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SOCIAL SURVEILLANCE IN THE COVID PANDEMIC: A CASE STUDY OF SHANGHAI AFTER AN EXTENT LOCKDOWN

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Abstract

China is the first country to employ digital tracking systems (Jiankang Ma) on social media apps like WeChat and Alipay as monitoring devices to monitor people's travels to prevent the spread of Covid-19. The system collects citizens' individual information, including personal data (gender, I.D. number, etc.), personal health information (body temperature, contact with people from high-risk areas, etc.), travel history in the past 14 days, and health certification information (COVID-19 test by authorized organizations) to help effectively control the spread of COVID-19 pandemic. Although the health code policy showed effective outcomes after its implementation, there are significant worries regarding the system's potential for abuse or exploitation at the expense of individual rights due to the seeming unrestricted collection of personal data. Citizens began to question whether the Health Code is a technology for regulating the virus or a tool to surveil individuals' privacy, revealing the problem of information regulation policies of the Chinese government. This essay, therefore, will provide a deep insight into the operation mode of the Chinese Health code and seek the balance between the effectiveness of pandemic control and the infringement of citizens' privacy due to the unrestricted collection of personal information.

Keywords

COVID-19, Media Surveillance, Privacy, Social Media, Sociology

1. Introduction

Digital tracing systems have long been at the centre of discussions among scholars since the outbreak of the COVID-19 pandemic (e.g., O'Callaghan et al., 2022 and Boeing and Wang, 2021). The Chinese Health Code, the earliest and most representative digital tracing system introduced during this era, immediately grabbed everyone's attention upon its application. The Chinese Health Code effectively controls the spread of the COVID-19 virus by collecting individuals' private information, including personal data (e.g., gender, citizen ID number and home address), personal health information (e.g., current body temperature or symptoms), travel history, and health certification information, such as the result of nucleic acid testing according to the "Personal Health Information Code — Data Format" published in April 2020 (Wang, 2021). Although the Chinese Health Code indicated effective results after its implementation, the sudden outbreak of the COVID-19 pandemic in Shanghai in April 2022 drew extensive questions, including infringing on privacy and mass surveillance (Cong, 2021). However, considering China's national condition of vast territory and an enormous population, these concerns were not sufficient to entirely negate the Chinese Health Code's application due to the increased difficulty of controlling the spread of COVID-19. Thus, this essay will study the Chinese Health Code in depth and discuss its corresponding privacy issues.

To develop such a method, this essay will discuss the issue in the following three sections:

1. It will introduce the Chinese Health Code and the specific social condition that makes its application possible.
2. It will refer to Foucault's theory of the Panopticon to study how the Chinese Health Code acts as a "gaze" to collect and surveil people's data.
3. It will investigate the legal and political conditions of the Chinese Health Code's invention to analyse how it may infringe upon an individual's privacy.

2. Controlling the COVID-19 pandemic and the invention of Chinese health code

The COVID-19 pandemic became a world threat upon its outburst in 2019. In early 2020, the Chinese government started implementing a series of strict prevention and control measures to cease its spread, including lockdowns, traffic restrictions, centralised quarantines and treatment, home confinement, social isolation, fewer gatherings, and improved medical facilities (Huang et al., 2021). Further, China enhanced its testing capacity, hastened the speed of reporting, and mandated all healthcare professionals wear personal protective equipment (PPE) at all times (Zhou et al., 2020; Huang et al., 2021). Studies found these collective and mandatory control measures may have successfully reduced COVID-19's initial outbreak, indicating a much lower rate of affection per million people than in Italy and the US (Dong et al., 2020).

However, the second round of COVID-19 in late 2020 and early 2021 cast doubt on these policies. Scholars, such as Taghrir, Akbarialiabad, and Ahmadi Marzaleh (2020), questioned the efficacy of control methods, such as city lockdowns and traffic restrictions. Meanwhile, scholars also criticised these policies for inhumanely restricting people's freedom (Huang et al., 2021), as most Chinese control policies included mandatory isolation in specific hospitals and forbidding entrance to public places or transportation without face coverings.

Unlike Western countries, China's national condition ensures its policies' applicability. While Confucian principles have had a significant impact on societal initiatives and policies' development and application since the 20th century, the Confucian ideal of "The ruler guides the subject" triggered a mass social mobilisation under the general rhetoric of collectivism, which enabled many mandatory policies' application (Cheng, 1990; Cong, 2021). For instance, since late January, the Joint Prevention and Control Mechanism of the State Council (JPCMSC) placed a focus on "strengthening society-wide efforts to prevent and control the pandemic" (JPCMSC, 2020). The terms "grid and blanket management," "be accountable and undertake the responsibility of preserving the land," and "a people's war against the disease" were regularly used in official announcements and propaganda (JPCMSC, 2020; Cong, 2021; Song and Xv, 2020; Xinhua News Agency, 2020).

However, the broad social mobilisation strategy soon proved impracticable and economically unsustainable. Under the plan of mass social mobilisation, a sizable number of state employees, party members, and community workers were rescheduled for the daily management of pandemic control (Cong, 2021). Even though they used sophisticated tools, such as surveillance cameras, infrared thermometers, and drones, many still operated most anti-COVID works by hand (Cong, 2021). For instance, "grid management" in local communities frequently entailed home inspections, giving temporary travel passes to inhabitants in residential clusters, gathering data from interviews with residents, and producing health profiles for families (JPCMSC, 2020a). These regular monitoring and tracking procedures frequently called for closer interactions, which raised the risk of viral transmission besides repetitions, redundancies, and mistakes (Tang et al., 2020; Chen, 2020). After the Chinese New Year, when numerous individuals travelled to return to work, the flaws in these manual monitoring systems were more serious (Cong, 2021).

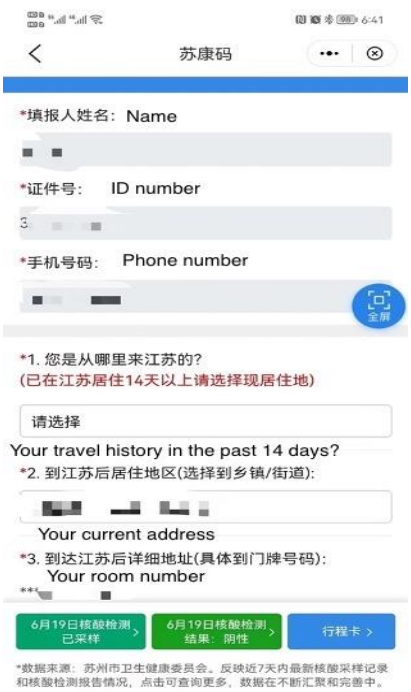

Figure 1

Thus, the Chinese Health Code rose in response to the proper time and condition to provide solutions for the challenges of pandemic control. In February 2020, Hangzhou became the first Chinese city to launch a smartphone-based health application, on Alipay or Wechat, for workers to return to work (Cong, 2021). The Chinese Health Code is a mini application requiring personal information, including names, ID numbers, home addresses, health conditions and records, and travel history for the past fourteen days to register (see Fig. 1 and 2 below). The Chinese Health Code programme determines each person's virus risk and gives individuals a coloured QR code based on the information provided and records from public services, including public transportation systems, ICT providers, and hospitals (Fig. 3). Non-restricted movement is permitted for individuals with the green code; with those with yellow or red codes subjected to a one or two-week quarantine.

Figure 2

Figure 3

People registered on the Chinese Health Code must scan or display their codes when entering public areas or using public transportation. For instance, those using the subway must check their code before boarding and again after exiting (Cong, 2021). Some cities sent anti-COVID personnel to every metro vehicle and bus during the outbreak to ensure riders were properly scanning their barcodes (Jiao et al., 2020). These QR codes quickly took the role of paper passes in residential communities. Residents and guests needed to display or scan their codes upon access, and their temperatures must be met.

Scanning was frequently needed during the early stages of the pandemic, particularly in severely affected locations like Wuhan (Cong, 2021). To indicate their health regulations, several restaurants placed their QR codes at the gates, which visitors had to scan first. The Chinese Health Code scheme also tracked movements by scanning codes at various eateries and metro stations. The theory was the Chinese Health Code might enable pandemic identification and response at the earliest stage with the system of real-name registration and ongoing data being gathered and updated (Jiao et al., 2020). Meanwhile, replacing human resources with digital tracing systems with greater efficacy in handling complicated data gathering processes increased the effectiveness of daily population health monitoring (Jiao et al., 2020). The Chinese Health Code can also promote economic recovery by restoring people to their original workplace and helping industries, such as restaurants and cinemas, to operate in a normal, pre-pandemic manner (Jiao et al., 2020). Thus, this alleviates the challenges brought by the mass social mobilisation policies of the COVID-19 control.

3. International monitoring, Foucault's Panopticon and citizen's privacy

While the Chinese Health Code helped resolve the harsh economic condition and effectively control the pandemic's spread, the mass surveillance of individuals' daily routines and unrestricted collection of personal information set off alarms for infringing on citizens' privacy, creating a "digital panopticon." The panopticon is a term used by 18th-century sociologist Jeremy Bentham to describe a tower allowing authorities to see every individual prison cell and the inmates inside (Mchoul and Grace, 1995, p.67). Yet, it prevents inmates from knowing if they are being watched (Mchoul and Grace, 1995, p.67). With the use of this concept, Foucault sparked an intuitive functioning of the disciplinary power in contemporary cultures by defining a state of consciousness and constant visibility, and by proposing surveillance as the essential component of social control. (Foucault, 1979; Couch, Robinson, and Komesaroff, 2020). An invisible "gaze" (or disciplinary power) surveilling individuals' daily behaviours is pervasive in society, which forces individuals to modify their behaviours according to the disciplinary authority (e.g., governments and schools). If individuals break rules established by authorities, specific punishments may occur. This power structure is prevalent in numerous fields, including public health and medicine, where few monitor the many while conducting surveillance using "methods of fixing, dividing, and documenting" across society (Foucault, 1979).

In reaction to this kind of social control, individuals have a propensity to internalise the authorities' disciplinary "gaze" in the panopticon, making themselves the bearers of the disciplinary power and conducting surveillance on themselves (Foucault, 1979). This pervasive panoptic surveillance leads to one feeling constantly watched as a sort of social control. People voluntarily cooperate with this surveillance and the norms the authorities intend to establish to avoid punishment. Under this kind of circumstance, panoptic surveillance functions as a tool of discipline that increases the effectiveness and efficiency of the exercise of power (Couch, Robinson, and Komesaroff, 2020), as the authorities do not need to spend extra energy on actually surveilling individuals. Individuals, instead, modify their behaviours according to the norms authorities set automatically. Common phrases, like "taking care of yourself," "keeping an eye on your weight," "watching what you eat," "monitoring the speed limit," and "watching your fluid (or alcohol) intake," are examples of how this self-surveillance is represented and ingrained in daily lives (Couch, Robinson, and Komesaroff, 2020). As a result, power is used covertly and subtly to influence all facets of social life.

The panoptic surveillance offers a helpful framework for thinking about surveillance actions during the COVID-19 pandemic. In China's circumstance, the Chinese Health Code represents the panoptic "gaze" that helps regulate citizens' behaviours without actually surveilling them. The Chinese Health Code surveil people's information by mandatorily collecting their information on smartphone applications (documenting) and classifying individuals' risks with different coloured QR codes (dividing). Meanwhile, as noted in the previous section,

scanning the Chinese Health Code is required when entering or leaving certain areas, including various residential buildings, places of employment, transit systems, and other public places (Tan, 2020). As soon as citizens scan the QR code, their information will immediately be updated on the Internet. If a yellow or red code is detected, citizens may face punishments, such as mandatory self-isolation or, more severely, bear criminal responsibility (Tan, 2020). Thus, individuals will discipline themselves to avoid penalties brought up by a yellow or red code. They will modify their behaviour according to the government's COVID-19 regulation policies, such as wearing face coverings at all sites or preventing gatherings in public places to keep their code green. Thus, the government does not need to spend more human and material resources, such as door-to-door supervision, to control the pandemic's spread. Instead, citizens keep themselves disciplined, thus increasing the pandemic control's efficacy.

However, the widespread use of the Chinese Health Code as the "gaze" to control the pandemic caused significant privacy concerns. Citizens are concerned the system may be utilised for additional social control reasons aside from pandemic control, with their personal information potentially being compromised (Wang, 2021). Although platforms such as Alipay and Tencent revised their data protection policies in March 2020, scholars still noted that some local governments, such as Beijing and Henan, still use Chinese Health Code systems with incomplete privacy regulation policies (Wang, 2021). The following section provides detailed information on the power dynamics surrounding the Chinese Health Code's application and the Chinese privacy and data protection laws.

4. Power dynamic surrounding the Chinese Health Code and data protection laws

The Chinese Health Code was born out of the apparent need for COVID-19 prevention and control. Still, it was also created at a time in China's socio-political history when such policies were more readily accepted and put into practice (Cong, 2021). While the Chinese Health Code increased the efficacy and efficiency of pandemic control, its mode of mass surveillance comes with severe privacy issues. This section will discuss two main factors contributing to these privacy issues:

1. The public-private partnership in the pandemic.
2. The role of law in the health regulation code.

Tencent and Alipay are the two leading platforms that significantly applied the Chinese Health Code. Before the outbreak of COVID-19, Alibaba and Tencent provided Chinese e-commerce services, social networking, digital currency, mobile payment, various financial goods, and essential government services, such as social insurance payments and paying water and electricity charges, for over ten years (Cong, 2021). They amass vast amounts of user data while providing necessary services and significantly alter people's lives (Cong, 2021). Without Tencent or Alibaba, people may need to go to various distanced government agencies, thus reducing their quality of life. The government and Internet platforms have developed a mutually beneficial working partnership, making society increasingly digitally connected (Zhang, 2020).

In the era of COVID-19, the government has mandated technology businesses to develop and market their digital anti-COVID technologies, such as the Chinese Health Code, under its direction (Cong, 2021). This tight cooperation between the government and digital platforms in crafting the Chinese Health Code further blurs the lines between China's public and private sectors, where digital platforms are already deeply ingrained in state governance (Cong, 2021). The government and private sectors, like Tencent and Alibaba, have the key to the panopticon and can "gaze" (cast mass surveillance) upon individuals' personal information used for Chinese Health Code registration.

Alibaba and Tencent can take advantage of the pandemic to further ingratiate themselves into people's daily lives as part of their social responsibility to fight COVID-19 (Cong, 2021). As the Chinese Health Code is indispensable for every citizen, their privacy is under Alibaba and Tencent's surveillance. Meanwhile, with the help of their cooperation with government sectors, they can easily cast disciplinary power over people using these data, thus may infringe upon citizens' privacy and raise personal rights issues. For instance, eleven citizens' personal information was spread in four WeChat groups (running by Tencent) by the deputy director general of the health bureau in Yiyang, Hunan province, in January 2020 (He, 2020). In this circumstance, the lack of solid privacy and data collection policies is another crucial factor contributing to this problem.

It is commonly acknowledged that China lacks a reliable framework for protecting personal information (Cong, 2021). This legislative shortcoming, and, therefore, the absence of legal scrutiny, became one of the contributing causes for the quick and widespread acceptance of the Chinese Health Code during COVID-19, despite its surveillance and infringement of privacy. Correspondingly, the rapid acceptance of the Chinese Health Code has exposed significant issues with data governance and flaws in China's current legal system. Due to these issues, people are now more conscious of the need to safeguard their privacy and personal information, with legislation moving faster to address these issues and govern the use of digital technology.

To solve the privacy issues brought up by the Chinese Health Code, the Chinese government implemented various regulation policies, with the non-obligatory industry standards mentioning basic requirements for protecting personal information. The national standards have cited pre-existing legal texts, including the GB/T 35723-2020 Information Security Technology-Personal Information Security Specification and China's Cybersecurity Law (Cong, 2021). Correspondingly, the Office of the Central Cyberspace Affairs published the Notice on Protecting Personal Information and Using Big Data to Support Pandemic Prevention and Control in February 2020 (Cong, 2021). The notice forbade collecting personal information by units or individuals other than those authorised under China's Cybersecurity Law, Law on the Prevention and Treatment of Infectious Disease, and Regulation on the Urgent Handling of Public Health Emergencies, thus emphasising the principles of data minimisation and purpose limitation, and required personal information to be published only when necessary and after data desensitisation (Cong, 2021; Office of the Central Cyberspace Affairs Commission, 2020). The more limited access to citizens' personal information effectively reduces its spreading range, thus decreasing the possibility of citizens' data being leaked.

The government's guidelines for local communities constructing anti-pandemic informatisation also cover the security of personal data. These guidelines stipulate those information technology products adhere to the requirements in the notice issued by the Office of the Central Cyberspace Affairs Commission in February 2020, and to China's Cybersecurity Law, the Law on Residential Identity Cards, and other relevant laws and administrative regulations on personal information protection, which specifies informatisation products, like the Chinese Health Code, must acquire citizens' consent before collecting their information for pandemic control (Cong, 2021; Ministry of Civil Affairs Cyberspace Administration of China Ministry of Industry and Information Technology National Health Commission, 2020).

Due to the Chinese Health Code's rapid application, these sporadic policy documents on privacy and personal data protection remain substantially insufficient (Cong, 2021), with two recent policies enacted to make up for this insufficiency. The first is the May 28th, 2020, approval of China's first Civil Code, which includes rules for protecting personal information and privacy (Cong, 2021). The second is the creation of China's Personal Information Protection Law, whose draft has now been created and presented for consideration in 2020 by the Standing Committee of the National People's Congress (Cong, 2021). According to policy number 13(4), the process of personal information without citizens' consent is only permitted when it is required to address urgent public health crises or safeguard natural persons' lives, health, and property security (Legislative Affairs Commission of the Standing Committee of the National People's Congress, 2020), thus providing more robust protection to people's privacy.

However, scholars, like Sharon (2020), still hold a sceptical attitude toward China's solution to privacy issues brought by the Chinese Health Code's application. Sharon (2020) noted that privacy and data protection may serve as the disguise through which technology firms exercise their surveillance and regulatory power and transform the market, rather than fulfilling the goal of conquering the COVID-19 pandemic. Sharon's concern is reasonable as, except for Baidu, no Chinese technology firms have yet adopted policies concerning privacy and data protection (Ren, 2020). The two leading platforms of the Chinese Health Code's application still hold an ambiguous attitude towards protecting data collected when registering on the Chinese Health Code.

Governments can use COVID-19's special provisions to co-opt or hijack conversations about privacy and protecting personal data to bolster their administrative and regulatory powers (Cong, 2021). The reason being that, in contrast to liberal countries, where privacy and data protection concerns are instantly raised against any digital surveillance proposals, China's collectivist terminologies, such as waging the "people's war," sidelines such concerns (Cong, 2021). Meanwhile, these discourses will not appear in public discussions until particular technologies, like the Chinese Health Code, are a done deal (Cong, 2021). Thus, when people worried about their privacy issues, the Chinese Health Code had already become indispensable in people's daily lives under the disguise of a weapon fighting the "people's war." The data collected when registering one's health codes has already been exposed to the surveillance of the government's gaze, thus enhancing their administrative and regulatory powers.

5. Thesis and case study establishment

This paper will use the most recent and significant COVID outbreak in Shanghai as the primary test field to carry out the following studies, ensuring the timeliness of the research. Shanghai endured a three-month lockdown since the outburst of Omicron in early March 2022. Schools and workplaces are closed and forced to turn online, causing a significant economic breakdown. Even in July, Shanghai's commercial centre has yet to recover from the punishing lockdown in the spring fully and is still documenting sporadic cases daily. It plans to conduct mass testing in many of its 16 districts and some smaller areas where new infections have recently been reported. The local administration issued a statement saying, "So far, there is still an epidemic danger at the community level" (VOA, 2022). According to local government statistics released on July 18th, Shanghai reported more than a dozen additional cases, although none were discovered outside quarantined regions (VOA, 2022). A Shanghai resident

surnamed Wang, who goes through testing every weekend in her neighbourhood, remarked, "I'm flabbergasted. It appears to be a waste of resources that ignores the core issue" (VOA, 2022).

To note, the method of Shanghai COVID testing is unique, called the "大筛查 (comprehensive screening)." That is to say, every ten people's PCR swab is placed in a joint test kit and will be tested together. Inevitably, every citizen should scan their Health Code before taking the test. If a test kit shows a positive result, all ten people using this kit will receive a yellow code on Wechat and Alipay. Correspondingly, people who receive a yellow code will be asked to self-isolate in their homes. A specially assigned person will contact them according to the information provided when registering the Health Code to carry out a second round test to affirm the carrier of the virus. In this circumstance, instead of using a new test kit for every citizen, the "comprehensive screening" can effectively reduce the cost of COVID testing by almost one-tenth. The Health Code, thus, plays a significant role in recording and tracking the citizen's information to help improve the efficiency of the screening process. On the other hand, the Health Code still acts as the "Panoptic Gaze," as all information is recorded and tracked via the Health Code.

Therefore, this paper will use Shanghai as the research field indicating to find the answer to the following question:

What are Shanghai citizens' attitudes toward the Health Code and its corresponding impact on their privacy after a three-month lockdown?

6. Methodology and Ethics

While people's attitude remains a vague factor to analyze in numeric formulas or data, this research will adopt qualitative rather than quantitative data. Qualitative data is less controlled and more interpretive, thus more suitable for analyzing factors like attitude, which is hard to quantify. Meanwhile, the Chinese Health Code, as one of the most burgeoning topics, falls short of former qualitative data since its application in early 2020. Therefore, this research will mainly obtain primary data collected in July and August 2022 from a self-developed interview to catch up with the pace of the rapid development of the Health Code to ensure its timeliness.

In order to obtain a more comprehensive understanding of what factors influence people's attitude towards the persistent influence of privacy brought up by the Health Code, an eight-questioned interview is carried out with ten interviewees living in Shanghai for over ten years and enduring the most recent lockdown in late spring and two people who used to live in Shanghai but left Shanghai for studies abroad in the past one year. Interviews were conducted face-to-face or by WeChat calls for approximately 10 minutes each. Answers were documented by note-taking via the interview, and I had the chance to record 9 interviewees' responses with consent, but two preferred not to be recorded. Content analysis is the primary method used in this research to evaluate answers, mainly classifying and discussing the meaning of individual words, phrases, and sentences. For face-to-face interviewees, their facial expression is also put into consideration when analyzing their answers.

I established the interview in a progressive logical process. The first two questions collect individuals' detailed demographic information, including their age, gender, occupation, ability to work remotely, and educational background. The following two questions are about whether the Health Code changed their life pattern and their opinion on the effectiveness of the Health Code. Furthermore, whether they feel being surveilled by the Health Code and are worried about their personal information being used for a purpose other than pandemic control stands as the two primary questions to analyze their attitude towards the Health Code. Besides their own perspective, a question asking them to name three phrases they saw or heard on the Internet or T.V. describing the Chinese COVID control policy is also implemented to record public opinions. A final question for suggestions for improving the Health Code is also added.

While 11 interviewees seem to be a limited sample and may bring biased outcomes, the specific ethical problems in China limited my sampling process. I tried to publish the research questions on Wechat via survey-making applications. Still, it turned out that questions, including terms such as "whether the Health Code surveils you," cannot be spread in public media in China due to internet legislation. Thus, I can only conduct face-to-face interviews with my family and friends to avoid potential disciplinary actions. In order to reduce the biased outcome brought up by the small and limited sample group to the maximum extent, I tried my best to increase the sample group variability in demographic issues. The age range spread from 21 to 82, and the educational background spread from middle school graduation to obtaining a doctor's degree among the sample group.

6.1 The variability of the sample group

Among the 11 individuals participating in the interview, 6 are females, and the remaining 5 are males. The following graph will provide a detailed overview of the interviewees. While all the interviewees will be kept anonymous, the interviewees will be tagged A-K in order of age. Interviewees B and C are Shanghai citizens who spent the past year abroad. The sample group covered a broad age group from 21 to 82, with a comprehensive educational background from secondary school to a doctor's degree, thus may reduce the bias brought up by the small sample size.

Tag	Age	Gender	Educational background	Occupation	Working Remotely
A	21	Male	Undergraduate	Student	Y
B	21	Female	Undergraduate	Consultant	N
C	21	Female	Undergraduate	Student	Y
D	21	Male	Undergraduate	Trainee	N
E	22	Female	Undergraduate	Consultant	Y
F	24	Male	Undergraduate	Freelancer	N
G	49	Female	College	Private business owner	Y
H	50	Female	Technical school	Nurse	N
I	58	Male	Doctor's degree	Senior manager	N
J	76	Female	Secondary school	Retired	N
K	82	Male	Secondary school	Retired	N

Table 1: Demographic information of the intervewees

6.2 Shanghai citizen's attitude towards the Health Code--- a dilemma

The most common word I hear when asking whether the application of the Health Code has affected individuals' life is "inconvenient." All interviewees complained about scanning the Health Code whenever entering public places. This condition is especially harsh in elderlies. Both interviewees over 75 showed a look of impatience when talking about scanning their Health Codes when entering public places. The 76-year-old female interviewee J exclaimed, "I'm too old for smartphones! It takes me a long time to find my Health Code when entering public places! It makes me embarrassed when I keep the line waiting for me!"

Statistics showed that interviewee J is not a particular case. According to Wang and Jia (2020), only 23 per cent of elderlies in China over 60 years old use the internet, which is indispensable for using the Health Code system. More severely, it is challenging for older persons who infrequently use interactive devices to complete procedures like typing, real-name authentication, and information retracing while applying for a health code (Wang and Jia, 2020), which further strengthens the pressure on elderlies when using the Health Code system.

Another critical factor that makes a difference in whether the Health Code changes citizens' life patterns is their ability to work remotely. Only 1 out of 5 individuals who can do their work (or studies for students) remotely claimed not to have a significant change in their daily lives. Conversely, 5 out of 6 interviewees claimed not to have a considerable difference in their life patterns after the application of the Health Code. That is to say, the more people can work remotely, the less affected they are by the application of the Health Code.

When asking the interviewees about their opinion on the effectiveness of the Health Code, not surprisingly, nearly all interviewees held a positive attitude towards the Health Code at the beginning of its application in 2020, as cases soon reduced drastically after its implementation. However, 5 out of 11 interviewees held a conservative perspective toward the effectiveness of the Health Code after the recent outbreak in Shanghai this Spring.

According to interviewee E, a 21-year-old female consultant working in Shanghai, "I think due to the COVID-19 variation, the virus was easier to spread than before. Thus, controlling COVID-19 by merely recording and tracking on the Health Code is not efficient anymore." She also claimed that the regulation of the Health Code is getting more disordered than before. When she went to a middle-risk area in Shanghai for dinner with her friends last week, all her friends received a risk-warning text message immediately after scanning their Health Codes at the door. But there was no sign of warning for her even when they finished dinner.

It turns out that the Health Code is facing a dilemma. Shanghai citizens are beginning to get tired of its application, and at the same time, its efficiency is getting lower, and regulations need to be applied.

10 Surveilled or not? The issue of privacy and the Health Code The interview's outcome showed that few Shanghai citizens felt being surveilled by the Health Code system or infringing their privacy. Only 3 interviewees felt the Health Code was surveilling them, violating their privacy. According to interviewee D, a 21-year-old male trainee working in Shanghai, he thought that all his daily actions were under government surveillance after applying the Health Code. "I need to scan my Health Code whenever I go out, even when entering the neighbourhood door or a restaurant downstairs! The government knows when I go to work, when I take a metro, when I come back home, or even when I eat!"

Even those not concerned about being surveilled by the Health Code, rather than considering their privacy is protected, are just "getting used to" the surveillance in China. That is to say, long before the Health Code was implemented, surveillance was already pervasive in China. Interviewee F, a 24-year-old freelancer, claimed that he needed to upload his personal information, such as his I.D. number when registering for some video games in China, to the game company to track (e.g., Honor of Kings) his game time for anti-addiction purposes. Thus, he had already gotten used to submitting his personal information to the government for revision.

Furthermore, interviewee G, a 49-year-old private business owner working in Shanghai, showed an uneasy mood when talking about her personal experience of being surveilled by the Health Code. According to her statement, when she returned from Lanzhou (a middle-risk area in China) to Shanghai this July, she received a phone call from the community authorities. The authorities informed her that they had tracked her on the Health Code and that she had just come back from a middle-risk area and urged her to do a COVID test every day for the

Figure 4

next week. More severely, both herself and her family (son and husband) received messages from the government warning them that they may have close contact with people from middle or high-risk areas (see figure below). "I was concerned about the strength of the surveillance. It seems like the government is not only watching me but all my family members, which makes me very anxious," claimed the interviewee. The personal experience of interviewee G exemplifies how the Health Code acts as the "Panoptic Gaze." After the phone call, the interviewee would feel watched by the government via the Health Code; thus, she would be disciplined to do all her COVID tests in time to avoid punishment.

Although some interviewees were worried about the panoptic gaze and infringing application mode of the Health Code, only 1 one of them was concerned about their information being used for a purpose besides pandemic control. Most individuals believed that their information was submitted to the national government but not informal organizations; the nation, without a doubt, will protect citizens' right to privacy with the newly developed online privacy protection regulations. However, is this condition the fact?

Scholars such as Pernot-Leplay (2020), the concept of privacy is a right that deviated from its political significance in China. While an individual's right to privacy is documented in the International Covenant on Civil and Political Rights, the Chinese government has not yet authorized it (Cong, 2021). In other words, China's recently formed legal efforts to safeguard personal information and individual privacy might be a self-justifying measure that aligns digital technology to strengthen the ability of the government to control and surveil citizens, thus enhancing the disciplinary power brought up by the "Panoptic gaze" (the Health Code) (Cong, 2021). All in all, it is not unexpected that a government that has accustomed its people to being watched exerts extensive and paternalistic control over them while pretending to be the defender of their privacy or a conscientious custodian of their personal information.

6.3 Propaganda of the COVID control policy --- a miss match

All interviewees' answers are surprisingly consistent when naming three phrases they saw or heard on T.V. describing the Chinese COVID control policy. All interviewees mentioned the word (or synonym) "excessive" (过度的/过分的)and "somehow unreasonable （有些不合理）." It's understandable that after three months of lockdown, people will begin to show impatience toward the COVID control policies if they still need to do COVID tests every day and the Health Code surveils their daily lives. To note, all synonyms of "excessive" or "somewhat reasonable" or other negative terms are from unofficial or privately owned media companies. Conversely, when interviewees mentioned favourable terms such as "effective" or "successful," these words are more likely from official media propaganda such as CCTV News. That is to say, there is an information gap between public opinion and official propaganda. The propaganda model of holding back unpleasant information is of common occurrence in Chinese COVID control propaganda. Official declarations and documents from JPSCMC frequently use phrases like "grid and blanket management (地毯式管理)," "be accountable and perform the task of protecting the land (守土有责, 守土尽责)," and "a people's battle against the disease (全民战疫)" (Cong, 2021).

The gap in propaganda exists in official and private media and significantly affects foreign and native Chinese broadcasting. Both interviewees working or studying in Foreign countries (Japan and America) claimed that the press overseas tends to hold a rather negative attitude towards China's COVID control policy, as they focused more on the number of cities suffering from the second round of COVID outbreak or the restriction of human rights due to the intermittent lockdown. Chinese media, however, put their effort into how the China government successfully controlled the spread of the pandemic and the reduction of new cases discovered every day.

Molter and DiResta's research (2020) found similar results in the propagation gap between the U.S. and Chinese news presses. They found that the Chinese government's response was presented in the English-language official media as being flawlessly efficient, effective, and transparent (Molter and DiResta, 2020). In contrast, the American press emphasized China's shortcomings (Molter and DiResta, 2020). Among the 30 news presses they selected in the Chinese state media post sample, 13 postings (or 43% of the total) adopted a positive framing. Whereas only one among 30 posts (3%) in U.S. mainstream media and two among 30 posts (7%) in U.S. government-funded outlets framed the Chinese government response favourably (Molter and DiResta, 2020).

The Chinese government, perhaps, intends to establish a positive image of itself, thus imperceptibly affecting people's incentives and gaining more comprehensive control over individuals. The coronavirus-related advertisements included several tales of Xi's leadership: In 2020, his name appeared in 32 of 50 (64%)

advertisements (Molter and DiResta, 2020). The advertisements hailed him as China's leader in the "fight" against COVID-19, paraphrased one of his speeches, stating that "for the Chinese government, the safety and health of the people always come first," and detailed his visits to the hospitals in Wuhan and Huoshenshan (Molter and DiResta, 2020). On the other hand, any negative evidence was controlled on a small scale on public media. For instance, the government deleted the phone record of an elderly's appeal to go to the hospital due to hepatitis. Still, it was rejected due to the lack of an inpatient ward mainly occupied by those with only slight COVID symptoms this April within 30 minutes after its spread on Wechat. Thus, the Chinese government can establish a "heroic" image of the sage leader in the battle with the pandemic (at least among most citizens) and better control individuals with harsh policies such as the whole city lockdown.

7. Discussion and Conclusion

While there is an evident trend of impatience among Shanghai citizens toward the Health Code and its related policy after an extensive lockdown, two primary issues remain unsolved. The problem of elderlies' difficulty in using smartphone-based applications and the mismatch in the propaganda of the Chinese Health Code policies.

Although some scholars such as Newman and Zainal (2020) indicate that the internet may help the elderly build a more concrete interaction with the outside world and enhance their perception of affiliation, it turns out that new technologies often ostracise them (Wang and Jia, 2020). Due to their inability to use the internet, they are often isolated from various information online, thus reducing their social participation. While this gap exists before the implementation of the Health Code, the social control of mandatorily using the Health Code online further detriments the condition of the elderly, casting tremendous pressure on them.

Luckily, the Chinese government has already realised the problem and adopted measures to alleviate the elderly's pressure. Many local governments across China began to provide elderlies with paper-version Health Codes, which can be scanned passively by the supermarket or restaurant staff rather than initiatively using their phone to check the Q.R. code to prove their health status. Moreover, suppose elderlies are accompanied by their family members. In that case, their health status can be checked on their families' self-phone by a "family code," thus avoiding the dilemma of elderlies' difficulty in finding their Health Code at the door.

Furthermore, the interview has already discovered an evident mismatch in the propaganda of the Chinese COVID control policy and discussed its probable cause of the intention to control Chinese citizens with harsher methods better. However, the Chinese people are not the only audience. As mentioned above, the U.S. and Chinese media have opposite reporting emphases. The U.S. focused much on the failure of the Chinese policy. It accused the Chinese government of incorporating disinformation by establishing a remarkable reputation but belittling other countries' open and lax COVID control policies (Wendler, 2021). Similarly, the WHO considered the Chinese procedure overly controlled or unsustainable. Scholars from the WHO highlighted the far-reaching impact of prolonged lockdowns by indicating its corresponding anger and anxiety among citizens and economic losses due to the lockout of many factories, which are critical to the global manufacturing industry (Nikkei Asia, 2022).

But undeniably, China's reported COVID affection number is one of the lowest in the world. And the particular national condition long-rooted Confucius's nature and a combination of complex factors, including the pressure of the COVID-19 pandemic, the power dynamics between private and public sectors, and China's imbalanced law and technology growth forced China to implement harsh control policies and invent the Health Code. Furthermore, given the Chinese government's significant efforts in data governance, a possible outcome of data-driven management might be a convergence of the norm and the exception, where personal data are legally protected. Perhaps, the most critical issue for the Chinese government to solve now is trying to find the balance between controlling the spread of the pandemic and concerning citizens' privacy and attitude.

Works Citation

[1] O'Callaghan, M.E., Abbas, M., Buckley, J., Fitzgerald, B., Johnson, K., Laffey, J., McNicholas, B., Nuseibeh, B., O'Keeffe, D., Beecham, S., Razzaq, A., Rekanar, K., Richardson, I., Simpkin, A., O'Connell, J., Storni, C., Tsvyatkova, D., Walsh, J., Welsh, T. and Glynn, L.G. (2022). Public opinion of the Irish 'COVID Tracker' digital contact tracing App: A national survey. *DIGITAL HEALTH*, 8, p.205520762210850. doi:10.1177/20552076221085065.

[2] Boeing, P. and Wang, Y. (2021). Decoding China's COVID-19 'virus exceptionalism': Community-based digital contact tracing in Wuhan. *R&D Management*, 51(4), pp.p.339-351. doi:10.1111/radm.12464.

[3] Wang, J. (2021). *China: The QR Code System - a battle between privacy and public interests?* [online] Lex-Atlas: Covid-19. Available at: https://lexatlas-c19.org/the-use-of-qr-code-system-in-china-a-battle-between-protecting-privacy-and-safeguarding-public-interests/.

[4] Cong, W. (2021). From Pandemic Control to Data-Driven Governance: The Case of China's Health Code. *Frontiers in Political Science*, 3. doi:10.3389/fpos.2021.627959. [4] Huang, F., Chen, W., Sun, W., Zhang, L. and Lu, H. (2021). Chinese infection-control strategies for COVID-19 prevention: A qualitative study with confirmed cases. *Public Health Nursing*, 39(3). doi:10.1111/phn.13017.

[5] Zhou, X., Wu, Z., Yu, R., Cao, S., Fang, W., Jiang, Z., Yuan, F., Yan, C. and Chen, D. (2020). Modelling-Based Evaluation of the Effect of Quarantine Control by the Chinese Government in the Coronavirus Disease 2019 Outbreak. *SSRN Electronic Journal*, 63(8). doi:10.2139/ssrn.3551346.

[6] Dong, J., Zhou, Y., Zhang, Y. and Fraz, D. (2020). A Validation Study for the Successful Isolation Policy in China: a Meta-Analysis in COVID-19. *medRxiv*, 18(3), pp.1–15. doi:https://doi.org/10.1101/2020.04.15.20065102.

[7] Taghrir, M.H., Akbarialiabad, H. and Ahmadi Marzaleh, M. (2020). Efficacy of Mass Quarantine as Leverage of Health System Governance During COVID-19 Outbreak: A Mini Policy Review. *Archives of Iranian Medicine*, 23(4), pp.265–267. doi:10.34172/aim.2020.08.

[8] Cheng, S.K. (1990). Understanding the culture and behaviour of East Asians--a Confucian perspective. *The Australian and New Zealand Journal of Psychiatry*, [online] 24(4), pp.510–515. doi:10.3109/00048679009062907.

[9] Joint Prevention and Control Mechanism of the State Council (2020). ***关于加****强新型冠状病毒感染的肺炎疫情社区防控工作的通知 [Notice on Strengthening Community Work of Preventing and Controlling the Novel Coronavirus Pneumonia]*. [online] Available at: http://www.gov.cn/xinwen/2020-01/26/content_5472235.html..

[10] Song, M. and Xv, Y. (2020). ***引****导行业坚定信心* ***做到守土有****责、守土负责、守土尽责--****旗****帜网*. [online] www.qizhiwang.org.cn. Available at: http://www.qizhiwang.org.cn/n1/2020/0320/c431674-31641706.html [Accessed 17 Aug. 2022].

[11] Xinhua News Agency (2020). ***全****总倡议：广大职工为做好疫情防控工作贡献智慧和力量_滚动新闻_****中国政府网***. [online] www.gov.cn. Available at: http://www.gov.cn/xinwen/2020-01/27/content_5472552.htm.

[12] Tang, M., Jiang, C. and Chen, Z. (2020). ***有效****发挥城乡社区在疫情防控全局中的基础性地位*. [online] mzzt.mca.gov.cn. Available at: https://mzzt.mca.gov.cn/article/zt_2020yqfkzjz/gzjs/sqfk/202004/20200400026539.shtml [Accessed 31 Aug. 2022].

[13] Jiao, Y., Wang, H., Su, Q. and Zhang, M. (2020). ***健康****码：人员流动的健康保障_****澎湃新****闻-The Paper*. [online] www.thepaper.cn. Available at: https://www.thepaper.cn/newsDetail_forward_6877828 [Accessed 17 Aug. 2022].

[14] Mchoul, A. and Grace, W. (1995). *A Foucault primer : discourse, power and the subject*. London: Ucl Press.

[15] Foucault, M. (1975). *Discipline and Punish: The Birth of the Prison*. New York: Vintage Books.

[16] Couch, D.L., Robinson, P. and Komesaroff, P.A. (2020). COVID-19—Extending Surveillance and the Panopticon. *Journal of Bioethical Inquiry*, 17(4). doi:10.1007/s11673-020-10036-5.

[17] Tan, S. (2020). *China's Novel Health Tracker: Green on Public Health, Red on Data Surveillance*. [online] www.csis.org. Available at: https://www.csis.org/blogs/trustee-china-hand/chinas-novel-health-tracker-green-public-health-red-data-surveillance [Accessed 8 May 2021].

[18] Zhang, L. (2020). When platform capitalism meets petty capitalism in China: Alibaba and an integrated approach to platformization. *International Journal of Communication*, 14, pp.114–134.

[19] He, C. (2020). ***海量涉疫情个人信息泄露 两地公安做出行政拘留****处罚*. [online] news.sina.com.cn. Available at: https://news.sina.com.cn/o/2020-02-05/doc-iimxyqvz0398976.shtml.

[20] Office of the Central Cyberspace Affairs Commission (2020). ***关于做好个人信息保****护利用大数据支撑联防联控工作的通知 [notice on protecting personal information and using big data to Support the epidemic prevention and control]*. [online] Available at: http://www.gov.cn/xinwen/2020-02/10/content_5476711.html [Accessed 19 Jul. 2022].

[21] Ministry of Civil Affairs Cyberspace Administration of China Ministry of Industry and Information Technology National Health Commission (2020). ***新冠肺炎疫情社区防控工作信息化建****设和应用指引 [instruction on the informatization building of community epidemic prevention and control]*. [online] Available at: http://www.gov.cn/zhengce/zhengceku/2020-03/05/content_5487110.html [Accessed 19 Jul. 2022].

[22] Legislative Affairs Commission of the Standing Committee of the National People's Congress (2020). ***中****华人民共和国个人信息保护法(* ***草案****)*. [online] Available at: https://www.dataguidance.com/sites/default/files/china_draft_personal_data_law.pdf.

[23] Sharon, T. (2020). Blind-sided by privacy? Digital contact tracing, the Apple/Google API and big tech's newfound role as global health policy makers. *Ethics and Information Technology*. doi:10.1007/s10676-020-09547-x.

[24] Ren, X. (2020). ***【两会****时间】李彦宏建议针对疫情采集的个人信息设立退出机制，此前曾多次关注信息保护-经济观察网*. [online] m.eeo.com.cn. Available at: http://m.eeo.com.cn/2020/0521/384268.shtml [Accessed 19 Jul. 2022].

[25] VOA. (2022). *Shanghai Enforces New COVID-19 Testing, Some Chinese Cities Extend Lockdowns*. [online] Available at: https://www.voanews.com/a/shanghai-enforces-new-covid-19-testing-some-chinese-cities-extend-lockdowns-/6664480.html [Accessed 6 Aug. 2022].

[26] Wang, T. and Jia, F. (2020). The impact of health QR code system on older people in China during the COVID-19 outbreak. *Age and Ageing*, 50(1). doi:10.1093/ageing/afaa222.

[27] Pernot-Leplay, E. (2020). China's approach on data privacy law: a third way between the U.S. And the E.U. *Penn State Journal of Law & International Affairs*, 8(1), pp.50–117.

[28] Molter, V. and DiResta, R. (2020). Pandemics & Propaganda: How Chinese State Media Creates and Propagates CCP Coronavirus Narratives. *Harvard Kennedy School Misinformation Review*, 1(1). doi:10.37016/mr-2020-025.

[29] Newman, M.G. and Zainal, N.H. (2020). The value of maintaining social connections for mental health in older people. *The Lancet Public Health*, 5(1), pp.e12–e13. doi:10.1016/s2468-2667(19)30253-1.

[30] Wendler, J. (2021). *Misleading a Pandemic: The Viral Effects of Chinese Propaganda and the Coronavirus*. [online] National Defense University Press. Available at: https://ndupress.ndu.edu/Media/News/News-Article-View/Article/2884217/misleading-a-pandemic-the-viral-effects-of-chinese-propaganda-and-the-coronavir/ [Accessed 29 Aug. 2022].

[31] Nikkei Asia. (2022). *WHO chief says China's zero-COVID policy not 'sustainable'*. [online] Available at: https://asia.nikkei.com/Spotlight/Coronavirus/WHO-chief-says-China-s-zero-COVID-policy-not-sustainable [Accessed 29 Aug. 2022].