City-as-Prison: A Panoptic Reading of Urban Logistics

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Abstract

Digitalization has become a central driver of contemporary urban governance, reshaping how authorities regulate movement, allocate resources, and manage public space. While often portrayed as innovation-led progress, these systems carry far-reaching implications for social order, accountability, and individual autonomy. Acknowledging these tensions is essential to understanding the political stakes of technologically mediated urban life. Within this context, the contemporary city increasingly operates as a logistical apparatus of control, where the apparent fluidity of human and products circulation conceals a deeply disciplinary infrastructure. Ostensibly neutral urban components—digital platforms, delivery hubs, and surveillance technologies— participate in an invisible regulation of behavior within the paradigm of the city-as-prison. This panoptic dynamic, sustained by the promise of efficiency, simultaneously reinforces spatial and social segregation. Logistics, far from being a mere functional layer, emerges as a central vector of urban power. Yet, against this technocratic rationality, forms of resistance are taking shape—challenging the algorithmic governance of urban life. Participatory platforms, tactical interventions in public space, and the subversive repurposing of urban data express a collective desire to reclaim control over city resources. These initiatives go beyond critique; they articulate an alternative vision of urbanity grounded in transparency, collective deliberation, and spatial justice. By bridging infrastructural critique and democratic experimentation, the article argues that urban technologies can be reconfigured beyond their instrumental logic.

Keywords: Algorithmic governance, City-as-prison, Digital infrastructure, Panopticon, Resistance, Surveillance, Urban logistics

1. Introduction

Contemporary urban planning is increasingly shaped by intrusive strategies aimed at monitoring individual behavior—strategies that some scholars within the critical management studies tradition group under the concept of the carceral city, a distinctive manifestation of broader carceral spaces (Bloch, 2024). From this perspective, the city becomes a diffuse extension of the prison system, where the line between spaces of freedom and confinement is progressively blurred. Drawing on carceral geography, Gilmore (2007) argues that the expansion of California's prison system cannot be disentangled from political agendas, revealing a networked spatialization of incarceration. In a similar vein, the contributions compiled by Moran & Schliehe (2017) investigate how carceral logics pervade urban environments, far beyond the confines of formal prisons. Relevant here is Senapaty's (2023) ethnography of open prisons in India, which shows how spaces ostensibly designed for autonomy remain deeply entangled with constraints, tensions, and everyday practices of governance. Recent research further demonstrates how algorithmic infrastructures reshape urban rhythms and political dynamics, as illustrated by Sepehr's (2025) examination of Vienna's AI-driven pedestrian systems, which reveals how intelligent urban devices simultaneously promise efficiency and reproduce new forms of exclusion. While this approach to the carceral city privileges a reading centered on the penalization of individuals, the present article adopts a different analytical stance. It conceptualizes the city-as-prison not through the extension of the penal system, but through the proliferation of material and logistical infrastructures of confinement.

The metaphor of the city-as-prison refers less to a juridical or disciplinary analogy than to a tangible spatial configuration. Unlike the carceral paradigm, which emphasizes formal mechanisms of repression, the city-as-prison foregrounds the architectural and logistical technologies designed to organize circulation, monitor mobility, and regulate behavior in urban environments. This framework draws directly from the panoptic model envisioned by Bentham (2010 [1791]), in which architecture itself becomes an instrument of power. In today's urban landscapes, control is not solely enforced by visible institutions; it is increasingly embedded within

logistical infrastructures—sensors, surveillance cameras, identification badges, automated bollards, and digital checkpoints—that silently govern the rhythms of everyday life. Urban logistics thereby emerges as a covert architecture of confinement, operating under the guise of efficiency and flow optimization, yet producing very real spatial and social restrictions. It does not punish but organizes; it does not sentence but directs. Nevertheless, it confines. This form of panoptic urbanism becomes legible through a critical examination of the logistical apparatuses deployed to structure and manage urban spaces.

By foregrounding the concept of the city-as-prison, this contribution seeks to uncover forms of resistance to the often-invisible yet constraining logics of organization and resource management that pervade urban life. Crucially, the city-as-prison is not a sealed or static entity; it is continually shaped by tensions, negotiations, and tactical subversions. Even in highly regulated environments, room for maneuver exists. Far from constituting a monolithic system, the city-as-prison is riddled with breaches—diversions of use, spatial reappropriations, and alternative logistical practices—that disrupt the smooth functioning of control mechanisms. We interrogate these fissures, bringing to light the strategies deployed by actors who challenge panoptic rationality from within. The objective is not to dismiss the penal dimensions emphasized by the critical management studies literature, but rather to propose a shift in analytical focus—from the punishment of bodies to the architecture of flows, from institutional power to infrastructural governance, from the juridical to the logistical. In doing so, it becomes possible to map new terrains of resistance—where oppositional practices emerge from within the very circuits that structure control.

2. Foundations of the Panopticon

At the dawn of modernity, Bentham (2010 [1791]) conceptualized an architectural mechanism of deceptive simplicity that would profoundly transform understandings of power: the panopticon (see Figure 1). This structure concentrates surveillance in a central vantage point, creating a radical asymmetry between the observer and the observed—where the latter never knows if, or when, they are being watched. More than a mere innovation in prison design, the "inspection house" inaugurates a new modality of power grounded in visibility, anticipation, and internalized discipline. In the contemporary digital era, the panoptic logic extends far beyond the prison's perimeter, permeating workplaces, schools, urban environments, and even the intimate spaces of homes and social media platforms. The modern panopticon is no longer bounded by walls; it has become an invisible infrastructure that governs behavior through the persistent possibility of observation and algorithmic scrutiny. Revisiting the foundations of this historical mechanism is essential to understanding how power operates today—at the intersection of logistics, technology, and surveillance. The enduring relevance of "panopticism" lies in its capacity to illuminate how spatial and digital systems co-produce new forms of social control.

2.1. Panoptic Control Beyond Walls

Originally conceived as a prison design, the panopticon allowed a central observer to see without being seen, establishing a radical asymmetry of visibility. Yet the underlying principle has long exceeded the boundaries of carceral architecture. Today, panoptic view permeate systems of control across education, workplaces, and leisure spaces. In British secondary schools, the widespread installation of surveillance cameras—ostensibly for safety—has significantly altered student behavior: individuals act in accordance with the ever-present possibility of observation (Hope, 2009). In Amazon warehouses, workers are subjected to continuous digital monitoring through sensors, scanners, and algorithmic performance tracking, capturing every movement, pause, and deviation from expected rhythms. Here, control no longer depends on direct human oversight; it becomes automated, embedded within the operational fabric of labor itself (Levy, 2015). The effectiveness of the modern panopticon lies not in overt punishment but in the internalization of behavioral norms, shaped by a persistent condition of visibility—whether real, recorded, or merely anticipated. It is this diffuse and anticipatory form of surveillance that governs conduct without recourse to physical coercion.
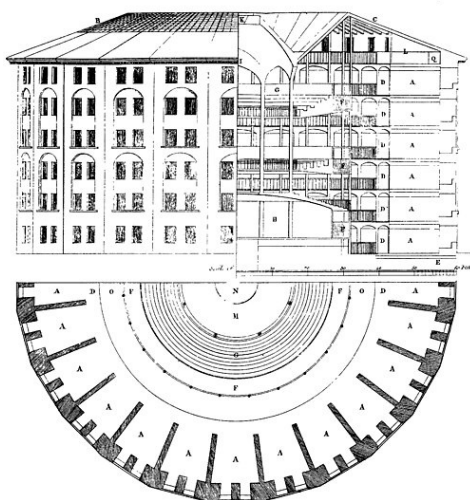
Figure 1. Architectural representation of the panopticon
Source: Bentham (2010 [1791]).

Beyond visible surveillance, the panoptic logic embedded in urban spaces manifests prominently in logistics management through intelligent control platforms. Barcelona offers a compelling example with its Sentilo platform, which integrates approximately 10,350 active sensors deployed across more than 300 municipalities within the province, gathering data on air quality, noise, parking, mobility, and energy consumption. By 2025, this ecosystem manages over 8 million data messages daily through the city's central system, embodying real-time algorithmic governance. The network functions as a distributed panoptic infrastructure where every human, material, and environmental flow is continuously monitored, modeled, and optimized according to efficiency criteria. However, Mattern (2020 [2017]) cautions against the consequences of such pervasive control: the pursuit of predictability standardizes behaviors, renders divergent practices invisible, and restricts the scope for urban creativity and citizen initiative. By suppressing spontaneity, the city-as-prison risks becoming a normative environment governed by technological rationality rather than dynamic social interaction.

2.2. Philosophy of "Panopticism"

Building on Bentham's panopticon (2010 [1791]), Foucault (2020 [1975]) conceptualizes "panopticism" as the prevailing mode of power relations in modern society. He characterizes panopticism as generalized, diffuse surveillance—no longer reliant on overt violence but sustained by the constant possibility of observation, which mechanically enforces self-discipline among individuals. Thus, the panopticon serves as a potent metaphor for modern institutions—schools, hospitals, factories, and barracks that function as disciplinary apparatuses. Numerous studies support this interpretation, highlighting the expanding scope and increasing sophistication of digital technologies that disseminate control across society. Lyon (2018) refers to this phenomenon as the "surveillance society," where digital data is continuously collected and leveraged for governance, blurring the boundaries between privacy and public oversight. Contributions gathered by Ball *et al.* (2014) further examine how surveillance capitalism shapes social norms by concentrating power in the accumulation and exploitation of data on individual behavior, including deviance, thereby reinforcing mechanisms of social regulation.

In the context of urban spaces, panopticism manifests as a spatial and technological reconfiguration whereby cities become vast systems of observation, capturing, analyzing, and fundamentally controlling human mobility and interactions. Graham & Wood (2003) introduce the concept of "*splintering urbanism*" to illustrate how technological infrastructures produce differentiated territories of inclusion and exclusion. Similarly, Kitchin (2016) highlights that panoptic technologies constitute an algorithmic governance framework that transforms residents into predictable subjects, categorized and classified through digital devices. These mechanisms extend beyond mere bodily control to act upon data, anticipated behaviors, information flows, and the very representation of individuals within urban environments. Surveillance thus becomes a constitutive element of urbanization, transforming the city-as-prison from a purely physical enclosure into a cybernetic territory governed by principles of anticipation, quantification, and invisible discipline. This perspective finds diverse concrete applications, embedding control deeply within the fabric of everyday urban life.

Deleuze's (2017 [1990]) conceptualization advances beyond Foucauldian's panopticism by describing a profound transformation in power structures, where traditional disciplinary institutions—once confined to enclosed spaces such as prisons or schools—give way to more flexible, diffuse, and modular mechanisms. The author characterizes this shift as the emergence of "control societies," in which power is no longer exercised through spatial confinement but through continuous processes of surveillance, modulation, and remote adjustment. In this new paradigm, individuals are not enclosed but constantly "sampled" through ongoing streams of data generated by their movements, digital interactions, and consumption patterns. Control operates in real time via connected infrastructures, particularly within urban environments. Consequently, the city is transformed into a machine capable of capturing, analyzing, and modulating behavior without relying on visible or fixed devices. The continuous modulation subjects all individuals to a dynamic circuit of normalization, founded on permanent data capture and feedback loops—transcending the static disciplinary logic of the classical panopticon.

2.3. Concrete Applications of "Panopticism"

The application of panopticism to the city-as-prison is exemplified by the extensive expansion of surveillance and urban management technologies, with London serving as a striking case study. Often cited as Europe's most surveilled city, London is projected to operate nearly 950,000 video surveillance cameras by 2025, distributed across public spaces, commercial establishments, and private residences—approximately twenty times the number found in Paris. While frequently invisible, this dense technological network exerts a concrete influence on individual behavior. The mere possibility of observation suffices to induce self-regulation, normalization, and social conformity (Dear *et al.*, 2019). Surveillance transcends visual monitoring; it increasingly incorporates facial recognition, geolocation, smart sensors within transportation systems, and mobile tracking applications. These technologies facilitate real-time observation but, more importantly, enable the anticipation and modulation of behavior. Andrejevic (2019) insightfully observes that algorithmic surveillance operates proactively, directing human flows, constraining opportunities for urban improvisation, and contributing to the construction of public space governed by the reality of continuous control.

Beyond visible surveillance, urban panopticism is deeply embedded in the logistical management of cities through the proliferation of intelligent control platforms. Singapore serves as a prime example with its Smart Nation program, initiated in 2014, which employs real-time data analytics to optimize a broad range of urban functions including road traffic, energy consumption, waste management, public safety, and individual mobility (Chua, 2018). By 2025, the program has significantly expanded with the widespread integration of ubiquitous environmental sensors and sophisticated artificial intelligence technologies. These systems enable continuous and dynamic governance of urban flows, where every human, material, and informational movement is monitored, analyzed, and recalibrated in real time. The pervasive infrastructural control transforms the city into a distributed panoptic apparatus that prioritizes efficiency and the rationalization of behavior across multiple scales. The ascendancy of technological governance over traditional forms of social regulation raises urgent and profound questions concerning democratic accountability, transparency, and the protection of individual rights within contemporary digital societies.

3. Declinations of Surveillance

Cities are no longer merely spaces for living, leisure, and commerce, as Le Corbusier's (1973 [1943]) *Charter of Athens* originally conceptualized them; they have evolved into complex architectures of control where logistics and surveillance intersect to profoundly shape spatial practices. Central to this transformation are infrastructures dedicated to managing material and human flows, which have become critical instruments of social regulation by integrating advanced digital technologies with physical control mechanisms. The new geography of power extends beyond a simple network of cameras and barriers, embedding itself within a cybernetic system that continuously monitors and analyzes every movement. Through the architecture of control, the city-as-prison is reconfigured as a laboratory of perpetual surveillance, governed by normative imperatives that raise urgent questions regarding privacy and the very fabric of urban sociability. Grasping these dynamics is essential to understanding the contemporary challenges faced by urban management in the digital era and their profound implications for democratic governance.

3.1. Integrated Surveillance of Urban Spaces

Urban logistics infrastructures extend far beyond the mere optimization of goods flows to become powerful instruments of spatial and social capture. Low-emission zones (LEZs), logistical hubs, and sorting centers are now equipped with advanced technologies—video surveillance, connected sensors, automated barriers—that

segment urban spaces according to criteria combining efficiency, safety, and environmental control. The systems not only facilitate smoother traffic flows but also impose continuous algorithmic surveillance, enforcing norms and restrictions that regulate mobility and produce invisible spatial hierarchies. Simone (2019) characterizes these infrastructures as "devices of capture" that shape unequal territories, while Mbembe (2019) invokes the notion of "*necro-politics*," where the control of flows functions as an instrument of sovereign power. Such dynamics resonate with recent developments in smart urban logistics. Mohsen (2024) shows how AI-based delivery systems, autonomous vehicles, and IoT infrastructures not only optimize flows but also intensify algorithmic governance, embedding surveillance deeper into urban management. As Bruun's (2024) analysis of techno-moral politics in smart-city experiments suggests, citizens actively contest ostensibly neutral data infrastructures through everyday practices of care, alternative uses of data, and situated forms of participation. Consequently, the city is transformed into a disciplined environment where freedom of movement is constantly redefined. Urban logistics thus embodies a contemporary panoptic dynamic, orchestrating confinement without physical walls—walls rendered obsolete by their ineffectiveness in preventing escape or "evaporation."

The technological stranglehold also manifests through the proliferation of mobile and adaptive devices—true sentinels of urban control—such as drones, smart cameras, checkpoints, and facial recognition systems that amplify public authorities' visibility over individual and collective movements. The Yellow Vests movement in France (2018–2019) vividly illustrates the logistical capacity to deploy sophisticated surveillance tools for framing, restricting, and repressing popular mobilizations. The extensive use of drones and mobile cameras enabled law enforcement to monitor roundabouts and protest zones in real time, significantly narrowing protesters' room for maneuvering and intensifying a shifting spatial confinement. This dynamic reflects the "security governmentality" concept eloquently analyzed by Bigo (2006), in which security relies on predictive and adaptive surveillance mechanisms. Through the hybridization of logistical flow management and security control, the city-as-prison becomes a fragmented, disciplined, and surveilled space, where mobility is governed by fluctuating rules tied to political imperatives. This extends Benthamian's panopticon metaphor into an integrated form that merges visibility and invisibility, control and constrained freedom.

3.2. Algorithmic Surveillance of Urban Spaces

As previously highlighted, contemporary urban logistics heavily relies on advanced technologies that allow for highly detailed control over material and human flows, all aimed at enhancing managerial performance. The widespread integration of smartphones, IoT sensors, GPS tracking, and sophisticated facial recognition systems is deeply embedded within urban infrastructures, enabling continuous surveillance and real-time monitoring of individuals' movements. In China, facial recognition cameras extend beyond regulating access to public transportation, automatically identifying behaviors classified as "abnormal" in public spaces—a development that confirms Gray's (2003) early prediction of the rise of a *facial recognition society*. This pervasive digital network creates a decentralized and highly granular surveillance environment, producing innumerable invisible "glances" that occur without individuals' knowledge. People remain unaware not only of when they are being observed but also who may be watching—whether it be a spouse, lover, or political opponent. Such dynamics intensify the panoptic dimension by embedding a constant, diffuse surveillance that fundamentally reshapes experiences of privacy, autonomy, and social control within urban life.

The massive exploitation of data increasingly powers sophisticated artificial intelligence algorithms that orchestrate logistics management with near-surgical precision while simultaneously modulating individual behavior in indirect ways (Paché, 2024). Predictive systems can detect crowd movements and behaviors deemed "at risk," as demonstrated during the 2024 Olympic Games in Paris, where these insights informed police decisions via automated incentive mechanisms. The controversial collaboration between IBM and the New York Police Department, analyzed by Ferguson (2017), exemplifies the rise of algorithmic policing, which combines intelligent video surveillance with predictive analytics to anticipate and manage social dynamics. In this evolving landscape, the boundary between logistics and normative governance becomes increasingly blurred, with the city-as-prison emerging as a singular environment where every movement is scrutinized, recorded, and potentially sanctioned. Sanctions may target individuals directly or operate indirectly through regulations imposed on businesses and organizations. Under this regime, surveillance becomes a permanent, pervasive, and often invisible condition that shapes behavior and silently regulates social life within the contemporary digital society.

3.3. Restrictive Surveillance of Urban Spaces

Beyond mere surveillance, urban logistics fundamentally contributes to the creation of segregated spaces that partition the city along social and economic lines, thereby restricting freedom of movement. Gated communities,

secure shopping centers, and restricted access zones operate as partitioned cells fragmenting the urban fabric. For instance, in Mexico City, the proliferation of walled residential neighborhoods with gates and access control devices over recent decades exemplifies a process of spatialized social exclusion (Morales, 2025). Figure 2, drawn from Sheinbaum (2008), depicts Bosque Real Country Club, a highly exclusive gated community on the metropolitan area's western edge. These logistical devices function as filters regulating human flows while protecting "privileged" spaces, often at the expense of a more inclusive urban mix. The spatial segregation continuously reinforces the city-as-prison metaphor, where mobility becomes a privilege contingent upon social status, intensifying inequalities and consolidating strict territorial control. Such exclusionary dynamics resonate with contemporary analyses of urban segregation explored in the volume edited by Bridge *et al.* (2011).

Urban confinement measures intensify markedly during crises when collective health or security is at risk. During the COVID-19 pandemic, cities such as Melbourne, Seoul, and Wuhan implemented extensive lockdowns, deploying drones, sensors, video surveillance, and tracking applications to restrict—and at times ruthlessly monitor—movement (McCall et al., 2021). While often justified by public health emergencies, the technological mobilization reflects a growing militarization of logistical systems originally designed for the fluid management of flows but now repurposed for spatial population control. These practices exacerbate existing urban divides, deepening the polarization between secure zones and areas subject to constant surveillance, a dynamic Atkinson & Blandy (2005) identified two decades ago. Algorithmic monitoring of mobility produces a new form of disciplinary urban planning, wherein crisis response becomes a lever for the permanent expansion of coercive technologies. The city-as-prison is thus governed by anticipation and prevention, resulting in a significant curtailment of individual freedoms and strain on the social contract. To clarify these complex dynamics, Table 1 offers a typology of dominant surveillance forms, each characterized by its logic and illustrated by scholarly and real-world examples.

Figure 2. Bosque Real Country Club in Mexico City (in 2008)
Source: Sheinbaum (2008).

Table 1. Key modalities of urban surveillance in the city-as-prison

Form of surveillance	Core definition	Illustrative examples
Integrated surveillance	Surveillance embedded in urban logistics infrastructures, combining physical and digital mechanisms to enforce behavioral norms and spatial hierarchies	• Real-time drone and mobile camera monitoring of Yellow Vest protests in France (2018–2019) • Smart surveillance checkpoints along the Bus Rapid Transit (BRT) corridors in Johannesburg
Algorithmic surveillance	Data-driven observation using AI and predictive analytics to monitor, anticipate, and influence individual and collective movement across urban spaces	• Facial recognition and predictive policing during the 2024 Paris Olympic Games • AI-based crowd monitoring system deployed in Hyderabad to anticipate "unusual" public behavior
Restrictive surveillance	Spatial control through the segmentation and securitization of urban territory, leading to exclusionary practices and constrained mobility	• Gated communities like Bosque Real Country Club in Mexico City • Surveillance-enhanced exclusion zones around Casablanca's port and financial district, limiting informal economic circulation

Source: The author.

4. Fighting Back Against the City-as-Prison

In response to the relentless expansion of urban surveillance systems—justified by promises of safety and efficiency under a city-as-prison paradigm—resistance is emerging that strategically subverts the very technologies used for control. This shift, articulated through civic tech initiatives, activist aesthetics, and the critical appropriation of participatory platforms, underscores that the connected city is not a neutral space but a contested political arena. The development of alternative tools, the symbolic repurposing of data, and creative visual and auditory disruptions constitute a tangible counter-power that directly challenges the dominant security narrative. Counter-surveillance practices are not marginal or anecdotal; they represent an urban voice—situated, deliberate, and often incisive. These interventions oscillate between direct confrontation, partial co-optation, and tactical ambiguity, exposing both the possibilities and the constraints of a digital urbanism that purports to be transparent and participatory. Rather than mounting a frontal attack, these acts of resistance reveal forms of political ingenuity embedded within the very infrastructures of power. Recent analyses reinforce this perspective. For instance, Ting (2025) shows how "*networked disobedience*" enables citizens to subvert smart-city infrastructures through digitally coordinated forms of dissent, while Bou Nassar *et al.* (2025) highlight that people-centered data governance can redistribute informational power and reconfigure the political stakes of urban technologies.

4.1. Counter-Power Through Civic Tech

In parallel with the rise of surveillance infrastructures, a growing number of citizen-led initiatives are working to restore transparency and rebalance power within the city-as-prison paradigm (Schrock, 2018). Grassroots collectives, civic hackers, and NGOs are developing participatory mapping platforms that render visible the hidden geographies of logistical flows, surveillance cameras, and zones of intensified policing. These tools are part of a broader critical civic tech movement that seeks to transform digital technologies into instruments of emancipation rather than domination (Kitchin *et al.*, 2019). The New York-based Data & Society Research Institute plays a central role in this effort. Since its founding in 2013, it has produced influential research on the social and political implications of algorithmic surveillance and supported the creation of citizen-driven mapping tools. These platforms enable residents to document surveillance practices, expose abuses, and generate alternative forms of urban knowledge. Such informational counter-power contributes to collective awareness and catalyzes new modes of democratic resistance. These initiatives do not operate on the "margins"—they constitute deliberate acts of spatial and technological reappropriation.

The initiatives supported by the Data & Society Institute are part of a broader effort to re-politicize urban spaces. By making infrastructures of control—often obscured by dominant security narratives—visible and contestable, citizen interventions aim to open a space for dialogue between authorities and residents. Drawing on Foucault's (2020 [1975]) analysis of disciplinary power, Klauser *et al.* (2014) argue that such efforts demand more transparent and participatory governance of urban logistics. At a practical level, these movements call for strict

regulation of how personal data is collected and used within surveillance systems. This includes the adoption of ethical frameworks, the implementation of algorithmic auditing protocols, and the safeguarding of fundamental rights, particularly the right to privacy. Through these participatory mobilizations, the city is reimagined not as a neutral interface for flow management, but as a contested and vibrant space where individuals reject their reduction to passive users or objects of control. Instead, they assert themselves as political agents, capable of shaping the technological and logistical rules that govern urban life.

4.2. Urban Acts of Defiance

"Tactical urbanism" emerges as a particularly dynamic form of resistance—both symbolic and material—against the panoptic effects generated by urban logistics practices. Through temporary, low-cost, and often citizen-led interventions—such as the creation of public plazas, artistic disruptions, or community vegetable gardens that contribute to ecological restoration and the enhancement of ecosystem services (Weldegebriel *et al.*, 2021)—public urban spaces are reclaimed as sites of social interaction, conviviality, and political engagement. These practices momentarily invert the logic of surveillance and commercial flows by fostering alternative, inclusive uses of urban spaces (Silva, 2016). The Reclaim the Streets movement, which arose in the United Kingdom during the 1990s, exemplified this strategic challenge: by transforming streets into festive stages and forums for public debate, it exposed the dominance of urban logistics over city centers. Although the movement itself is less active under this name in 2025, its legacy persists in ongoing campaigns for more livable cities, notably through groups such as Extinction Rebellion and Open Streets initiatives in New York and San Francisco (Sheller, 2018).

Often described as "urban micro-utopias" (Iveson, 2013), such movements contribute to reimagining the city as a common good. By creating openings within entrenched logistical and security systems, they expose the fragility of the boundaries enforced by panoptic surveillance. Through the temporary yet visible occupation of abandoned or overexploited spaces, they embody a pointed critique of the confinement logic underpinning the city-as-prison paradigm. However, certain interventions—such as collective vegetable gardens or the planting of open-crown trees—pose potential health risks to both humans and animals, necessitating heightened vigilance in planning and management (Alamu & Adelasoye, 2018). These challenges call for a critical, holistic reflection on tactical urbanism, one that balances social reappropriation with environmental responsibility. Moreover, while such practices foster renewed political consciousness around urban governance by encouraging self-organization and direct democracy, it is crucial not to overlook the fundamental need for infrastructures to support not only the circulation of goods but also social ties and spatial justice—a dimension sometimes neglected by activists.

4.3. Urban Control Under Hack

Digital technologies inherently contain vulnerabilities that activists can exploit to evade systematic surveillance and traceability. During the 2019 Hong Kong protests—massive demonstrations sparked by opposition to an extradition bill and broader demands for democratic freedoms—protesters extensively relied on encrypted communication platforms such as Telegram and FireChat. These tools enabled decentralized coordination and real-time organization of actions aimed at challenging state authority while avoiding detection by government surveillance. By creating zones of opacity within what can be described as a city-as-prison, demonstrators disrupted the pervasive control. Although the Chinese government eventually imposed strict measures to quell the movement, the tactics employed illustrate a broader resistance to algorithmic governance and urban disciplinary architectures. In response, communities worldwide have developed decentralized digital tools designed to empower citizens with greater control over their data and privacy. Organizations like the Open Knowledge Foundation and Cryptoparty merge technical training with political advocacy to support these initiatives (Monsees, 2019). Such counter-power practices redefine individuals as active agents capable of influencing and reshaping the digital infrastructures that govern urban life.

In Barcelona, the Decidim platform—still operational—provides, according to Barandiaran *et al.* (2024), a participatory framework through which residents can directly shape urban policy via an open-source interface grounded in transparency and democratic accountability. The authors underscore Decidim's technopolitical significance, arguing that it surpasses the role of a mere digital tool to function as a collective network safeguarding citizen autonomy against pervasive commercial interests and algorithmic governance. This model exemplifies the potential to redirect urban technologies toward genuine collective emancipation. Far from embodying technophilic optimism, such innovations critically challenge dominant paradigms centered on efficiency, logistical optimization, and intrusive surveillance (Capdevila & Zarlenga, 2015). By embedding normative values within algorithmic systems, Decidim and similar initiatives confront entrenched power structures that reproduce spatial hierarchies. Consequently, they advance an alternative urban vision where digital resources serve to enhance public deliberation and democratic governance rather than reinforce

exclusionary control mechanisms. Table 2 summarizes principal modes of resistance to the city-as-prison, highlighting their defining features alongside diverse empirical examples that attest to the creativity and scope of urban counter-surveillance efforts.

Table 2. Key forms of resistance against the city-as-prison

Form of resistance	Key characteristics	Representative examples
Counter-power through civic tech	Use of participatory platforms, data transparency, and citizen-driven mapping to expose surveillance and promote democratic dialogue	• Data & Society Institute's civic tech initiatives in New York • Safecast project in Japan—a citizen-led radiation mapping after Fukushima disaster
Urban acts of defiance	Temporary, often artistic or ecological interventions reclaiming public space to contest surveillance and logistical control	• Reclaim the Streets in the United Kingdom • Portland All Souls River Procession—a community arts event reclaiming public space for social reflection and activism
Urban control under hack	Tactical use of encrypted apps, VPNs, and privacy tools to evade surveillance; decentralized tech for digital autonomy	• Protesters in Hong Kong using Telegram and FireChat • Lavabit encrypted email service in the United States—used worldwide to secure communications against surveillance

Source: The author.

5. Discussion and Conclusion

The challenges posed by urban logistics extend well beyond the mere task of efficiently organizing deliveries within city centers. Through its complex infrastructure, advanced technologies, and operational methodologies, urban logistics enforces a spatial and social discipline that significantly curtails individual freedoms. The fusion of logistics and surveillance actively constructs a societal framework where power manifests through behavioral standardization and the algorithmic regulation of flows, effectively transforming the city into a cybernetic space of control. However, this domination is neither absolute nor uncontested. Organized citizen resistance, coupled with the development of alternative technologies, demonstrates that emancipatory urban logistics is not only imaginable but achievable—one that balances efficiency with social justice and individual liberty. The fundamental challenge lies in reimagining the city-as-prison into an open, democratic environment. Resisting the allure of disciplinary control requires urban governance that rigorously upholds fundamental rights and places human agency at the core of flow management and spatial planning. Thus, panopticism should be understood not as an inevitability or irreversible condition, but as a contested arena where crucial battles for the future of urban life are actively waged.

From this perspective, the article makes a significant and original contribution by shifting the analytical focus on urban surveillance and flow management toward the often-overlooked architectural and logistical dimensions that underpin the construction of the city-as-prison. By drawing on the figure of the panopticon and clearly distinguishing it from the more conventional carceral city paradigm common in critical management studies, it opens new pathways for understanding the spatial, material, and technological mechanisms that shape contemporary urban control. This approach highlights the centrality of logistical infrastructures and devices as vectors of a diffuse, often invisible, yet profoundly structuring power. Moreover, it emphasizes the inherent plasticity of urban spaces, where diverse forms of resistance and reappropriation emerge, challenging dominant regimes of control. The article's interdisciplinary perspective—bridging management studies, urban geography, and digital technology research—enriches ongoing debates on governance and territoriality. Ultimately, it offers an innovative conceptual framework that invites scholars and practitioners alike to reconsider the city as a dynamic laboratory where tensions between control and emancipation are continuously negotiated.

Historically, logistics has been shaped predominantly by a business-driven approach focused on maximizing performance, reducing costs, and optimizing efficiency for companies and their customers. The panoptic reading advanced in the article challenges this narrow managerial perspective by revealing critical social and political dimensions that public and private stakeholders must urgently address in urban space management. It demands moving beyond the view of logistics systems as mere operational tools serving commercial interests, emphasizing instead their profound and often overlooked impact on individual freedoms, social diversity, and urban quality of life. As a result, policymakers and planners are called upon to embed ethical, transparent, and

participatory principles into the development and deployment of urban technologies, fostering decentralization, inclusivity, and accountability. Furthermore, the panoptic framework encourages novel collaborations among urban planners, technologists, decision-makers, and citizens to design adaptable, open infrastructures that balance security imperatives, flow efficiency, and spatial justice. Such a transformation is vital to overcoming traditional business-centric logistics and advancing emancipatory, equitable urban governance.

Far from offering a merely theoretical lens on urban surveillance, the article brings to the forefront the deeper issue of *how cities govern access to vital resources in contemporary life*. Logistical and digital infrastructures are not simply instruments of flow optimization; they orchestrate the distribution of essential elements such as spatial freedom, temporal autonomy, mobility, quality of life, and civic participation. In doing so, they quietly—but decisively—shape the urban commons, determining who is empowered to benefit from urban services and who is left at the margins. Optimization platforms, often portrayed as neutral facilitators, become vectors of power, subtly redefining the rules of access and presence in shared spaces. Within this context, the metaphor of the city-as-prison functions not merely as a critique of surveillance, but as a conceptual tool for unveiling the normative foundations of contemporary urban development. It invites scholars to engage seriously in the ethical and political implications of infrastructural governance, and to lay the groundwork for an ambitious interdisciplinary research agenda, one capable of fostering urban models that are more equitable, inclusive, and sustainable.

To advance such a research agenda in concrete terms, two primary avenues clearly stand out. The first research avenue involves a comprehensive empirical study of resistance practices against the city-as-prison, focusing on alternative logistics strategies, technological subversions, and citizen mobilizations aimed at reclaiming and re-signifying urban spaces. Avoiding reductive labels such as mere alter-globalization or radical degrowth activism, a deeper exploration of these counter-powers would greatly enrich theories of spatial control by integrating the dynamic, contested, and pluralistic nature of social relations in urban settings. A second major research avenue calls for a thorough assessment of the social and environmental consequences of panoptic logistical infrastructures, particularly their long-term impacts on segregation, sustainability, and social cohesion. Such an investigation is especially critical amid recurring episodes of riots, violent protests, and the deterioration of communal assets such as schools, libraries, and community centers. Together, these research trajectories highlight the urgency of documenting not only how logistical systems discipline urban life, but also how their effects materialize unevenly across neighborhoods, bodies, and temporalities.

Pursuing these lines of inquiry is vital for generating rigorous knowledge capable of guiding urban policymaking toward more inclusive and equitable frameworks. Future investigation could further explore how emerging AI-driven logistical systems reshape notions of urban citizenship, particularly in relation to transparency, autonomy, and the right to mobility. Comparative studies across diverse geopolitical contexts would also illuminate how the city-as-prison paradigm materializes unevenly, depending on local governance cultures, infrastructural histories, and differentiated access to technological resources. In parallel, interdisciplinary methodological approaches—combining digital ethnography, infrastructural analysis, participatory urban design, and critical data studies—could generate innovative frameworks for imagining post-panoptic urban futures. Such approaches would help bridge the gap between theoretical critiques and applied experimentation, fostering collaborative forms of knowledge production with citizens, planners, and technologists. Ultimately, advancing this research frontier offers the potential to rethink urban governance more broadly, transforming cities into laboratories of emancipation rather than instruments of control, and enabling the articulation of logistical futures grounded in accountability and spatial justice.

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Conflicts of Interest

The author declares no conflict of interest.

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