Video Surveillance and COVID-19 in Eurasia

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To enforce quarantine measures, some Eurasian cities are relying on smart surveillance technologies initially installed a few years ago to capture criminal and disorderly behavior. Moscow, Nur-Sultan, and Kyiv have been leaders in retooling existing electronic surveillance infrastructure, including facial recognition cameras, to monitor violations of government restrictions on movement amid the COVID-19 pandemic.

The recent measures taken by these cities have shown that in the name of the public good, cutting edge technologies can be quickly adapted to new functions by municipal and national authorities. Without a broader debate about implications for privacy and civil liberties, such rapid shifts are likely to benefit political incumbents and expand their control over urban populations. The issue of digital surveillance as a way of controlling the spread of COVID-19 is discussed worldwide, including in the United States and Europe, but in Eurasia, surveillance is augmented top-down by national and municipal authorities without public oversight.

Electronic Surveillance Regimes in Eurasia

Smart city technologies have become ubiquitous across cities in Eurasia over the last few years. Moscow’s mayor has pledged to make the Russian capital, already one of the most interconnected cities in the world, on par with New York and London. Kyiv’s mayor plans to expand the use of facial recognition cameras beyond the city’s central zones. The president of Kyrgyzstan has declared that “digital technology comes to daily life” and last year smart cameras were installed in Bishkek. Cities with varying economic capabilities introduced elements of smart technologies that recognize faces, motions, emotions, and license plates.

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“Smart” and “safe” are often used interchangeably in the Eurasian context meaning innovative technologies installed to protect the general public from disorderly behavior. But beyond surveillance, other common aspects of the “smartization” of urban spaces are slower to spread, such as improvements accessing public transportation and using public utilities. Municipal authorities have worked with interior ministries to focus on areas where violations may take place, and surveillance cameras have become the leading feature of such innovations.

With the spread of the COVID-19 virus, some cities are retooling smart technologies to help enforce quarantine measures. Several of the more highly surveilled cities in Eurasia—Moscow, Kyiv, and Nur-Sultan—have relied on smart technologies to identify infected individuals and violators of social distancing measures. Evidence collected by smart cameras is reported to police who can then it to accuse, fine, or detain individuals. Russia and Kazakhstan have been particularly aggressive in deploying smart cameras to monitor both urban and rural areas. Yet not all cities with newly introduced smart technologies have been able to resort to similar levels of “surveillance of quarantines.”

Yerevan, Bishkek, and Chisinau have all previously announced transitions to smart city technologies and installed smart cameras in the most populated areas, but these cities seem to continue to rely on traditional law enforcement mechanisms by dispatching police officers to roam the streets. Why did some cities in Eurasia quickly retool their technologies to fight the pandemic, while others avoided, at least publicly, relying on electronic surveillance?

From my research on the spread of surveillance technologies in urban areas in Eurasia, I see a similarly negative impact of rapid technological innovations on law enforcement practices within a city.2 Independent of whether a city has a more democratic political environment (e.g., Kyiv or Bishkek) or exists within an authoritarian context (e.g., Moscow or Almaty, which is larger than Nur-Sultan), technologies are installed without public debate on privacy and methods of controlling data collected from the streets. Instead, depending on each city’s availability of funds and access to skilled labor, three different electronic surveillance regimes emerge.

First, cities with modest budgets, like Dushanbe, Yerevan, and Bishkek, embark on opaque deals with Chinese and Russian tech firms such as Huawei or Vega. These companies may perform larger geopolitical functions for their governments by harvesting data across the globe, and therefore they offer flexible pricing for their services when entering foreign markets. Upon installing surveillance cameras, these cities usually depend on fines paid by traffic violators to service loans to foreign firms. This model results in a lopsided relationship between the public and their municipal authorities. The more crimes and violations reported, the faster external debts are paid off. As a result,

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there is less incentive for the authorities to improve social and economic conditions to reduce deviant behavior. These cities are also likely to share data collected from their streets with foreign providers. For instance, Vega collects data into its Prisma Cloud that is operated from Russia. Chinese contractors do not specify how collected data will be stored and who will have access to it. Due to their deep dependence on external suppliers of technologies, it is probably more difficult for poorer cities to quickly redirect their use of technologies for other public measures.

Second, wealthier cities such as Moscow, Kyiv, and Almaty have developed hybrid models. While still depending on foreign companies for supply of technologies, they simultaneously enhance domestically grown technological innovations that generate localized models for law enforcement. These cities have been early adopters of different types of electronic surveillance mechanisms on the streets. They are driven both by the idea of enhancing domestic surveillance of disorder and by mimicking international examples for innovations. At a public meeting with Russian President Vladimir Putin, Moscow Mayor Sergey Sobyanin boasted that his city is covered by 200,000 cameras and that soon only China would have larger metropolis coverage areas. Cameras now supply evidence in 70 percent of criminal investigations in Moscow.

Almaty has the largest number of smart cameras in Kazakhstan, reaching over 119,000, thanks to supplies from Chinese, Russian, and Western firms. For surveillance purposes during the pandemic, however, Kazakhstan’s authorities rely on Sergek, a domestic supplier of smart technologies capable of storing and processing big data. Nur-Sultan and Almaty have installed 14,000 and 2,000 Sergek cameras, respectively. Even though Almaty has been the national leader in installing surveillance technologies, Sergek is more widespread in Nur-Sultan. Therefore, the pandemic will be surveilled through cameras more intensely in the capital.

In Kyiv, the authorities collaborate almost exclusively with the Chinese company HikVision. By 2019, the city’s number of surveillance cameras exceeded 8,000, a significantly smaller number than Almaty’s. The Ukrainian authorities stress the valuable role that smart cameras play helping to solve crimes in areas where police are in short supply. Cameras—some visible, some concealed—are used in public spaces, including roads, bridges, schools, bus stops, tourist attractions, and downtown areas. The cameras can help law enforcement agencies better monitor crowds during large events and can determine “the age, the route of travel, and even the emotional state” of an individual in a crowd. In early April, officials announced that they were planning to purchase 400 HikVision heat-sensitive cameras capable of identifying individuals with fevers.

Finally, the third category includes cities like Tallinn, Estonia, that generate safe and smart city models through entirely domestic innovation capabilities, often with emphases on environmental issues and public connectivity. In contrast to Moscow and Nur-Sultan, the Estonian Ministry of Economic Affairs and Communications crowdsourced ideas to
“hack” the virus. Within days, the winners of the public-private initiative included projects to connect people most at risk and create platforms for workforce sharing. In Kyrgyzstan, entrepreneurs launched #HackCoronaForKG to distribute food and solicit help during the pandemic. Similar grassroots actions relying on technologies have emerged in both Russia and Kazakhstan but they exist in parallel to government response efforts. Most cities across Eurasia likely have domestic cadres capable of developing algorithms the use their current systems’ street data.

Retooling Surveillance During COVID-19

In early March, Kazakhstan was the first state in the former Soviet space to announce the use of surveillance to fight the spread of COVID-19—even before introducing strict quarantine measures. Soon after, Moscow’s mayor announced that police could punish all motorists or individuals exiting their apartment buildings and violating quarantine rules based on electronic surveillance evidence. The head of the Department of Information Technology of Moscow, Sergey Lysenko, said that infected persons quarantined at home are given phones with preinstalled applications that monitor their movements. The Moscow authorities explained that their smart cameras could identify individuals even if they are wearing facial masks.

Since the announcement of extraordinary measures to help stop the COVID-19 pandemic, media outlets have been reporting infringements of quarantine measures captured by these technologies. A man in Moscow who recently returned from Italy and was placed under quarantine was detected throwing trash away outside his apartment building. The police came to his home with photographic evidence depicting him exiting his building; they had matched the photograph with his passport information. To date, 90 people have been accused of violating quarantine measures in Moscow. In just two days in March, 307 people were charged with administrative violations. For perspective, in the last week of March, 2,000 people in Nur-Sultan had “administrative measures” taken against them for violating the state of emergency. All motorists are monitored, and citizens moving around in private vehicles are required to obtain permits.

However, such detailed reporting, which relies on individual cases and statistical records, constructs both a false impression of government effectiveness in preempting the spread of the virus as well as justification for why total control by smart technologies is necessary for people’s daily lives. Technologies help police and municipal authorities move toward result-oriented law enforcement by measuring success in terms of the number of interdictions, completed criminal investigations, arrests, and fines imposed thanks to documented violations. This utilitarian function of these technologies serves the larger ideal of a society in which even minor crimes are meticulously documented, a habit dating back to the Soviet tradition of criminological research. Like Soviet-era practices of enforcing autocratic regimes, government policies will eventually extend regime control over diverse groups. The aspiration for modernity and the urge to repress may coexist in
a country’s promise to improve the quality of life within a city.

Yet, photographic evidence of disorderly or criminal behaviors conveys a narrow representation of the vast range of experiences lived within a city. Not discussed in these drives for innovation are issues that force individuals to engage in disorderly or criminal behavior, including unequal access to public goods and infrastructure. Visual evidence of disorderly behavior reduces chances for a more comprehensive police investigation and is unlikely to be contested in courts. Surveillance cameras change the metrics around how crimes are counted, pre-empted, and punished, with a greater emphasis on crime statistics derived from surveilled areas. Cities can pick and choose what to surveil from a menu of different behaviors, depending on their policy priorities.

Privacy and Digital Prisons

Discussions on privacy violations related to governments’ reliance on smart technologies have yet to catch up with reality in Eurasian cities. The first substantive reaction to surveillance came recently from Russian opposition activist Alexey Navalny, who labeled the Moscow authorities’ reliance on advanced technologies as a “digital concentration camp” and reminded them of the lack of basic protective equipment among medical personnel. In his terms, the Moscow government communicates in the style of, “We will watch you. If you won’t do something right, we will find out. You may think that the police aren’t catching you, but we see you through the video camera.”

Activists in Moscow are especially alarmed about easy access to the content collected by smart cameras, offered for a fee by house committees (domkom) or online hackers. Interestingly, however, according to anti-corruption activist Georgy Alburov’s investigation, Sobyanin’s own apartment building, as well as other top-ranking officials’ buildings along the city’s so-called fancy Golden Mile (Zolotaya milya), are not covered by smart cameras. The elites are allowed to escape the city’s gaze and maintain their privacy.

In Kazakhstan, critiques of unchecked surveillance began to emerge among lawyers and political activists earlier this year. But amid the pandemic, opposition activists have shifted most of their attention towards ways to support economically deprived segments of the population, victims of domestic violence, and the needs of healthcare workers.

Conclusion

Moscow, Kyiv, and Nur-Sultan are right in taking harsh measures to prevent the spread of the novel virus. But even amid the pandemic, discussions of civil liberties must not be overshadowed by the urge to protect public health. In the long term, smart cameras can be seamlessly retooled for other political or social purposes, all in the name of the public good. Technologies provide a sense of control by the authorities, but in reality, they may be enforcing order only selectively in areas with the highest availability of smart cameras.
Instead of relying on surveillance technologies to successfully maintain social distancing, municipal authorities can solicit ideas from the public on the best ways to serve communities facing the greatest risk of exposure to the virus or assisting the needs of healthcare workers and other essential workers.