Dialogue

China's Response to the COVID-19 Pandemic: Surveillance and Autonomy

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Pandemics bring the specter of death, disruption, and despair, but historically they have also been engines for social transformations visible at almost every level of society (Tuchman 1978). For scholars interested in understanding contemporary surveillance dynamics, the COVID-19 pandemic encourages thinking about how different forms of monitoring have altered aspects of the global infectious disease response and what these developments might suggest about the evolving practices of surveillance and governance more generally.

In this brief commentary, we focus on China, where the virus is assumed to have originated and where—given China's population profile—rapidly spreading infections pose stark morbidity and mortality risks. We draw particular attention to some of the surveillance technologies Chinese authorities turned to in confronting the pandemic, pointing out how these (unsurprisingly) increased the visibility of the population and enhanced state control of both groups and individuals. At the same time, and perhaps more surprisingly, these developments also draw upon and are helping to fashion a form of circumscribed individual autonomy among Chinese citizens that many Westerners fail to appreciate as being part of China's larger emerging governing strategy (Hoffman 2010; Jeffreys 2009).

China, like many countries, responded to the COVID-19 pandemic with lockdowns, quarantines, and isolation protocols. These measures are generally in line with how all nations have reacted to past pandemics, including the 2002 SARS outbreak that was also first identified in China (Lawson and Xu 2007). However, in 2019–2020, Chinese authorities significantly modified their pandemic response, enthusiastically turning to “smart” surveillance technologies (Hampapur et al. 2003; Xu and Liu 2020). These technological initiatives created a type of Chinese health surveillance ecosystem that allowed local governments to monitor and control people's behaviors in detail, often manifest as extremely localized efforts to regulate geographic mobility, social interactions, and health status.

However, the information generated through this ecosystem was not exclusively used as a top-down tool of population management and control. Nor was it designed to simply support a flow of one-way communications about the spread of the disease. Instead, this infrastructure allowed the authorities to make information available in different forms to individuals, families, neighborhood organizations, and businesses. All of this sought to integrate people's rational self-interests into larger efforts to deliver a flexible pandemic response that could protect citizens and the economy through more customized solutions (Ren 2020; BBC News 2020).

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One of the more noteworthy features of this multi-pronged effort is the “quick response health code” (健康码). Available on Chinese citizens’ smartphones through the popular apps Alipay and WeChat, this code crudely differentiates a user’s risk profile into one of three colors: red, yellow, or green. These colors indicate whether someone is required to quarantine, self-isolate, or if they are free to carry on with their lives. Initiated in February 2020 (Government of Zhejiang Province 2020; Ningbo Zhenhai District Committee 2020), this system received official support from the State Council a few months later (State Council 2020b).

On its face, the “response code” application appears quite rudimentary, but it is built upon a sophisticated informational infrastructure, commonly known as “Internet Plus” (互联网+). Launched in 2015, Internet Plus is an e-governance system that uses cutting-edge telecommunication networks and internet-based applications to optimize government services. It gathers data on populations and feeds an integrated platform that unifies information and services from government institution across the country (i.e., the “Nationally Integrated Government Service Platform” or 全国一体化政务服务平台) (Xinha News 2020). Internet Plus also combines different big data platforms to optimize economic processes (e.g., e-commerce, farming, banking, and manufacturing) (Wang et al. 2016). As the disease started to spread, the National Health Commission (NHC) drew upon the mandate of Internet Plus to accelerate the integration of healthcare services data, including patients’ information (NHC 2020), into the Nationally Integrated Government Service Platform.

Municipalities manage the quick response health code (Zhang 2020), and smartphone users who want to obtain such a code must register their app account with the local authorities. Users do so by entering their personal details onto the app, including a facial recognition scan. Once connected to the local government’s platform, the app starts to automatically track and update the users’ information in real-time. It does so by constantly scrutinizing their social networks and mobility patterns, including whether they had encounters with high-risk individuals or visited affected areas. On the government platform, data from the app integrate with data from the healthcare system, including information from hospitals and neighborhood-level “medical teams” (医疗集团) (NHC 2018, 2019; State Council 2017). Such integration allows the government to link people’s health status with their patterns of mobility and interactions, gaining a tremendous degree of visibility into their lives.

The scope of the informational systems that goes into producing these three colored codes is staggering. In the West, it would be akin to combining all of the data held by Facebook, Instagram, Twitter, Tinder, WhatsApp, etc. into a single platform along with all of the information contained by government organizations (e.g., driver’s licenses, residential addresses, tax information, and medical records) and using it as the basis for a real-time automated monitoring system.

Such a massive data infrastructure allows the color of a person’s health code to be automatically updated on a daily basis (Tangshan Dafenghuang Community 2021; Ningbo Zhenhai District Committee 2020). It also creates publicly available “epidemiology maps” (State Council 2020a) that classify urban spaces according to contagion risks.

The colored codes became incorporated into overt measures designed to regulate personal mobility within cities, as people must scan the codes in their apps at checkpoints to enter residential compounds, transit systems, stores, and public places. The ubiquity of such codes quickly resulted in “are you green today?” becoming an informal greeting during the height of the pandemic. Those who do not have a smartphone (e.g., children, teenagers, and elderly people) were initially excluded from such surveillance (CGTN 2020) and, as a result, experienced several quotidian limitations on their daily lives. Hence, while this system is ostensibly “voluntary,” the social and personal costs of not participating can be enormous, effectively precluding individuals from opting out. In practice, life outside of such monitoring has become almost unfeasible.

With their colored health code and epidemiologic maps of their cities in hand (literally, as these were accessible through a smartphone), people can plan and make decisions about myriad practical aspects of

their daily lives, including where they can travel, and shop, and what “high risk” urban areas to avoid. They can also use it to inform decisions about managing their personal health status and the risks they pose to others.

Crucially, the surveillance ecosystem in which the health codes are embedded gives smartphone users a degree of autonomy and personal flexibility, allowing them to make individual decisions about their activities. This contrasts markedly with the dynamics of governance and control in China’s previous Mao era, when the government used surveillance (“old,” low-tech surveillance [Marx 2017]) primarily to silence personal interests and impose state-mandated decisions on the population. Today, in contrast, several surveillant practices in China resemble aspects of neoliberalism in the West, in that they increasingly produce informational resources for individuals to use in pursuing their interests, making choices, and bearing their own risks (within certain circumscribed boundaries). The ecosystem also allows the government to articulate personal freedom within a coercive-collective environment, reconciling the age-old governmental challenge of simultaneously governing individuals while governing the nation (Foucault 1991).

Surveillance technologies that aim to accommodate both individual autonomy and state-planning in China pre-date COVID-19. Such initiatives started to emerge in the late 1970s with the reforms to China’s “hukou” system—a digital registration system based on one’s family membership that surveils and classifies Chinese people according to their geographic status (Chan and Buckingham 2008; Siqueira Cassiano 2019). Along with other initiatives, the hukou reforms created a policy environment of opportunities for, and constraints upon, individual initiative that uses hukou classification (i.e., place of household registration) to invisibly guide people’s actions under the auspices of “free choice.” This, in many respects, is similar to how the health codes have operated during the recent pandemic. The Communist Party, however, has also used the pandemic to tap into the goal of improving health and resuming life to normal in order to expand the perceived legitimacy of surveillance technologies to include personal interests as well as the national interest. In the process, the regulatory power and authority of the Communist Party has been further reinforced.

Aspects of China’s pandemic response—particularly the health code—suggest that smart surveillance does much more than connect regulatory institutions (e.g., the family, the school, and the workplace) into a continuum of what Gilles Deleuze (1992) called “environments of enclosures.” Such surveillance can also have a didactic and pedagogical function, working to “teach” or “encourage” people unaccustomed to the rituals, routines, and rationalities of responsabilized self-governance to experience “freedom” in a “society of control” marked by continuous forms of personal regulation modulated by internet-based applications (e.g., apps, artificial intelligence, and blockchain technology).

Reflecting on these developments, it would be easy to conjure up George Orwell’s (1949) account of a brutal, mind-controlling totalitarian Big Brother. However, a more accurate analogy for the reality being created, in part, by the pandemic response in China comes from Orwell’s French teacher at Eton College, Aldous Huxley, in his book *Brave New World* (1946). In it, Huxley depicts an unsettling vision of a totally planned society where “everybody is happy” in a scenario that reconciles “control” and “happiness.” Indeed, one thing that is striking about China’s technological response to the pandemic is the degree to which it is supported by the Chinese public, as Liu (2021) and others have noted (Liao et al. 2020). To Westerners, however, China’s surveillance ecosystem appears distinctive and perhaps unsettling due to its ability to condition individual autonomy via the expansion of surveillance.

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