

Surveillance, data police, and digital enclosure in Xinjiang’s ‘Safe Cities’*

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Sometime in the summer of 2019, Vera Zhou, a young college student from the University of Washington, forgot to pretend that she was from the non-Muslim majority group in China, the Han. At a checkpoint at the shopping mall, she put her ID on the scanner and looked at the camera. Immediately, an alarm sounded and the guards manning the equipment pulled her aside. That was when she remembered that when she ventured outside the jurisdiction of her police precinct, she should pretend she had forgotten her ID and hold her head up high, playing the part of a wealthy, urban Han college student who could not be bothered by mall security and face scans.

In fact, as much as Vera could pass as Han—she liked to wear chunky silver earrings, oversized sunglasses, and dress in black—her ID card said she was Hui, a Chinese Muslim group that makes up around one million of the population of 15 million Muslims who are the majority in the Xinjiang region. Now, a surveillance system connected to local police detected that she had ventured out of bounds. As a former detainee in a reeducation camp, she was not permitted to travel to other areas of town without explicit permission from both her neighbourhood watch unit and the Public Security Bureau. Recounting the ordeal several months later, Vera told me that as the alarm went off, she felt she could not breathe. She remembered her father had told her, ‘If they check your ID, you will be detained again. You are not like a normal person anymore. You are now one of “those” people.’

Vera was living in her hometown of Kuytun (Kuitun) in Ili Prefecture, an area directly north of the Tian Shan mountains that border Kazakhstan. She had been trapped there since 2017, when—in the middle of her junior year at the University of Washington, where I was an instructor—she had taken a spur-of-the-moment trip home to see her boyfriend, a

*This essay was originally published in *ChinaFile* on 30 December 2020. It has been updated and edited for style for inclusion in this volume. Jessica Batke provided research for it.

former elementary school classmate. Using digital surveillance tools, the Kuytun police had noticed that Vera had used a Virtual Private Network to access websites such as her university Gmail account. Given her status as a member of a Muslim minority group, this could be deemed a ‘sign of religious extremism.’

Police had contacted her boyfriend, who was Han, while the couple was on their way home from a night at the movies, asking him to stop by the nearest police station. Police told him they needed to speak with Vera, so the couple entered the station. There, police explained they would need to take Vera to a larger station for questioning and that her boyfriend could follow the police van in his own car. But once Vera was in the van, safely out of her boyfriend’s sight, a man working for the police pulled her hands behind her back and handcuffed her:

It felt like a horror movie. Like maybe if I said the right things, I would wake up and find that it wasn’t happening. That was when I started wailing, half-screaming, half-crying. The lead police officer told me, ‘It will be better for you if you shut up.’

Without formal legal proceedings, for the next several months, local police held Vera with 11 other Muslim-minority women in a second-floor cell in a former police station. In whispered conversations, she learned that others in the room had been told they had committed cyber violations or had engaged in other activities indicative of future criminality according to broad interpretations of China’s counterterrorism laws, which were established in 2016 (China Law Translate 2018). As Chinese authorities explain in an official document submitted to the United Nations (Government of China 2020), some people detained in this manner are deemed to have participated in ‘extremist’ activities ‘not serious enough to constitute a crime’. Vera told me some of the women had used WhatsApp or registered multiple SIM cards to the same ID. Others had WeChat contacts in Kazakhstan or had travelled to Muslim-majority countries like Malaysia and posted images of visits to famous mosques and of people dressed in identifiably Islamic clothing. Some had been detained for going to mosques too often or for possessing retroactively outlawed religious books or other materials such as DVDs with instructions on how to study the Quran.

Vera spent several months in ‘reeducation’: chanting rules, singing ‘Red songs’, writing ‘thought reports’, and studying elementary Chinese—under the bright lights of her cell and occasionally in a fortified classroom. Then, she was unexpectedly released and placed on a kind of probation. Staff at her neighbourhood watch unit told her she was not permitted to leave her small town. Over time, she told me, she came to understand that the ‘smart city’ features of Kuytun meant that at key nodes such as train stations or shopping streets (Tianshan Net 2018), ever watchful facial recognition cameras could pick her out of crowds and alert the legions of contract workers employed by the local police that she had ventured out of bounds (Byler 2020a). Fearing that too many of these encounters might result in her being detained again, and aware that many of her friends were afraid to be seen with her, she began to change her behaviour. ‘I just started to stay at home all the time,’ she said.

‘You are not like a normal person anymore. You are now one of “those” people.’

After she had spent several weeks at home, a senior police officer in her neighbourhood learned that she had spent time in the United States as a college student. He asked her to begin tutoring his children in English. She said: ‘I thought about asking him to pay me, but my dad said I needed to do it for free. He also made food for the police officer’s family, to show how eager he was to please them.’ The commander never brought up any form of payment. The reeducation camp and surveillance system left Vera alone and isolated as an unfree, unpaid educator and nanny, responsible for the education of the police officer’s family. On many occasions, she stood up in front of her neighbours and confessed the errors of her past, how much she had learned by studying the political thought of President Xi Jinping, and her gratefulness to the government for giving her a second chance.

In an attempt to prove that she could be trusted to continue her education back in the United States, she tried to follow the rules and always demonstrate a good attitude. Getting caught at the mall checkpoint was not part of this plan; since her neighbourhood watch unit was linked to the ‘smart city’ platform (People’s Daily 2019), she knew all her violations would be recorded. Fortunately, the leaders back in her neighbourhood watch unit did not see her unauthorised excursion as a sign of deviance and agreed to let her go with a warning. Eventually, after six months

under neighbourhood arrest and after signing numerous documents guaranteeing that she would not talk about what she had experienced, Vera was allowed to reclaim her passport.

When Vera emerged from the escalator into the baggage claim area of Seattle-Tacoma International Airport on 18 September 2019, she smiled weakly at me and the small group that had gathered to welcome her home. She looked exhausted. Her life had been forever changed by her time in the system of confinement and surveillance that had overwhelmed her in Kuytun. And all along, she had been living in what China's government and technology industry calls a 'Safe City' (平安城市).

In combing through hundreds of government documents, I have found that dozens of county-level or larger administrative divisions in Xinjiang have developed 'Safe City' surveillance systems. This network of Safe Cities is a particular instantiation of nationwide Skynet, Smart City, and Sharp Eyes systems (Batke and Ohlberg 2020; Rudolph 2019). Since 2017, when the reeducation campaign intensified, these programs have enveloped the entire region (Sinolink Securities 2018)—pulling Xinjiang's surveillance systems into alignment with and, in some ways, exceeding the capacity of areas in eastern China. Stories like Vera's show how these surveillance systems can control the lives of those they target, but the inner workings of such systems have remained something of a puzzle.

The case of Shawan

Newly uncovered procurement notices for the small town of Shawan and the surrounding county, 64 kilometres from Vera's hometown of Kuytun, now provide a more fine-grained view of how a Safe City surveillance system in Xinjiang can function. As outlined in nearly 400 pages of a 2017 feasibility study and two legal contracts (Chinese Government Procurement Network 2020), the system Shawan's officials hoped to purchase would be supported by the Face++ algorithm designed by the computer vision company Megvii. Megvii denies it did business in Xinjiang, apart from selling facial recognition registration systems that tie hotels to public security bureaus (Byler 2021). But an investigation published in December 2020 by surveillance industry publication *IPVM* revealed that Megvii collaborated with Huawei to develop a 'Uyghur alarm' that would automate the detection of Uyghur faces in video monitoring (IPVM Team 2020).

The Shawan Face++ system would be designed to assess object information such as vehicle licence plates, but also to home in on ‘human faces, physical features, accessories, and so on’, the feasibility study explained. It would track those identifiers while gathering other social data such as ‘communication behaviour, accommodation behaviour, migration behaviour, financial behaviour, consumer behaviour, driving behaviour, and administrative violations.’ The accuracy of the system would depend on a base set of images associated with state-issued IDs and comparison technology used to conduct image analysis of other captured images—a system similar to Clearview AI software used by law enforcement agencies in the United States (Mac et al. 2020). It would also use analysis of real-time video—something similar to a London Police pilot project using NEC-supported video facial surveillance (Gallagher 2020). While there are some similarities between American and British policing systems, which also disproportionately harm ethno-racial minorities, according to a study by the American Civil Liberties Union (Crockford 2020) and others in China (Byler and Boe 2020), the high degree of surveillance density in Shawan, as well as the capacity of its detention facilities, shows there are remarkable differences as well.

The Shawan ‘Safe City’ procurement documents are the first to show in minute detail the design parameters and feasibility of a county-level surveillance system in Xinjiang. In the context of northern Xinjiang, Shawan is an unremarkable, ageing, Han-majority town. According to the *Xinjiang Statistical Yearbook* for 2018, the total population of the county is around 200,000, with 67 per cent of the population between the ages of 18 and 60 years. Almost 80 per cent of the people in the county are employed by the Xinjiang Production and Construction Corps (or Bingtuan) (Statistical Bureau of Xinjiang Uygur Autonomous Region 2018), a paramilitary farming colony that was recently sanctioned by the US Government for its involvement in Xinjiang’s detention camps and forced labour (AFP in Washington 2020). Many residents of Shawan are involved in cotton and tomato cultivation (Bureau of Statistics of Shawan County 2019)—two of the primary crops of the region. The ethnic-minority population of the county numbers around 72,000, but only 9,500 are Uyghurs; most are Kazakh and Hui. If demographic trends hold across the entire population, about 48,000 of these Muslims are aged between 18 and 60 years.



Plate 14.1 Images of a detention facility built in Shawan County, accessed on Google Earth, 19 December 2020. Sources: Top image, Google, © Maxar Technologies; centre, Google, © CNES/Airbus; bottom, Google, © Maxar Technologies.

Given the town appears relatively unremarkable—it has no history of violence; it is simply a typical Bingtuan town—the sophistication of the proposed surveillance system is surprising and suggests that even small Han-majority towns are highly invested in the detention and reeducation campaign. Dozens of state media reports and a series of procurement notices from Shawan in 2017 and 2018 make clear that the Shawan Public Security Bureau bought and operationalised significant portions of the surveillance system described in the feasibility study (Ying'an Net 2019; Public Security Bureau of Tacheng Prefecture 2017).

It is also clear that many Muslims in Shawan have been detained. While researching this story in August 2020, I came across a new detention facility (see Plate 14.1), built on the north side of town in 2019. Raphael Sperry, an architect and the secretary of the US-based Architects/Designers/Planners for Social Responsibility, estimates it has the capacity to hold between 7,000 and 20,000 people—roughly 15 to 40 per cent of all Muslim adults in the county. The construction of the new facility flies in the face of the Chinese Government's public line on the detention of Uyghurs. In early 2019, the Governor of Xinjiang, Shohrat Zakir, said everyone held in the camps had 'graduated' (Yanan 2019). The dramatic expansion of the detention facilities in Shawan, after this announcement was made, belies this claim.

Since 2017, Xinjiang has become a limit case even for Chinese surveillance systems (Batke and Ohlberg 2020). In the region, the networks of cameras are denser than systems in other parts of China and are supported by more than 9,000 surveillance hubs—dubbed People's Convenience Police Stations (便民警务站)—and thousands of face-scan and phone-scan checkpoints at jurisdictional boundaries (Yang and Li 2019), and nearly every resident of the region has submitted their biometric data to the authorities in a comprehensive 'public health' initiative (Wee 2019). Because of the fidelity and scale of iris scans and facial image portraits from Xinjiang IDs, which form the baseline of the facial recognition systems, the tools Xinjiang contractors employ are more finetuned and invasive than those of their counterparts elsewhere in the world. The Megvii algorithm—and the algorithms of its principal rivals in China, YITU and Sensetime—run at '1:N', or one-to-many, comparisons with hundreds of millions of images extremely rapidly. Moreover, when partnered with Xinjiang's public security bureaus, these algorithms have access to many high-definition images of the faces of each resident of Xinjiang.

In Shawan, the Megvii system would be designed to match and register the faces and record alarms for up to 300,000 targeted people in 0.8 seconds and, in two-tenths of a second longer, 500,000 people. Matches within such systems are always a probability, but technicians in Shawan would be able to 'set the comparison threshold manually' to finetune the targets of the surveillance algorithm. And the longer the system runs, the more finetuned it would become. Over time, the feasibility study explains, it would automatically 'supplement information for portraits in the base library' with views of residents throughout their daily life and, by collecting online behavioural data, 'enhance person-specific information.'

According to an additional procurement notice in September 2017 (Bidcentre Net 2017a), the Shawan Public Security Bureau began to buy biometric data collection equipment that would 'collect and identify basic personal information and social network data' from populations of 'registered and unregistered people,' those who had criminal records, the migrant 'floating population,' people from other countries, and 'two types of prisoners'—a phrase that appears to refer to prisoners in the reform through labour and 'reeducation' through labour systems (parts of which were officially abandoned in 2013) (The Economist 2013). Another notice explains explicitly that the Shawan Public Security Bureau would use the system to track 'detainees and people undergoing education transformation' (Bidcentre Net 2017b). Then, on 11 December 2017, in what appeared to be a response to the feasibility study, Shawan issued another major procurement notice announcing the winning bid of the Shawan Safe City project (Bidcentre Net 2017c). The notice outlined how the Shawan Public Security Bureau would pay RMB105 million to Shenzhen Jiaxinjie Technology to construct the Safe City system. In the first year of the project, Jiaxinjie would complete a 'front-end construction, transmission network construction, platform construction, command centre and sub-command centre construction, and monitoring and lighting system construction.' Over the following 10 years, the Shawan Public Security Bureau would pay the Shenzhen company RMB17.7 million per year to maintain the system.

During 2018, the Shawan Public Security Bureau issued a series of additional procurement notices. In another notice, posted in January 2018 (Bidcentre Net 2018a), the bureau declared its intention to purchase 82 sets of iris-scanning equipment from Beijing Wanlihong Technology for RMB1.4 million to use in building a new ID dataset. In yet another procurement notice (Bidcentre Net 2018b), the bureau declared its

intention to purchase 52 sets of ‘portrait collection devices’ and 32 sets of fingerprint collection machines for RMB1.2 million from the Third Research Institute of the Ministry of Public Security.

Surveillance as efficient settler protection

According to much of the framing of state media reports, the design and implementation of the Safe City project in Shawan created greater governance efficiency. In 2018, the Shawan Public Security Bureau administrative services system—responsible for household registration and residential identification documents—transitioned to a smartphone-driven digital model (Xin 2019). A wide array of smartphone-based facial recognition technologies enabled this administrative system to collect individuals’ data, a public service announcement explained. The implementation of smartphone-based systems started with a face-scan-centred, state-issued photo ID. By mid-2018, applications to replace lost IDs could be submitted online using a smartphone camera to scan the applicant’s face (Public Security Bureau of Shawan County 2018).

To pass through neighbourhood-entrance face-scan checkpoints, residents needed to install another face-scan app on their phones, a government announcement explained (Public Security Bureau of Shawan County 2020). Even agricultural work brigades installed face-scan systems to monitor villagers’ work efficiency (Wang and Liu 2018). If the feasibility report was implemented as planned, much, if not all, of this face-scan and phone data from housing areas, work units, and schools would be integrated into the broader three-tiered Safe City system through the ‘societal resource integration platform’ and funnelled through 14 new neighbourhood watch unit ‘subcommand centres’.

As outlined in a recent article by Jessica Batke and Mareike Ohlberg (2020), the proposed Shawan system would use 4,791 networked high-definition cameras, 70 of which were to be facial recognition units:

[It] would be positioned in crowded places with clear entrances and exits, including mosques, with others to be installed in train stations and bus stations. On the back end: a set of interlocking platforms would span three administrative levels (the village/township level, the county level, and the prefectural level) and three network layers (the public Internet, a private video network, and the Public Security Bureau’s own intranet). Critically, the

system would allow for information to flow from private cameras to the police via a ‘societal resource integration platform’ that drew from surveillance in ‘hotels, Internet cafes, gas stations, schools, hospital monitoring [sic], bicycle rental points, and shops along the street, etc.’

Some locals seemed to welcome the new technology, but newly built forms of surveillance also seemed to inconvenience some residents. For instance, as new systems were put in place in 2017, the Shawan authorities began to conduct ‘night patrols’ that required drivers to stop and be inspected (Duan 2017). This prompted a resident of Shawan using the surname Hu to complain to his friends on WeChat. According to a state media source called Peaceful Shawan (2019), the Shawan ‘Internet Security Police’—a division of the Public Security Bureau stationed in command centres in the Safe City system—discovered these private posts, detained the man for 15 days, and publicly shamed him.

Data police

The Safe City system needs human monitoring to operationalise it and, at times, this human intervention creates friction. As in all complex technology systems, human technicians are required to finetune the data and ‘debug’ the system. Technology studies scholar Lilly Irani (2015) describes these workers as ‘data janitors’. In this context, the data janitors of the Safe City system in Shawan and throughout the region were 90,000 police officers or police assistants (协警) hired at the beginning of 2017 (Byler 2020b). According to job listings (Lintao Focus 2018), most of these recruits would not receive formal training in police academies as Public Security Bureau employees do (Ramzy 2019). Most would not be authorised to carry lethal weapons. In other places in China, they would simply be referred to as ‘security guards’ (保安) or ‘urban management officers’ (城管), but in this context they had power over Muslim lives from their positions in the People’s Convenience Police Stations. According to research I conducted in Xinjiang in 2018 as well as dozens of online advertisements, local public security bureaus hired many of these workers from Muslim-minority populations. The basic qualification for the job was having a ‘trustworthy’ (放心) family background, actively opposing ‘ethnic division and illegal religious activities’ (Peaceful Shawan 2017), and having a basic working knowledge of Chinese. The ads actively

recruited the spouses and children of ‘Xinjiang Aid’ (援疆) personnel. These mostly Han citizens were brought to Xinjiang as part of a ‘paired assistance program’ that linked wealthy cities and provinces in eastern China with counties and prefectures in Xinjiang (Xinhua 2019). This ‘poverty alleviation’ scheme brought industries, educators, and labour transfer programs to Xinjiang, but as scholar of Chinese politics Jennifer Pan (2020) points out, it also brought new forms of surveillance and coercion. Shawan’s ‘sister city’ was Anshan, a city of about 3.5 million people in Liaoning Province, in northeastern China.

As one police chief in Ürümqi put it (Yaxin Net 2016), in general, the job of the new contractors was to create a 24-hour ‘seamless’ security environment. According to Baimurat, a former police contractor who spoke about the system in an interview posted online, assistants conducted spot checks centred on actively profiling passers-by (Byler 2020c), stopping young Turkic people and demanding they provide their state-issued IDs and open their phones for automated inspection via spyware apps and external scanning devices. Policing contractors monitor face-scanning machines and metal detectors at fixed checkpoints. All these activities ensure that information forcibly collected from Uyghur and Kazakh residents continues to feed the system’s dataset, making the ‘extremism assessments’ conducted by neighbourhood watch units more and more precise (Chin and Bürge 2017). As anthropologists such as Joanne Smith Finley (2019) have shown, Muslims determined to be ‘untrustworthy’ through data checks can be sent to detention centres, where they are interrogated, asked to confess their violations, and name others who are also ‘untrustworthy’. In this manner, the parameters of the technopolitical system determine which individuals are slotted for what was referred to in Shawan as a ‘centralised closed education training’ internment camp (Alecci 2019; Zhang 2019).

Implementing the system

On the edge of Bingtuan farming colonies, in another small town, called Qitai, 370 kilometres directly east of Shawan, Baimurat was one of the police contractors who conducted these checks. He was in one of the first groups of contractors hired from across the region in late 2016. In an extensive, hour-long Kazakh-language interview posted online after he fled across the border to Kazakhstan in early 2019 (Atajurt Kazakh Human Rights 2019), Baimurat provides fine-grained detail on how

surveillance systems have overwhelmed small Xinjiang towns and are linked to the camp system. He is one of only a handful of former security workers in the Xinjiang surveillance system who has spoken to researchers and journalists.

In the interview, he says that because he was a college graduate, he was ‘considered very well qualified’. As a result, he received the highest-level salary available to the contractors—around RMB6,000 per month, which is far above the local minimum wage of around RMB1,800 (Xinhua 2018). Others in his cohort who were considered less qualified because of their educational background, he says in the interview, were paid closer to RMB2,500. Through research conducted in Kazakhstan in early 2020, I confirmed details of Baimurat’s story through an intermediary. Alongside past reporting done by *The New York Times* (Ramzy 2019), I pieced together that, like many highly educated Muslims in northwestern China (Tohti 2015), Baimurat had in the past struggled to find work for which he was qualified, so taking the job was a choice he felt he could not refuse. Not only would he be able to provide for his family, but also he would be able to protect them from the reeducation system. ‘We were given uniforms,’ he says in the interview. ‘Then we started doing different kinds of training. It was really strict, as if we were planning for a war.’

In late 2016, Qitai authorities started building People’s Convenience Police Stations, which are a type of surveillance hub erected every several hundred metres in Muslim-majority areas as part of the Safe City grid (Wong 2019). Authorities divided the contractors up and assigned them to the 89 stations that were built in Qitai County (Zhang and Jiao 2017).

According to local media reports and hiring advertisements (Du and Chang 2016; Peaceful Shawan 2017), in Shawan, a similar process played out, with 42 stations erected in 2017 (Public Security Bureau of Tacheng Prefecture 2017). The Public Security Bureau of Shawan recruited at least 490 auxiliary officers (Public Servant Exam Information Website 2017). According to one advertisement (Police Examination Network 2017), 316 officers would be stationed within the town of Shawan along with 48 ethnic-minority recruits, and the remainder would be assigned to rural stations. There is some indication that the force continued to expand. In 2018, Shawan authorities circulated advertisements, first, for 100 more officers in the spring, and another 200 in late summer (Kunlun Human Resources and Social Security Website 2018; Police Officer e-Station 2018). In 2019, Shawan recruited another 200 officers (Career Centre 2019) and, through a series of additional procurement notices, announced that it

had awarded bids for close to RMB7 million for equipment and other supplies related to the People's Convenience Police Stations (Ying'an Net 2020). The Shawan feasibility report from 2017 called for 77 stations.

Baimurat recalled in his online interview that, in the Qitai stations, 'initially, we sat facing the TV monitors, and you could see the places where the cameras were pointed.' 'We had to sit there monitoring them all the time. If we failed to notice an alert, or stopped looking, we would be punished.'

Over time, higher-ups in the Public Security Bureau began to assign different types of surveillance work to Baimurat and the other police contractors who were assigned to the People's Convenience Police Stations. First, superiors sorted the contractors based on their Chinese-language ability, demonstration of loyalty, and how well they understood the concept of 'extremism' and its elastic definition in the context of the reeducation system.

'They made us do other exercises like reciting rules about participating in the camp system,' Baimurat said in the interview:

We had to recite things related to law. There were quotes from Xi Jinping on the walls of the station. We had to learn these by heart. We were not allowed to go out on patrol until we successfully recited the quotes from Xi Jinping.

Then, in the middle of 2017, the police contractors were tasked with actively finetuning the programming of the Safe City system using digital forensic tools. Plugged into smartphones through a USB cable, these devices scanned the phones' files, searching for up to 53,000 markers of Islamic or political activity (Special Equipment Net 2020):

After I had been working there for six months, they handed out devices to check pedestrians and car drivers. When we scanned their ID card and phone with it, we got information about whether or not the person had worn a veil, had installed WhatsApp, had travelled to Kazakhstan. All sorts of things like that. (Atajurt Kazakh Human Rights 2019)

The officers began to perform night-time checks, like the ones that had upset the person surnamed Hu in Shawan:

We could stop every car on the street and check them. When we stopped them, we asked the people inside to show their phones and ID cards. If there was something suspicious like I mentioned before, we needed to inform the leaders. (Atajurt Kazakh Human Rights 2019)

Around this time, Baimurat learned that although he was a contingent worker, hired on a contract basis, he was not free to quit:

If we were tired and wanted to quit, they would tell us if you are exhausted you can take a rest, but then you must come back. If you quit the job, then you will end up in the 'reeducation camps', too.

Initially, Baimurat and his co-workers felt that despite the long hours and the confrontational positions they were placed in, being a police contractor 'was a good job' with a steady paycheque and protection from police harassment. They saw themselves as being on the side of the 'good guys'. This began to change around the time they received the smartphone-scanning equipment. Baimurat said:

I learned then that they had sent the children from the Kazakh Number 3 Middle School in the county seat to the Han school. They built an iron gate, high electric fence, and four watchtowers around the Kazakh school. If we found anyone suspicious through the ID checks, they would send them to the Kazakh school. They had suddenly turned it into a prison. They forced all of the people who had been visiting mosques, praying, or wearing headscarves to go to that school. (Atajurt Kazakh Human Rights 2019)

Initially, it seemed to Baimurat that it was just people who had been actively religious who were sent to the new 'prison' school. It was close to six months before he fully realised the implications of the 'rounding up those that need to be rounded up' policy that the Xi administration had announced in a speech given by Xinjiang Party Secretary Chen Quanguo in February 2017 (Ramzy and Buckley 2019). Baimurat said:

While I was working one day, we had a meeting. It was in early 2018. In the meeting, we were told we had to transfer some detainees from the jail to the school. We had so many manacles. When we

got there, we saw that they had caught around 600 people. There were rooms inside the building that were like cells. I saw very young women, very old women, and men with beards [over the age of 55] among the detainees. They were mainly minorities, the majority were Uyghurs, then a few Kazakhs and some Hui people. I don't think there were Han people. Maybe one or two, but not more than that. We handcuffed and shackled them and then we gave blankets to them whether they could hold them or not, and we told them to get on the bus. I had to handcuff one person that I had a feeling I had seen before. Then I realised he had worked as a police contractor as well. I had seen him before while I was working. I didn't remember his name, but I knew him. I really wanted to ask what happened to him, but because there were cameras I didn't ask any questions. I thought maybe I could ask later. But I never found a chance. (Atajurt Kazakh Human Rights 2019)

In the interview, Baimurat speaks in a quiet voice without much expression on his face. This begins to change as he discusses this moment of encounter. He holds his hands out in front of him, showing the way the detainees were shackled and how the blankets were thrown on to their bound hands.

Continuing, he explained that sometime later, when he felt it was safe, he asked another Kazakh police contractor about the man he had recognised among the detainees. His co-worker told him:

He came from a village and didn't understand how the CCTV cameras worked. While he was working in the prison, he saw a paper on the floor which said 'get me out of here'. He didn't report it, but the camera saw it, so he was taken 'to study'.

Baimurat said that, hearing this, he for the first time fully realised that any Kazakh or Uyghur could be sent to the camp. No-one was safe, no matter how hard they tried to work within the system. He said:

I felt very bad about being part of the system. There were so many people who made very tiny mistakes and ended up there. As police, we had tasks we were forced to do. Some days the leaders said do this, other days they said do that. Each day, we had to do what they said. (Atajurt Kazakh Human Rights 2019)

Over time, the pressure wore on Baimurat and his wife. He said: ‘We couldn’t sleep. We were crying all the time, my wife and I. But we didn’t show other people that we were crying, because they might think we were dangerous and might inform on us.’

Back in Shawan

Back in Shawan, as the Safe City project was implemented, a similar process appeared to unfold. On the weekend of 7 April 2017, the leaders of Shawan County attended a meeting at which Chen Quanguo declared a new beginning to the ongoing ‘de-extremification’ campaign (Shawan News 2017). The cadres said they would renew their resolve to ‘resolutely oppose the infiltration of religious extremist ideas.’ By August 2017, the county jail had been expanded and officially turned into a ‘concentration reeducation centre’ (Zhang 2019). In early 2018, two of the mosques in the town were destroyed and a third had its Islamic architectural features removed.

In the years since, the Xinjiang Victims Database, an international organisation, has documented more than 100 cases of people detained in Shawan. In most cases, the relatives of Shawan detainees said they had no knowledge of why their relatives were detained. In some cases, detainees or their family members said they were detained for violations that did not rise to the level of criminality and were related to online activity or travel to Kazakhstan to visit their relatives (Atajurt Kazakh Human Rights 2018a, 2018b). The most frequently known reasons for detention, however, were ‘praying’ and ‘visiting a mosque’—the sites where most facial recognition cameras were slated to be installed in Shawan’s Safe City project.



Plate 14.2 Nurbai Qunapia and Mahmutjan Abla in an undated wedding photo, provided to the author by Nurbai's sister, Orazhan Qunapia. Source: Courtesy of Orazhan Qunapia.

In Shawan, it appears that, first, they came for the Uyghurs. One of the first people detained was a Uyghur baker named Mahmutjan Abla (Xinjiang Victims Database 2020b). He was taken in the autumn of 2017. The police told his wife it was because of his devotion to Islam. Then in March 2018, they came for his wife, a Kazakh woman named Nurbai Qunapia (Xinjiang Victims Database 2020a). It was around this time that the Shawan Public Security Bureau began to take most of the other documented Kazakh detainees.

When I interviewed Nurbai's sister, Orazhan Qunapia, in January 2020 about what had happened to her family, she said her relatives had been taken for 'no real reason.' They practised Islam and prayed five times a day, but so did most of the 48,000 adult Turkic Muslims living in Shawan County. What may have set them apart was that Mahmutjan was Uyghur and had gone to visit Orazhan's family in Kazakhstan in 2014. 'Actually, they both had gotten their passports, but Nurbai never had a chance to come,' Orazhan said.

The couple met and fell in love when both were working as traders in Ürümqi. Since they were from different ethnic groups, their marriage was a bit unusual; they had a 'love marriage' that was not arranged by

their families. ‘Nurbai was independent,’ Orazhan said. ‘She also had a small business when they met. She sold clothes in the market to make money for herself.’

Even more remarkably, given Uyghur patriarchal traditions, Mahmutjan decided to move to Han and Kazakh-dominated Shawan, rather than back to his home village in Khotan Prefecture. He even had his household registration changed to Shawan. Thinking about Mahmutjan’s visit to Kazakhstan in 2014, Orzhan remembered: ‘He was funny. Since he was a baker, when he came here, he really just wanted to see how people bake bread in Kazakhstan. He loved to learn new things.’

After Nurbai was taken in April 2018, Orzhan’s communications with the couple went dark. Then, without warning, Nurbai was released, in December 2018. ‘We talked via WeChat in December,’ Orzhan told me:

We talked about her release. She said that Mahmutjan was still in the Shawan camp. I congratulated her on surviving. She said, ‘But my health is not good.’ We had been careful not to talk about any political or sensitive subjects, so when she said this, I knew that she must have been deeply hurt by her time in the camp.

Within several weeks, Nurbai disappeared again. Orzhan suspects that, like others in Shawan (Feng 2019), she was forced to work in a factory, perhaps at the Shawan Textile and Garment Industrial Park that manufacturers from Anshan City set up as part of their ‘Xinjiang Aid’ project. In other parts of Xinjiang (Byler 2019) and across the country (Murphy and Elimä 2021), these ‘aid’ programs have been shown to be part of Muslim forced-labour schemes. In 2019, the broader ‘poverty alleviation’ scheme in Shawan resulted in county authorities assigning 15,600 ‘surplus labourers’ from Shawan to jobs in places like the industrial park (Shawan News 2019, 2020). As I have shown in other research (Byler 2019), in the context of Xinjiang’s camp and surveillance systems, ‘poverty alleviation’ refers to moving Muslims from farming and self-employment into wage labour, particularly factory work. There are three main tracks used to accomplish this transformation. The first is through the camp system itself, the second is through local authorities assigning underemployed Muslims to work in factories, and the third is by building ‘satellite factories’ in rural areas. In Shawan, it appears that the first two tracks were the dominant ways Muslims were put to work.

What has troubled Orzhan the most is that Nurbai and Mahmutjan have three children:

Since December 2018, we have not heard any news about them. No-one knows where the children are. They have two daughters and one son. The oldest is Dilhumar; she is 22. The second is 18 years old, named Dilmira, and the youngest, Enser, is seven years old. The oldest has graduated from school. The second is in school. We don't know where the youngest is. We don't know how he is surviving. It has become almost impossible to find out any information. We can't call our relatives.

Orzhan worries that Enser, the little boy, has been taken to an orphanage as has happened to other children in Shawan (Shawan News 2018).

Orzhan also worries that her brother-in-law may have been given a prison sentence like so many other former detainees.



Plate 14.3 An image of Shawan's county seat and surrounding areas, accessed on Google Earth, 17 December 2020. Source: Google, © Maxar Technologies, CNES/Airbus.

Business opportunities

In the feasibility report describing the parameters of the Shawan Safe City project, the assessors argue it will 'greatly improve the local government's ability to quickly respond to major events and ensure economic construction'. At the same time, they suggest it will also foster private

business investment and improve social security by protecting private property. ‘The indirect economic benefits are immeasurable,’ they write (Chinese Government Procurement Network 2020).

In April 2017, two months after Party Secretary Chen Quanguo declared the new ‘round up those who should be rounded up’ campaign and the Shawan procurement notice was posted (Ramzy and Buckley 2019), the Party Secretary of Tacheng Prefecture, Xue Bing, visited Shawan and toured the different facilities involved in the reeducation campaign. According to a report from *Shawan News* (2017), a local state-affiliated weekly news service, he visited the Public Security Bureau command centre to inspect the ‘implementation of stability maintenance work’. In his remarks to town officials and state workers, he discussed strengthening the ‘education and management services’ for mosques—two of which would be destroyed the following year. He described the Shawan Textile and Garment Industrial Park as a key area for future ethnic-minority employment. Meetings conducted at the same time among Shawan Party leaders emphasised ‘study transfer’ programs and that cadres tasked with village surveillance should fully embrace their role in waving the ‘assessment baton ... and enforce strict discipline in the villages’ (Shawan News 2017).

Weekly updates in *Shawan News* between April and December 2017 suggest surveillance and political campaigns suffused Shawan. Announcements and advertising from work units and housing complexes make clear that nearly every aspect of the lives of Shawan’s residents—from the apps on their phones to the ways they enter and leave their homes—depends on a set of digital codes linked to images of their faces. If the plan laid out in the feasibility study was implemented, these codes would function as flexible systems of monitoring, enclosure, and blockage; the checkpoints could be turned on and off and the sensitivity of watch lists could be manually adjusted. The data collected would then circulate on the regional intranet, among police contractors and Public Security Bureau employees who are themselves surveilled by the system.

As my conversations with Vera make clear, because of this segmentation, the algorithms of face-codes deny the people they target knowing how and why they are being surveilled. Those questions cannot be asked. What is known is that they make people discipline themselves by monitoring deviance in their daily routines. They reroute people, separating sisters from each other and parents from their children. As Baimurat noted, they produce all the feelings of walls and watchtowers but move beyond

the sense of being blocked and watched to limiting the ability of Muslim residents to communicate and influence others. Ethnic-minority farmers and self-employed business owners like Nurbai and Mahmutjan have been removed or walled off from the protected population by this system.

At the same time, those who are protected by these systems are, despite minor inconveniences, generally empowered by them. In Shawan, real estate appears to be more valuable because of them. According to the feasibility study, streetlights would have been installed throughout the county, making it harder for people to escape notice when dumping their rubbish.

Taken as a whole, the interlinked surveillance and camp system in Shawan appears to centre on ensuring the movement of 'beneficial' goods, services, and biometric data, while channelling or stopping the movement of objects, bodies, and data that could potentially disrupt this circulation. From the perspective of its designers and purchasers, it would increase the circulation of what the state and its market economy deemed 'good' and cut off the movement of anything and anyone they rejected. The shaping power of this technology would regulate the population to produce lower rates of fear, higher rates of economic growth, and greater power for the right kind of people.

Baimurat recalled that a fellow Kazakh contractor, a 24-year-old Tianjin University graduate with a fancy car, made the mistake of giving a Uyghur detainee a cigarette during his midnight shift at the camp. For young Kazakh and Uyghur men, sharing a cigarette is a basic sign of respect. Baimurat said: 'He thought it wouldn't be a big deal, so he did it. But he forgot about the cameras. Just as the man finished smoking it, the higher-level police came and took my co-worker away. We never saw him again' (Atajurt Kazakh Human Rights 2019). In the controlled society of a Safe City, life is made predictable by maintaining relations of power at a technical remove. It does something more than this, too. When the technology begins to think for people, it starts to strip away their basic humanity. When space for thinking is lost in the black box of a complex technological system, it becomes banal and inhumane, producing profound capacities for cruelty.

This text is taken from *Xinjiang Year Zero*, edited by Darren Byler, Ivan Franceschini and Nicholas Loubere, published 2022, The Australian National University, Canberra, Australia.

doi.org/10.22459/XYZ.2021.14