

Automating Gentrification in Times of Crisis

By: *Erin McElroy*

MOVEMENTS & MOBILIZATION

McElroy, Erin. "Automating Gentrification in Times of Crisis." Just Tech. Social Science Research Council. June 7, 2023. DOI: doi.org/10.35650/JT.3057.d.2023.

The surveillance state was already in full-effect when the 718 households at the rent-stabilized Atlantic Plaza Towers (APT) in the Ocean Hill-Brownsville neighborhood of Brooklyn discovered that their landlord was going to install a biometric heatmapping facial recognition system in their building. The landlord's plan intended to replace tenants' keyfobs—which were already linked to facial images required by their landlord—with a new surveillance system, Stonelock's True Frictionless™ Solution. But tenants opposed this invasive technology, which APT resident and organizer Tranae' Moran likened to the transformation of her already surveilled home, replete with closed circuit television (CCTV) cameras, to that of Fort Knox or a juvenile detention center. As a third-generation Black Brooklynite born and raised in APT, she contextualized, "They did not want to get rid of all of the current surveillance. They wanted to add facial recognition on top of it. So . . . I now have to scan my face as well. And it has to approve . . . that I am who I say I am to get into my home."^[1]

Over half of the tenants living in APT shared her critique and went on to launch a mighty organizing campaign against Stonelock installation.^[2] Part of their concern stemmed from research on anti-Black bias built into facial recognition systems^[3]—especially disconcerting since the majority of residents are Black—as well as what they understood as the technology's gentrifying effects. As Moran contextualized, "We know that the building management wants these big, beautiful apartments back so they can remarket it to 'the new tenant.'" This new tenant would be someone not generally targeted by facial recognition algorithms and the racist carceral state—likely someone whiter and wealthier. She and others worried surveillance technology might also "catch" tenants for petty lease violations and create data that could be used as grounds to evict them and raise the rent—essentially automating gentrification.

While APT tenants were ultimately successful in thwarting the deployment of Stonelock, other tenants

have not been. In 2013, the 1,600-unit, 12-building Knickerbocker Village affordable housing apartment complex in Manhattan’s Lower East Side, also installed facial and motion recognition technology made by FST21. Knickerbocker Village is home to 4,000 residents as well as the Hamilton Madison House/Knickerbocker Village Senior Service Naturally Occurring Retirement Community, and its residents are largely Asian American immigrants. While they haven’t been able to remove the invasive technology, they have advocated for its removal given similar concerns. Other buildings such as Morris Avenue Apartments in the Bronx, Taino Towers in Harlem, and more have similar landlord technologies installed, much to the chagrin of tenants who are rarely, if ever, given the option to consent.



Knickerbocker Village in Manhattan’s Lower East Side. Photo via [Flickr](#).

Here, I continue to map out some of the harmful effects of these scopic “landlord technologies” in New York City housing. By landlord technologies, I refer to the various systems that landlords and property managers deploy in tenant housing—from virtual rental payment platforms to tenant screening systems to building access facial recognition systems. While many of these systems are considered “proptech” by the real estate industry, I use landlord tech to better signal the power dynamics undergirding these platforms. I draw upon collaborative research conducted with Manon Vergerio, Paula Garcia-Salazar,^[4] and a number of other collaborators in groups such as the [Ocean Hill-Brownsville Alliance](#), the [Anti-Eviction Mapping Project](#), [Anti-Eviction Lab](#), [\[people.power.media\]](#), and the [AI Now Institute](#)—all of which have contributed to [Landlord Tech Watch](#). I also examine how and why these systems get rolled out in perceived times of crisis through the logics of crisis capitalism—or contexts in which profit-seeking agendas, companies, and programs frame their interventions as salvific and necessary.^[5] And indeed, crises such as the 9/11 terrorist attacks, the 2008 subprime mortgage crisis, and Covid-19 pandemic,

have been mobilized by landlord technology companies, particularly in New York City, to implement surveillance practices in tenant housing.^[6] This often leads to the automation of gentrification, though many tenants continue to organize against landlord tech-led dispossession and exploitation.

Proliferation of Landlord Tech during Crises

For over a decade, New York City has been considered the center of the global proptech industry—a place where the industry receives funding and investment, but also where new technologies are tested and rapidly deployed in neighborhoods home to poor and working-class residents of color. While there have been centuries of technological experiments of property making and policing in New York City,^[7] it was in the aftermaths of 9/11 and the newfound “war on terror” that that public-private partnerships between companies such as Microsoft and IBM and law enforcement led to a proliferation of CCTV cameras and data fusion centers.^[8] At the same time, tenant screening—as a means of conducting background checks regarding eviction histories, credit data, and criminal records—exploded as a technology of tenant control under the auspices of keeping buildings safe from “criminals” and “terrorists.”^[9] Tenant screening functions to punish those already bearing the brunt of housing precarity, systemic poverty, and the carceral state by denying them future housing—essentially “innovating inequity,” as Ruha Benjamin writes.^[10]

These investment companies needed new tech platforms to manage their thousands of units, and proptech provided the perfect solution.

The broader proptech industry then consolidated in the aftermaths of the subprime mortgage crisis. It was then that short-term and app-based rental companies such as Airbnb emerged, but it also saw the rise of corporate landlordism with numerous Wall Street and other mid-scale investment companies buying up huge swaths of foreclosed properties and turning them into single-family rentals across the country. In denser renter-majority cities like New York, investment companies began purchasing multifamily buildings at scale ushering in the era of the corporate landlord.^[11] These investment companies needed new tech platforms to manage their thousands of units, and proptech provided the perfect solution. This was also a moment in New York City when then Mayor Michael Bloomberg launched an economic recovery plan that, in part, hinged upon reinventing the city as a global tech leader.

Today, New York City is home to an assemblage of proptech investors, venture capital, conferences, and products deployed locally and globally.^[12] A significant portion of New York City companies produce building-access and surveillance systems for multifamily residences, many of which are tested in the city. While many high-end smart home systems are deployed in luxury and market-rate housing as amenities, others are implemented in poor and working-class housing, such as Knickerbocker Village.

Facial recognition landlord technology has been rolled out in or adjacent to upzoning geographies, especially in East New York.

Many of these building access surveillance systems were rolled out under Bill de Blasio's mayorship, in which he promised to close the gap between "the Tale of Two Cities" through a 2014 housing plan. Fifteen low-income communities were designated for upzoning—a practice of increasing density through development largely by producing giant mixed-income residential towers. However, rather than producing housing affordable to poor and working-class New Yorkers, upzoning prompted new waves of speculation, destabilizing communities and expediting gentrification.^[13] Facial recognition landlord technology has been rolled out in or adjacent to upzoning geographies, especially in East New York. It was there that Stonelock was procured at Atlantic Plaza Towers, a location on the frontlines of anti-Black gentrification. This was also the case with Taino Towers, a federal public housing complex in East Harlem that had FST21 SafeRise biometric facial recognition technology installed in 2013 amidst rezoning efforts. This was also the moment in which Knickerbocker Village in the Lower East Side also had FST21 biometric cameras installed. These examples illustrate how technologies that serve to automate gentrification are being deployed in areas where the city is already working hand-in-hand with developers using crisis capitalist logics to reshape working-class neighborhoods into new landscapes of profit. Sometimes new surveillance is explicitly part of development plans; sometimes it is an aftereffect.

Covid-19's Landlord Tech Expansion

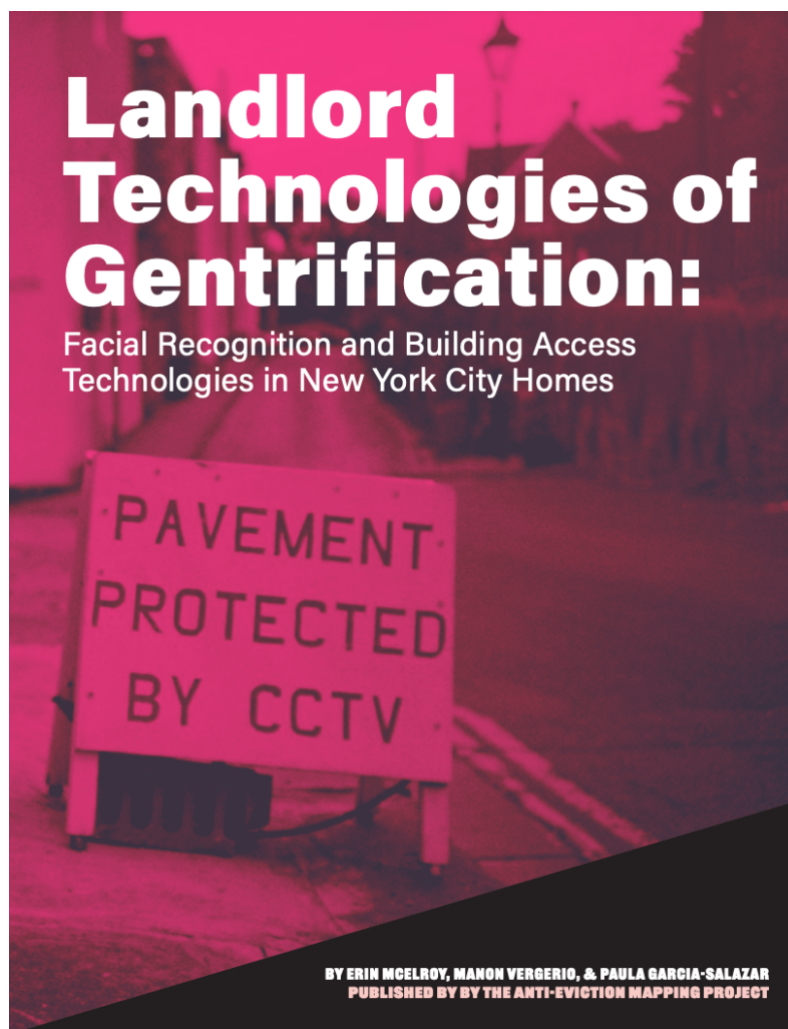
While investment in landlord tech spiked after 2008, and while new surveillance systems were rolled out amidst upzoning plans, the industry experienced a new uptick during the Covid-19 pandemic. Investors, such as Koch Real Estate Investments (which advocated against the CDC eviction moratorium), bought ownership stakes in proptech companies such as SmartRent,^[14] while tenant screening companies such as Naborly saw accrued rental debt as a commodity. In an email sent to landlords, Naborly urged reporting whether or not tenants paid rent, which they explained was data that "helps other landlords know in the future if a tenant has been delinquent in the past, while also helping Naborly continue to deliver the most accurate and up-to-date tenant screening services in the market."^[15] The company Civvl, meanwhile, created a gig economy platform for evicting tenants unable to pay rent due to pandemic hardships.^[16] While these examples took place nationwide amid the pandemic, other landlord tech companies found new opportunities in specific cities.

In New York City, the building access technology "digital doorman" system ButterflyMX began scoping new opportunities to install smart locks as a security-based amenity. During the pandemic, they conducted their own research and found that such amenities proved more successful in marketing to tenants compared to traditional convenience-based amenities such as parking lots.^[17] Their white paper cited a manager with GreyStar, the United States's largest apartment manager, who writes, "When it

comes to amenities, it's all about security and convenience. Today's tenants want amenities that make their own lives easier while allowing them to feel safe in their own homes."^[18] Similarly, according to a 2020 National Multifamily Housing Council survey, many tenants would pay extra for desired amenities such as "smart" home systems like automated thermostats and lighting fixtures.^[19] Throughout the pandemic, corporate landlords such as Blackstone invested heavily in this market of single-family rentals replete with smart offices for remote work.^[20]

As Moran observed in APT, security hadn't been one of their concerns before their landlord began courting Stonelock; it was simply their landlord's justification.

Yet, these findings focus on the preferences of higher-paying tenants seeking amenities, home offices, and heightened security, not of those historically targeted by racist surveillance systems rolled out under the auspices of securitization and frictionlessness.^[21] As Moran observed in APT, security hadn't been one of their concerns before their landlord began courting Stonelock; it was simply their landlord's justification. In addition, in court, her cotenant described how the lack of transparency and care about where data collected about them lives actually makes them feel less safe. In her words, "We as residents do not want to feel as though we are prisoners, tagged and monitored as soon as we make a move We have experienced disrespect, and have been continuously treated like criminals in our own homes Our biggest danger is that this technology will get into the hands of third-party entities, who will get unsolicited access to our biometric information, and ultimately we will be placed in damaging systems such as perpetual police lineups."^[22]



Report by the Anti-Eviction Lab on landlord technology.

Bringing Research and Organizing Together against Landlord Tech

Building upon the organizing work of APT tenants, Moran and her co-organizer Fabian Rogers went on to form the Ocean Hill-Brownsville Alliance to support other tenants in fighting facial recognition technologies.^[23] I then began collaborating with them through the launching of [Landlord Tech Watch](#), a collaborative project dedicated to creating scholarship and popular educational to embolden tenants in understanding and organizing against invasive landlord technologies. It has also brought in members of the [Anti-Eviction Mapping Project](#) (which I am a part of), [\[people.power.media\]](#), the [AI Now Institute](#), and the [Anti-Eviction Lab](#). Together, we have produced a taxonomy of numerous technologies installed by landlords from a tenant harms perspective, as well as a survey, map, and a resource guide, all of which live today [on the Landlord Tech Watch website](#). I have also collaborated with Manon Vergerio and Paula Garcia-Salazar to create an in-depth report about building access landlord technology in New York City detailed on the [Anti-Eviction Lab's site](#).

While there is still much to be studied regarding how the real estate and landlord tech industries continue to transform in the aftermath of Covid-19, particularly as landlords seek to recover pandemic-related tenant debt and as eviction protections get lifted, it seems clear that surveillance will only proliferate. Recent advances in algorithmic platforms will likely only add fuel to landlord tech trends. While the landlord technology industry clearly intends to continue using tenant data and networked

surveillance systems to abet eviction and gentrification cycles, there is hope to be gained through the work of the Ocean Hill-Brownsville Alliance and other groups organizing against these dispossessive trends.

Author's Note

Much of this essay is based upon collaborative research conducted with Manon Vergerio, which we have published about together here: Erin McElroy and Manon Vergerio, "Automating Gentrification: Landlord Technologies and Housing Justice Organizing in New York City Homes," Environment and Planning D: Society and Space 40, no. 4 (August 1, 2022): 607-26.

Footnotes

- 1 Tranae' Moran, interview with the author, 2021.
- 2 Tranae' Moran, "Atlantic Plaza Towers Tenants Won a Halt to Facial Recognition in Their Building," *AI Now Institute Medium* (blog), January 9, 2020.
- 3 Joy Buolamwini and Timnit Gebru, "Gender Shades: Intersectional Accuracy Disparities in Commercial Gender Classification," *Proceedings of the 1st Conference on Fairness, Accountability and Transparency* 81 (2018): 77-91.
- 4 Erin McElroy, Manon Vergerio, and Paula Garcia-Salazar, *Landlord Technologies of Gentrification: Facial Recognition and Building Access Technologies in New York City Homes* (New York City: Anti-Eviction Mapping Project, 2022).
- 5 Naomi Klein, *The Shock Doctrine: The Rise of Disaster Capitalism* (New York: Macmillan, 2007).
- 6 Erin McElroy, Meredith Whittaker, and Genevieve Fried, "COVID-19 Crisis Capitalism Comes to Real Estate," *Boston Review*, May 7, 2020.
- 7 Simone Browne, *Dark Matters: On the Surveillance of Blackness* (Durham, NC: Duke University Press, 2015); Joe Flood, *The Fires: How a Computer Formula, Big Ideas, and the Best of Intentions Burned Down New York City—and Determined the Future of Cities* (New York: Riverhead Books, 2011).
- 8 Brian Jefferson, *Digitize and Punish: Racial Criminalization in the Digital Age* (University of Minnesota Press, 2020), 174.
- 9 Rebecca Oyama, "Do Not (Re)Enter: The Rise of Criminal Background Tenant Screening as a Violation of the Fair Housing Act," *Michigan Journal of Race and Law* 15, no. 1 (January 1, 2009): 181-222.
- 10 Ruha Benjamin, "Innovating Inequity: If Race Is a Technology, Postracialism Is the Genius Bar," *Ethnic and Racial Studies* 39, no. 3 (2016): 2227-34.
- 11 Alexander Ferrer, *Beyond Wall Street Landlords: How Private Equity in the Rental Market Makes Housing Unaffordable, Unstable, and Unhealthy* (Los Angeles: Strategic Action for a Just Economy, 2021).
- 12 Aaron Block and Zach Aarons, *PropTech 101: Turning Chaos Into Cash Through Real Estate Innovation* (Advantage Media Group, 2019).

- 13 Tom Angotti and Sylvia Morse, eds., *Zoned Out!: Race, Displacement, and City Planning in New York City*, rev. ed. (New Village Press, 2023).
- 14 Andrew Perez and David Sirota, "Charles Koch Funded Eviction Push While Investing in Real Estate Companies," *The Guardian*, May 21, 2021.
- 15 Didi Rankovic, "Naborly Asks Landlords to Report If Tenants Are 'Delinquent' on April Rent, to Build a Profile on Them," *Reclaim The Net* (blog), April 4, 2020.
- 16 Erin McElroy, Wonyoung So, and Nicole Weber, "Keeping an Eye on Landlord Tech," *Shelterforce*, March 25, 2021.
- 17 ButterflyMX, *From Amenity to Necessity* (New York: ButterflyMX, Inc).
- 18 ButterflyMX, *From Amenity to Necessity*.
- 19 Hiawatha Bray, "In Smart Apartments, Is Tenants' Privacy for Rent?," *Boston Globe*, February 11, 2020; Jeff Shaw, "Technology Is Top-of-Mind for Multifamily Renters, Says NMHC Survey," *REBusinessOnline* (blog), November 19, 2019.
- 20 James Kleimann, "Blackstone Gets Back into the Single-Family Rental Game," *HousingWire* (blog), September 1, 2020.
- 21 Erin McElroy, "Disruption at the Doorstep," *Urban Omnibus*, November 6, 2019.
- 22 Erin McElroy and Manon Vergerio, "Automating Gentrification: Landlord Technologies and Housing Justice Organizing in New York City Homes," *Environment and Planning D: Society and Space* 40, no. 4 (August 1, 2022): 607-26.
- 23 J. Khadijah Abdurahman, "Organizing as Joy: An Ocean-Hill Brownsville Story, with Tranae Moran and Fabian Rogers," *Logic Magazine*, December 25, 2021.