black Quantified-self* in a place where the audience felt familiar. Different from galleries, the lounge was a place where people came in and out everyday. I wanted my work to approach and invade the audience's daily lives so that they could have a conversation with my work easily.

2.2 Extension and Animation

As the title implies, I intended to discuss "quantified-self" through the project *Black Quantified-self*. I defined "quantified-self" as a lifestyle because when people try to qualify everything around them, they may change their ways of living and their world views. Technology, such as the cellphone, computer and activity tracker used to quantify personal data, is carried and accessed as a medium by users everyday. Therefore, I chose to depict everyday activities to reflect "quantified-self". I recorded videos to document my daily activities and drew a great amount of pen and ink drawings and animated them. Specifically, I selected three activities, running, eating

and using an App called Okcupid. The running animation depicts the process of a woman trans-forming into countless binary code. With the woman running, all drawing lines deform into binary code (1 and 0). The eating animation reflects how a woman is transformed into binary code through the process of eating. The Okcupid animation shows a mobile phone and a hand turning into binary code with the motion of the hand. At the end of these animations, the screens are occupied by binary code and after some weird flicker effects, everything disappears.
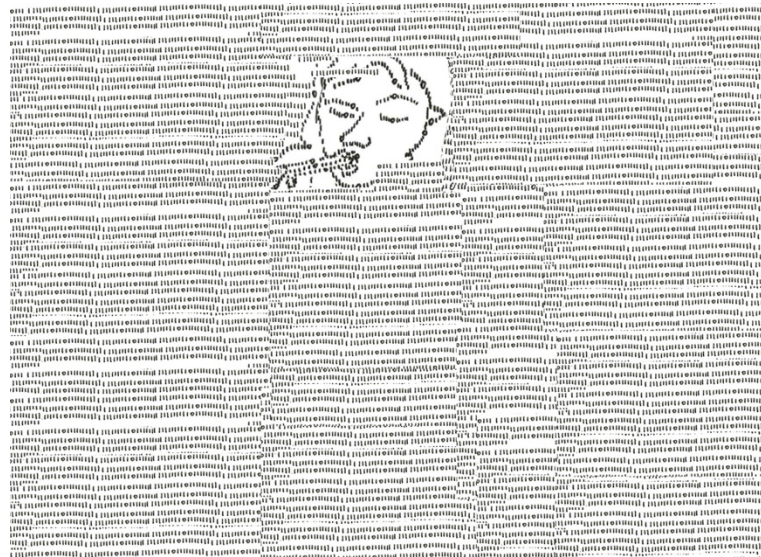
Figure 2.1, Xiaoyu Sun. *Black Quantified-self*. January 23, 2017.The Lounge, University of Calgary.

The first scenario I picked was running, because running is the most common activity for the tracking data habit.[21] Every time I explained the concept of "quantified-self" to others, I would raise the example of runners using personal activity trackers to quantify themselves, and people always gave me instant feedback that they had connection with this lifestyle. I thought

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[21] Choe, Eun Kyoung, Nicole B. Lee, Bongshin Lee, Wanda Pratt, and Julie A. Kientz. "Understanding Quantified-selfers Practices in Collecting and Exploring Personal Data." *Proceedings of the 32nd Annual ACM Conference on Human Factors in Computing Systems - CHI 14*, 2014.

this scenario, then, could help viewers access my intention effectively and brought strong empathy to them. The second one was eating. If there is any activity that can pass through all the barriers of cultures, nationalities, and backgrounds, and bond all people together, that must be eating. Many people, like me, considered eating as the most important activity in daily life. Therefore, I thought eating was a good point to reflect my subject and conveyed my opinion. The last scenario was a person using Okcupid. The reason why I chose this aspect was that I was a user of Okcupid, and I had an experience of dating someone who was chosen by Big Data. Okcupid uses a matching algorithm to match users based on the information they offered and all information constitutes a giant dataset.[22] Some people believe that this matching algorithm could help them find perfect partners. Using dating Apps is becoming more and more popular, especially among younger generations.

However, this lifestyle also has negative aspects. As Marshall McLuhan asserts, media act as extensions of the human senses.[23] McLuhan establishes every technological advancement as an extension of the body's senses. For example, clothing is an extension of our skin, housing is a collective skin, and cities create technological organisms from these collective membranes.[24] From this point of view, "quantified-self" makes technology become an extension of our body. What is the problem of this extension? I suspect that it makes people lose a sense of natural body signals. People used to feel their feelings directly, but now, they get their feelings from data collected by personal activity trackers. For example, today, there is an abundance of food around many of us and a list of ingredients and nutritional information can be found on every package of

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[22] Emil O. W Kirkegaard and D. Bjerrekær Julius. "The OKCupid Dataset: A Very Large Public Dataset of Dating Site Users." *Open Differential Psychology*, 2016.
[23] Marshall McLuhan, Understanding Media: The Extensions of Man. Cambridge (Mass.): MIT Press, 2013.
[24] ibid

food. People usually want to taste various kinds of food, but do not want to have a fat body, so they eat, calculate the calories and repeat this. As a result of this repeated calculation, they forget what a real hunger sensation is, even though a human body has evolved its own feedback mechanisms to indicate when food is really needed.

In my opinion, it is impossible to avoid the negativity of this extension. As Slavoj Zizek argues, the greatest difficulty in detaching from the media is the media's semblance to our own senses.[25] Once familiar with the general workings of the media, we are only able to perceive our own senses with respect to their mechanical extensions, even if we are able to sense without the media.[26] Particularly, the concept of embodiment can address the relationship between cognition and this extension. N. Katherine Hayles claims "in contrast to the body, embodiment is contextual, enmeshed within the specifics of place, time, physiology, and culture, which together compose enactment".[27] Descartes said "I think, therefore I am".[28] In his view, body and mind are separate. In contrast to Descartes's view, "embodiment" addresses body and mind as an entity. Therefore, relying on the information gained from the extension/technology probably changes the experience of embodiment. Bernadette Wegenstein explains that "the experience of embodiment today can be altered through robotic devices, implants, prostheses and a variety of other technical exteriorizations of the body".[29]

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[25] Slavoj Zizek, "From virtual reality to the virtualization of reality," *Electronic culture: technology and visual representation*. New York: Aperture, 290-295, 1996.

[26] Maggie Hansen, Body, embodiment. *The Chicago School of Media Theory*, 1-7, 2003.

[27] Nancy Katherine Hayles, How We Became Posthuman: Virtual Bodies in Cybernetics, Literature and Informatics. Chicago: Univ. of Chicago Press, 2010.

[28] René Descartes, Oeuvres De René Descartes: Discours De La Méthode, Les Passions De Lâme. Paris: R. Hilsum, 1932

[29] Bernadette Wegenstein, Getting under the Skin: The Body and Media Theory. Cambridge, MA: MIT Press, 2006.

To reflect the alteration of embodiment caused by "quantified-self", I decided to create hand-drawn animation. As a consequence of notions of the direct and unmediated transfer of idea to drawing, the act of hand drawing is often associated with assumptions of immediacy and authenticity. Additionally, drawing for me is a way to fully connect with the ideas and activity, which is contrary to quantified-self's disembodiment of its users. More important, animation offers a different vocabulary of expression to live action and enables greater creative freedom.[30] To some extent, this creative freedom also ensure a tight connection between my mind and my production. Also, the experience of drawing my activities on paper was an autobiographical process. I documented my life through artworks to reflect a broader social context. Meanwhile, drawing a lot of pen and ink drawings was time-consuming, but I had a sense of peace at that time. When I was drawing, time slowed down, and that meditative moment brought me back into an age without too much technology. I wanted to convey my feelings of that moment to viewers, and trigger their thinking about the necessity of quantifying themselves.

Furthermore, to some extent, I felt that the characters I drew were experiencing "quantified-self" as myself. Ray Harryhausen once said when asked how he would master stop motion art technically: it becomes your second nature.[31] When I drew every frame of the motion, I felt the character was deconstructed into countless static dots, lines and planes, which was similar to the personal data quantified by technology. When I quantify myself, I also have the feeling of being fragmented into countless data.

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[30] Paul Wells, The fundamentals of animation. Ava Publishing, 10, 2006.
[31] Harryhausen, Ray, Tony Dalton, and Ray Bradbury. *Ray Harryhausen: an animated life*. Billboard Books, 2003.

2.3 Conclusion

In Chapter 1, I discussed the reasons for why people choose to quantify themselves. In this chapter, I raised some possible negativities of "quantified-self" and combined my understanding of "quantified-self" with animation creation. I put forward that "quantified-self" makes technology become an extension of our body and makes people lose a sense of natural body signals. Additionally, I introduced the concept of embodiment and doubted that "quantified-self" disembodies people. To respond this opinion, I chose to create hand-drawn animations, as drawing tightly connects mind and activity which is opposite to disembodiment of "quantified-self". Finally, I talked about other features of animation and how these features supported my concept.

As my first art project in the MFA programme, *Black Quantified-self* helped me open a dialogue to discuss the concept of "quantified-self." Personally, I enjoyed the procedure of hand drawing and producing animation. Meanwhile, I experienced the differences between embodiment and disembodiment in the process of research. With this project, I obtained a better understanding of the core of "quantified-self." However, some viewers critiqued that it was difficult for them to gain my intentions as my animations were too abstract. Some viewers also indicated that they did not consider the "quantified-self" to be an issue. Therefore, I decided to create the next art project in a more direct and convincing way to convey my ideas.

Chapter 3: Seeing Yourself through Technology

3.1 Exhibition Description

Seeing Yourself through Technology was an installation exhibited in the Little Gallery of the Department of Art in University of Calgary from April 24 to 28, 2017. This installation consisted of three parts. Each part contained a fragmented self-portrait and a drawing on a mylar screen. The self-portraits and the drawings are 5.5 feet high (the same height as me) and 3.2 feet wide. The three parts hung from the ceiling and faced three directions (See Figure 3.1).

Figure 3.1, Xiaoyu Sun. *Seeing Yourself Through Technology*. April 24, 2017. The Little Gallery, Calgary.

The three fragmented self-portraits reflected three of my daily activities: running, eating, and playing on a cellphone which were the same as the activities I chose to portray in my previous project *Black Quantified-self*. I segmented these self-portraits into small squares and put them together loosely. The three mylar screens were drawn with my images from the fragmented self-portraits with pen and ink. On the drawings, my images were filled with my written personal data, such as my weight, height, and heartbeat. I intended to create three interpretative layers in this installation. The first layer consisted of the fragmented self-portraits, which represented our physical bodies. The second layer was constituted by the mylar screens with my personal data

written on it, which represented data and technology. The third layer was the audience themselves. When the audience looked at the self-portraits through the drawing screens, they were "seeing themselves through technology," as the title implied.

3.2 Big Data and Heterotopia

In Chapter 1, I raised several questions, such as who owns the data that is being selected during the process of "quantified-self"? Do people own their personal data? Do companies own the data they collect? Do governments own their citizens' data? These questions were central to my exploration in this artwork, *Seeing Yourself through Technology.* In this chapter, I focus on this artwork to clarify my examination of the concept of big data. Amir Gandomi and Haider Murtaza describe big data as "a term that describes large volumes of high velocity, complex and variable data that requires advanced techniques and technologies to enable the capture, storage, distribution, management, and analysis of the information."[32] It usually includes data sets with sizes beyond the ability of commonly used software tools to capture, curate, manage, and process data within a tolerable elapsed time.[33] The data collected by "quantified-self" becomes one of the sources of Big Data, as Melanie Swan explains, "there are opportunities for big data scientists to develop new models to support 'quantified-self' data collection, integration, and analysis, and also to lead in defining open-access database resources and privacy standards for how personal data is used."[34] *Seeing Yourself through Technology* could be considered as the extension of my

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[32] Amir Gandomi and Haider Murtaza. "Beyond the Hype: Big Data Concepts, Methods, and Analytics." *International Journal of Information Management* 35, no. 2 (2015): 137-44.

[33] Ann Cavoukian and Reed Drummond, *Big privacy: Bridging big data and the personal data ecosystem through privacy by design.* Toronto: Information and Privacy Commissioner of Ontario, 2015.

[34] ibid

previous artwork *Black Quantified-Self*. By introducing the concept of big data in this art project, I delved in the phenomenon of "quantified-self" and existing issues behind this phenomenon.

To better understand big data, I found the concept of heterotopia from Michel Foucault works well:

> There are also, probably in every culture, in every civilization, real places—places that do exist and that are formed in the very founding of society—which are something like counter-sites, a kind of effectively enacted utopia in which the real sites, all the other real sites that can be found within the culture, are simultaneously represented, contested, and inverted. Places of this kind are outside of all places, even though it may be possible to indicate their location in reality. Because these places are absolutely different from all the sites that they reflect and speak about, I shall call them, by way of contrast to utopias, heterotopias.[35]

I assume that Cyberspace can be considered as a type of heterotopia that differs from real places, but people can interact with this heterotopic space and real places. Foucault explains this concept with an example of the mirror. He notes that "in the mirror, I see myself there where I am not, in an unreal, virtual space that opens up behind the surface."[36] If Cyberspace is like a mirror, then I can see my reflection there in the form of data. On Internet, the physical body is absent and only personal data can represent an individual. In this heterotopic space, big data is like a collective body of all Internet users. He also outlines 6 principles of heterotopia, and the third one is "heterotopias need a system of entrances and exits, which borders and distinguishes it from its environment."[37] For the Internet, the entrances and exits are logging in and logging off.

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[35] Michel Foucault, The Order of Things: An Archaeology of the Human Sciences. London: Routledge, 2010.

[36] ibid

[37] ibid

I wanted to reflect this heterotopic space and big data in my installation of *Seeing Yourself through Technology*. There are no clear definitions of installation, but in general, the term has some consistent characteristics: site-specificity, on process and spectatorship.[38] Julie Reiss explains that the verb "to install" represents a working process that frees itself from the artist's studio and aims for direct contact with audiences.[39] In this art project, I considered my art piece as the representative of the self that reflected my cognition and the condition of my life. Therefore, I intended to increase audience's senses of participation and shorten the distance between them and my work through the formation of installation, so that they could perceive my objectives easily.

This installation was a continuation of my earlier project, *Black Quantified-self.* In both projects, I used myself as the subject to access my research creation. However, instead of creating animations, as I did in *Black Quantified-self*, I chose to shoot photos of myself directly and then used these photographs as the basis for pen and ink drawings of myself. Three photos recorded three activities, running, eating and playing on a cellphone, which were the same as the last project's activities because these three normal activities easily elicited audience's empathy. The drawings were made with pen and ink based on the photos. The reason why I chose to draw myself was identical with the reason why I chose hand-drawn animation in *Black Quantified-self.* As I mentioned in Chapter 2, drawing for me is a way to fully connect with the ideas and activities, which is contrary to technology's disembodiment of its users. However, photography is different. Photography uses cameras as medium to connect the ideas and activities, which compared

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[38] Vivian Van Saaze, Installation Art and the Museum Presentation and Conservation of Changing Artworks. Amsterdam University Press, 17, 2013.

[39] Julie H Reiss, From Margin to Center: The Spaces of Installation Art. Cambridge, MA: MIT Press, 2001.

to drawing lacks immediacy and authenticity. In this installation, drawings on mylar screens represented embodiment and fragmented self-portraits reflected disembodiment. Through comparing fragmented self-portraits and drawings on mylar screens in this installation, I intended to contrast embodiment and disembodiment as well.

In the installation, aside from taking photos and drawing myself, I also recorded my personal data. My personal data can be seen as my reflection in Cyberspace and also can be considered as my identity in the heterotopic space. My cellphone has the function to record my personal data, such as steps and frequency of Internet surfing. I collected my data during one month and wrote the data on mylar screens to fill the drawings. The combination of the drawings and data represented my identity in both Cyberspace and reality. In Cyberspace, my personal data is not collected as a whole by big data, but as different categories that can separately represent my identity. From this point of view, in Cyberspace, I become the fragmented self. Eleanor Wynn James E. Katz notes "a main theme of the postmodern perspective is that Internet technology allows the separate existence of multiple aspects of self that otherwise would not be expressed and that can remain discrete rather than having to be resolved or integrated as in ordinary social participation."[40] To depict this fragmented self, I printed the three photos in human size and segmented them into small squares. Looking through the mylar screens at the fragmented photos was the process of looking at my different types of identity in different spaces.

3.3 Conclusion

In this chapter, I described the installation *Seeing Yourself through Technology*, and discussed the concept behind it. I introduced Big Data and heterotopia, and used the mirror as a metaphor

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[40] Eleanor Wynn James E Katz, "Hyperbole over Cyberspace: Self-Presentation and Social Boundaries in Internet Home Pages and Discourse." *The Information Society* 13, no. 4 (1997): 297-327.

to help readers fully understand heterotopia. Then, I talked about my artistic intention, as well as the considerations of drawings and photography. Additionally, I expressed my concerns about Big Data and my identity in Cyberspace, and how I conveyed my concerns through the installation.

Through this art project, I successfully brought the concept of "quantified-self" to the viewers and introduced several questions about big data. As this art project was more direct than the previous one, I felt I narrowed the space for the viewers' imaginations. The result was that although they immediately understood the intentions of my artwork, my work lost part of its mystery and implications. In the next project, I wanted to balance abstraction and connotation. In other words, I wished for my next project to be straightforward while still having great potential for viewers to interpret.

Chapter 4: The Blue Pill

4.1 Exhibition Description

The Blue Pill was a video exhibited in the 621 Gallery in the Department of Art in University of Calgary from April 16 to 20, 2018. The video was shown on an all-in-one computer in the middle of the gallery, and arranged directly on the floor. I used this code because I wanted my work to communicate Chinese Internet policy, Internet surveillance and big data. The content of the video itself mainly consists of two parts. The first half of the video is a scene depicting my behaviours of cupping and scratching my neck (See Figure 4.1). Camera angles switches between a surveillance (distant) view and a close-up view with a flashing black background and a white "404", which is the code for "page not found." In Chinese Internet zone, when I tried to open some articles with sensitive topics, they showed "404 not found". At the end of the first part, I look at the camera and the picture gradually transitions from my face to the digital version of my face. In the second part, my face is fragmented after the formation of the digital face. These pieces of my face then explode and return to the original condition several times. Red and blue screen alternate and afterwards, my real face returns with a content smile.

Figure 4.1, Xiaoyu Sun. *The Blue Pill*. April, 2018. The 621 Gallery, Calgary.

For the installation of this piece, I used yellow-black warning tape with a word "caution" surrounded the computer and walls, which created a visual boundary that required the audience to cross the warning tape to watch the video or to stand at a distance from the video. I used the caution tape as this boundary specific because I intended to create a "dangerous" area. The tape was affixed along the edge of the walls, forming an isolated area in order to give the audience a sense of "The Great Firewall," which is a censorship apparatus that blocks Internet access and controls Internet traffic in Chinese Internet zone.[41] Dim light shone from the ceiling on the computer and warning tape, created a solemn atmosphere.

The title *The Blue Pill* was from *Matrix,* a science fiction movie. The red pill would free people from the enslaving control of the machine-generated dream world and allow people to escape into the real world, but living the "truth of reality" is harsher and more difficult. On the other hand, the blue pill would lead back to stay in the comfortable simulated reality of the Matrix. In the video, after gazing with the digital me, the real me faced two choices. Red meant being rebellious and fight for my right. Blue represents accepting the current situation and being obedient.

4.2 Biopolitics, Internet Surveillance and the Gaze

The larger content of my work engages with philosopher Michel Foucault's concept of "biopolitics." While Foucault has proposed various definitions of "biopolitics" in his texts,[42] the meaning that best fits my theme is that he considers "population" as an independent biological corpus, a

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[41] Xu, Xueyang, Z. Morley Mao, and J. Alex Halderman. "Internet Censorship in China: Where Does the Filtering Occur?" *Passive and Active Measurement Lecture Notes in Computer Science*, 2011, 133-42.
[42] Lemke, Thomas, Monica J. Casper, Lisa Jean Moore, and Eric Frederick Trump. *Biopolitics: An Advanced Introduction*. New York: New York University Press, 37, 2011.

"social body."[43] This "social body" is different from the body of individual, but the collective

body of a population, and it has its own characteristics, such as birth rate, life span, the produc-

tion of asset and its circulation.[44] To achieve an overall concrete processes of the life of this "so-

cial body", "technology of security" is applied.[45] From my point of view, this "technology of se-

curity" refers to regulations and laws. This technology views population as a biological entity

and tries to protect this entity from risks by analyzing the mass phenomena characteristic of a

population.[46] But Foucault mentioned, the issue is "technology which aims to establish a sort of

homeostasis, not by training individuals but by achieving an overview equilibrium that protects

the security of the whole from internal dangers."[47] The idea of society as a biological whole and

"technology of security" as an instrument assume a central authority that manages, governs and

controls it and watches its condition. Specifically, the government takes this responsibility. As I

introduced in Chapter 3, big data exposes people's private information and makes them have no-

where to hide. With big data being manipulated by the government, the government has unprece-

dented capacity to regulate and control society. For this artwork, *The Blue Pill*, I was thinking

about how Foucault's concept of biopolitics could help me better understand and convey through

my artwork the ways in which surveillance operates in relation to the body, specifically to the

context of my home country of China.

The population of China can be considered as a "social body". As a Chinese person, I had

lived inside of "the Great Firewall" since this wall was established in 1998. From the perspective

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[43] Michel Foucault, Security, Territory, Population: Lectures at the Collège De France. Basingstoke: Palgrave Macmillan, 2009.

[44] ibid.

[45] Mark Hearn and Michel Foucault. "Society Must Be Defended: Lectures at the Collège De France, 1975-76." *Labour History*, no. 86 (2004): 218.

[46] ibid.

[47] ibid

of biopolitics, "the Great Firewall" is a powerful apparatus to isolate the "social body," and prevent it from outside risks and keep it in a "good" condition. However, the "good" condition of the "social body" cannot ensure a good condition for individuals. For example, because of the regulation *Chinese Interim Provisions on the Administration of the Development of Public Information Services Provided through Instant Messaging Tools* (Posted on August 7, 2014), a lot of information is deleted from the Chinese Internet zone, which leads to people living in China not being aware of some sensitive issues and events around them. This regulation appears to maintain the peace and stability of society, but individuals have to sacrifice their opportunity to know the truth.

As a result, in my art project, *The Blue Pill*, I decided to use cupping and Guasha as metaphors to covey the context of Chinese culture in relation to information access, Internet policy, and regulation of the body. Cupping and Guasha are traditional Chinese therapies. The principle of cupping is to put round cups on the skin and use flame or mechanical suction to make vacuum in the cups. The vacuum causes tissue to stretch into the cups creating light or dark ecchymosis. A lot of Chinese people believe that cupping can suck bad energy from their bodies with good energy remaining. The principle of Guasha is similar to cupping, which consists of closely timed, repeated, unidirectional press-stroking with a smooth-edged instrument over a lubricated skin area until ecchymosis appear.[48] Ecchymosis represents bad energy and the colour of ecchymosis depends on severity of illness. After Guasha, bad energy goes out of the body and people are healed. Within my piece, I am making symbolic connections between these therapies and Chinese surveillance and Internet police: Chinese Internet policy is like a gargantuan cup on Chinese

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[48] Ou, Ming. Han Ying Zhongyi Cidian, Chinese-English Dictionary of Traditional Chinese Medicine. Hong Kong: Joint Pub. and Guangdong Science & Technology Pub. House, 1988.

Internet zone. By deleting "bad" information and controlling criticism, this "social body" can remain healthy and stable.

In my project, I used my body as the metaphor of this "social body", a collective body of Chinese people. I used a close-up view and a surveillance (distant) view to record the process of cupping and Guasha in a confined room. In the close-up view, ecchymosis was intense and clear which easily led the audience to feel uncomfortable. I wanted the viewers to perceive how Chinese Internet policy affected me through this uncomfortable feeling. Cupping and Guasha were metaphors of Chinese Internet policy, so ecchymosis on my body was the "bad" information deleted by the government. By showing how ecchymosis looked on my body, I intended to express the influence of Chinese Internet policy on individuals. Although the policy is abstract and invisible in daily life, it affects every individuals living inside China. In the surveillance (distant) perspective, I sat in front of a computer and did cupping and Guasha. The computer reflected my behaviours but the screen flashed "404" intermittently. Through this surveillance (distant) perspective, I aimed to provide an opportunity for the audience to look at my cupping behaviour from the perspective of surveillance. From this perspective, the viewers became the people who surveilled me so that they could have a sense of participation.

Foucault's concept of the gaze gives us an interpretation of this surveillance. He claims that the disembodied gaze forces everyone becomes objects and the gaze's "inspection functions ceaselessly, the gaze is on alert everywhere."[49] When the government utilize Internet surveillance to surveil people's behaviours and thoughts, the relationships between the government and individuals become extremely unfair. Internet surveillance brings people to an environment where they are experiencing the Big Brother's eyes at all times. Unconsciously, people lose their

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[49] Michel Foucault, Discipline and Punish the Birth of the Prison. New York: Vintage Books, 2011.

subjectivity and become operating puppets for the government. French philosopher Jean-Paul

Sartre claims that the gaze redefines a person.[50] He states that "the gaze of the other is outside

our immediate control and the way the gaze objectifies us robs us of our freedom as a subject."[51]

In my solitude, I control and objectify the world around me, but when the other people see me, I

have to presume that the other people also objectify the world and me. Then, I notice that I be-

come an object in other's visions. Surveillance is like the ubiquitous gaze that objectifies people

day and night.

To depict the gaze from the government, I created a gaze between the real me and the

digital me. The real me was in the confined room. After doing cupping, I looked up at the cam-

era, and then, the shot changed to a digital me looked down. By describing the gaze between two

versions of myself, I aimed to explore the relationship between how I see myself and how the

government sees me. In the government's perspective, my body is not an individual but one

piece of the collective body of the population. Meanwhile, my body was fragmented by big data

and the government, in order to better surveil and regulate my data and fit my body in the "social

body". In the video, I fragmented my digital face, the pieces of my face then exploded and re-

turned to the original condition several times. My target was to depict my status in the perspec-

tive of big data and the government.

In the end of the video, red and blue screen alternated and afterwards, my real face re-

turned with a content smile. The red and blue were from *Matrix,* a science fiction movie, which I

explained in the first section of this chapter. Red meant being rebellious and fight for my own

right. Blue represents accepting the current situation and being obedient. The final blue screen

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[50] Jean-Paul Sartre, *Being and Nothingness*. New York: Gramercy Books, 1994.
[51] ibid

did not imply that I was a pessimist but to express the despair toward Chinese Internet policy. As when I was experiencing the gaze from Internet surveillance, I had to smile and be obedient. China as a "social body" limits its net citizens' freedoms to know and share information because China considers the Internet as part of its sovereignty, which I will discuss in the next chapter.

4.3 Conclusion

In this chapter, I mainly described an exhibition, *The Blue Pill*. In this exhibition, I created a video to communicate Chinese Internet policy, Internet surveillance and big data. I started my description with the concept of biopolitics. I used cupping and Guasha as metaphors to covey my understanding of Chinese Internet policy. Camera language switched between a surveillance view and a close-up view in order to emphasize the concept of the gaze. I talked about the gaze with references from Michel Foucault and Jean-Paul Sartre. By creating the gaze between real me and digital me, I intended to explore the relationship between how I see myself and how the government sees me. In the end, I used red pill and blue pill to give the audience space to think about their choices if they were facing the same situation.

The biggest success of this art project was that it convinced and touched Chinese viewers who had experiences that were similar with mine. I had a strong connection with cupping and scratching as I understood the principles of them. However, viewers who were unfamiliar with these two therapies found it difficult to connect them with the topics I intended to discuss. As a result, I decided to get rid of these therapies in my next art project. I wanted to choose a new metaphor that made my work reach a greater number of people, not merely Chinese people.

Chapter 5: We Are Walled

5.1 Exhibition Description

We Are Walled was a video installation exhibited in the TRUCK gallery in Calgary from June 22 to July 14, 2018. Through this project, I explored the influence of the Great Firewall for individuals who have both experiences of living both inside and outside of it. The Great Firewall is a censorship apparatus that blocks Internet access and controls Internet traffic in the Chinese Internet zone.[52] Upon entering the TRUCK gallery, viewers proceed up a long narrow stairway on the left. I intended to create an isolated space that was different from the outside environment to exhibit *We Are Walled*. The second floor of the TRUCK gallery is 404 square feet which was perfect for my intention. When people went into the space, they entered a closed 404 land. The 404 code signals the blocking of Internet content. Every time I tried to open some articles with sensitive topics or websites like Google in China, they showed "404 not found" or "this article was deleted because it violated the regulation." Thus, the viewing of the piece replicated the content of the piece, so that the viewers could have a better experience and a more intense understanding of my work. At the top of the stairs, a black curtain hanging from the doorframe prevented people from entering into the U-Hall space where *We Are Walled* was showing (See Figure 5.1). After sweeping aside the curtain, viewers entered the gallery and walked into the space. It took each person a while to get used to the darkness. By drawing viewers into this dark and empty space, I wanted them to have a greater understanding of the Great Firewall, not only literally through their senses, but also emotionally. From this bare, empty, and dark room a woman's voice resonated in three languages - Mandarin, English, and binary code. She was reading a regulation

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[52] Xu, Xueyang, Z. Morley Mao, and J. Alex Halderman. "Internet Censorship in China: Where Does the Filtering Occur?" *Passive and Active Measurement Lecture Notes in Computer Science*, 133-42, 2011.

called *Chinese Interim Provisions on the Administration of the Development of Public Infor-mation Services Provided through Instant Messaging Tools* (posted on August 7, 2014). This regulation is implemented inside the Great Firewall to delete comments and articles that violate the rules and functioning for shaping citizens' behaviours.[53] Mandarin, English and binary code represent inside China, outside China and cyberspace, respectively.

Figure 5.1, Xiaoyu Sun. *We Are Walled*. June 22, 2018. The TRUCK Gallery, Calgary.

When viewers moved further inside towards a hidden corner, they would notice a small screen video projected on the lower half of the wall with a woman in the video. Technically, there are seven identical women reading together. Two of them are on a smart phone, two of them are on a laptop, two of them are on television, and one is on an iPad. There are multiple views of the same woman through different technological devices because I wanted to form a community with seven figures with the same appearance. When viewers watched the video, they had to stand close and look down, as the characters and numbers on the screen were quite small

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[53] Lee, Jyh-An, and Ching-U. Liu. Forbidden City enclosed by the Great Firewall: The law and power of Internet filtering in China. *Minn. JL Sci. & Tech.*, *13*, 125, 2012.

and vague. By comparing the barren and dark room with the small screen video, I wanted to intensify how the regulation and the Great Firewall influenced Chinese citizens. Although the regulation only contains ten articles, it constrains all Chinese netizens to know and share; meanwhile, it also eliminates the diversity of expression in the Internet environment.

In the beginning of the video, a security camera's view revealed a woman coming into the room from outside and sitting in front of these devices. After turning on all of these electronics, she begins reading by articulating the numbers zero and one (binary code). Around two minutes later, she starts to read English and Mandarin sentences. However, these sentences become less and less understandable as a result of using different translation applications. There is a website called Baidu, which is a Chinese version of Google. Similar to Google Translation, Baidu also has a Translation App. However, Baidu and Google always give different results with identical inputs due to their algorithms. Correspondingly, flickering characters and numbers on the top and bottom of the screen constantly appear and change to match meaningless sentences, resembling a glitch. In the following sections, I specify the details of this exhibition and elaborate on the intentions and concepts behind each element.

5.2 Internet Sovereignty

More than 600 million Internet users are located behind the world's most sophisticated and pervasive censorship system: the Great Firewall of China (GFW).[54]

As a Chinese person, I had been living inside the Great Firewall since it was established in 1997 up until the time I came to Canada in 2016. Living inside this wall means people are not allowed to go on foreign websites including Google, YouTube and Facebook. Inside the wall, there is a

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[54] Ensafi, Roya, Philipp Winter, Abdullah Mueen and Jedidiah R. Crandall. "Analyzing the Great Firewall of China Over Space and Time." *Proceedings on Privacy Enhancing Technologies* 2015, no. 1 (2015): 61-76.

regulation called *Chinese Interim Provisions on the Administration of the Development of Public Information Services Provided through Instant Messaging Tools*. Because of this regulation, a lot of information is deleted from the Chinese Internet zone, which leads to people who live in China being not aware of some sensitive issues and events around them. This regulation only operates inside the Great Firewall, but the influence of this regulation was still with me after I traveled outside the Great Firewall. Even after the first half year of being in Canada, I was still using Baidu rather than Google, because I had used Baidu for more than ten years and relied on it. In other words, during that period of time, while my body was in Canada, my mind was still inside the Great Fire Wall. I chose to write diaries to record my confusions and changes after I came to Canada and I considered this autobiographical process as the initial motivation for the project *We Are Walled*. I created a video installation to explore the influence of the Great Firewall for individuals, like me, who have both experiences of living inside and outside of it.

In March 2010, Google stopped its Chinese search engine and quit mainland China. According to Kaveh Waddell's report, Google made this decision because of China's censorship.[55] Since then, Baidu has become the largest search engine within the Chinese Internet zone. However, the Internet world that Baidu provides is not complete. Inside the Great Firewall, people only see the information that the government wants them to see due to the regulation *Chinese Interim Provisions on the Administration of the Development of Public Information Services Provided through Instant Messaging Tools*. In the video installation, before sweeping aside the curtain, viewers probably expected something there, but they could only see an empty and dark

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[55] Kaveh Waddell, "Why Google Quit China-and Why It's Heading Back." The Atlantic. January 19, 2016. Accessed August 03, 2018. https://www.theatlantic.com/technology/archive/2016/01/why-google-quit-china-and-why-its-heading-back/424482/.

room. By bringing the viewers a sense of disappointment, I intended to let them experience the lack of information inside the Great Firewall.

The reason why the Great Firewall exists is that China considers the Internet as part of its sovereignty. As well, the Chinese government views the Internet as a tool for increasing China's economy and maintaining social stability, rather than being an extension of people's freedom to share their opinions.[56] Rebecca Mackinnon noted that "All governments, from dictatorships to democracies, are learning quickly how to use technology to defend their interests."[57] However, differing from the U. S. that promote a single connected Internet, China pursues a bordered Internet based on territorial sovereignty. In other words, the Chinese approach is state-centered which "emphasizes individual responsibilities over individual rights, maximum economic benefits, and minimal political risk for the one-party state."[58]

Meanwhile, as Andy Fell described in his paper *China's Eye on the Internet,* "The Great Firewall of China…is actually a "panopticon" that encourages self-censorship through the perception that users are being watched."[59] Ubiquitous Internet surveillance inside the Great Firewall forces individuals to obey the laws and regulations of China and creates a multiple layered censorship that is able to shape public opinion.[60] To better understand the Great Firewall, I use Lawrence Lessig's description of "code is law" as a lens. He states:

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[56] ibid

[57] Rebecca MacKinnon, Consent of the Networked: The Worldwide Struggle for Internet Freedom. New York: Basic Books, 2013.

[58] ibid

[59] Andy Fell, "China's Eye on the Internet." UC Davis. January 24, 2016. Accessed August 03, 2018. https://www.ucdavis.edu/news/chinas-eye-internet.

[60] Ronald Deibert, Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace. Cambridge, MA: MIT Press, 2010.

This regulator is code--the software and hardware that make cyberspace as it is. This code, or architecture, sets the terms on which life in cyberspace is experienced. It determines how easy it is to protect privacy, or how easy it is to censor speech. It determines whether access to information is general or whether information is zoned. It affects who sees what, or what is monitored. In a host of ways that one cannot begin to see unless one begins to understand the nature of this code, the code of cyberspace regulates.[61]

The Great Firewall is similar to an Internet filtering architecture that has been built by the Chinese government. From Lessig's perspective, the feature of code-based regulation is that citizens "experience these controls as natural,"[62] because they are more used to being regulated by law rather than by code. Rebecca also concerns that "our ability to organize and speak out is shaped—often quite subtly—by the Internet service providers, e-mail services, mobile devices, and social networking services."[63] If the information we gain is manipulated in manners that we are not aware of, we will be eroded in a subtle and insidious way.[64] In my video, the woman naturally read the regulation and meaningless sentences as if she did not consider any problems in doing so, or consider the significance of words she was reading. Take me as an example, when I got used to seeing the information filtered by the regulation in China, not only did I lack the power of knowing the truth, but I did not think it significant to know the truth. I thought the information provided by Baidu was enough as everyone around me obtained their knowledge by Baidu, and I did not realize that I was controlled and eroded at that time.

Other Chinese artist are also concerned about the Internet environment that they are living with. For example, Xu Bing chose video as the media to explore the surveillance inside the

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[61] Lawrence Lessig, Code is law. *The Industry Standard*, 18, 1999.
[62] Lawrence Lessig, Code and Other Laws of Cyberspace: Version 2.0. New York: Basic Books, 138, 2006.
[63] Rebecca MacKinnon, Consent of the Networked: The Worldwide Struggle for Internet Freedom. New York: Basic Books, 2013.
[64] ibid

Wall. Xu Bing and his assistants collected and culled through approximately 10,000 hours of sur-

veillance videos from the Internet in China and edited bits together to make a cohesive story

voiced by actors. This work is *Dragonfly Eyes.* [65] (See Figure 5.2). This movie potentially offers

viewers opportunities to comment on everything from the lack of privacy in the modern world to

the level of violence around us. Interestingly, Xu Bing and his assistants gathered all surveillance

videos from the public network that everyone could access. In Chapter 3 of this thesis support

paper, I compared cyberspace with heterotopia, which differs from real places, but people can

interact with this heterotopic space and real places. [66] I described cyberspace as being similar to a

mirror where people can see their reflections in the form of data. In Xu Bing's work, he utilized

the Internet data to reflect ubiquitous surveillance in real life, which embodies the consistency

between cyberspace and real life. In contrast to Xu Bing, I recorded videos from security camera

perspectives to discuss Internet censorship. I wanted my work not only to reflect Internet surveil-

lance, but also to reflect the mirrored real world. This was also the reason why the content of the

video duplicated the installation of the piece. By creating this bare, empty, and dark gallery

space, I intended to show the consistency between the Internet world and reality.

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[65] Xu Bing, *Dragonfly Eyes,* Toronto International Film Festival, 2017.
[66] Michel Foucault, The Order of Things: An Archaeology of the Human Sciences. London: Routledge, 2010.

Figure 5.2, Xu Bing. *Dragonfly Eyes*. 2017, Toronto International Film Festival, Toronto.

5.3 Assimilation

In the project *We Are Walled*, I again used myself as the subject to create the artwork. The reasons are similar to my previous works, wherein my research was based on my personal experience and about the exploration of the self, extending to a larger context. Other artists also use themselves as subjects to engage with the concept of surveillance in their artworks. In Hito Steyerl's *How Not To Be Seen* (2013), the artist performed as a mentor to guide audiences on how to evade the surveillance cameras.[67] (See Figure 5.3). In Jill Magid's *Trust* (2004), the artist closed her eyes and called the police on duty with details of where she was and then asked them to film her in particular poses, places, while guiding her through the city with public surveillance cameras.[68] (See Figure 5.4). Both of these artists commenced their projects based on their own experiences of being surveilled. After translating their research into artworks, they chose to use themselves as the subjects for their artworks.

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[67] Hito Steyerl, *How Not To Be Seen,* The Museum of Modern Art, 2013
[68] Jill Magid, *Trust,* Urban Video Project, 2004

Figure 5.3, Hito Steyerl. *How Not To Be Seen*. 2013, The Museum of Modern Art, New York.

Figure 5.4, Jill Magid. *Trust*. 2004, Urban Video Project.

In the practice of my work, I utilized several electronic devices to record a video from different perspectives to create an illusion of seven identical "selves" reading simultaneously. Two of these "selves" were on a smart phone, two on a laptop, one on an iPad and the other two

on television, respectively. The reason why I chose these forms of electronics was that these devices are the most common media to disseminate information in daily life. The seven figures in the video not only represented my identity, but also represented a community. In the beginning of the video, the woman made a FaceTime call between the cell phone and the laptop. Through the connection between the two devices, two figures had the bridge to communicate. However, they were saying exactly the same words with identical gestures.

The seven figures with the same appearance not only represented my identity, but also represented every net citizen in China, forming a community where everyone looked the same. The comparison between my identity and every Chinese netizen's identity embodied intimacy and distance. I used myself as the subject as I wanted to directly show audience my vulnerability and pursued intimate conversations with my audience. However, because of the Great Firewall, the boundary between the self and the public has been obscured. The self cannot represent the real self but a government-led self. Blocking inside the Great Firewall and only obtaining filtered information molds Chinese net citizens into the same "perfect" standard. As a result, in this case, using myself as the subject failed to shorten the distance between myself and the viewers, but distanced us. Another artist, Manu Luksch also expressed a similar concept in her work *Faceless*.[69] She collected and edited surveillance videos resembling Xu Bing's *Dragonfly Eyes*, but she covered all of the pedestrians' faces with black dots in the video. Without distinct appearances, everyone looked identical, lacking diversity. I discussed biopolitics in Chapter 4 of this thesis support paper where I articulated the idea that society as a biological whole assumes a central authority that manages, governs and controls it and watches its condition.[70] While Foucault

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[69] Manu Luksch, *Faceless*, C/O Berlin Foundation, 2007.
[70] Mark Hearn and Michel Foucault. "Society Must Be Defended: Lectures at the Collège De France, 1975-76." *Labour History*, no. 86 (2004): 218.

has proposed various definitions of "biopolitics" in his texts,[71] the meaning that best fits my theme is that he considers "population" as an independent biological corpus, a "social body."[72] Manu Luksch's faceless pedestrians and my identical figures are like the cells in this "social body." To achieve an overall concrete process of life in a population, the "technology of security" is applied.[73] From my point of view, this "technology of security" refers to regulations and laws. This technology views a population as a biological entity and tries to protect this entity from risks by analyzing the mass phenomena characteristic of a population.[74]

From the perspective of biopolitics, "the Great Firewall" is a powerful "technology of security" to isolate the "social body," and to prevent it from outside risks, thus maintaining it in a "good" condition. However, the "good" condition of the "social body" cannot ensure a good condition for individuals. For example, *Chinese Interim Provisions on the Administration of the Development of Public Information Services Provided through Instant Messaging Tools* appears to maintain the peace and stability of society; however, in reality, individuals have to sacrifice their individuality. Lessig explained that "as the code changes, the character of cyberspace will change as well. Cyberspace will change from a place that protects anonymity, free speech, and individual control, to a place that makes anonymity harder, speech less free, and individual control the province of individual experts only."[75] In an environment where freedom of speech is re-

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[71]Lemke, Thomas, Monica J. Casper, Lisa Jean Moore, and Eric Frederick Trump. *Biopolitics: An Advanced Introduction*. New York: New York University Press, 37, 2011.

[72] Michel Foucault, Security, Territory, Population: Lectures at the Collège De France. Basingstoke: Palgrave Macmillan, 2009.

[73] ibid

[74] ibid.

[75] Lawrence Lessig, Lawrence. Code is law. *The Industry Standard*, 18, 1999.

stricted, no one is allowed to express opinions freely; as a result, assimilation intensely increases.[76] Through the identical figures in the video, I intended to depict this lack of individuality in the Chinese Internet zone, and to raise this question to viewers: "Are they identical because they are reading the same regulation?"

In addition to the figures in the video, there are flickering characters and numbers on the top and bottom of the screen. With the characters and numbers changing, the woman alternately reads in three different languages. She reads the regulation *Chinese Interim Provisions on the Administration of the Development of Public Information Services Provided through Instant Messaging Tools* in Mandarin, English and binary code. In the beginning, these languages are very clear. However, as time passes, the Mandarin and English sentences became less and less understandable, as a result of using different translation applications. Similar to Google Translation, Baidu also has a Translation App. However, Baidu and Google always give different results with identical inputs due to their algorithms.

As I prepared to record this video, I input an article from this regulation into Google Translation to translate it into English; then, I input this translated English article into Baidu Translation to interpret it into Mandarin. After being repeated several times, this sentence lost its meaning and became more and more ambiguous. Through this method, I transformed several articles from this regulation into elusive sentences. I chose to read these incomprehensible sentences in the video to convey my feeling of confusion after having both experiences of living inside and outside of the Great Firewall. As mentioned before, when I was in China, I thought the information provided by Baidu was enough as everyone around me obtained their knowledge through Baidu, and I did not realize that I was being controlled and eroded at that time. But now,

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[76] Jack M Balkin, "Digital Speech and Democratic Culture: A Theory of Freedom of Expression for the Information Society." *SSRN Electronic Journal*, 2003.

after having the experience of living outside the Great Firewall, I have noticed the differences between Baidu and Google, and have realized the significance of freedom of speech on the Internet. Therefore, once I realized this difference, I felt confused and desperate because of the hopelessness of pulling down the Great Firewall. Meanwhile, I wondered how I would get used to Baidu again once I returned to inside the Great Firewall.

5.4 Conclusion

To explore the influence of the Great Firewall for individuals who have both experiences of living inside and outside of it, I created a video installation shown in the TRUCK gallery. In the video, I mainly discussed the Chinese government's attitude towards seeing the Internet as part of its sovereignty and people's experiences of living inside the Great Firewall. I also expressed my concerns of assimilation rising from this experience, due to the filtered information in the Chinese Internet zone. As I shared my research from my own experiences, I desired to elicit viewers' empathy even though they did not have the experience of living in China. To achieve this purpose, I created an isolated space to mimic the environment of the Chinese Internet zone. By showing this video in the hidden corner, but with voices that filled the space, I conveyed my trepidation about the influence of the Great Firewall.

As my culminating project within the MFA programme, *We Are Walled* successfully created an extraordinary and provocative space for viewers to experience the Great Firewall. This video installation gave non-Chinese people an intense sense of living inside the Great Firewall and let them perceive my understanding of the Chinese Internet policy. Yet I feel there is still much work to be done on eliciting Chinese people's emotions and to provide a potential imaginative space for viewers.

Chapter 6: Concluding Thoughts

Throughout my MFA experience, my core research question has been to explore how data and technology quantify and surveil the self. Specifically, I used my own body as a subject to create artworks that explore the expansive reach, as well as the limitations of surveillance. In this thesis support paper, I mainly discussed four projects that I have done during these past two years. The first project, *Black Quantified-self,* focused on the concept of the "quantified-self," where I used animation as a vehicle to engage with. The second project, *Seeing Yourself through Technology,* concerned how people see themselves through big data, and I presented the concept of heterotopia to support my opinion. I created an installation with my photos and self-portraits to convey my research on big data and heterotopia. The third project, *The Blue Pill,* engaged with the topics in Internet surveillance, gaze and biopolitics. I expressed my understandings of these topics through a video. In the last project, *We Are Walled,* I paid particular attention to how Chinese net citizens have been being surveilled and constrained. I created a video installation to deliver my comprehension and emotion concerning this theme.

My research practice research was based on my personal experience and about the ongoing exploration of the self. I was born in 1992 and I still remember making the first online friend on a forum when I was 11. I owned my first colourful cell phone when I was 12. I also cannot forget how surprised I was when I received my first smart phone, an iPhone 4. I was so obsessed with this little smart phone, which was like a mini computer, allowing me to visit website anywhere and anytime. Since then, I have spent more and more time on my cell phone. Now, I spend at least three hours on my cell phone every day. I use my cell phone for shopping, video chatting, calling Uber, paying tuition and knowing the world. Sometimes, when I have gone out without my cell phone, I felt I was not a complete person. In other words, mentally, my cell phone has already become a part of myself. Therefore, I made the decision to do research on cell phones

and how cell phones change people's lives. At that time, I found the concept of the "quantified-self" working well with my intention. Before I did this research, I never thought there would be so many considerations behind this topic. As the research progressed, multiple directions appeared in front of me. I still chose to go back to myself and to my experiences. As a Chinese person, I have confronted a great deal of changes in the past two years since I came to Canada in 2016. One change I cannot ignore is that my cell phone provides me plenty of information that I could never access when I was in China. This change elicited my passion to know more about it and to express the result of my research in the form of art. As a result, my final project helped me achieve this goal.

Over the course of my studies, I became increasingly more confident and comfortable with experimenting with the quantified-self and surveillance. In each work, I used myself as vehicles for my own curiosities and considerations about the quantified-self and surveillance, and I intended to convey my concerns to viewers and thereby to arouse their attention. Through my works, I wanted viewers to have more senses about their own lives regarding how they are quantified and surveilled unconsciously, and to choose their own ways to live in this almost unchangeable environment. Just as most artists, I am not able to provide answers to a particular social problem, but I can offer viewers a space to consider their lives and to form a conversation between themselves and my works.

Until now, I still have a great number of queries regarding my research. For example, although I consider that the Great Firewall constrains Chinese net citizens's freedom to know and to share, I still noticed that some Chinese netizens support the Great Firewall because they see the Wall as a protection and they have a sense of security when they live inside the Wall. I doubt these people support the Great Firewall due to a trait of Chinese culture. The trait is that China

has a long history of collectivism, which can be traced back predominantly to Confucian herit-age.[77] These people probably consider the interests of the country exceeding individuals' inter-ests. From this perspective, the Great Firewall has become a feasible apparatus to meet people's requirements. According to this consideration, I think the topic of the Great Firewall is so com-plex that needs me to study further. I the future, I would like to continue using my own body as the subject, and to create artworks to express the outcomes of my research. I plan to continue choosing video as the media to present my intentions and to disseminate my works as much as possible. In the end, I want to quote Sartre's words to finish this thesis support paper: "You are free, therefore choose - that is to say invent. No rule of general morality can show you what you ought to do: no signs are vouchsafed in this world."[78]

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[77] Vliert, Evert Van De, Huadong Yang, Yongli Wang, and Xiao-Peng Ren. "Climato-Economic Imprints on Chinese Collectivism." *Journal of Cross-Cultural Psychology* 44, no. 4 (2012): 589-605.
[78] Jean-Paul Sartre, Existentialism and Humanism. Methuen, 1997.

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