



# Gatekeeping fare collection in late industrial urbanity: Infrastructural labour in the gate milieu of the Stockholm metro

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**ABSTRACT:** Metro stations around the world are equipped with gate infrastructure to collect fares from passengers. At the Stockholm metro, the regional authority replaced tripod turnstiles with electronic gates aiming to better prevent fare evasion and increase revenue following reduced public transport subsidies. In this article, I engage with the politics of fare collection by attending to the gate environment in metro stations as constituting a milieu designed to regulate circulation. Rather than examining the gate milieu through its upfront purpose of fare collection, I critically examine the urban political relations generated and foreclosed in encounters with the material and semiotic properties of the gates. The margin of indeterminacy presented as the gates' doors slide open upon a ticket validation, invites passengers to assist the gates, in either blocking or letting pass the following passenger to get through. Together with the regional authority's framing of fare evasion as a cause for a degrading public transport infrastructure, the gate milieu pulls passengers into performing the work of fare collection. As such, the gate arrangement individualises responsibility among passengers for the maintenance of the metro as a collective good. Ultimately, the gate arrangements and the moralized repertoire in which they are inscribed, reveal how fare collection infrastructure risks contributing to escalating urban injustices in times of late industrial urbanity.

**Keywords:** Gate milieu, infrastructural labour, public transport, fare evasion, late industrial urbanity

## Introduction

On a weekday in early spring 2015 on a bench in Bredäng metro station in the south of Stockholm, I joined in a conversation with Mona, a commuter in her 60s, about the electronic ticket gates standing in front of us. When people entered or exited, the glass doors slid open and retracted into the gate pillars on each side, generating a metallic sound in the station hall. Local news outlets had informed that the recent arrival of these gates, and their replacing of the former tripod turnstiles, was a result of the regional authority's concern with fare evasion. Mona, who waited for the train with an empty bag to be filled with groceries from the market a few stations southwards, shared her view on the recently installed gates:

They are better than the earlier ones. At least people don't jump over. Yet. But they will always find a way. You have to make a halt once you've passed through so that they have to pay for their own ride if you don't want to offer one. It happened to me once in Gamla stan [metro station]. Someone walked through behind my back. It's really irritating when they try to enter behind your back.

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Mona's comparison of the former and current gates regards their material appearances and the different practices of fare evasion that they enable. Passengers would pass through the previous turnstiles by placing a hand on each side of the gate to leap over the tripod. The higher doors of the new gates made such practice difficult. Instead, the new gates offered opportunities to enter through the gates behind the person ahead who had just entered, a practice that Mona suggested could be thwarted by making a halt once through so as to obstruct any potential follower from getting through.

During 2015, when the replacement of tripod turnstiles with electronic door gates across the hundred stations of the Stockholm metro was being finalised, I observed numerous instances of people negotiating fellow metro passengers' entrances and heard diverse reasoning by commuters about how to handle the practices emerging with the new gates. On the one hand, people were, akin to what Mona suggested, halting in the gate passage. In interviews, metro passengers told me that this was necessary to prevent fare evasion. Meanwhile, I observed people actively holding the doors open to facilitate for the following person to pass through, and had conversations with people reasoning that this action made the metro more accessible. During the time of my fieldwork, when metro users had the tripod turnstiles fresh in mind, the issue of how to act when spotting fare evasion practices in the new gates soon entered into conversations that I had with metro users. Oftentimes, these discussions were steeped in formulations appealing to these stances as grounded in moral terms, as Mona summed up when asking me right before leaving for her arriving train: "What do you do when you see someone who tries to get through [the gate behind you]?" Formulated this way, the question ruled out the alternative of indifference towards fellow passengers' gate practices, instead calling upon a responsibility to act.



Figure 1. The electronic gate under installation in Stadion metro station during 2015.

States and cities build large-scale infrastructure like metro systems to demonstrate progress and modernity (Larkin 2018; Sadana 2018), and inscribe ideological claims about societal

transitions (Lemon 2000). As a form of transport for the masses, metro systems fulfil the criteria of infrastructure as assemblages privileging the circulation and connections between some people, places, and things, while always also disconnecting (Anand et al. 2018). Across the world, metro systems have various fare collection systems in place – except in the few cities with fare-free public transport (Cats et al. 2017) – that are designed to ensure that disconnect is produced without hindering the flow of paid passengers, by differentiating between legitimate and irregular passages. Fare collection infrastructure comprises both material and semiotic arrangements, as its properties and physical design are invested with assumptions about passengers' behaviour and desires to shape these (Höhne 2015).

In this article, I follow the negotiations between passenger flow and fare collection occurring in, and through metro gates, to inquire about what they reveal about the politics of fare collection infrastructure. The way passengers, like Mona, compared the techniques used to get through the former and current gates, calls for attention to how negotiations in the gates take shape through their material properties. Drawing on recent efforts in urban anthropology to understand how urban materialities shape urban political relations (Anand 2020; Kemmer 2020; Pilo' and Jaffe 2020; Von Schnitzler 2008), I consider the moral positions and relations that the gates afford as a fare collection infrastructure. I do so by exploring how the material properties of the gates mediate relations among passengers, beyond their upfront purpose of collecting fares.

The material arrangement of the gate environment, I argue, draws metro passengers into performing the work of gatekeeping fare collection. The occurrences of metro passengers acting as gatekeepers by obstructing or entitling fellow passengers' metro entrances are suggestive of how urban dwellers are drawn into maintenance work of public transport systems, in times of reduced state funding and support for urban infrastructure. This argument draws on, and contributes to, the expanding literature on human-infrastructure relations, and especially how degrading infrastructure in need of maintenance, puts pressure on local communities to compensate in time and effort for their failing to provide the promised water (Anand 2011; Barnes 2016), electricity (Von Schnitzler 2008), or housing (Gastrow 2020). While infrastructure is always in flux, and requires human labour for its maintenance (Carse 2014), such literature underlines the necessity to consider when, how, and who becomes enrolled in infrastructural labour, since its maintenance is not a singular, unified process but “highly differentiated and deeply embedded in local understandings” (Barnes 2016: 160). Unpacking climate mitigation infrastructure in Los Angeles, Sayd Randle (2022) shows how the communities exposed to the risk of flooding that small-scale water absorbent installations are to prevent, are laden with responsibility for securing their everyday functioning. Analyses of ‘infrastructural labour’ in diverse cities have forcefully demonstrated how the ways in which urban communities perform the repair of material arrangements, also maintain social injustices and reproduce state-community power relations (Stokes and De Coss-Corzo 2023).

Attention to infrastructural labour is perhaps increasingly important in contemporary times of late industrialism (Fortun 2012), where complex entanglements across technical, financial, and political systems generate situations of existing infrastructure degrading with absent maintenance and investments. Such infrastructure degradation unfolds simultaneously to new grand-scale infrastructure being forecasted (see also Anand et al. 2018), and neoliberal policies render publicly managed infrastructure privatized in various

ways (Bear 2020; Collier 2011). In the Stockholm metro, such policies inform the daily operation of the metro outsourced to a global corporation, the reduced share of public funding for its maintenance, and the introduction of ticket gates produced by a global security equipment producer, in parallel to major budgets invested in metro line extensions.

Amidst a backdrop of investments in new metro systems, and emphasised responsibility of metro users for contributing to fare collection, the urban political relations around fare collection gatekeeping in the gate milieu are telling of the “complex challenge of [...] just transition in late industrial contexts” (Adams et al. 2023: 4).

The claims that I make in the article are based on seven months of fieldwork in 2015 during which I visited and observed sites where the gates figured physically, and through associations. This was in addition to participant observation in metro stations with passengers, technicians, and ticket vendors, in a fair for public transport, and in citizen consultations for new metro stations. The empirical material also includes interviews that I conducted with public officials in the regional authority’s Transport Administration, and the initiators of the association *planka.nu*<sup>1</sup>, which advocates fare-free public transport. Moreover, I analysed political protocols and reports about the discussions preceding and succeeding the implementation of new gates, and followed the topic in news journals, and on online forums subscribed by enthusiasts of rail-bound transport discussing the metro.

To substantiate the argument that I am making here, the article is divided into five sections. The first section discusses how the gate environments in metro stations constitute a milieu with the purpose of regulating circulation under specific conditions. The second section outlines how fare evasion has come into the centre stage of the Stockholm regional transport authority, and how its work on fare collection developed in oscillation with passenger practices. Third, I detail how the regional authority manages and reconfigures the gates through policy and laboratory work. Fourth, I attend to the gate environment where passengers’ encounters unfold through appeals to roughly two alternative collectives: that of fare-payers aligning with the regional authority’s figures of fare evasion as risking the future security of the metro itself; and that of passengers considering the metro as a service for all irrespective of paid fares.<sup>2</sup> Lastly, I discuss how the gate arrangements favour a cushioning of fare collection in moralized terms calling for individual action to contribute to the maintenance of the metro.

### **Contextualising Stockholm metro stations as a milieu**

The observations of gate practices by metro passengers occur amidst intensified attention to fare collection by the Stockholm regional authority overseeing the metro, which it shares with other cities across the world that are putting increasing efforts into prevention of fare evasion (Barabino et al. 2020). The regional authority claims public transport is key to achieving social and environmental sustainability in the present, whereas major infrastructural investments

<sup>1</sup> *Planka.nu* can be translated to *fare-dodge.now*.

<sup>2</sup> Melissa Butcher’s observation in the Delhi metro that “different lines at different times of day can tend towards particular constituencies” (2011: 249) is true as well for Stockholm. However, in this article, I focus on their commonalities in the line of gates and treat metro passengers as a generic group. Further engagements with the dynamics observed in the gate milieu call for intersectional analysis of these practices and for a more detailed understanding of who gets pulled, and on what grounds, into doing the gatekeeping work.

for new metro lines are portrayed as enhancing regional economic growth and ensuring future sustainable mobility (Stockholms Läns Landsting 2018). Decoupling of the present and future infrastructure is at full disclosure in Stockholm, where considerable reduction of existing public transport networks is driven based on reduced number of passengers and fare collection income; while investments worth billions are being undertaken for the construction of new metro lines (Nordström and Lindblom Pääjärvi 2023). In the dynamics of late industrialism's "tightly laced systems" producing social injustices (Adams et al. 2023), the metro extensions are largely funded through municipal selling of valuable land for private developments, which meanwhile generates higher costs for the developed housing, and thus exacerbating housing and urban injustices across the city (Olsson 2019).

More than just a transit zone between the street and the platforms, the gates are an environment lively with social and political relations. Approaching the gates as an environment in its own right resonates with the regional Transport Administration's consideration of the metro stations as a "gate environment" (*spärrmiljö*) (AB Storstockholms Lokaltrafik 2013), for which they put in place elaborate policies on collecting fares and preventing and punishing fare evasion. This line of work includes a continuous "recalibration" of the gate settings to optimize their capacity to curb fare evasion (Thurfjell 2015). I borrow from Michel Foucault (2007) when considering the gates as constituting a "milieu," in order to account for their design and management as a means to control and condition circulation. According to Foucault, modern town planning attempts to govern populations through logics of security that plan "a milieu in terms of events or series of events" that are "regulated within a multivalent and transformable framework" (Foucault 2007: 55). A milieu is not designed to eliminate undesired elements or to seek total encompassment of a space. Instead, by working with the material means in an environment, the aim with a milieu is to "maximising the positive elements and reducing risks and disadvantage" through regulated circulation (Bærenholdt 2013: 24). Transit technologies in public transport and mobility settings like airports and ports serve to condition circulation in line with outcomes desired by governing institutions, with diverse effects for users. Michael Fisch (2013) demonstrates this with the case of Tokyo's public transport system and its traffic planning system, that is organized to manage traffic interruptions generated by the regular occurrences of commuter suicides. Rather than working to prevent suicides as an irregularity, the traffic planning system incorporates these as events regularities within the system that focuses on reorganising the running plan of trains to reinstall order. Fisch argues that more than organising commuter trains, this system performs these tragedies as mere "bodily accidents," as the public transport milieu "constitutes a machine assemblage organizing material and immaterial flows meshing with the structure of human thought and experience" (2013: 321-22). A milieu then, is more than about how circulation is regulated and governed. It also affects urban imaginaries and everyday life.

Whereas the framing of the gate environment as a milieu calls attention to its material properties as informed by intentions to govern and regulate urban mobility, these intentions do not control how encounters and negotiations occur. Infrastructure, such as fare collection technologies, does not singlehandedly "represent political ideology but actively participate in often unexpected ways, in the processes by which political relations are articulated and enacted" (Harvey and Knox 2012: 524). Thus, a gate milieu may enact diverse urban political relations, not solely reproducing the political ideology with which they are invested, as

infrastructure creates “conditions of possibility for a wide array of second-order phenomena with unforeseeable consequences” (Ojani 2023: 28).

Approaching fare collection infrastructure as a milieu allows for understanding how human-gate encounters are mediated through a mesh of fare evasion discourses, passengers’ actions, moral debates, and material properties. By considering the governing of the gate milieu together with attention to the practices among metro users, I consider how political-semiotic rhetoric and technical specificities create conditions for, though not determining, the outcomes of passenger-gate encounters. In the gates milieu, then, fare evasion is not an externality eradicated by the gates’ decision-making according to binary logics of fare validations (cf. Lianos 2012), but instead a constant possibility in the material properties of the door gates, as metro users negotiate their degree of openness.

### The issue of fare collection

The metro largely structures the urban topography of Stockholm and provides a means of transport upon which many residents rely in their everyday lives. Among the various transport means included in the same fare system, the metro is the most used, with an estimated 2 million persons boarding on a regular weekday in a region of 2.3 million inhabitants.<sup>3</sup> The first metro line was inaugurated in 1950 following an ambitious plan by the city of Stockholm to develop an underground transport network jointly with the construction of suburban neighbourhoods (Gullberg and Kaijser 2004; Paulsson 2020).<sup>4</sup> The concern with fare evasion and free riders is as old as the metro in Stockholm, and elsewhere (Höhne 2021). In the beginning of the 1940s, ‘regulated passenger circulation’ (*reglerad trafikantcirkulation*) was introduced to decrease the number of ‘free-riders’ (*gratisåkare*).<sup>5</sup> The techniques to manage the circulation of people took shape in the oscillation between passengers’ practices and technological capacities. The first entrance control was composed of railings that steered the circulation of people by leading entering commuters alongside the booths with ticket collectors, who in principle made up the gates by controlling valid tickets. Exiting commuters were moved along the outside walls of the hall, with metal gates obstructing entrances. In the 1980s, automatic ticket gates were installed, in the form of tripod turnstiles made up of two pillars creating a walkway locked by a rotating tripod (Figure 1). Upon ticket validation, the tripod unblocked and allowed rotation of the arms upon the weight of a passenger pushing through. The regional authority presented the change of gates as a rationalization project that would decrease costs of personnel such as ticket collectors and allow a more efficient flow of people through the station (AB Storstockholms Lokaltrafik 1976). Acknowledging that navigating smoothly through the metro spaces is an acquired skill, they noted that the new gates required that passengers “learn a completely new technique” to enter (Sjöberg 1980).

The emerging new techniques included ways to evade fares. Besides jumping over the tripod by bracing one’s hands against the pillars, it was also possible to drag the tripod slightly

<sup>3</sup> These numbers are from 2019, the year before the pandemic which impacted traveling habits considerably

<sup>4</sup> I would like to thank André Klaassen and Elise Perrault for pointing me to archival material about the Stockholm public transport system.

<sup>5</sup> These are quotes from signposts in the permanent exhibition at the Stockholm Transport Museum (*Spårvägmuseet*) that details the history of Stockholm’s public transport. The museum is owned by the Region Stockholm, the regional authority.



Figure 2. Tripod turnstiles in Hässelby Strand metro station in 2015 that soon after were replaced by electronic door gates. Photo: by the author.

backward, as if exiting, which created a gap, enough to easily squeeze through. Research on fare evasion prevention has termed this practice “backcocking,” suggesting that it exists across metro systems equipped with turnstiles (Reddy et al. 2011). When notified of this practice, the regional authority eventually installed photocells at foot level from the exiting side, which required activation for the tripod to rotate. Passengers soon outsmarted this measure by stretching out a leg beneath the tripod, which then allowed the same procedure. These practices were still common during the years before the electronic door gates were installed, as I learned from observations and conversations with other commuters.

Public transport fares are entangled with broader political priorities and ideologies informing the funding and governing of public transport (Hultén 2020). While the fare control infrastructure developed in relation to passengers’ fare evasion practices, financing models also informed their design. As part of broader austerity measures and neoliberal reconfigurations of welfare services, the tax-funded share of public transport was around 70% up until the late ’90s; since then, it has decreased to around 50 % (AB Storstockholms Lokaltrafik 2013). Against the backdrop of reduced public funding and an overall increase in costs to maintain public transport (Trafikanalys 2023), the Transport Administration intensified its efforts to collect fares in the early 2000s. These ambitions included the initiation of a yearly survey of the prevalence of “cheating,” defined as occasions when a passenger travels without a valid ticket, based on observations in metro stations of passengers entering public transport lines without ticket validation (Region Stockholm 2022). In one of the first surveys, it was reported that “insufficient securing of income and lacking moral of payment is today a major issue” with estimations that passengers’ non-paid fares equalled 200 million Swedish kronor yearly (AB Storstockholms Lokaltrafik 2004). The replacement of gates is emblematic of these increased efforts to collect fares, together with a semiotic turn towards a concern with “securing revenue” (*intäktsäkring*) by preventing fare evasion (Stockholms Läns Landsting 2011b). This vocabulary is coupled with a moralizing rhetoric

of fare collection, as exemplified by the former transport councillor suggesting fare evasion not only reduces revenue for the regional authority, it “also reduces the moral of payment among other commuters watching the cheating spread out” (Hernadi 2007).

From 2009 until 2015, the period during which tripod turnstiles were gradually replaced with electronic gates, the estimated loss of income due to fare evasion and malfunctioning gates fluctuated between 238 and 315 million SEK. The percentage of non-paid travels was estimated to be around 3.5% in the same reports, with a peak in 2009 at 4.62%. Notably, these figures are estimations of non-registered entrances, which makes calculations difficult and the numbers unreliable, as pointed out by the regional authority’s own audit (Landstingsrevisorerna 2014). In addition, they include un-paid trips in the public buses and tramways equipped with other fare collecting techniques than gates. During the same period as these surveys, 5,270-7,027 million SEK was collected through fares. The monthly fare has more than doubled since the early 2000s, from 450 SEK to over 1,000 SEK in 2023. The electronic gate investments were estimated to cost 140 million SEK between 2011 and 2015 (Stockholms Läns Landsting 2011a). However, it is difficult to ascertain the actual sum spent on the purchase and the running costs of the gates in the absence of public or coherent numbers on the invested amounts. An official I interviewed in 2015, estimated each gate costing 80,000 SEK, in addition to an estimated 30 million SEK in running costs per annum. Besides the gate investment, other added revenue measures include more frequent ticket controls, and the penalty fare for an unpaid trips increased from 600 SEK in 2003 to 1,200 SEK today.

The Transport Administration’s scheme to “secure revenue” was informed by austerity measures placing increased demands on an increasingly fare-funded public transport. Politicians called for action “to stop the cheating” and advocated for “proper gates that cannot be passed through without valid tickets” (Stockholms Läns Landsting 2003). Based on observations of a trial with the electronic gates of reinforced glass doors in one metro station, the Transport Administration’s expressed confidence that the new gates, “compared to the tripod turnstiles, are safer and more difficult to pass through without a valid fare” (Stockholms Läns Landsting 2011a). The search for replacement gates was steeped in perceptions about the cultural particularities of Stockholm passengers, and in ignorance of other political and economic aspects affecting metro practices. An official that I interviewed suggested for instance that “in Hong Kong they only have low gates with foam rubber so it’s possible to walk through but nobody does it,” compared to Stockholm passengers with “a lower moral of payment” which require higher doors to prevent that they are jumped over.

The manufacturer of the procured gates ensured that their ticket control technology was equipped with “fraud dissuasive access control” delivering a “future secured” (see Figure 3), thus appealing to the promissory capacity of infrastructure to deliver the “future perfect” (Hetherington 2016) at the expense of attention to contemporary conditions in need of attendance. The Transport Administration’s investment in the gates were steeped in projections of a future free from fare evasion, and through that, better secured revenue streams, while present-day experiences of this idealised future rather meant a reorganisation of passenger encounters and fare-evasion techniques in the gate milieu.

The manufacturer, a company specializing in entrance control technologies, assured that their gates with “retracting obstacles for rapid movement” and “high-performance anti-tailgating” prevent the occurrence of non-paid travel while ensuring “high-speed passenger





Figure 3. Brochure about the electronic gates procured for the Stockholm metro. Source: by Automatic Systems.

flow" (see Figure 3). In other words, the gates promised to allow for a milieu that is "maximizing the good circulation by diminishing the bad" (Foucault 2007: 54). Meanwhile, they provided a modifiable framework through a "modular design" necessary to manipulate the regulation of circulation in relation to yet to become known uncertainties.

During my fieldwork, I visited a fair for public transport, which was an assembly of major actors in public transport such as transport operators, technical companies, and consultancy companies. I asked the technical company which was contracted to maintain the Stockholm metro gates where to find them, and learned that I should visit an upcoming security fair that they were more likely to attend. Their gates were used for port facilities, airports, and offices, to name a few examples, where other validation mechanisms such as identity cards would steer their opening. In these settings, they serve private companies. The turn to higher and stronger security technologies for fare collection in the metro assumedly for public interest follows in line with intensified securitization and forms of bordering of urban spaces (Christensen and Albrecht 2020). The Transport Administration's scheme to "secure revenue" was spatially manifested in the choice of gates promising to function as a border against fare evasion, but also as welcoming towards fare-payers. It was by repeating the proposed decoupling of the gates' capacity to secure fare collection and ensure passenger flow that their efficiency could be advocated by politicians. The former transport councillor assured that flow would be ensured since "the gates are constructed to allow several persons to walk through the gate after each other" (Kallin 2008). However, this description of flow predicted the practice that would become possible in order to avoid paying fares, as a result of which the transport administration has to reconfigure the gates continuously and periodically.

### In the laboratory of the gate milieu

The tripod turnstiles worked well, but politicians thought they were too easy to dodge. And people did leap over them, but it required quite an effort [...] with the new gates, anyone can pass through. I've seen old ladies using a cane to activate the photocells so that they can pass through.

These words are Fredrik's, an official at the regional Transport Administration. His observation about the gates facilitating fare evasion complements Marc Augé's observations on the Parisian metro turnstiles in 1986, that with "the current system of control mechanisms, cheating presupposes youth (it is hard to imagine an elderly man or woman flying over the turnstiles in a graceful leap)" (2002: 45). Together, these observations point to how, rather than a question of age, the gates afford diverse techniques and skills to pass through.<sup>6</sup> Aware of passengers' use of diverse techniques to pass through the gates, the Transport Administration set up the "gate laboratory" as Fredrik referred to the room of some twenty square meters equipped with a set of ticket gates in the basement of their office building where we met (Figure 4).

Almost concurrent to the successive instalment of the electronic gates, newspapers reported alongside about passengers who got their arms, legs, and shoulders squeezed by the slamming doors, just to mention a few of the injuries out of the almost 230 incidents officially reported during 2010-2012 (Hammarlöf 2012). The then head of the Transport Administration managing the metro attempted to ease the situation assuring that he had also been lightly squeezed by the doors, before affirming that they "constitute a well-considered system with many good sides of which one is securing revenue" and that the incidents might be due to "people's behaviour" (Ritzén 2012). His reasoning echoed what I heard among several officials and politicians during the time, that if people had only used the gates correctly they would have fulfilled their purpose. When I brought forth the episode of gates jamming passengers with Fredrik, he recalled how eventually "it was decided to take on a nicer approach," to reduce the speed with which the door closed and adjust the photocells to open up in the case of a body detected near the closing doors.

The manufacturer delivered the hardware pre-equipped with a set of modifiable variables, such as the speed of the doors and the functioning of the photocells; installation, modification, and carrying out maintenance of the equipment within the metro stations, is the job of the technicians from a local private company. Prior to handing out instructions for changes in settings to the technicians, the Transport Administration set up a laboratory to test the effects of different settings. There was however, no precise script used for carrying out tests in the laboratory. Fredrik described how they had performed tests with help from colleagues asked to walk through the gates simulating peak hours in metro stations, with some "asked to fare-dodge (*planka*)."<sup>6</sup> Once they found a setting functioning as desired, on these colleagues acting as gate passengers, the technicians were provided the instructions to implement the modifications in "the gate environment," Fredrik specified. Thus, the laboratory served to elaborate and test alternative settings to optimize the trade-off between

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<sup>6</sup> The presumption of fare evasion being a problem associated with youth has also been debunked elsewhere (Eddy 2010).

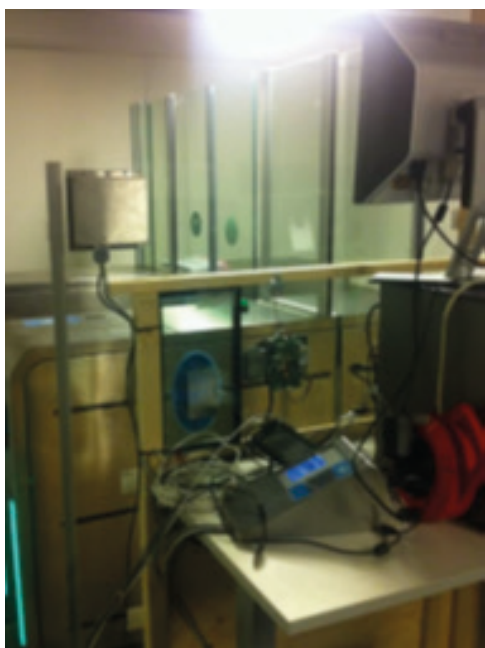


Figure 4. The gates from Automatic Systems in the laboratory of barriers. Photo: by the author.

transportation” and shapes “the rhythm of urban life” (2013: 21). A reason for aggravated queueing was found in the way people entered the gateway before putting the card toward the reader – similar to how the turnstiles were used – by swiping a card and in the same continuous motion, walking through the tripod. However, the photocells deactivated the ticket reader when a body or thing was detected in the walkway prior to ticket validation. This meant that people had to back out of the walkway to validate anew before moving through, which therefore hampered the flow. Eventually, settings were changed so as to also allow ticket validations when inside the walkway, to achieve better flow, at the potential expense of fare collection.

Since then, however, the announcements of modified settings have primarily favoured the bordering purpose of the gates. Traveling across metro stations, I was told by several passengers that they experience the doors closing with varying degrees of aggression across stations, and more so in suburban stations. Although I did not get confirmation from the Transport Administration that this was an intentional setting, it is probable that the settings differ. Technicians must modify each gate manually – there is no way for remote and unified reconfiguration – and it takes time for the technicians to go through each gate across all metro stations when the Transport Administration orders the implementation of a new setting. Difference in gate behaviours is also likely, considering the regulation of the gate as a milieu that is local and contextual requiring specific knowledge of the elements to which the gates must respond. A ticket collector who had worked for a long time in the inner-city station Gamla Stan suggested the presence of prejudices informing fare evasion presumptions.

Many people seem to think mainly of young guys, immigrants, and fare-dodging, but it’s not the case. In Gamla Stan I saw this man with an attaché bag entering behind other passengers

passenger flow and fare collection, or between the desired and undesired circulation. If the replacement of gates started as a project to set the gates in order to optimize the reduction of undesired and unpaid entrances, the incidents of jammed passengers shifted the focus towards fine-tuning the gates to ensure that they let passengers through safely.

The episodes of changed gate settings during their apparent malfunctioning, were among the first in a series of continuous episodes of publicly announced modifications. When installed in T-Centralen, which is the busiest metro station where all lines intersect, long queues emerged in front of the gates and disrupted the rhythm of passengers entering, leading to complaints among metro users. Though Stockholm is a city with far fewer residents, Fisch’s observation about the Tokyo commuter train network resonates here; the metro provides “the primary means of

every day, but nobody noticed him. The office workers are not seen, people only see the others [the young guys, immigrants].

Sitting in a booth positioned across from the line of gates, without any duties to interfere, ticket collectors are first-hand observers of gate behaviours. The observations he made are suggestive of presumptions informing the targeted observations carried out by the Transport Administrations in 2014. In the 2015 “Progress Report on cheating,” the Transport Administration reported that “an observation study of entrances has been made in fourteen selected metro stations” to survey “the occurrence of cheating in the gate milieu” (Stockholms Läns Landsting 2015: 16). The selected metro stations along the northbound blue line and the southbound red line were located in residential areas with marginalized and less affluent households. The observations concluded that cheating was more frequent in these stations than elsewhere; this conclusion was used to initiate targeted ticket controls, which were carried out with support from a recent amendment. The amendment specified that ticket controllers can require help from the police to remove passengers without a valid ticket from the metro (Ritzén 2015). This intervention gained much public attention, as well as much critique for the racialised policing of metro passengers. It was reminiscent of how the metro gates have previously been subject to measures framed as a security intervention against migrants, such as in 2013, when the police used identity checks during ticket controls to deport undocumented immigrants (Galis and Neumayer 2016). These interventions show how fare evasion infrastructure is drawn into intensified policing of urban space (Christensen and Albrecht 2020), as the gate milieu was used for regulating circulation of not only fare collection, but also other undesired movements by the state.

### **Collectivities emerging in the gate milieu**

The attempts to govern circulation in the gate milieu were conditioned, without determining how encounters in the gate milieu unfolded. A manifestation of this was visible to me, on an occasion when I arrived at the entrance hall of the Slussen station. Two persons standing in the middle of a gateway caught my attention since it is an unlikely place for mingling. The woman furthest into the walkway stretched her arms out while loudly saying “stop, stop!” to hold back the man behind her. As he backed out of the lane, the woman continued through, and the doors emitted the mechanical sound of the mechanism pushing for their closure. Another person arriving proposed that the man to enter with her, which she facilitated by moving straight through, leaving enough time for him to follow. In the escalator leading down to the platform I ended up next to the man who, notably uncomfortable, shared that “it’s so embarrassing when it happens, it’s so embarrassing.” When the escalator arrived at the platform, he merged in with the crowd, of which his earlier opponent was also a part. When the train arrived, the doors opened, and the waiting crowd entered. By these doors, I have observed on several occasions how persons on the train put their hands in front of the photocells that are placed right by the inside of the doors to ensure they only close if the passage is clear of persons or objects. The incident that I observed at Slussen station appears to be more than an exception. An anonymous tweeter described frustration from a similar event in the following terms: “stayed inside a barrier so that the fare-dodger couldn’t fare-dodge. Another passenger helped the person to #fare-dodge hopeless!” (Figure 5).



Figure 5. “Stayed inside a barrier so that [the] fare-dodger couldn’t fare-dodge. Another passenger helped the person “#fare-dodge hopeless!” Tweet by an anonymous commuter.

The episodes of people negotiating entrances are indications of how the gates provide what is needed in a milieu “to account for action at a distance of one body on another” (Foucault 2007: 55). In comparison to the sliding doors of the train through which people on the platform enter as a crowd, the gate doors render visible each passenger’s entrance. Based on the principle that the gates open up when presented with a valid ticket, any following persons getting through the doors opened by the first one passing, appear fraudulent. However, it does not necessarily equal an unpaid entrance, as a passenger reminded me. As one of many regulars who hold the pre-paid monthly fare, this man in his 40s explained how he repeatedly followed behind others to get through faster, than it took to take out the card and wait for the validation, until the doors close behind the previous person. Confident with how to handle the eventuality that the door closes before being through, he had the habit of holding up the arm as a blocking safety measure. His practice of piggybacking might appear fraudulent but did not equal fare evasion, which is an important caveat to counter assumptions about causality between fare evasion and tailgating.

Certainly, many passengers were indifferent to how fellow metro riders went about passing the gates. However, conversations that I had with metro users surprisingly often revolved around opinions on how to act in the case of forced entrances and the reasons why. One common practice was to make a halt after passing the doors, not allowing the following persons through. There were different reasons as to why. Some explained doing it primarily because of accreted frustration with being pushed in their back and having fellow passengers get too close physically. For instance, a woman in her 30s explained irritation over “people squeezing through behind you, breathing into your neck and pushing your back.” According to her reasoning, this was a matter of common sense and the correct way to behave: “they could at least ask before” she suggested, adding “if they would ask, just like ‘I don’t have a ticket can I go in with you?’ it would be fine, it’s just so annoying to be pushed.” Of importance here was less how fellow passengers potentially avoided paying fares, but more, how they managed the situation concerning body contact. Traffic relations overall are embedded in social norms that sanction “offense through unnecessary claims on

the other's senses" (Hannerz 1980: 105). The subject of fare evasion itself is entwined with presumptions about civility, in Stockholm, as well as in Brussels, with their similar gates (Sträuli and Kębłowski 2022).

Other passengers who actively made a halt reasoned along the lines of this being a necessary act so as not to be "paying for others' tickets." Such comments were present also in online forums, such as a Reddit thread initiated with the question "If you notice someone fare-dodging behind you in the metro gates, do you let them through? Why/why not?" to which a person responded by blocking others based on the principle "I paid for my trip. You pay for your own" (BanAllAds 2023).

Passengers who skipped validating fares, regularly or occasionally, expressed a different feeling in doing so with the new gates. A passenger traveling the metro for many years without paying fares said, "it feels more personal to fare-dodge now" and explained that it was due to the reliance on other persons to pass through, which was not the case with the turnstiles. The relational implication became explicit in an incident described by a passenger who recounted entering "through behind a girl maybe 10 years old, but I felt so bad, I mean it doesn't feel very morally defensible to take advantage of a child..." An experienced fare-dodger illustrated clearly the role of the material properties of the gates, in shaping political and moral subjectivities in gate encounters: "with the turnstiles, it felt more as if you were against the system when you leaped over, now it feels more like you are against other people." Through this comparison of differences between ticketing infrastructure, the passenger's reflection suggested that urban material properties generate subjective experiences that can play into the grounds on which fare collection systems are legitimized. If fare evasion is understood as causing a diminished budget for metro maintenance, it legitimises the gates' presence and their need of human assistance to achieve the purpose of stopping fare evasion.

While the material properties enabled passengers' gatekeeping of fare collection, they also allowed for assisting fellow passengers. In Skanstull station on a weekday afternoon, I observed a passenger halfway through the gate placing his hand toward the opened glass door, when turning around addressing the man standing a few meters behind: "Are you joining?" Nodding affirmatively, the man hastened forward inside the walkway, where the first man having entered removed his hand from the doors once the follower was close enough to take over the holding up if needed. This act is possible by a combination of force holding the door up, and the photocells in the walkway nearest the door that will reverse the closing movement when detecting something between them. While passengers were differently aware about the technical details of how the doors and photocells operated, many had learned that the doors were weak enough that a determined arm push could hold them off. The association *planka.nu* made efforts to spread knowledge about how to manoeuvre the gates to enable easy entrance, through videos showing for instance that putting a sticker on one of the several detectors alongside the open door would keep it open. Such acts to keep the doors open are reminiscent of alternatives to the current situation of face-to-face, or body-to-body, negotiations between fare payer and evader determining the doors' opening.

I recounted my observations of passengers assisting each other through, to a passenger who nodded, affirming that "of course, I always try to help people through," explaining that sometimes a smile toward people standing in the entrance hall is enough to signal approval that they might enter along. I found analogies to the position she expressed, in the numerous times that I observed subtle eye contact, a nod or a wave followed by several

persons entering through together. In the thread on Reddit, those arguing for gatekeeping were countered by at least as many suggesting that they did not care what others were doing. Some argued that it was quite acceptable to assist others, such as the person writing “next time I might be the one without a ticket for some reason. We should help each other in these times of insane fares.” Another pointed out not wanting to “act hobby police for [the transport administration]” (BanAllAds 2023). These inputs often indicated that public transport ought to be a welfare service accessible to all and an urban right.

During a couple of years around 2015, the Transport Administration accompanied its campaigns with the slogan “together it all works” (*tillsammans funkar alltsammans*). It figured on posters in the metro, and on the webpage titled “shop of fines” (*botshop*) launched by the administration; it was meant to engage passengers in voting for whether they wanted the Transport Administration to offset fares from ticket controls with income from penalties levied. These efforts to encourage paying the fares, and to denounce fare evasion as the cause for malfunctioning metro services, were “couched in a moral-pedagogical language” (Von Schnitzler 2008). Read through the rhetoric of the Transport Administration, the slogan called for a solidarity exclusively for, and amongst paying passengers. For instance, this was manifest in the former transport councillor’s motivation for harsher measures towards fare evasion since “too many people travel with SL without paying [...] and it should hurt to sponge off other commuters” (Hernadi 2007). It is through such reasoning of fare evasion harming fellow passengers that the use of ‘cheating’ makes sense: cheating suggests a relationality of action at others’ expense. Considering how infrastructure produces phenomena beyond its intended services, the gate milieu mediated urban political relations in ways that distorted the intended meaning of the slogan. The solidarity observed in the incidents of passengers assisting each other, suggests an alternative collectivity among urban dwellers, enacting the metro as a public transport to be accessible irrespective of fare-paying capacity.

Concerns with fare evasion have been debated and are part of public transport discourse in Stockholm for a long time. If previously expressed through opinions and comments towards turnstile-leaping passengers, the current gate milieu reconfigured the debate by pulling passengers into taking hands-on action in relation to opinions. As passengers recounted, these situations reckon fare collection as a problem situated between individual passengers who pay fares, and whose transport service is at stake due to fare evasion.

## Conclusion

In this article, I focus on the social and political dynamics instituted in the metro gate milieu to inquire how they mediate the legitimization of contemporary fare collection measures, and what this reveals about the larger politics of fare collection. By analysing the gate environment as a milieu, I have attempted to demonstrate how the rhetoric of fare evasion framed in moralizing terms and as a threat to the continued smooth functioning of the metro, play out in encounters among passengers at the gates. The instances of passengers assisting the gates in collecting fares, and by consequence reinforcing the regional authority’s discourse, resonate with Foucault’s suggestion of modern security logics seeking for spatial designs that assist people to “govern themselves with the help of material equipment and the environment / milieu, much of which enables mobility and circulation” (Bærenholdt 2013: 25). In line with the power relations in a milieu, as I have demonstrated that the Transport Administration was continuously occupied with reconfiguring the gates to ensure

they were optimized between their purpose of both assisting passenger flow and circulation, and blocking undesired elements in the form of unpaid entrances.

Through ethnographic engagements with passengers in the gate milieu, I showed how, while shaping negotiations in the gate environment, the fare collection infrastructure and rhetoric did not determine how gate encounters played out. As a technical solution to fare evasion, the gates did not reduce complexity and preclude human negotiations (cf. Lianos 2012). If anything, they are embedded in enhanced complexity, as the margin of indeterminacy presented by the sliding doors opening, distributes the decision to block or let other passengers pass through, to fellow passengers. Through material components of photocells and doors organizing entrances around interpersonal encounters, and through semiotic figures of fare evasion as cheating and reducing moral of payment, the gates were instigating passengers to act as gates. Meanwhile, other passengers used the gate affordances to assist fellow passengers to get through. By identifying the diverging ways in which passengers engage with the gates, the analyses moved from attending to the gate milieu as governing behaviour, toward exploring the two broader groups of collective action that emerged between assisting fare collection and passenger flow. The collective subjectivity formed around assisting fellow passengers into the metro emerges as “sites where the technical, improvisational potential of collective life is forged” to bring about alternatives to contemporary privatization of urban infrastructure (Stokes and De Coss-Corzo 2023: 430), such as public transport.

However, read through the lens of infrastructural labour, both these practices are troubling as they suggest how the gate milieu brings passengers into positions of contributing to public transport maintenance by performing the work for which the regional authority installed the gates. The Stockholm metro commuter communities reliant on this public transport infrastructure are exposed to the work of patrolling fare collection. Furthermore, such exclusionary practices impede others who depend on the metro for access to urban spaces. By so doing, they exacerbate urban and social injustices, similar to how communities relying on an urban infrastructure are burdened with ensuring its maintenance (e.g. Randle 2020). The regional authority’s modified fare collection system came with promises of the capacity of the electronic gates to secure the revenues needed to secure the future of the metro for the city’s dwellers. The gate milieu inverts this relation as metro users are drawn into acting as gates and assisting in fare collection, and by so doing contribute to securing revenue for the public Transport Administration.

The episodes in the gate environment reverberate beyond the question of fare evasion into questions about how the gate arrangements and moralized repertoire in which they are inscribed, constitute a challenge for public transport to contribute to urban social justice and environmental transitions. The passenger negotiations in the gate milieu spark polarisation and reinforce framings of fare collection as an issue about passengers’ willingness to pay. By generating such polarisation, the gate milieu shapes the forms of collectiveness that present themselves as alternatives to favour; it also strips the question of fare collection from its broader politics of distributional justice and inclusiveness.

I have shown how passengers assist each other to enter, and occasionally the gates perform the same action when standing open *en masse* due to technical issues as happened in the summer of 2023 (Bremen 2023). However, together with the continuous dismantling of existing public transport infrastructure, the gate milieu gives prominence to the



collectiveness, or ‘togetherness’ in the repertoire of the public transport administration, of fare-paying being the ground for entitlement to the metro. As such, it obstructs alternatives for advancing accessibility to public transport administration as an urban right, and complicates opportunities to unite around solidarity efforts to counter social injustices in late industrial urbanity.

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