Automated Law and COVID-19: Data Driven Measures With National Characteristics In China and Israel and the Future of the Law-Governance Complex

Coalition for Peace & Ethics
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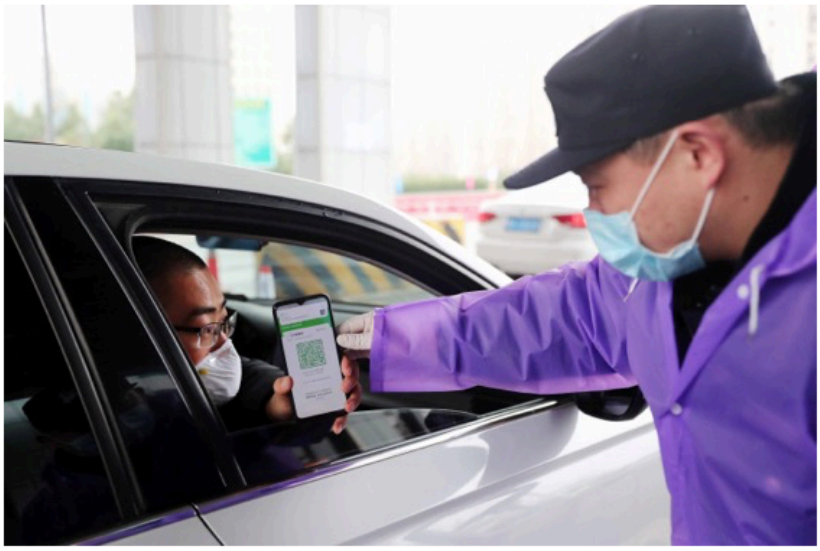
24 March 2020



↑杭州西湖区三墩镇某小区居民凭支付宝健康码进出小区

(Pix credit:支付宝健康码 7 天落地超 100 城 数字化防疫跑出"中国速度")

It should come as no surprise that the COVID-19 pandemic would generate responses by states, entities and other actors with governance (and self-governance) authority. Such responses, in turn, provide a window about the state of the mechanics of governance among these communities. More specifically, it also provides a window on the evolving alignments between the command functions of law and the implementation functions of data driven governance.

We have already considered the character of that relationship (and its alignments) in the case of Taiwan. [1] This contribution briefly describes some of these alignments (with national characteristics) of other states, with particular focus on China and Israel, as well as the way in which COVID-19 behavior standards enforcement furthers the development of data driven governance measures in each state. Brief consideration of data driven COVID-19 related measures are reported for Spain, South Korea, Singapore, India, Poland, U.K., Germany, Austria, Italy, Belgium, Iran, and Russia.

[1] Coalition for Peace & Ethics, Data Driven Management of COVID-19: The Case of Taiwan, Law at the End of the Day (6 March 2020) (prepared by Larry Catá Backer). Available http://lcbackerblog.blogspot.com/2020/03/data-driven-management-of-covid-19-case.html.

For those interested in the official discourse at the international level, the WHO site, *Country & Technical Guidance - Coronavirus disease (COVID-19)*,[2] might be of some interest.

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China: Chinese authorities have been working to align their regulatory approaches to the management of responses to the pandemic with their social credit system. It was recently reported (*China Adds COVID-19 Contagion Risk Ratings to Individual Profiles in National Surveillance System*) that the social credit system for individuals has been modified to include a "health color code" with the code tied to obligations to quarantine. A Yellow rating requires a seven day quarantine; a red contagion risk requires stronger measures. Both yellow and red contagion rankings also produce collateral consequences--restricted access to malls, public transport or restaurants (which may be completely restricted). In some cases yellow or red contagion ratings affect the right to return to work and in some cases to return to one's home.

The analytics have not been entirely revealed but include weighted factors based on places visited and contact with people already known to be infected. Lack of transparency, of course, is one of the great issues of data driven governance in this, its formative stage. The addition to the social credit system also has been criticized on the usual grounds (not that these usual grounds are unimportant or worth ignoring; indeed, they go to the integrity of the system and thus cannot be ignored even within the ruling ideology of those crafting the system). These include the robustness (including accuracy) of data, the coherence of the analytics, and the actual usefulness of the algorithms (in its role of imposing rewards and punishments) in relation to state policy.

[2] World Health Organization, Country & Technical Guidance - Coronavirus disease (COVID-19) (March 2020), available https://www.who.int/emergencies/diseases/novel-coronavirus-2019/technical-guidance.

The contagion color coding system further cements the relationship between the private Alipay enterprise and the state. The Alipay Health Code program[3] is administered through Alipay, which effectively enrolls a substantial majority of the population which are almost universally used for economic transactions in China. The connection between the DAMO [4]in Hangzhou and high level elements of the CPC ought not to be ignored in this construction. As important, the refinement of data driven ratings for managing individual conformity to regulation will provide the platform through which it will be possible to expand the program to entities as well. For Westerners, the *New York Times*[5] provides the usual (and for that reason useful) analysis from the perspective of the influence driving cliques it represents ("But a New York Times analysis of the software’s code found that the system does more than decide in real time whether someone poses a contagion risk. It also appears to share information with the police, setting a template for new forms of automated social control that could persist long after the epidemic subsides." Ibid., pix in this section from Ibid).

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Israel. Israel passed legislation that opens the possibility of tracking people known to be infected with COVID-19.[6] In a statement posted to Facebook,[7] prime minister Benjamin Netanyahu wrote:

> “We will dramatically increase the ability to locate and quarantine those who have been infected. Today, we started using digital technology to locate people who have been in contact with those stricken by the Corona. We will inform these people that they must go into quarantine for 14 days. These are expected to be large – even very large – numbers and we will announce this in the coming days. Going into quarantine will not be a recommendation but a requirement and we will enforce it without compromise. This is a critical step in slowing the spread of the epidemic.”[8]

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[3] 支付宝健康码 7 天落地超 100 城 数字化防疫跑出 “中国速度” 2020-02-19 16:17:46 来源： 新华网 available http://www.xinhuanet.com/tech/2020-02/19/c_1125596647.htm.

[4] Alibaba DAMO Academy; About (March 220), available Hangzhou https://damo.alibaba.com/.

[5] Paul Mozur, Raymond Zhong and Aaron Krolik, “In Coronavirus Fight, China Gives Citizens a Color Code, With Red Flags,” New York Times (1 March 2020); available https://www.nytimes.com/2020/03/01/business/china-coronavirus-surveillance.html.

[6] Natasha Lomas, “Israel passes emergency law to use mobile data for COVID-19 contact tracing,” *Extra Crunch* (18 March 2020) available https://techcrunch.com/2020/03/18/israel-passes-emergency-law-to-use-mobile-data-for-covid-19-contact-tracing/.

[7] The Prime Minister of Israel (17 March 2020); available https://www.facebook.com/IsraeliPM/posts/3345468375467884.

[8] Ibid., see also Lomas, “Israel passes emergency law,” supra note 6.

The law is particularly interesting for the way that, like the measures in Taiwan, it aligns and makes coherent multiple measures for maximizing attainment of (measurable) goals. In this case the coordination is with COVID-19 testing.[9] The consequential coordination with surveillance manages population movements. More importantly, when expanded to cover surveillance of movements of the entire population it may provide basis for warning those not exposed to COVID-19 to the proximity of COVID-19 positive individuals. Thus, it was reported that:

> "On orders of Prime Minister Benjamin Netanyahu, the Shin Bet domestic spy agency is running this new surveillance program tracking telephone data. When someone has tested positive for the coronavirus, the Israeli spy agency traces where that person's cellphone went over the past two weeks, the incubation period for COVID-19. And if your cellphone was nearby, you get a text message. Sharon Perri is a cellular tracing expert".[10]

Of course, all of this will have significant potential application for all sorts of other uses--especially important in places like Israel.[11] "The other state bodies don't have the necessary technological means to aid this effort," Argaman said in a statement. "I am well aware of the sensitivity of this matter and therefore have instructed that only a very limited number of agents will be handling this and the information will not be saved in the Shin Bet database."). The alignment of state security and health ministries, connected through technology and melded through the utility of coordinated data warehouses, presents both efficiencies in meeting short term objectives (mitigating adverse health effects of COVID-19) and challenges (managing the effects of this new regulatory tool in light of the foundational premises of political organization). But not just Israel. "Civil liberties campaigners have warned the move to monitor citizens' movements sets a dangerous precedent."[12] This is part of a larger conversation, and a larger critique, one that eventually will require resolution.[13] It is not clear in what direction, and with what consequences, that resolution will produce. At a minimum it is likely to challenge the core premises around the

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[9] Sam Dorman, "*Israel's Netanyahu seeks 'mass blood tests' to weed out COVID-19, restart economy: report*," Fox News (22 March 2020) available https://www.foxnews.com/world/israel-netanyahu-mass-blood-tests-coronavirus.

[10] Daniel Estrin, "Israeli Government Criticized For How It Monitors COVID-19 Cases)," *NPR* (19 March 2020) available https://www.npr.org/2020/03/19/818192570/israeli-government-criticized-for-how-it-monitors-covid-19-cases.

[11] Aron Heller, "Spying on the virus: Israel secret service to track patients," *Egypt Independent* (17 March 2020) available https://egyptindependent.com/spying-on-the-virus-israel-secret-service-to-track-patients/.

[12] Lomas, "Israel passes emergency law," supra note 6.

[13] Catalin Cimpanu, "US, Israel, South Korea, and China look at intrusive surveillance solutions for tracking COVID-19," ZDNet (20 March 2020) available https://www.zdnet.com/article/us-israel-south-korea-and-china-look-at-intrusive-surveillance-solutions-for-tracking-covid-19/.

foundational principle of human dignity on which liberal democratic states are organized, at least since 1945.

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Other States. China and Israel are useful case studies, principally because they are both quite protective in moving development forward, but also because they are both emblematic of two quite distinct frameworks for organizing political society. They are also both influential--an influence that can actually be measured by the intensity of the criticism of their actions. Other states, however, have not been idle.

Spain. The police have begun to use drones to enforce the stay at home rules.

> The police in Madrid are now deploying their own spies in the skies, filming streets and parks, using its onboard speaker to order people home. "We will not hesitate to use all the means at our disposal to ensure your security and that of everyone," Madrid's Police Force explained on Twitter. "Although some still make it difficult for us." And that's the crux of this, as countries across Europe deploy a civilian lockdown and surveillance regime reminiscent of wartime, which does not always land well with the population.[14]

In this case, neither the technology nor its use is new. What is new is its deployment in this way in Europe, where sensitivities toward these sorts of activities may be much higher than elsewhere. The technology, of course, will become more potent when (and if) it is combined with national measures for aligning facial recognition to drone based data of activity that violates administrative rules about staying in place.

Drones have also been used in Belgium. To date they have been used mostly to augment the physical presence of police and to warn people away from discouraged activity.

South Korea. Again, it is the coherence of multiple projects of data harvesting when coordinated with consequence based directives, that characterize the synergies between data based governance (not just as an implementation technique but as the vehicle through which administrative-legal rules are actually operationalized and through that operationalization actually defined). These

[14] Zak Doffman, "Coronavirus Spy Drones Hit Europe: This Is How They're Now Used," *Forbes* (16 March 2020) available https://www.forbes.com/sites/zakdoffman/2020/03/16/coronavirus-spy-drones-hit-europe-police-surveillance-enforces-new-covid-19-lockdowns/#636086c87471.

combine an aggressive testing program (critical data harvesting) with analytics based alignments with other national data bases.

> "If these patients can't be found, testing capacity doesn't mean much. This is where smart city infrastructure comes in. The aim is to work out where known patients have been and test anyone who might have come into contact with them. There are three main ways people are tracked. First, credit and debit cards. South Korea has the highest proportion of cashless transactions in the world. By tracking transactions, it's possible to draw a card user's movements on the map. Second, mobile phones can be used for the same purpose. In 2019, South Korea had one of the world's highest phone ownership rates (there are more phones than people). Phone locations are automatically recorded with complete accuracy because devices are connected to between one and three transceivers at any time. And there are approximately 860,000 4G and 5G transceivers densely covering the whole country. * * * Finally, CCTV cameras also enable authorities to identify people who have been in contact with COVID-19 patients."[15]

South Korea adds an element of transparency as well. "The result of the tracking is not only used by health authorities but also made public via national and local government websites, free smartphone apps that show the locations of infections, and text message updates about new local cases. This help citizens avoid hotspots of infections."[16] Moreover, the ability to track patients produces a system that is similar in some respects to that instituted in Israel.

Other States: As Reported on Top10VPN:[17]

> *Singapore* – 20/03/20. On March 20, a new app called TraceTogether was released by authorities in Singapore to help trace the spread of COVID-19. The app, which already has 650,000 users according to the app's website, was developed by the Government Technology Agency and the Ministry of Health. According to the Straits Times, the app can "identify people who have been in close proximity […] to coronavirus patients using wireless Bluetooth technology." According to a video released by TraceTogether, "No geolocation data or other personal data is collected." 01/03/20 At the end of February, Singapore's Ministry of Health made information about victims of the virus available to the public. Following this, a

[15] Jung Won Sonn , "Coronavirus: South Korea's success in controlling disease is due to its acceptance of surveillance," *The Conversation* (19 March 2020) available https://theconversation.com/coronavirus-south-koreas-success-in-controlling-disease-is-due-to-its-acceptance-of-surveillance-134068.
[16] Ibid.
[17] Samuel Wodhams, "COVID-19 Digital Rights Tracker," *Top10VPN* (20 March 2020) available https://www.top10vpn.com/news/surveillance/covid-19-digital-rights-tracker/.

developer turned the information into an interactive map so that citizens' could track the location of those infected. The map quickly went viral, raising fears that it could lead to discrimination, stigmatisation and gross digital privacy violations. "We must demand more from authorities as the role of big data and technology in humanitarian response matures." Access Now.

India – 20/03/20 On Friday, 20 March, Reuters reported that: "People suspected of having the coronavirus in India have received hand stamps and are being tracked using their mobile phones and personal data." The indelible hand stamps, which have been applied to citizens arriving at airports in Maharashtra and southern Karnataka, include the date that the person may be released from self isolation. "In southern Kerala state, authorities have used telephone call records, CCTV footage, and mobile phone GPS systems to track down primary and secondary contacts of coronavirus patients," the Reuters story continues.

Poland – 19/03/20. On March 19, Poland's Ministry of Digital Affairs launched a new app for quarantined citizens. The app prompts its users to send a geo-located selfie at random times throughout the day, so that authorities can ensure that they are abiding by the quarantine measures. Failure to comply with the orders to remain inside could result in a fine of PLN 5,000. According to Privacy International: "The system checks both the person (using facial recognition) and the location, essentially replicating what would otherwise be a visit from a police officer."[18]

United Kingdom – 19/03/20. On Thursday March 19, Sky News reported that the British government was working with major mobile network, 02, to analyse its users' location data. According to the article, "the project will not be able to track individuals and is not to designed to do so." A report published the same day by The Guardian revealed that EE, the country's largest mobile operating company, was also in advanced discussions with the government about how best to share their users' location data. As the article made clear, "privacy campaigners worry that handing over such personally identifying information in large quantities crosses a line that may be hard to step back from when things return to normality."

Italy – 18/03/20. Vodafone launched a five-point plan to help respond the outbreak of COVID-19 on March 18. According to the press release, the company was "already producing an aggregated and anonymous heat map for the Lombardy region in Italy to help the authorities to better understand population movements in order to help thwart the spread of COVID-19." 14/03/20 Like Germany, the UK and Austria, Italian mobile operators have also been shown to be sharing aggregated location data with health ministries. In a bid to control the virus in a country that

[18] [″″People in quarantine have a choice: either receive unexpected visits from the police, or download this app,″ a spokesman for Poland′s Digital Ministry said. The Polish government is automatically generating accounts for suspected quarantine patients, including people returning from abroad.″ Isobel Asher Hamilton, "11 countries are now using people′s phones to track the coronavirus pandemic, and it heralds a massive increase in surveillance," *Business Insider* () available https://www.businessinsider.com/countries-tracking-citizens-phones-coronavirus-2020-3].

has now registered more Coronavirus-related deaths than China, the location data is thought to have to helped local authorities monitor citizens' responses to its lockdown measures. According to a report by The Guardian, over 40,000 Italians have been found to be violating the lockdown measures.

Germany – 17/03/19. Deutsche Telekom, the German mobile operator, announced on March 17 that it was passing anonymised location data of its users to the Robert-Koch Institute, a research institute and government agency responsible for disease control and prevention. The move came after the government altered its GDPR-enabling legislation to allow the processing of personal data during an epidemic.

Austria – 17/03/20 In Austria, reports emerged on March 17 claiming that Austrian mobile operators had begun sharing anonymised mobile location data with the government. Like the initiatives in Germany and the UK, the measure is intended to be used to track whether or not citizens' were restricting travel and following government advice.

Belgium – 12/03/20 On March 11, the Belgian government confirmed that it would allow local mobile operators to share anonymised data with a third party to help track the spread of the virus. The following week, a group of technology entrepreneurs argued in favour of creating app to track and regulate individuals' movement based on their health status. 21/03/20A tweet by Raphael-Antonis Stylianou, the EU Commission's Online Communications Officer, appeared to show the use surveillance drones in Brussels on March 21. The video shows a drone emitting a warning through its speakers, urging citizens to respect social distancing measures.

Iran – 03/03/20 On Tuesday, March 3, Iranian citizens received a notification about a new app supposedly from the Ministry of Health. The app, called AC19, was created by the same developer that has made clones of Telegram in the past. The app is thought to have collected citizens' live location that it may have shared with the regime to track users' movement.

> "Of course, the app couldn't tell citizens if they had coronavirus. But what it could do is hoover up huge amounts of data on citizens, including names, addresses, dates of birth, and even track people's location in real time." VICE

The following week, the app was removed from Google's Play Store.

Russia – 21/02/20 On Friday, 21 February, Reuters reported that Moscow's mayor had announced the use of facial recognition to help ensure people remained at home. According to the article, the mayor wrote on his website: "Compliance with the regime is constantly monitored, including with the help of facial recognition systems and other technical measures." According to one report, over 200 people have been found to be disobeying the self-quarantine orders by the city's 'Safe City' surveillance system.