SATELLITE SURVEILLANCE

Sarah Weiss
M.Arch I 2021

Google Earth got its big break on CNN when, in 2003 during coverage of the Iraq War, the network "used the maps to simulate flying over Baghdad and dropping down to street level at bombing targets."[1] Not long after, in preparation for the 2008 Mumbai terrorist attacks "the technology chief of Lashkar-e-Taiba, the Pakistani terror group, and fellow conspirators used Google Earth to show militants the routes to their targets in the city."[2] In both of these examples Google Earth is employed as a method for civilian surveillance, though unfortunately in service of violence and destruction. By being able to watch our cities from both above (satellite images plus topographical data) and within (Street View), their narratives become legible from miles away. Inscribed with detailed information about the societies that built them and the lives of the inhabitants within them, their stories are broadcast to personal computers everywhere. Though the information presented by Google Earth is not exclusive to the platform (until recently all of the images were collected from third-party sources), the interface makes it accessible and user-friendly to all.[3] So what is Google Earth good for? Though laden with a history of observing and planning for violence, as architects we use it to gather information about site, to get an "objective" sense of scale, of material, of adjacencies. But is it actually a good tool for doing any of these things? Is it possible that looking at one's site from so far away, so anonymously, so clandestinely, is inherently better for ruination than progress? Does looking without feeling protect us from the very human consequences of our design decisions, so that we may claim to be naïve? Are we preparing to build upon what's there or to dismantle it? Standing so far back to watch the city, we are granted a degree of detachment. In Google Earth there are no people, only the artifacts we have produced. There is a lifelessness to the mosaic of industry that drifts across our screens as we click and scroll. From Google Earth we can see businesses grow and die, parks emerge from empty lots and glossy high-rises take the place of fields of homes. It is hard to imagine that there are human actors behind this seemingly spontaneous metamorphosis, that only painstakingly deliberate plans can enact such surface manipulations. Instead, we peel back layers of time and muse how much has changed, good and bad. By watching buildings, rather than people, we observe cities as autonomous entities. Cities become surrogates for governments, for cultures, for ways of life. From Google Earth, there are no individuals, just forces. There are centers of power and communities in peril, and we can see all of it from our screens. From where we're sitting, we can see exactly what we'd like to change about this array of structures, but we can't feel the tambour of life that swells around them daily. The urban landscape becomes an inert object: the subject of our observation. The city might be watching us, but we are also watching it.

1 https://usatoday30.usatoday.com/tech/news/techinnovations/2003-03-20-earthviewer_x.htm
2 https://www.propublica.org/article/mumbai-attack-data-an-uncompleted-puzzle
3 https://www.theatlantic.com/technology/archive/2014/01/silicon-valleys-new-spy-satellites/282680/

LETTER FROM THE EDITOR

Miriam Dreiblatt
M.Arch I 2020

In today's media landscape, we are inundated with imagery of objects of security and surveillance. From immigration to gun violence, governments and corporations propose walls, cameras, and sensors to address the ills of contemporary cities. Despite the ever increasing clarity of CCTV and satellite imagery, surveillance remains a murky topic. When used to secure targeted institutions or obviate expanses, guards and cameras are an effective way to prevent crime and ensure the safety of vulnerable populations. Yet, the objects of surveillance can quickly turn sinister. What happens when a cure becomes a threat in its own right?
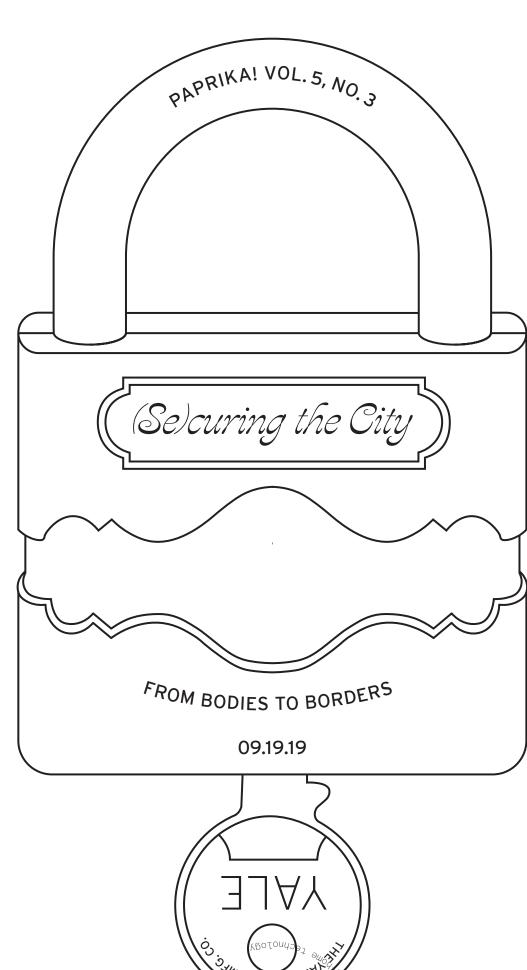
This issue of *Paprika!* explores the impact of security and surveillance at diverse scales. The essays within "(Se)curing the City" are organized as a gradient of inquiry, from the body to the domestic, from institutions to the urban, and from national borders to the globe. Rukshan Vathupola discusses sartorial measures of resistance to facial recognition software, while Mary Carole Overholt demonstrates how domestic abusers exploit home security systems. Architect Esther Sperber weighs in on designing sacred space with growing security concerns, whereas Ramis Wadood and Andrew Rising depict how Detroit's latest policing measure transitioned from an emblem of safety to a tool for targeting minorities. Maya Sorabjee, Limy Rocha, and Aaron Tobey consider surveillance mechanisms at contentious national borders, and Sarah Weiss concludes the issue with a meditation on the way in which Google Earth obstructs our understanding of urban life.

The infrastructure of surveillance is rendered at varied levels of visibility, affecting individuals' perception of these objects' efficacy. The visual prominence of European synagogues' security blockades and bollards contrasts the partly obscured CCTV cameras of Detroit gas station's Green Lights. Surveillance becomes simultaneously omnipresent and imperceptible along the extensive stretch of highway with no connecting roads between China and Kyrgyzstan, as well as from satellites' continuous capture of our environments while orbiting far above the earth. Contemporary technology facilitates national and city governments' illegal action against citizens, including shutting down all communication in and out of Kashmir to deter political dissent and disproportionately targeting black residents of Detroit. National governments also support the construction of security infrastructure for economic gain rather than citizens' safety as demonstrated in President Trump's support of the U.S.–Mexico border wall or China's western border crossing, misplaced, yet fully-stocked with duty-free delights for purchase.

I am grateful to the contributors who opened my eyes to the sometimes efficacious yet often sinister gaze of objects of security and surveillance. A special thanks to Julia Schäfer and Cindy Hwang, the issue designers who discovered and illustrated our shared namesake's (the old lock and key) ancestral ties to the business of security.

SMARTHOME, ALERT!

Mary Carole Overholt
MED 2021

An intentionally vapid terminology, the "Internet of Things" was created by techies and eager entrepreneurs to describe a network of internet-reliant apps, programs, and hardware. These "things" have in many ways altered our lives for the better, with seamless guidance to the nearest coffee shop, instant translation of foreign languages, and immediate access to news and entertainment. Over the last few years, consumers have realized that these technologies have all-the-while served as tools of surveillance and data extraction. When considering the surveillance state, we may be quick to recall tropes of security cameras, armed guards, and protected vehicles with tinted windows. However, these devices are branded as improving our lives, allowing us to access a rarified commercial experience at all scales, from the urban (i.e. Google Maps) to the domestic (i.e. Amazon Echo). As companies like Google, Apple, and Amazon compete to build fully integrated platforms of "things," they are engaging in a gladiatorial fight to control our most intimate space: the home.

Technology titans are not the first to propose home-centered technologies as a means of social liberation. In the 1940s and 1950s, companies advertised liberation from domestic duties to housewives with the vacuum cleaner, dishwasher, and laundry machine. We have reason today, as we did then, to remain skeptical that consumerism holds the key to liberation from sexism and other modes of oppression. Nonetheless, these advertisements generated profits and gave rise to the emerging mechanized home. Fast-forward half a century. The "smart-home" has entered the economic matrix of the "Internet of Things," which McKinsey Global Institute estimates will be a $4–$11 trillion-dollar industry by 2025.

The smart-home solidifies our fears that technology companies own much of our personal data, but the question of who has immediate access to our network of smart devices may prove more sinister. In January 2018, Nellie Bowles of *The New York Times* published an article entitled "Thermostats, Locks and Lights: Digital Tools of Domestic Abuse." In her article, Bowles profiled thirty victims of a disturbing new trend in domestic abuse: stalking, control, and attack executed via smart-home technology. The victims covered in the story, women of various ages and relationship statuses, reported a range of abuses from sudden shifts in temperature through the remote control of central air-conditioning, to changes in digital door codes, and incessant ringing of doorbells. While many of these attacks, if isolated, could be seen as cruel pranks, the repetition of these actions creates an environment of hostility and causes victims to feel helpless in their own homes. The National Domestic Violence Hotline's definition of abuse as a "pattern of behaviors used by one partner to maintain power and control over another partner" is applicable to this new terrain of psychological violence.

Smart-home abusers use intimidation as a means of achieving control and power over their victims. Their attacks may also lead to feelings of isolation and acute economic stress. As victims are often unable to regain control of their smart-home technology, many are forced to seek alternative shelter. This can impair victims' financial status, as they might resort to finding temporary housing in addition to paying for their primary residence. Additionally, many of the victims that Bowles interviewed ultimately disconnected the hardware in protest against their abuser's manipulation of these devices. However, in the "Internet of Things," dissociation from these devices may limit our connections and cause isolation. One of the less tangible effects of abuse, isolation can have lasting impact on victims.

Most of us interact with a myriad of companies through our personal network of internet-connected "things," whether we are cognizant of it or not. We have all felt the frustration of devices that are not synchronized (wireless printing being my current battle), but the lack of connection might protect us against interlopers attempting to breach our homes. Still today, someone who hacks your Amazon Echo might not find a way to compromise your Nest security cameras, carbon monoxide monitors, and thermostat control center. However, today's corporate structure portends a future where an interloper requires just a single point of entry to breach your network of smart-home technologies, be they under the umbrella of Google, Apple, Amazon, or another rising company in the market. Encouraging homeowners to understand and install their own smart-technology may be a first step of defense against domestic abuse through hacking. Yet, the question remains: how vulnerable are we making ourselves in the name of interconnectedness?

MAKING SPACE FOR RESISTANCE

Camille Chabrol
M.Arch I 2020

Making Space for Resistance: Past, Present, Future, an exhibit by the Indigenous Scholars of Architecture Planning and Design is currently on view in Rudolph Hall's North Gallery until October 5th. The exhibit was designed and built by Summer Sutton (Lumbee) Architecture PhD '21, Anjelica S. Gallegos (Santa Ana Pueblo/Jicarilla Apache) MArch I '21, and Charelle Brown (Kewa Pueblo) BA in Architecture Studies '20. 50 years after the occupation of Alcatraz Island by the Native American group, Indians of All Tribes, the exhibit revisits the events of the occupation and their impacts on the present and future of Native identity and spatial practices.

During the 19-month occupation of Alcatraz Island, Indians of All Tribes staked a land claim and tested the validity of the 1868 Fort Laramie treaty, permitting non-reservation Indians to claim land the federal government had abandoned. The occupation was part of a nation-wide movement of Indigenous resistance, demanding that the United States Government fulfil promises made with American Indian Tribes that guaranteed lands, waters, resources, education, housing, and health care for the cessation of millions of acres of land that formed the United States.

Making Space for Resistance: Past, Present, Future highlights the importance of Alcatraz Island as a space of resistance and a site for the development of Native American architectural and planning practices.

The materials used in the exhibit build on a complex history of Indigenous material culture, Anjelica S. Gallegos explains: "The materiality of the exhibit references specific historical moments which required ingenuity of resources and application of inherited and adaptive techniques. In the exhibit, the use of these materials is again reinterpreted to create a spatial identity that is Indigenous." The exhibit itself is a work of Indigenous architecture since, according to Gallegos, "Both the materiality and the curated works reference dynamic use and proper harvesting of site specific materials, principles that are within an architecture that does not separate nature and culture; Indigenous architecture."

Among the ideas produced during the occupation of Alcatraz was a proposal for a long term architectural and urban design plan for the island, which was developed during an open conference on December 23, 1969. The layout of the exhibit space is based on five themes that were brought up during the discussions: reflection, knowledge sharing, training, ecologies, and spiritual practices.

The space dedicated to reflection contains archival material from various media sources covering the events of the occupation of Alcatraz Island and other Indigenous acts of resistance throughout the 1970s, as well as images of landmarks of Indigenous architecture that were a result of these acts of resistance, such as the Daybreak Star Indian Cultural Center. The knowledge-sharing and training spaces highlight the importance of the practice of making in defining Indigenous architecture. In this space, architect Chris Cornelius (Oneida) presents a study for the design of a university on Alcatraz island in his series, *Radio Free Alcatraz: An Architectural Speculation*. The ecology-themed space displays works of art developed by architecturally trained artist, Adrian Standing Elk Pinnecoose (Navajo/Southern Ute) and architect SantiagoX (Koasati/Hačha'Maori), presented and detailed especially for this exhibit. The fifth space, about spiritual practice, is dedicated to raising awareness about the cause of missing and murdered Indigenous women. With the help of the Native community at Yale and their families, Sutton, Gallegos, and Brown made hundreds of horse-hair tassels, which represent the lives of missing and murdered Indigenous women. Sutton explains that "the process of making is supposed to be a meditative awareness and acknowledgment of a life that has gone unaccounted for. We are hoping that by having this space where people can pick up a horse-hair tassel and put it on the wall, that this act makes them part of the process of acknowledgement that we went through in making each tassel...visitors spend that time acknowledging the life and loss of an Indigenous woman...as a small step to making a change and addressing the epidemic."

ON THE GROUND

09.09.19
Martin Doll, Professor of Media and Cultural Studies at Heinrich Heine University Düsseldorf joins the Yale Architecture Forum to discuss Fourier's utopia.

09.10.19
Phil Bernstein imagines a scenario of racketeering sibling in-law-out-laws pilfering fees from the client via discounted HVAC systems.

09.11.19
First year Groupme blows up with call-to-arms for better Yale Architecture merchandise

09.12.19
First years have their first review; plotters at full tilt the hour before studio.

Teddy Cruz and Fonna Forman present their lecture, "Unwalling Citizenship."

09.13.19
A frat themed 6on7 brings kegs to the roof terrace. Rex and Lisa look on, skeptically, as host Paul Meuser fills guests' cups with foam rather than beer.

The EiD mentor/mentee meeting brings pizza and friends to the fourth floor terrace.

09.14.19
A big thank you to everyone who came to celebrate *Paprika!*'s 5th birthday! Performances by Thomas Mahon, the Sputnik Sweethearts, and DJ Bloomfilter get standing ovations. Andrew Benner gets to deliver his own drink description for 'the Fold,' a play on the paper plane – "the Aperol makes it fly."

09.14.19 (con)
Nicolas Kemper shares inspiring words with all assembled as rain begins to beat down on the terrace, his tempo slowly accelerating as the urgency of his words mirrors the urgency to get downstairs to the safety of the drawing studio for a dance party. We order 28 pizzas.

09.15.19
10 boxes of Pepe's Pizza appear in the 4th floor kitchen.

09.16.19
Students in Mark Foster Gage's *Theory Through Objects* reinvent the practice of leaflet dispersal by filling eggs with scraps of paper. Classmates are asked to break the eggshells on the table; their contents — the latest issue of *Paprika!*

Elia Zenghelis tells his studio, "We are still living in the cult of the picturesque." He proposes declaring war.

Rudolph Hall Stress Level Alert:
Global Industrial desk yellow (medium-low).

THE AESTHETICS OF SURVEILLANCE

Rukshan Vathupola
M.Arch I 2020

As societies shape the environments we inhabit, they also shape the bodies that inhabit them. For over a millennium, the powers-that-be regulated human expression in cities through clothing and the marking of flesh. Sumptuary laws required people to wear clothing that reflected their economic, sexual, and racial identity. These laws enabled social status to manifest sartorially in order to control and separate the populace along class lines. At the same time, branding the body in the form of paint, scars, and tattoos has been used as a sign of identity to mark both veneration and social exclusion. However, as these laws and the language of bodies enter into our contemporary, technology-driven age, designers and artists have begun to create innovative and subversive body enhancements to protect individuals from the eye of surveillance.

As the eye goes digital, new social surveillance systems have emerged in the form of facial recognition software and global security cameras. To combat the incursion on their bodies, people have developed new means of anonymity to hide their identities from the digital gaze. This expression of anonymity differs from those of the past, for in addition to concealing one's identity from people in their immediate surroundings, one must also prevent traces of themselves from being recorded or replicated elsewhere. Facial recognition assumes standards of appearance such as a symmetrical face, an elliptical skull, two eyes, and consistent tonal gradients of skin and hair. Conventional means of hiding identity such as face masks are inefficient in countering this new surveillance for masks are illegal in most cities and are conspicuous enough to draw a great deal of attention from security forces. Designers such as Adam Harvey of CV Dazzle recognized this and began introducing counter-surveillance measures concealed as makeup and hairstyling. For example, unevenly extending dyed hair over an eye and the sides of a painted face heightens facial asymmetry, disguises head shape, and complicates tonal gradients. This is highly effective in preventing one's identity from being captured by the digital gaze. Others such as Ewa Nowak have begun to create jewelry that doubles as a virtual mask, manipulating facial software by hiding focal recognition points such as the nose bridge and cheeks.

In addition to hiding from techno-surveillance, one can manipulate the process of data collection to break the system with its own means. To continue combating facial recognition Harvey, in collaboration with Hyphen-Labs, developed a seemingly inconspicuous pattern for clothes that acts as a generator of false faces. The clothing pattern is composed of multiple hidden faces for facial software to scan, which subsequently burdens the system and slows down the collection of data from actual people. Security cameras capture individuals' identities through the medium of film and photography. In response, designer Chris Holmes created fabrics that, when photographed, blow out pictures by excessively reflecting light, rendering the identity of the wearer unrecognizable through images. Kate Rose, a hacker and fashion designer, produced Adversarial Fashion, a series of designs that injected junk data into license plate tracking cameras to prevent governments from monitoring the location and movement of civilians throughout a city or country. As digital cultures erase the identity of targets by seeing them only as clusters of thermal images, designers such as Stealth Wear, an anti-drone fashion line. It is a response to the anonymous nature of drone strikes, specifically in the Middle East, whose cameras erase the identity of targets by seeing them only as clusters of thermal images. The fashion line therefore includes an anti-thermal variation of the burqa that renders the wearer anonymous and protects the wearer from the drone's cameras far above.

As we move towards the future, the image of the city is increasingly becoming an image of the surveilled. Slowly our rights and freedoms are being eroded; anonymity within the city is gradually becoming a privilege we cannot guarantee. As we proceed further into this digital age, new methods of surveillance will continue to emerge; however, as long as people maintain their desire for individual freedom, there will always be attempts to subvert intrusions on our privacy. The encroachment of surveillance upon our cities will never end our acceptance of it may.

SECURING RELIGIOUS SPACE

Interview with Architect Esther Sperber, AIA
of Studio ST Architects (www.studio-st.com)
Conducted by Miriam Dreiblatt M.Arch I 2020

What is your approach to designing synagogues and sacred spaces?

There are many interesting aspects to synagogue design. It is a building that combines sacred space like a sanctuary, where prayers take place, with communal spaces. I think the idea and space for communal prayer is very interesting because it is paradoxical. We often think about spirituality and introspection, and perhaps even a conversation with a divine entity, as something personal and quite private. Yet, people often engage in this practice within a community of other people. So why do we choose to connect to feelings of pain, vulnerability, joy, or gratitude with a community of people? To me, this is the challenge of designing sacred communal space. I try to create space that encapsulates a sense of holding, expressing the comforting embrace of community while respecting the individual and allowing his or her thoughts to drift off.

What is the impact of security on your design work?

We are currently working on a renovation of a synagogue called Ansche Chesed in Manhattan, which was built in 1927. The building is now used differently than it was intended. The formal building entry is on West End Avenue, but this entrance is rarely used. The congregation uses the side street's smaller entry in order to retain only one security guard and because other prayer groups meet in rooms that are only accessible from this entry. While this entrance is functional during the week when the entire building is used, the circulation pattern on Sabbath conflicts with the building's architecture and does not function well when the main sanctuary is in use.

In your experience, have your clients' security concerns increased over time? Especially in light of attacks on sacred spaces in the U.S. and abroad?

I have no doubt that conversations about synagogue security have increased in the last few years. I do not remember discussing security when we were working on the Kesher Synagogue, ten years ago. The building was designed as a knot, which is the meaning of the institution's name in Hebrew. The building design is a loop with multiple entrances and exits connecting different indoor and outdoor spaces. I imagine that if we proposed this concept now, many people would feel really uncomfortable. Unless the whole site was surrounded by a big fence, which would undermine much of the design's welcoming quality. People now are more nervous, but also a bit confused. 'Have we just had a few unfortunate events and things will get back to feeling comfortable, and therefore, we shouldn't make an extreme investment in security systems? Or, is this the new reality and we have to do this?'

Many synagogues in Europe ensure the safety of their congregants through multiple layers of security and surveillance. Do you anticipate a trend of a similar kind for religious institutions in the U.S.?

Perhaps because of my upbringing in Israel, where, unfortunately, terrorism is part of life, I feel that these violent acts should not determine the ways we live. While we entrust our security forces to do what they can, we also need to accept violence as an unfortunate byproduct of living in society. When we are in the public realm, we are more likely to get hit by a car, but nevertheless we don't think twice when we leave the house and cross the street. We have to use our logic and resilience to overcome fear of attacks, because statistically the threat is low.

How do objects of surveillance change peoples' perception of a space's safety?

At my synagogue, there are two security guards who greet everyone on Saturdays. Knowing there is a guard at the front door does give people a sense of safety. I think we must strike the right balance between defending the space and inviting people in. Paradoxically, if a big police car was parked outside, people might feel nervous, despite the extra safety. In Europe, where police cars are typically parked outside synagogues, I imagine that people feel this is necessary. This balance is specific and culturally-based.

Some final thoughts:

We often think of security in terms of the hardware such as the cameras, intercoms, and lock-down mechanisms. But, it is also worth emphasizing that we use people to guard our spaces. This is a daunting concept—someone is ready to physically stand at the door to protect us. But it is these guards' ability to interact with people, recognize community members, and notice unusual behavior that is invaluable. At the 14th Street YMCA community center, which we renovated in 2010, the security was upgraded with full-time security staff who were part of the center. These guards quickly became part of the community. As such, they notice when someone returns after a long absence and can ask them how they are feeling. The human touch and intuition is something that is very hard to replicate with technology such as artificial intelligence. Facial recognition can do a lot of the work, but it can't ask you how you're feeling. If security is completely hidden, does it lose some of the comforting effect?

Photos by Miriam Dreiblatt
From top to bottom: The Oslo Synagogue,
The Grand Synagogue of Paris, The Great
Synagogue of Copenhagen

Maya Sorabjee
M.Arch I 2020

A LAND WITH NO SHADOW

There once was a land so utterly beautiful that everyone who lived near it wanted to call it their own. Nestled in the foothills of the largest mountains in the world, this lake-spotted land was once a kingdom amongst kingdoms. But as the kingdoms around it dissolved into larger territorial swathes, the time had come for this land to join one of its neighbours. But it was coveted too deeply, utterly beautiful as it was, and so its people and landscape were split in to two halves that would never see each other again. In exchange for its acquiescence, this ruptured land was given special freedoms on either side of the newly carved border—its own constitution, flag, and the semblance of autonomy. Never were its people asked what they wanted.

Many decades after these violent incisions were made, the benevolent ruler of the larger territory decided one evening that the land would be better off without the burden of its freedoms. It had been cut off for too long from the rest of the territory, which had made Great Leaps in the intervening years. The land must be liberated, the benevolent leader cried, opened up for the rest to buy property and enjoy its splendours, for great cinema to be filmed on its snow-capped peaks and lotus-filled lakes, for those who fled the violence of the partition to return to their homeland!

These events occurred during a strange time on the planet when every place existed in two simultaneous dimensions: the warm crust of the earth and the glistening surface of the digital universe. These realms of being had become increasingly intertwined, neither able to exist without the other. The leaders of the physical world relied on the land of data to survey its territory and keep track of its people. And in case of troubles in the physical realm, the people could use the internet to coordinate, to whistle-blow, to broadcast. Cities effectively had digital twins, built with the bricks of personal messages, emails, user reviews, and billions of photographs that could be accessed by anyone, anywhere. Information that once existed on earth now lived here, more nimble and with a wider audience. Cut the connection, and darkness falls suddenly on both planes of existence.

The people of the land were surprised by the announcement of the benevolent leader. They hadn't seen it coming. To implement his desired change in the beautiful land, he announced, a rebirth was required, a temporary return to the womb. And so he sent his benevolent troops to keep the people at home, ordering the immediate halt of all information flowing in and out of the land. The internet went down and phones failed to function. The lifeblood of contemporary society trickled to a dead stop.

With no digital tether to the rest of the world, the information trapped in the land began to bubble to the surface. People moved in great swells, only to be tamed by the troops. Rebirth must be peaceful, said the leader, ordering tear gas and pellets to maintain decorum. The Holy Day of the people of the land passed in this manner; cities transformed in to ghost towns on what was usually the busiest time of the year. No one could share their photographs of the occupied streets, the maimed people, the vicious security. Days passed in this state, then months. The rest of the world watched as the land's digital twin flickered, unable to reflect the state of its physical counterpart.
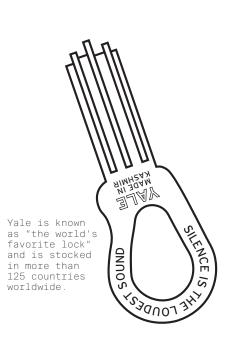
The benevolent leader believed that the heartbeat of the land and its people could be slowed to a fatal rate without the lines of connection to its virtual presence. One cannot live without the other, he thought. The land's voice was quietened, replaced by false information spread from the political centre. Dissidents could be jailed without official tallies, uncertainty could be propagated and weaponized. A conspicuous hole in the internet was made, growing bigger each day.
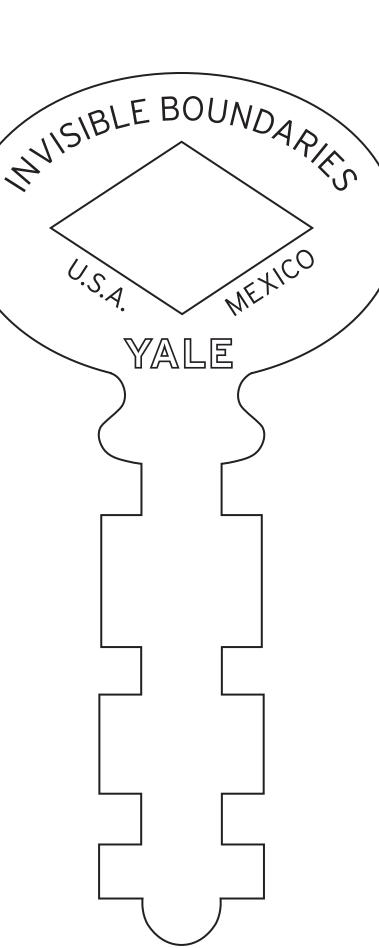
Arundhati Roy's recent article on the revocation of Article 370 is titled "Silence is the Loudest Sound." The silence she refers to is the stringent security controls imposed by the thousands of troops deployed to Kashmir. This silence also pertains to the communications blackout that is still largely in place since the announcement was made on August 5th. But it also refers to the general lack of criticism from domestic media outlets, who are either working with the BJP (Bharatiya Janata Party, the Hindu nationalist party currently in power) or threatened by them. Finally, it points to an alarming apathy found in the majority of the Indian populace, the conspicuous absence of public protest against an alarming breach of both constitutional powers and human rights. The world looks on in horror, while in India, Google searches for Kashmir might soon only result in film stills and real estate ads.

When a government can so quickly crack or manipulate the black mirror we depend on today, we realise the fragility of this new facet of urbanity. Since coming to power in 2014, Narendra Modi has allowed the internet to become a destructive tool through which lies are spread and lynch mobs are incited. This fanatic, digital landscape is reflected in cities and villages across the country, where Muslims are beaten to death for refusing to repeat "Jai Shri Ram," a Hindu chant, and the Gau Rakshak, a group of vigilante cow protectors, routinely attack those they suspect of possessing or selling beef.

On September 5, 2019, one month after the occupation of Kashmir began, landline phones in the region were reconnected. But none of the calls would go through. People outside the state still have not been able to speak to their families trapped in Srinagar or Jammu. Kashmiris can now reportedly leave their houses in the daytime but must navigate an obstacle course of army checkpoints. Sporadic protests continue, only to be met with a violent response.

In an age of endless streams of information, the sudden halt of any flow commands global attention. The people of Kashmir have been silenced, but they are not quiet. That we cannot see them in our topography of screens does not mean that they have disappeared. It only means that we should allot them a greater digital presence, amplify their messages, and, when their broadband connections eventually return, be prepared to listen. The child of the world's ugliest geopolitical divorce must be given what it is due, and finally asked what it wants.

Aazon Tobey
PhD
Candidate
YSoA

3/31/2014: 39.723116, 75.208326 TO 39.679535, 73.901221

Exiting the building and getting into the taxi that the Chinese border officials had insisted on arranging for us, one of my fellow travelers for the day, Dil, remarked how much the passport control checkpoint had resembled an airport. From the high-gloss terrazzo and the white metal, bowstring trusses, to the duty-free shop, selling cigarettes and Toblerones, the checkpoint and its procedures (metal detectors, bag searches, etc.), had, in fact, resembled an airport, save for one crucial detail. It was located at a highway pull-off on the outskirts of a small town some 200 miles from the geographic border between China and Kyrgyzstan.

Before sunrise, a number of hours earlier due to the discrepancy between solar and administrative time in far-western China, I had serendipitously met two French NGO workers, a Japanese photojournalist, and Dil, a Singaporean doctor, at a taxi stand in the city of Kashgar. As part of our combined journeys to Kyrgyzstan, we now found ourselves entering a literal and figurative "no man's land." From here, across a long, arid, and mountainous stretch of desolate highway, we would continue to traverse China physically even after having exited it administratively. In doing so, we were entering a space in which the body was no longer the sole, or even primary, object of governmental control. The highway's more recent toll upgrade as part of the "Belt and Road" initiative only extended this disjunction farther as it economically as well as administratively reregisters the movement of bodies/things.

Like other no man's lands such as the "sterile" zone of an airport or the fluidity of international waters, the mostly empty stretch of highway from the passport control point in Ulugqat to the collection of trailers at Irkeshtam—where we entered Kyrgyzstan after a long delay because of lunch break discrepancies between Chinese and Kyrgyz border guards— was very much a part of the security apparatus. Controlling movement through a territory otherwise inhospitable to traffic or its policing, the highway acts as a surveilable buffer zone. Its distance from population centers and lack of off-roads reduce the threat that any chance of deviation might pose; the frailty of the human body in the vast, extreme environment serving as a better insurance policy for national security than even the best magnetometer.

The architectural pomp and circumstance of the passport control checkpoint was thus fitting, if also somewhat incongruous to the overall experience. The building and everything inside it, Toblerones included, performed the image if not necessarily all the functions of the contemporary, national security apparatus. In doing so, they monumentalized the entrance into this no man's land as well as the psychological space of border crossing associated therewith. By deploying these tropes of travel and straying, however slightly, from the efficiency of rural Chinese police garrisons' standardized blue and grey metal-clad buildings, the passport control checkpoint signalled the physical departure it could not actually affect and the psychological impact the government could nonetheless leverage to enforce travelers' compliance and proper border guards' control.

During the six-hour drive to the minimally guarded river-crossing that marked the two countries' geographic border, the prevailing emotion in the car was uncertainty; the same kind of captive uncertainty that often occurs in airport terminals where any number of factors might strand you in limbo and leave you with little recourse. Only, instead of the distraction of shopping and CNN International, we had blurred, mountainous scenery and intermittent reception of garbled Chinese talk-radio, which none of us could quite make out. Our feeling of insecurity there and then was, no doubt, very much connected to the production of a sense of security for others elsewhere. In that sense, we found ourselves in a perverse spatialized economy at the intersection of safety and inclusion, an economy which exploits those who wittingly or unwittingly move through these spaces, many of whom might see the candy and cable TV both as perverse symbols of iniquity than contemporary, cosmopolitan comforts.

The Kyrgyz passport control building a few hundred meters after the river, by contrast, brought to mind a much different kind of architecture. Its form resembled the utilitarian minimalism of a gas station, perhaps alluding to the more pressing concern of having sufficient fuel to navigate the sparsely populated surrounding in a way that the magnetometers and duty-free back in China most certainly had not. No one in the group remarked on this architecture as we split up to hitch rides to our various destinations in Kyrgyzstan, secure again in the union of our physical and administrative bodies and the somewhere-ness of where we were headed.

INVISIBLE BOUNDARIES

U.S.A.   MEXICO

YALE

Ramis Wadood &
Andrew Rising
JD 2021

PROJECT GREEN LIGHT: SAFETY OR SURVEILLANCE?

If you drive down any of Detroit's main avenues at night, you will notice something distinct: a long string of flashing, green lights. You will see them atop buildings, above liquor store windows, and affixed to gas station price displays. Around each dark corner, the green glow persists. This is Project Green Light. The project is a public-private partnership that enables Detroit's small businesses to pay for the installation of green lights and security cameras on their premises.

Launched through an agreement between the Detroit Police Department and eight local gas stations in early 2016, the Project Green Light partnership has grown to include over 500 participating businesses across the city as of mid-2019. In exchange for an entry fee of between $4,000 and $6,000, plus a monthly fee of up to $150 for cloud-based video storage, businesses receive high-definition cameras with a real-time connection to police headquarters crime analysts, along with accompanying signage and one of the program's recognizable green lights. According to the *Detroit Free Press*, the city allocated nearly $8 million in bonds to the department's RealTime Crime Center, from which the Police Department monitors all of the program's security camera feeds.[1] Proponents of the program tout its effectiveness in crime reduction and deterrence, pointing to a 23% reduction in violent crime across all Project Green Light sites, and a 48% reduction at the original eight sites compared to 2015, when Detroit was still unfairly derided as the "Murder Capital" of America.[2] The original intent of the program can be understood best in the context of the larger public fight against crime in 2014 and 2015. When the program began in 2016, Deputy Chief James Craig pitched the initiative as a deterrent and an opportunity to catch crimes as they were committed.

In a short amount of time, these green lights have become commonplace. What, to the outsider, seems otherworldly has quickly become an ordinary part of Detroit's built environment. Some Detroiters see the green lights as a sign of safety—an assurance that, at this establishment, the Detroit Police Department has its eyes on the ground. Other Detroiters interpret the lights as an oppressive force—an overwhelming reminder that, no matter where they go, the Police Department is carefully watching. In either case, urban residents continue with their routines, passing in and out of convenience stores and restaurants under flickering green halos.

But this collective comfort was shaken up earlier this year, when it was revealed that the Police Department was testing technology that would run the program's camera feeds through facial recognition software. According to *The New York Times*, the software "matches the faces picked up across the city against 50 million driver's license photographs and mug shots contained in a Michigan police database."[3] But, as the Georgetown Law Center on Privacy & Technology report aptly puts it, "face surveillance doesn't identify crime; it identifies people."[4] Given that studies demonstrate that facial recognition technology disproportionately misidentifies Black faces,[5] residents of this majority-Black city are unsurprisingly concerned—betrayed, even. What was once a popular and effective crime deterrent is now a symbol of surveillance. Detroit's built environment and its twinkling green lights remained the same after this news was published. Yet, to many Detroiters, their meaning transformed into something much more sinister.

Today, the status of Project Green Light is uncertain. Just as criticism and discomfort with the program's impact on civil liberties began to mount, officials have touted improved crime statistics and announced their intent to expand the network of cameras into public housing and schools across the city. In the absence of federal regulation of facial recognition surveillance, some cities have stepped up to legislate. Earlier this year, San Francisco became the first major city to ban local government agencies' use of facial recognition technology.[6] Although the political future of facial recognition in Detroit and cities like it remains murky, it is clear that Project Green Light has had a significant impact on the psyche of Detroit, changing the way Detroiters view the balance between safety and surveillance beneath a skyline of flashing green lights.

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3 Harmon, Amy. "As Cameras Track Detroit's Residents, a Debate Ensues Over Racial Bias." The New York Times, July 8, 2019. Accessed September 14, 2019. www.nytimes.com/2019/07/08/us/detroit-facial-recognition-cameras.html.

4 Clare Garvie and Laura M. Moy. America Under Watch: Face Surveillance in the United States. Washington, D.C.: Georgetown Law Center on Privacy & Technology, 2019. Accessed September 14, 2019. www.americaunderwatch.com.

5 Joy Buolamwini and Timnit Gebru. "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification." Proceedings of Machine Learning Research 81, 1 (February 2018): proceedings.mlr.press/v81/buolamwini18a/buolamwini18a.pdf.

6 Kate Conger, Richard Fausset, and Serge F. Kovaleski. "San Francisco Bans Facial Recognition Technology." The New York Times, May 14, 2019. Accessed September 14, 2019. www.nytimes.com/2019/05/14/us/facial-recognition-ban-san-francisco.html.—border-wall.

Limy Rocha
M.Arch I 2020

EL MURO

Hours before the government shutdown on December 22, 2018, U.S. President Donald Trump released a video reiterating a pledge for additional funding for a fifty-foot "wall of a slat fence or whatever you want to call it" because "drugs are pouring in, human trafficking, so many different problems, including gangs like M.S. 13" were concentrating along the border. The White House prefaced Trump's statement with a National State of Emergency due to the border's lack of regulation and surveillance. The President signed an executive order soon after to establish fortification as a means to address undocumented migration. The physical filtration of bodies has become a central issue in the ongoing quasi-trade conflict between the U.S. and Mexico. However, the debate changed due to the concept of the wall and the depiction of non-U.S. bodies as symbols of illegality, in contrast to the discussion on allowable goods for trade. The two countries are culturally and socio-economically codependent and interconnected; the border between the U.S. and Mexico is the second most significant bi-national corridor in the world, with millions of jobs dependent on the passage of goods and resources that transcend the national boundary.

Political upheaval and economic crises engendered the U.S.-Mexico border wall. The first military outposts, checkpoints, and infrastructure were established along the border during the Mexican-American War from 1846 to 1848. In subsequent years, the U.S. continued to build military bases and invested in more infrastructure in response to threats of social revolution and national invasions. Historically, U.S. xenophobia has intensified in times of economic hardship; a clear pattern of mass deportations can be traced back to the Great Depression onward. The country has systematically incriminated and condemned migrants for centuries as much as it has perpetuated the romantic notion of the melting pot, specifically during times of economic turbulence. However, it was the government's response to 9/11 and Congress's approval of the Real ID Act that precipitated surveillance to physically manifest as a border wall. Demonstrative of a gray political zone, the act allowed the government to ignore 37 federal laws in protection of land, air, water, wildlife, public health, and religious freedom and enabled the wall's construction—a legislation that constituted the largest waiver of laws in U.S. history. In the past 20 years, the borderlands of El Muro have been transformed from open countryside and generally cooperative twin cities into areas of intensive surveillance in the form of 20,000 border patrol officers and high-tech surveillance equipment, including drones and other sophisticated military technology.

The bi-national corridor's expansion emerged due to a renegotiation of NAFTA and potential tax threats on Mexican trade. A 2016 CBS poll reported popular dissent for the wall's expansion—the majority of U.S. citizens opposed the government's plan, unaware that over 700 hundred miles of barrier had already been built with their own tax dollars. While the income gap increases and the already large national debt rises, the government continues to allocate working class people's taxes to projects that have financial benefit for only a subset of the population. For example, taxing remittances at the U.S. border contributes to welfare programs such as Social Security, which some tax-payers are prohibited from accessing due to their legal status; tax dollars continue to contribute to the exponential increase in the growth of the Prison-Industrial Complex, as it privatizes within the regulations of a so-called public, democratized, state infrastructure. While migrants and their children contribute to American society as civil servants, educators, health care professionals, and community members, their impact is valued by their economic footprint. The fear, anxiety, illness, and death that accompany their struggles amidst a fight against commodification is perpetuated by a surveillance net cast over the financial regulation of migrants.

History has not obscured the punitive nature of the wall, which shares a common link to the repercussions of economic prosperity. Border myths emphasize topographic barriers to distract the general public from root issues. El Muro holds the promise of a quick-fix solution to which modern society is accustomed due to digital culture, while it disregards the region's complex history. But the public continues to react with hostility to its construction cost and its violent and oppressive ends, unambiguous in both its aesthetic and political terms. The typology emerges as a cipher for political conflict and power imbalance, where the issue is not the actual passage or regulation of goods—or people—but an economic instability unable to tame the flow of global capital. In turn, the greater power justifies militarization and fortification of boundaries based on perceived national threat without need for scientific evidence. Whether propagated as trade of goods or bodies, such as migration, the pressure to codify, standardize, and monetize invisible boundaries has led to the construction of barriers and structures that eschew the ethical practice of architecture; codes of ethics and professional conduct that describe an architect's obligation to the public, client, and environment are waived within the gray political zone, which reveals a lack of legislation for our communities' safety. El Muro—among other geo-political boundaries—exists similarly in contemporary politics and the urban fabric; they are permanent structures living within the gap fabric; they, the neutral of the political paradigm and architectural realm. These domains converge at the moment when space is produced through exclusion of site, context, material, and tectonics; walls live, and will continue to live, through the surveilled, economic inclusion of the political sphere's excluded bodies.

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2 Deeds, Colin, Scott Whiteford. "The Social and Economic Costs of Trump's Wall." Voices of Mexico, Centro de Investigaciones Sobre America del Norte 2017. p. 24.

3 Ibid, p. 25

4 Ibid, p. 26

5 Sarah Dutton, "Eight in Ten Americans Think U.S. Will Pay for the Wall on Southern Border," CBS News, http://www.cbsnews.com/news/eight-in-10-americans-think-u-s-will-pay-for-a-mexican-border-wall.

6 Deeds, Colin, Scott Whiteford "The Social and Economic Costs of Trump's Wall." Voices of Mexico, Centro de Investigaciones Sobre America del Norte 2017. p. 24.

7 Ibid, p. 24.

A SIGN OF SAFETY?

YALE   MADE IN DETROIT

Linus Yale Jr., who invented the Yale cylinder lock, is a descendant of the same Welsh family as Elihu Yale, the benefactor and namesake of Yale University.

Yale is known as "the world's favorite lock" and is stocked in more than 125 countries worldwide.

SILENCE IS THE LOUDEST SOUND

WALL IN KASHMIR

NO MAN'S LAND   MADE IN CHINA   YALE

the highway acts as a surveilable buffer zone ... controlling movement through a territory otherwise inhospitable to traffic or its policing ... from the population centers and lack of off-roads reduce the threat