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Experimental Logics of Street Transformations

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Abstract

Street experiments are proliferating in cities worldwide and have emerged as an approach to transform urban mobility and public space. Previous research attests to the broad spectrum of street experimentation and its variety of stakeholders, aims, methods, and impacts. In this article, we probe this multi-faceted nature through a study of the landscape of street experimentation as it evolved in one city—Stockholm, Sweden—over a 10-year period (2014–2023). Through document analysis and 19 semi-structured interviews, we analysed stakeholder involvement, motives, and interactions related to four different platforms of street experimentation. Our temporal, evolutionary perspective moves beyond isolated case studies to show how experimental logics emerged over time in Stockholm via shifting ambitions, foci, and stakeholder constellations. The city-specific perspective allowed us to analyse how experimentation develops and transforms as actors change, thus revealing dynamics of complementarity and competition, the addition or subtraction of layers, and successful as well as missed opportunities for between-experiment learning. The article highlights the crucial role of municipal actors for implementation and scaling, but also their limited capacity to effect transformative change.

Keywords

governance; institutionalisation; participation; street experiment; tactical urbanism; urban mobility; urban transformation

1. Introduction

Street experiments are proliferating in cities worldwide. They have emerged as a quick, affordable approach to reimagine and change mobility and urban space. They can range from smaller tactical interventions to large-scale municipal transformations, and they often bring together various stakeholders with potentially diverging goals (Bertolini, 2020, 2025; Garau et al., 2024; Glaser & Krizek, 2021; VanHoose et al., 2022; Verhulst et al., 2023). Existing scholarship stresses both promises and pitfalls: while street experiments *can* change mobility patterns, democratise public space, generate new governance practices, and initiate greater socio-technical change processes, they may equally have exclusionary, commercialising, and depoliticising effects (Littke, 2016; Sierhuis et al., 2024; Verlinghieri et al., 2024; von Schönfeld, 2024).

A growing body of literature on street experiments has sought to classify and evaluate these interventions. Bertolini (2020) proposed a framework to assess their transformative potential—to what extent they are radical, challenge-driven, feasible, strategic, and communicative/mobilising—which has been further developed and applied in subsequent research (Glaser & Krizek, 2021; VanHoose et al., 2022). VanHoose (2023) synthesised barriers and enablers, highlighting the crucial role of long-term institutional support as well as the tensions between early municipal enthusiasm and later confinement by established institutional processes. Other scholars have drawn attention to governance conflicts (Vitale Brovarone et al., 2023), democracy and justice (Eneqvist & Karvonen, 2021; Smeds et al., 2023), as well as public acceptance around street experiments (Marcheschi et al., 2022; Smeds & Papa, 2023). These studies attest to the wide spectrum of experimentation in terms of actors, aims, means to achieve those aims, and kinds of impacts. However, most studies examine isolated cases or compare multiple cities while paying less attention to how street experiments evolve diachronically within one context.

Recent scholarship has started to address this gap by tracing the trajectories of street experimentation within single cities. Studying Ghent's Living Streets programme, VanHoose and Bertolini (2023) conceptualise three municipal roles—promoter, enabler, and partner—to capture how the local authority's position evolved as the programme developed over a decade. They find that, in the early phases, the municipality's role as promoter and enabler benefitted the transitional capacity of street experiments. As the programme matured, the municipality's later promoter–partner role provided stability but reduced radicality. Villani and Talamini (2023) analyse Hong Kong's pedestrianisation experiments over time, showing how different trajectories reflected changing governance responses, from commercially initiated, contested uses of public space, to more regulated and tightly managed forms of pedestrianisation, with some experiments ultimately discontinued.

Meanwhile, Verlinghieri et al.'s (2024) study of a collaborative pedestrianisation experiment in Turin traces how the locally driven initiative became, due to municipal and institutional pressures, more constrained and with less transformative ambition. In contrast, Smeds et al. (2023) explore the evolution of participation and access regarding street experimentation in connection to New York's public plaza scheme, and show how citizen coalitions transformed a top-down, inequitable scheme into a more inclusive approach that enhanced equity in public space. Together, these studies illustrate that street experiments should not be understood as static interventions but rather as evolving practices embedded in shifting political and institutional configurations, often—but not always—marked by an increasing consolidation of municipal control.

This article contributes to this literature through a diachronic analysis of Stockholm's decade of street experimentation (2014–2023) to identify different experimental logics. We draw on the concept of institutional logics, which captures the drivers and ambitions that shape actors' identities, practices, and understandings of legitimate behaviour (Hellquist et al., 2025; Thornton & Ocasio, 2008; Thornton et al., 2012). Berglund-Snodgrass and Mukhtar-Landgren (2020) distinguish between a bureaucratic logic of conventional planning—with hierarchy, stability, and accountability as defining features—and an experimental logic oriented toward innovation, exploration, and testing. In this article, we move beyond this dichotomy to differentiate between *multiple* experimental logics in street transformations. These logics embody different approaches to reworking the form and function of streets with a range of outcomes, allowing for a fine-grained analysis of how their ambitions, actor constellations and participation, governing practices and tools, and forms of learning and institutionalisation shape the evolving streetscape.

We identify four experimental logics, demonstrating a loose chronology with partially overlapping phases: a tactical grassroots logic, a pragmatic municipal logic, a challenge-led innovative logic, and an embedded administrative logic. Each was championed by different actor constellations and carried distinct ambitions for transformation, participation, and learning. By tracing these logics, the article makes two contributions. Firstly, it shows how the meanings and functions of street experiments change as they are appropriated by different actors. Secondly, it highlights the trade-offs between experiments as drivers of radical transformation and as instruments of more incremental adaptation. In this way, the Stockholm case adds to debates on urban experimentation and governance by illustrating not only how municipalities act as promoters, enablers, and partners (VanHoose & Bertolini, 2023), but also how other stakeholders—civil society groups, designers, commercial actors, and national agencies—reshape the experimental landscape. In doing so, the article brings a broader, multi-actor perspective to the evolutionary study of street experimentation.

2. Methodology

To explore the logics of street experimentation, we conducted a case study of Stockholm activities between 2014 and 2023. Our diachronic approach allowed us to trace the outcomes of individual experiments as well as the interplay between them, the shifts in stakeholder constellations, and the changing logics of experimentation.

We reviewed municipal policy documents and project reports relating to key interventions. These documents provided background information on the rationale, implementation, and reception of the experiments. We also conducted interviews with individuals involved in the design, implementation, and evaluation of street experiments in Stockholm, seeking to capture a broad range of perspectives, from grassroots organisers to senior municipal officials. Some participants were not directly involved in our key projects but were interviewed for their strategic perspectives on how these initiatives were viewed and managed within the Traffic Administration. In total, 19 interviews were conducted between 2022 and 2023, including with project leaders from the City of Stockholm (P1–P4), consultants from the private sector (C1–C6), representatives from the Traffic Administration (T1–T6), a civil society member (G1), and project leaders from the national government agencies Vinnova and ArkDes (N1–N2). The interviews lasted 40–95 minutes, most of them conducted remotely (online). The interviews explored the interviewees' motivations, experiences, and reflections on the experiments. All interviews were transcribed and coded

thematically, alongside project documents, to identify the street experiment logic in terms of intervention design, stakeholder roles, sources of inspiration, ambitions, success factors, obstacles, long-term strategies, and learning processes. Quotations are cited verbatim (with minor adjustments for readability) to preserve the voices of stakeholders.

We identified four key platforms of urban experimentation: Pallis (2015), Levande Stockholm (2015–present), Framtidsgator (2020–2021), and Street Moves (2020–2021). Additional potential cases surfaced through our research but were excluded for different reasons: some lacked available interviewees, while others differed substantially in character or were too embryonic to analyse systematically (e.g., the city's play street trials and the recent work on low-emission zones). We do not seek to provide an exhaustive account of every experiment but instead to trace how experimental logics emerged over time. The emphasis is on interpretation and synthesis rather than evaluation of outcomes.

3. Tactical Grassroots Logic—Pallis (2015)

The first experimental logic is *tactical grassroots*: community-driven, small-scale experimentation that challenges conventional assumptions about who can initiate urban change. This logic is exemplified by Pallis, a temporary "pop-up" park established in the Södermalm district in the summer of 2015. Pallis was modest in scale—it occupied a short cul-de-sac for one month—but it has since acquired a symbolic status as the starting point for street experimentation in the city. It followed a tactical urbanism approach that is citizen-driven, experimental, and deliberately temporary, with the municipality playing the role of enabler (Schreiber, 2025; Webb, 2018).

Pallis emerged from the initiative of two well-connected individuals: a well-known Swedish actor and the CEO of the Stockholm chapter of the Swedish Property Federation. Motivated by a desire to question the limits of shared urban space, they sought to create "temporary arenas for meetings and activities, at no cost and open to all" (Fastighetsägarna Stockholm & White Arkitekter, 2016, p. 2). They identified a section of Åsögatan—a "rather desolate place" (G1) along which one of them lived, but close to a lively street—as the site for a temporary community-driven transformation (see Figure 1).

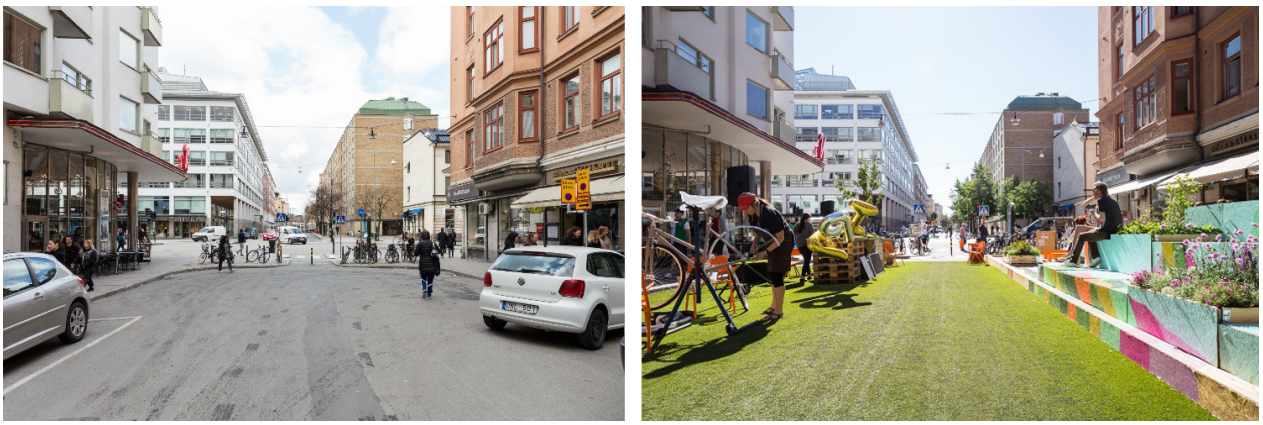

Figure 1. Åsögatan before (left) and during (right) the establishment of the Pallis pop-up park. Photo: Thomas Zaar, White Architects.

The intervention involved closing the street to traffic and furnishing it with temporary structures made largely from pallets (the name "Pallis" plays on *lastpall*, Swedish for pallet). The space hosted a wide range of community-led practices: DIY jewellery-making, skateboard deck design, horticultural tutorials, food trucks, DJs, and live performances. At the end of the project, residents were invited to take elements of the park home to ensure that the material legacy of the initiative lived on in the neighbourhood (Fastighetsägarna Stockholm & White Arkitekter, 2016). This combination of community initiators and simple, temporary interventions reflects the actor–practice configuration of the tactical grassroots logic.

The initiators drew inspiration from international and local precedents: the pedestrianisation of Times Square in New York, the spread of parklets in San Francisco, the Superkilen project in Copenhagen, and the culture of temporary architecture in Berlin (Littke, 2016; Prytherch, 2022; St Hill, 2019). One organiser, who split his time between Stockholm and Berlin, noted the contrast between Berlin's citizen-driven transformations and Stockholm's "rule-based" planning culture, where "nothing ever happened without the city administration's initiative" (G1). Pallis was thus a deliberate attempt to test "whether a more Berlin-inspired approach was possible in Stockholm." The ambition was not only to activate a forgotten space but also to democratise urban design and challenge assumptions about who has the right to shape the city. As one landscape architect recalled: "The driving force was to test what is possible to do in Stockholm, quite simply, in the form of fun initiatives in the streetscape….To test the limits for our common spaces" (C6). Thus, the experiment explicitly tried to challenge the presumed understanding of legitimate behaviour on city streets.

Although initiated by a small core group, Pallis, with its open-ended organisational structure, quickly expanded into a collaborative endeavour. An architecture firm, whose employees lived nearby, contributed *pro bono* design expertise. As one of the landscape architects explained, "temporary architecture" had become *en vogue*, and the firm connected Pallis to their "chain of place-making [activities] in the city" (C6). The members of a housing society and local businesses—including a bicycle repair shop, a tattoo studio, and café owners—participated in workshops to co-design the site. Sponsors provided plants, sand, and materials. Importantly, local residents were not only consulted but directly involved. The organisers "went around the neighbourhood and talked to people and put up notes," inviting them to participate in the design and construction. "And surprisingly many people thought it was a great idea and wanted to be involved," one initiator explained, continuing: "Of course, it was us who were the project managers at the beginning, but towards the end it had become much more of a kind of spontaneous, anarchic order, which was also very lovely" (G1). Civic initiative rather than formal planning was the driver and ambition behind the logic.

This participatory ethos sets Pallis apart from other street experiments and aligns with contemporary notions of co-production and co-design of public space (Huybrechts et al., 2017; Lee et al., 2024). It fostered a sense of ownership: "We wanted everyone to also feel that they themselves had invested a little in it to increase the feeling of ownership" (G1). The lack of budget, which could have been a limitation, was instead recast as a catalyst for community commitment. According to one organiser, the goal was "democratic somehow," to test what interventions could "do to the cohesion in a neighbourhood" (C6).

The biggest obstacle came from municipal regulations. Stockholm lacked a permit category for temporary, non-commercial use of street space. The only available option—an outdoor dining permit—involved a cost far beyond the organisers' means. After initial resistance, one organiser used personal contacts to lobby senior politicians and administrators. Eventually, the head of the traffic administration found a workaround

by categorising Pallis as a "religious gathering." As one organiser recalled, "[the head of department] was very creative, I thought, because in the end he managed to find a category [that we were allowed to use]" (G1). This workaround allowed the initiative to go ahead legally without prohibitive costs. The episode highlighted both the rigidity and flexibility of municipal bureaucracy. On the one hand, existing regulations posed a major barrier. On the other hand, sympathetic officials could find ways to bend the rules, enabling experimentation through informal means.

Once implemented, Pallis benefited from strong media coverage. The involvement of a well-known actor, combined with the communications expertise of the other initiator, ensured publicity. The presence of Janette Sadik-Khan, New York's former traffic commissioner, on the opening day further boosted visibility. National television covered the launch in real time, and newspapers reported on the project throughout its one-month existence. Interviewees consistently described Pallis as a "success" that created a good "vibe" and attracted enthusiastic participation.

Despite its success, Pallis had limitations. It lasted only one month, and the organisers did not conduct a systematic evaluation. As one landscape architect put it, "What were we going to do with it [an evaluation]? Why? No, I think we're more doers" (G1). The ambition was never to create a permanent transformation but rather to inspire others: "We had hopes that it would also lead to more people taking things into their own hands" (G1). This lack of formal learning mechanisms is a common symptom of many urban experiments (Evans et al., 2021; Metzger et al., 2025; Zhao & Sun, 2025). As a result, the impacts of Pallis depended largely on diffusion through inspiration and storytelling, rather than structured evaluation.

Still, Pallis left tangible legacies. The organisers published a *Handbook of Citizen-Driven Urban Development* (Fastighetsägarna Stockholm & White Arkitekter, 2016), with practical advice on how to identify sites, mobilise communities, and navigate bureaucratic processes. The handbook explicitly aimed to inspire others to replicate the model. Perhaps more significantly, Pallis triggered changes in municipal regulations. City officials recognised that the absence of a "temporary park" category had posed unnecessary barriers. Drawing inspiration from San Francisco's *Parklet Manual*, they created a new permit type for non-commercial, temporary street uses. By 2017–18, fee-free permits for non-commercial uses were introduced, lowering barriers for cultural events and installations (T4). As one interviewee argued, this was "Pallis' greatest gift to the afterworld" (C6). These outcomes illustrate the logic's learning and institutionalisation patterns: primarily informal and inspirational, although with some influence on municipal routines.

Pallis exemplifies a grassroots tactical experimental logic with activities that are small-scale, temporary, low-cost, and community-driven. It explicitly challenges the perception that urban change must always come from municipal authorities. At the same time, its very existence depends on informal alliances with sympathetic officials, who circumvent bureaucratic rules to make the project possible. The municipality's role was ambiguous: while existing rules formally obstructed the experiment, officials informally enabled it. The participatory ethos of Pallis—its emphasis on co-creation and community ownership—distinguished it from later street experiments in Stockholm, where grassroots involvement would be less pronounced.

4. Pragmatic Municipal Logic—Levande Stockholm (2015–ca. 2019)

A contrasting experimental logic of street transformation in Stockholm is defined by the municipality's assumption of leadership. We refer to this logic as *pragmatic municipalism*. From 2015, Levande Stockholm ("Living Stockholm") emerged as a programme for temporary street interventions that then grew into a citywide municipal platform. This programme brought experimentation from the margins into the centre of governance, reshaping its purposes, actors, and outcomes. Municipal leadership enabled scaling, visibility, and continuity at the expense of community participation, highlighting municipal control and administrative feasibility as the ambitions driving the logic.

Levande Stockholm originated in the political climate of the mid-2010s, when the Green Party controlled the transportation agenda in Stockholm's municipal government. Inspired by international precedents, the mayoral office introduced temporary pedestrian streets in the city's 2015 budget. As one policymaker recalled, "my idea was to distribute a lot of seating, greenery, larger outdoor cafés and get like this cozy urban life…a pretty quiet, pleasant street you can kind of stroll on" (T4).

The first year saw two summer pedestrian streets, closed to cars for several months and activated with temporary furniture, greenery, and opportunities for pop-up parks and cafés (see Figure 2). The approach was explicitly experimental. Officials stressed that the temporary framing reduced risk and allowed both the administration and the public to "test" changes without permanent commitment—attesting to the logic's focus on governing through reversible pilot interventions (Karvonen, 2018). As one policymaker put it: "I think that testing…it's a good way to move forward a little bit, especially with 'scary' measures such as closing out cars somewhere. It might be a lot more appetising to say, 'we're just testing'" (T1). The trials also worked internally to "create acceptance for these kinds of measures within the city [administration]" (T1) and provoke established professional norms such as prioritising car traffic flow and the separation of modes.

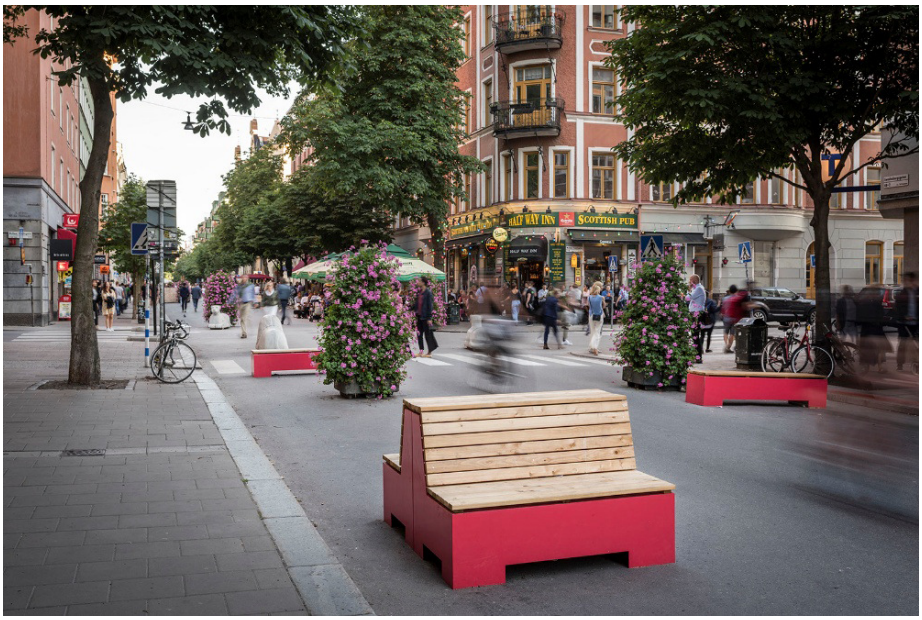

Figure 2. Swedenborgsgatan—one of the first two summer streets in the Levande Stockholm project. Photo: Ernst Henry, Sweco Architects.

Thus, the early pedestrian streets acted not only as interventions in public space. They were also bureaucratic provocations that challenged existing understandings and practices within the administration.

After this tentative beginning, the programme expanded rapidly. By 2016, four streets were included; in 2017, 10; and in 2018, around 20 sites, including "winter streets" and experiments in suburban districts (Trafikkontoret, 2018). Replication was propelled by both political and societal demand. Politicians saw in Levande Stockholm a visible and popular way to promote sustainability and liveability, while local businesses, property owners, and residents increasingly requested to host pedestrian streets. As one consultant noted, "the city districts have become increasingly eager to host summer pedestrian streets, while the city itself has begun to use the initiative as a branding tool to promote Stockholm to visitors" (C3). The pedestrian streets thus acquired a dual identity as neighbourhood amenities and as a marketing device to attract tourists.

The success of the programme depended on strong political support. Initial reactions were mixed, but as the initiative gained popularity even parties on the right, sceptical at first, endorsed it for its benefits to commerce and tourism (T4). This political backing, paired with internal support within the administration, empowered civil servants to take risks and defend the programme in the face of criticism. As one official observed:

> We were probably also a little tougher [than in some other cities] actually…removing parking spaces and [being] tougher at regulating, which also meant that we maybe got a little further. But I think it has to do with the fact that we actually have political decisions on what we do, and that we have the traffic department's leadership behind us. (P3)

The political backing both empowered the programme but also made it explicitly dependent on political leadership.

Another important factor was the creation of a cross-departmental project team. Levande Stockholm brought together traffic planners, communicators, regulatory experts, landscape architects, and land use specialists who otherwise worked in silos. This novel collaboration allowed for more agile handling of permits, design, and activation. Over time, the Cultural and Sports Departments joined, contributing art installations and physical activity initiatives, while district administrators used pedestrian streets as "security-creating measures" (C3). One policymaker remarked that "the trials offered a chance to unite the city's administrations around a new way of working" (T4). In this sense, the programme not only produced new public spaces but also new institutional arrangements (Bulkeley, 2019; Karvonen, 2018).

Despite its popularity, Levande Stockholm differed sharply from Pallis in its engagement with residents. A few early projects involved businesses, property owners, and housing associations as initiators and custodians, but as the programme scaled, grassroots involvement waned. Cafés and restaurants became the dominant actors besides the municipality. A policymaker lamented that "outdoor cafés and dining areas have taken over a lot in some places….I wish that there had been more stakeholders who wanted to do things…and that there had been greater creativity from below….It is hard to get this [non-commercial] rolling" (T4). Thus, even though administrators were sympathetic to grassroots initiatives, they lacked the time and means to facilitate and support such endeavors. The municipality's framing of Levande Stockholm as a programme to "activate" streets encouraged commercial uses that were easy to organise and sustain, which entailed a more structured and institutionally driven mode of participation. In contrast, the participatory ethos of Pallis, with its emphasis

on co-creation and neighbourhood ownership, was largely absent in Levande Stockholm, marking a distinctive configuration of key actors and participation within this logic.

Not all responses were favourable. According to municipal evaluations, though most feedback was positive, recurring complaints involved lost parking spaces and noise from cafés and restaurants (Trafikkontoret, 2018). Motorists expressed frustration at reduced access and a project leader also noted that the city lost revenue from parking fees (T4). Early signs of geographic variation and imbalance also emerged. Central, affluent districts proved easier to activate, while suburban areas, with less commercial activity, were more difficult to animate and experienced less impact. As one planner remarked, while central, affluent districts "'activate themselves' thanks to external parties'...resources and capital," suburban areas often lacked the "local anchoring" that gave experiments social vitality, therefore requiring more effort from the municipality (P4).

The programme also marked a shift in learning practices. Compared to Pallis, Levande Stockholm engaged in more systematic evaluations of its temporary interventions. Nevertheless, these assessments remained site-specific and focused mainly on technical issues and user satisfaction. Hence, the logic focused on what is referred to as single-loop or first-order learning rather than broader institutional reflection (Beukers & Bertolini, 2021; Zhao & Sun, 2025). From around 2018, the programme also began to serve as a platform for testing designs before permanent reconstruction—"to see if it works or not," as one project leader explained (T3). For project leaders with limited pilot budgets, Levande Stockholm offered infrastructure—furniture, signage, competence—that made experimentation cheaper and easier (P3). While this testbed role was not its original purpose, by the late 2010s it had become a recognised though still informal function.

The pragmatic municipal experimental logic involves low-risk testing and promotion of temporary interventions to trial car-free streets, activate public space, and build acceptance for permanent changes. While the approach supported scaling and visibility, it had limited grassroots participation, minimal learning beyond the site, and revealed challenges such as commercial dominance and uneven geographic outcomes. In short, Levande Stockholm marked the shift from a marginal grassroots initiative to a centralised municipal platform, demonstrating both the power and limitations of municipal leadership. It transformed experimentation into a tool of governance. While it paved the way for permanent redesigns and citywide scaling, it foreshadowed debates about participation, equity, and purpose that would be more prominent in later programmes.

5. Challenge-Led Innovative Logic—Framtidsgator and Street Moves (ca. 2020–2021)

By the late 2010s, Levande Stockholm had become the city's platform for street experiments, with a focus on low-risk, temporary, and politically acceptable interventions to activate public space. Around the same time, a different strand of experimentation emerged. Carried forward by national innovation agencies, design firms and institutions, and research organisations, this third phase reframed experimentation around a logic of *challenge-led innovation* (Buylova et al., 2025; Janssen et al., 2021, 2023). The goal was not just to test incremental improvements but to challenge car-dominated policies and entrenched planning norms, and to produce systematic knowledge that could be scaled up. This new logic is illustrated by Framtidsgator ("Future Streets," 2020–2021) and Street Moves (2020–2021).

The reorientation was reflected in the constellation of actors involved. While Levande Stockholm was firmly anchored in the municipal administration, the new projects were funded and driven by national bodies such as Vinnova, Sweden's innovation authority, and ArkDes, the national centre for architecture and design. They worked in collaboration with universities and private design firms and consultancies who participate in expert-led urban innovation programmes and actions involving digitalisation, greening, economic development, and social cohesion. The City of Stockholm remained a necessary partner, but not the lead actor. Instead, the municipality became one stakeholder among many—characteristic of this logic's actor constellation. The redistribution of authority created opportunities for more radical experimentation, while also generating tensions between overlapping platforms.

Framtidsgator was the Stockholm-based pilot within the broader Smarta Gator (Smart Streets) research and innovation programme, coordinated by KTH in collaboration with Chalmers, VTI (The Swedish National Road and Transport Research Institute), Spacescape, and other architectural firms. The initiative drew inspiration from international models—particularly the National Association of City Transportation Officials' Urban Street Design Guide (2025) and the Global Designing Cities Initiative (2025)—building on New York's high-profile public space transformations. The project leader recalled that Sweden's national street guidelines were "car-centric and outdated" (C1), and the core ambition was to challenge these entrenched standards by promoting multifunctional and multimodal street use. This work ultimately resulted in the publication of the *Design Guide for Smart Streets* (KTH et al., 2022), offering municipalities a more flexible framework. Locally, Framtidsgator was described as "practice-based research"—a way of doing applied research through direct engagement in planning processes (C1).

Three streets in the inner city were chosen for temporary redesigns. Selection criteria included low traffic volumes, absence of bus routes, city-owned parking, and adjacency to schools. The political calculus was clear: "By strategically selecting that surface [streets adjacent to schools], we simply eliminated many types of conflicts" (N2). School sites offered an advantage because, as one project leader put it, "it is politically impossible not to side with ambitions to create better environments outside schools" (C1). The interventions included playful installations that foregrounded the needs of children, disrupting long-standing traffic priorities (Figure 3). Design elements were co-created with children, parents, and teachers through workshops, with Spacescape (2025) facilitating participation via its digital tool *Place to Plan*.

While Framtidsgator was unfolding, Vinnova launched a new "mission pilot" under its mission-oriented innovation strategy, which focused on street transformation and spawned Street Moves. Coordinated by ArkDes, the project had an explicit national ambition. As a Vinnova official put it, the task was to "make all Sweden's streets become healthy, sustainable and full of life by 2030" (N1). Building on workshops with municipalities and private sector actors, Vinnova identified municipal capacity gaps around parking and micromobility (N1). ArkDes was tasked with leading a collaborative design process, supported by Lundberg Architects, and convened a consortium including Voi, Volvo Car Mobility, and the Swedish Transport Agency.

Stockholm was already engaged in the Smarta Gator programme and agreed to pilot Street Moves on the same three streets as Framtidsgator. Here, modular prototypes were installed as mobility-oriented "hot-spots," combining e-scooter parking with "plug-in" modules that could host greenery, seating and various other activities, and charging infrastructure. The prototypes, installed in September 2020, were evaluated, and the insights compiled into a manual to guide other municipalities (ArkDes Think Tank, 2021a,

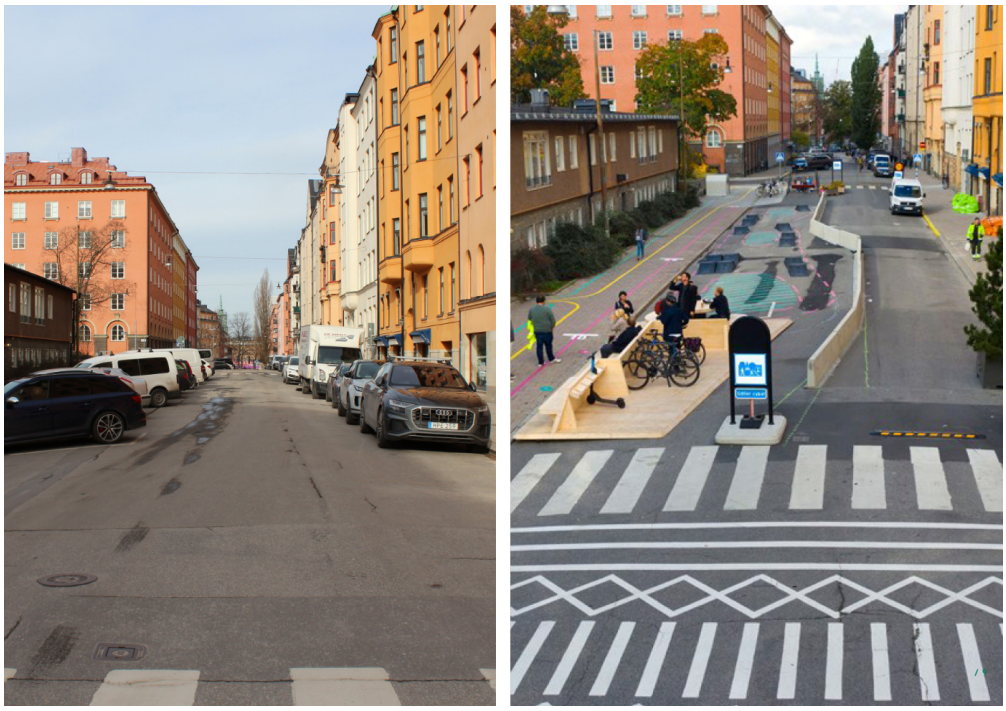

Figure 3. Hälsingegatan—one of the three streets that were temporarily transformed as part of the Framtidsgator and Street Moves projects—before (left) and during (right) the experiment. Photo: Lennart Johansson. Source: Spacescape (2021).

2021b). For a design consultant involved, tangibility was the key contribution: "It's one thing to show it in pictures—but it's something completely different to show it in real life. Only then do people really understand the project's potential" (C5). Thus, the rationale was to show and tell through the experiments while also opposing the car-centric planning ethos.

While the two projects differed—Framtidsgator emphasised child-centred school streets and guideline reform, while Street Moves pursued modular design and national rollout—they shared several defining features. Both championed rapid, low-cost, collaborative experimentation, highlighting the logic's characteristic practices and forms of participatory engagement. Both critiqued municipal norms and sought to accelerate change. One Smarta Gator leader argued that municipalities lacked the "habit…to go outside the box and try new things" and described the project as being about exploring "how to make quick conversions…how to make cheap and fast" (C1). Meanwhile, a Street Moves project leader emphasised that its design-led approach accelerated planning, reducing timelines from "3–5 years to 8–14 months compared to traditional planning," and how, by operating "a little outside the usual norms," it provided opportunities to bypass bureaucracy (N2).

Evaluation and learning were formal elements of both projects. Whereas Levande Stockholm engaged in first-order or single-loop learning through site-specific, ad hoc assessments, these projects integrated evaluation into their design to develop second-order or double-loop learning (Beukers & Bertolini, 2021; Zhao & Sun, 2025), highlighting systematic evaluation and reflection. Framtidsgator produced a 45-page report (Spacescape, 2021) that a municipal official described as "a very proper evaluation if you compare it to our other evaluations" (P1). These evaluations documented generally positive attitudes as well as clear

impacts: reduced vehicle speeds, considerably more lingering, and improved resident perceptions of safety (Trafikkontoret, 2021). Yet conflict was unavoidable. Complaints centred on noise from children playing and the loss of parking (Spacescape, 2021). Even removing ten of fifty parking spaces provoked strong reactions among a "vocal minority," making parking loss "politically very sensitive" (C1). Street Moves representatives also made special mention of parking. Anticipating resistance, and recognising that "this is a sensitive area," they emphasised the need for an "open and transparent dialogue" and for deeper co-creation: "truly doing this together with the citizens [to ensure] added value" for them (N1). Both projects also made efforts to reflect on the outcomes and translate them into design or process guidelines.

The relationship with Levande Stockholm was ambivalent. Project leaders stressed complementarities and potential synergies and the opportunities to share equipment and expertise (P2). Yet other city officials viewed national projects as a "political imposition," that is, that collaboration with Vinnova was forced upon them, and they questioned the need for parallel experimental platforms: "If we have our own way of working, why invent something new together with Vinnova?" (T3). Scepticism was also voiced toward the Smarta Gator guidelines, viewed by some as visionary but lacking technical grounding in practical concerns such as underground infrastructure (T1). These diverging views reflected differing positions within the municipality: project leaders emphasised complementarities while officials with less connection to the projects were more sceptical, perceiving them as disruptive or imposed.

The challenge-led innovative experimental logic framed experiments as vehicles for knowledge production, design demonstration, and national policy influence. Alongside tangible interventions, it generated manuals, guidelines, and systematic evaluation frameworks, with the ambition to accelerate change, reframe norms, and equip municipalities with evidence and design tools. Successes lay in visibility, learning, and cross-sector collaboration, while hindrances included political sensitivities, rushed execution, and occasional friction with municipal approaches.

6. Embedded Administrative Logic—Levande Stockholm 2.0 (ca. 2019–Present)

The fourth experimental logic of street transformations in Stockholm is defined by the consolidation and embedding of Levande Stockholm into the municipality. We refer to it as an *embedded administrative* logic. What began in 2015 as a politically championed programme for seasonal pedestrianisation matured, since approximately 2019, into a permanent municipal platform encompassing more than 40 sites—pedestrian streets (several now designated as permanent, recurring summer pedestrian streets), squares, pop-up parks, and quays—citywide and embedded in governance routines. The designation of 2019 as a turning point is not linked to a specific event, but rather to what a project leader called Levande Stockholm's transition to a "management phase" (P3), characterised by a budgetary reallocation in which a significantly larger share of funds was directed towards management and operations rather than investments when compared to previous years. Experimentation shifted from ad hoc interventions and programmatic trials toward a professionalised and routinised practice of street activation with an increased emphasis on design quality and communication with other stakeholders. As one policymaker summarised, "we moved from a project to a programme, and from a programme to a platform" (T4). This shift signals the logic's core drive and ambition: experimentation embedded as routine administrative practice rather than one-off moments of innovation.

Levande Stockholm became both a vehicle of visible urban change and a framework to adaptively manage public space. Its consolidation entailed dedicated staffing, sustained pollitical support, and forrmalised arrangements: budgets were formalised, routines codified, and responsibilities distributed across departments. One official described how the administration now worked "much more systematically and professionally and long-term…than in the early years" (T4), while another argued that "it is no longer a fad, no longer a test" (P3). This indicates that experimentation has gone from an alternative practice to a standardised tool of governance (Andres, 2025; Bulkeley, 2019; Karvonen, 2018).

Institutionalisation also revealed tensions between political and administrative timescales. Administrators sought to embed Levande Stockholm in long-term governance, while politicians valued its visibility for photo opportunities and campaigns. As one official explained, "our mandate is more long-term than politics, which runs on a four-year cycle. We don't want this to just be 'a spectacle,' but something anchored in our main mission" (T6). The same official noted growing pressure from politicians to "do more" to produce quick, visible results. Another reflected: "While there has been strong political will, there has been little long-term perspective. The project has expanded year by year, but with short time horizons, resulting in many quick decisions and solutions" (P4). The programme's growing scale also began to strain capacity. Team members acknowledged that expectations often outpaced resources: "We are running the whole time. We don't really have time to reflect" (T5). This results in limited opportunities for second-order or double-loop learning.

By now, Levande Stockholm had consolidated its role as the city's testbed for permanent investment projects. Although still dependent on personal relationships among officials, several large-scale projects routinely used the programme to trial temporary regulation and design before committing to costly reconstruction; Levande Stockholm's temporary infrastructure offered a low-risk evaluation method and political legitimacy. One planner explained how this made it "easier to argue [for the change]" (T3). In effect, Levande Stockholm became the city's default interface for public-space experimentation. As one project leader put it, "It's almost as if you can't test something without Levande Stockholm being involved" (P3). This testified to the platform's success but also raised concerns of over-centralisation, potentially narrowing the range of approaches and crowding out other forms of radical or decentralised experimentation (T1).

The stakeholder landscape also shifted. Though the Traffic Administration remained the institutional anchor, commercial actors became increasingly prominent. Property owners and restaurateurs saw opportunities to enhance the attractiveness and value of their areas. A planner noted that "property owners have really woken up in the last few years and discovered that this is a good way to work with public space" (P3). Their motivations were explicitly economic: "More attractive environments in connection with their businesses…creates better profitability for the businesses that their tenants run" (C3). Restaurants also benefitted from expanded outdoor seating, reinforcing the programme's commercial orientation. In their own evaluation, the administration highlighted how Levande Stockholm supported restaurant revenues and had become a feature in real estate marketing (Trafikkontoret, 2022). By contrast, grassroots and civic groups had difficulty gaining traction (T4). The stakeholder mix had thus changed: municipal leadership paired with strong commercial actors and even less community presence.

Geography also continued to shape outcomes, with outer districts proving harder to activate. One official highlighted a suburb where activities only took off after extended collaboration and the presence of local staff: "That's when you really see a change…but those kinds of collaborations also take a very long time….It is

rarely in year one that it is full activity" (T6). This highlights the geographical unevenness of urban experiments (Karvonen, 2018).

Officials claimed that the programme conducted "more evaluations than most" city initiatives (P3), using citizen panels and site-specific surveys, and had built an "enormously much larger" knowledge bank than other projects (P4). Yet learning limitations persisted. Evaluations often only served instrumental purposes (justifying political decisions), rather than attempting to change existing policies or develop new ones. "We do not stop and reflect on what we do well. So, we don't document that learning to the extent [we should]" (P3), one official admitted. Another explained: "We weren't that good at reflecting after launch…everyone was happy it happened…and then next year you try to remember what to do differently" (T2). This reflects how, within this logic, learning remained primarily operational rather than transformational; the lack of second-order or double-loop learning continues from the first phase of Levande Stockholm.

Nonetheless, Levande Stockholm encouraged new mindsets and bolder forms of experimentation. A planner emphasised how temporary measures and accompanying evaluations had helped build "organisational courage," imbuing staff with tacit knowledge about what works and greater confidence to push boundaries (P4). Yet this way of working has not spread evenly across the administration. As one interviewee noted, "it's a fairly limited group of people who still work with it actively" (P4). From this perspective, Levande Stockholm risks remaining a niche practice rather than transforming the department's standard operating procedures.

Others suggested that the programme's influence was felt less in formal procedures than in everyday mindsets. A project leader reflected that Levande Stockholm had shown planners "that we can actually work with temporary measures in public space." This short-term experimental mindset did not always align with 5–20 year planning horizons, but did reframe what counted as legitimate practice and contributed to a "process of change in how one understands the city" (P3). In this sense, Levande Stockholm's significance in this later period lay not only in its interventions but in its contribution to cultural shifts within planning. Experimentation became institutionalised not merely as a means to realise permanent changes but as a governance tool in its own right—an approach that valued flexibility, iteration, and adaptation. As one strategist put it, while people often see pilots as trials before permanence, the real aim here was "to test [and] achieve this flexibility" (P1).

After 2019, Levande Stockholm professionalised and stabilised, embedding adaptive street management into Stockholm's policy landscape. Within the embedded administrative logic, street experimentation evolved into a durable governance practice, suggesting that municipalities can institutionalise flexibility, making streets adaptive and dynamic. Yet institutionalisation came with trade-offs, as the programme experienced challenges in balancing political visibility and long-term change, and commercial interests and democratic participation. This reveals both the potential of embedding experimentation in municipal governance and the risks of institutionalisation: routinisation, commercial capture, and diminished creativity. Together, these dynamics highlight the tensions inherent in turning experimentation into the everyday work of governing cities.

7. Discussion: Competing Logics and the Evolution of Street Experimentation in Stockholm

Stockholm's decade of street experimentation follows a move from improvised grassroots action to institutionalised municipal governance. This trajectory shows how different experimental logics—tactical grassroots, pragmatic municipal, challenge-led innovative, and embedded administrative—have overlapped and partially replaced one another (see Table 1). The coexistence of logics demonstrates that urban experimentation is not singular but continuously redefined through complementary and sometimes contrasting visions, including the nature and speed of change and who should drive it. Rather than a linear progression, it reflects an evolutionary sequence of initiatives, each building on but also diverging from what came before. As one participant summarised it: "I want to believe that Framtidsgator is a spinoff of it, not

Table 1. A comparison across dimensions of four experimental logics in Stockholm.

	Tactical Grassroots (Pallis, 2015)	Pragmatic Municipal (Levande Stockholm, 2015–2019)	Challenge-Led Innovative (Framtidsgator & Street Moves, 2020–2021)	Embedded Administrative (Levande Stockholm 2.0, 2019–present)
Drivers & Ambitions	Challenge municipal regulation; democratise street space; test limits through temporary, low-budget, citizen-driven creativity.	Create attractive public space; reduce political risk by testing temporary changes; emphasise activation, visibility, and pragmatic problem-solving.	Accelerate systemic change; challenge car-centric policies; design-led innovation; evidence-based experimentation.	Stabilise experimentation as part of routine governance; prioritise continuity, coordination, and predictable delivery over disruption.
Key Actors & Participation	Initiated by citizens and local civic actors; municipality as informal enabler; emphasis on community/ neighbourhood co-creation.	Municipality leads; cafés, restaurants, property owners as key stakeholders; limited citizen involvement.	National agencies, designers, researchers lead; municipality as partner; structured co-creation with selected stakeholder groups (e.g., children, schools).	Municipality leads; large property owners increasingly dominant; limited role for citizens.
Practices & Governing Tools	Pop-up park; DIY construction; permit workaround; intensive local engagement; temporary activation.	Seasonal pedestrian streets; cross-department coordination; standardised temporary furniture; branding and communication tools.	School street transformations; modular street prototypes; guidelines and manuals; participatory tools.	Recurrent street activations; standardised management routines; institutionalised testbed function; embedded operational procedures.
Learning & Outcomes	Informal, inspirational learning; diffusion through storytelling; creation of permit category; no systematic evaluation.	Site-specific evaluations (single-loop); strengthened internal acceptance; used informally as testbed for permanent redesigns.	Systematic evaluations (double-loop); evidence-based insights aimed at wider dissemination; limited municipal uptake.	Operational learning; routinisation and institutionalisation; limited reflective learning; risk of commercial capture and reduced creativity.

just Pallis, but I mean that everything [is] like a string of projects in some way, it is connected…informally, all projects rub off on everything" (C6).

Despite continuity and projects "rubbing off" on one another, each logic is distinct. Pallis pioneered bottom-up, temporary transformations and demonstrated the persuasive power of tactical interventions. Levande Stockholm inherited regulatory tools such as the "temporary park" permit, but reframed experimentation as municipally coordinated and politically sanctioned activation. Framtidsgator and Street Moves reintroduced more radical ambitions, tying temporary designs to research, national guidelines, and systematic evaluation, yet also revealed tensions with municipal routines and authority. The subsequent institutionalisation of Levande Stockholm helped professionalise experimentation and embed it in administrative routines while reducing participation and co-creation. In hindsight, Pallis is remembered as both an inspiration and a missed opportunity. It seeded new regulatory frameworks and encouraged municipal actors but did not lead to a broader wave of citizen-driven experiments. Instead, subsequent phases would see experimentation taken up and reshaped by municipal and national institutions. While Pallis remains emblematic of what bottom-up experimentation can achieve, its legacy also highlights how radical and participatory ambitions can be diluted as experimentation becomes institutionalised (Ehnert, 2023; Evans et al., 2021; Raven et al., 2019).

Different actor constellations underpinned these trajectories. Building on VanHoose and Bertolini's (2023) ideal types, municipal roles shifted over time: from enabler (Pallis) to promoter (Levande Stockholm), partner (Framtidsgator, Street Moves), and, finally, institutional owner (Levande Stockholm's consolidation). Compared to the Ghent case discussed by VanHoose and Bertolini (2023), the Stockholm case reveals more tensions, such as those between spontaneity and bureaucracy, inclusion and commercialisation (as also highlighted in Villani & Talamini's [2023] study of Hong Kong), and short-term visibility and long-term learning.

Pallis, Smarta Gator/Framtidsgator, and Street Moves were led by architects, designers, and researchers who foregrounded citizen dialogue and reflection, and challenged planning norms. These coalitions were eclectic, involving universities, design firms, and national agencies. Levande Stockholm, by contrast, was anchored by civil servants in the Traffic Administration, privileging pragmatic activation and visible results aligned with political priorities. This grounding provided stability and visibility but, as Sierhuis et al. (2024) note in other contexts, results in less scope for disruptive ambitions. Over time, commercial actors gained prominence. Property owners recognised pedestrianisation as an opportunity to raise rents and enhance neighbourhood appeal, while restaurateurs benefitted from expanded terraces. As in Hong Kong (see Villani & Talamini, 2023), this commercial orientation shaped the programme's trajectory, favouring uses that were easier to regulate and sustain. Grassroots and civic groups, by contrast, were largely marginalised. In this sense, the balance of actors shifted from civic and design-led coalitions to municipal–commercial alliances, in direct contrast to the findings of Smeds et al. (2023), which saw citizen groups in New York mobilise *in response* to an initially municipality-led scheme.

The label "experiment" often mistakenly suggests systematic learning (Beukers & Bertolini, 2021), with the reality proving more uneven. In Stockholm's early street experiments, learning was tacit. Pallis proved the power of full-scale demonstration but produced little structured knowledge. Levande Stockholm produced reports and citizen surveys, but evaluation was often instrumental, used to justify political choices rather than to develop policy. Reflections were acknowledged as ad hoc and partial. By contrast, the

Vinnova-backed projects treated learning as central. Framtidsgator was conceived as practice-based research, with rigorous evaluation and a design guide aimed at national dissemination. Street Moves codified lessons into manuals and toolkits to support other municipalities. These were attempts to translate local experimentation into systemic knowledge. Yet their influence on Stockholm's municipal routines was limited. Some city officials viewed externally produced evaluations as peripheral, and the lessons were only partly absorbed into Levande Stockholm. Still, Levande Stockholm fostered what interviewees called "organisational courage": the confidence to test, evaluate, and make decisions based on visible examples. This shift in mindset was perhaps its most important legacy. Even if policy learning was thin, experimentation began to be seen as a legitimate way to govern streets. Temporary interventions were no longer novelties but part of the municipal repertoire. Interestingly, while other projects *challenged* norms, it was Levande Stockholm that actually seemed to *change* norms, thanks to the more tacit learning among officials working with Levande Stockholm over an extended period.

The tangible achievements of Stockholm's experiments are evident. Levande Stockholm grew into a permanent platform with professional staff, curated furniture, and political legitimacy. Framtidsgator informed alternative street design guidelines. Street Moves generated modular prototypes and gained global media coverage. On the ground, these interventions slowed cars, encouraged lingering, and showed that even modest temporary changes could alter everyday life of residents and visitors.

Yet important opportunities were missed. The non-commercial ethos of Pallis—a meeting place without consumption requirements—was never institutionalised. Structured learning from Vinnova projects was not fully transferred into municipal routines. Instead, Levande Stockholm remained focused on visible activation. Political cycles reinforced this orientation: administrators worked with four-year time horizons, striving to deliver quick results rather than slow, reflective learning. Across the projects and programmes, geographic imbalances persisted. Inner-city districts with high-income residents were easier to activate, while outer districts with lower-income residents required sustained local collaboration and often lagged behind. The fact that Pallis took place in a desirable neighbourhood and was driven by empowered local actors is, if we take note of Verlinghieri et al. (2024), no surprise and it is perhaps little wonder that typically underrepresented groups remained on the fringes until more recently. Despite targeted efforts, however, remaining disparities raise enduring questions of equity and inclusivity in Stockholm's street experimentation.

Mobility transformation also remains limited. Street experiments often balance two ambitions: to alter mobility patterns and to nourish public space (Bertolini, 2023). In Stockholm, as in many other places, the latter dominated. Interventions prioritised placemaking in central locations—lingering, socialising, café life—rather than the fundamental reworking of mobility systems, reflecting broader trends (Bertolini, 2023; Smeds & Papa, 2023). Although car restrictions were often a precondition, the focus was rarely on shifting travel behaviour or overall mobility patterns. Instead, experiments sought to create attractive public space or safeguard children. A traffic planner described Levande Stockholm as "probably more about rerouting the traffic rather than limiting the traffic…a tool to be able to develop a place in the long term" (C2). Avoiding politically sensitive parking conflicts reinforced this orientation toward placemaking rather than systemic mobility change. This reflected a deliberate strategy to sidestep the contentious politics of automobility and preserve the "positive vibes" of Levande Stockholm.

8. Conclusion

This article highlights that street experiments are not static interventions, but rather dynamic processes that evolve, institutionalise, and compete with one another. Stockholm's decade of experimentation demonstrates this interplay across four distinct experimental logics: tactical grassroots (Pallis), pragmatic municipal (Levande Stockholm), challenge-led innovative (Framtidsgator and Street Moves), and embedded administrative (Levande Stockholm 2.0). Across these logics, actor constellations, ambitions, practices, and engagement with learning, evolved and coalesced into distinct configurations of experimentation over time. These developments brought tangible gains—the activation of lively pedestrian corridors, safer school streets, and innovative new ways of governing the city—yet came at a cost. Grassroots initiative, central in Pallis, faded over time. Commercial actors—cafés, restaurants, property owners—became dominant partners, raising concerns of privatisation. Learning remained fragmented: Framtidsgator and Street Moves showed how structured evaluation could inform policy, yet the municipality only partly adopted these lessons. Geographic imbalances persisted, with central districts favoured over suburban areas. Radical ambitions—to democratise space or confront car dominance—were diluted as experimentation became a routine mode of administration and placemaking took precedence over mobility transformation. Similar dynamics observed in cities globally suggest that, without inclusive participation, spatial equity, and structured learning, street experimentation can have limited transformative potential.

Taken together, Stockholm illustrates both the potential and the risk of embedding experimentation into governance. On the positive side, temporary interventions are now seen as legitimate planning tools. Officials have adopted more agile ways of working and gained the confidence to push boundaries. On the negative side, learning remains partial, participation weak, and mobility transformation has been consistently deferred. A more structured approach to learning could have generated richer insights and embedded more radical transformation ambitions into municipal practices.

Three broader lessons follow from the case presented here. First, experimentation is not inherently transformative: its meaning depends on who drives it, with what ambitions, and under which institutional conditions. Second, systematic learning cannot be assumed. Without deliberate structures for evaluation and synthesis across projects, experiments risk being reduced to political spectacle. Third, equity and participation require active cultivation. Without deliberate attention, experimentation risk reproducing existing inequalities and privileging the well-resourced.

For scholars, the Stockholm example highlights the benefits of studying cities diachronically. Their significance lies not only in isolated interventions but in how they evolve, connect, and are institutionalised. The case also demonstrates that multiple experimental logics, rather than one single "experimental logic," operate in parallel. This reflects VanHoose and Bertolini's (2023) finding that street experiment roles are "not absolute" (p. 8), suggesting the potential generalisability of the Stockholm case. We do not, however, claim that these four logics are exhaustive; street experimentation in other cities—and experimentation in other policy domains—may reveal additional experimental logics. For policymakers, the lesson is to embrace experimentation as a tool for flexibility and adaptation, while guarding against the erosion of participation and inclusivity.

The previous decade of street experimentation in Stockholm leaves a mixed legacy. It has embedded flexibility into governance and mainstreamed the idea of streets as adaptable commons. Yet it has also shown how

professionalisation can blunt street experimentation's radical edge. The challenge for the coming years is to preserve creativity and civic voice while consolidating institutional stability—ensuring that experimentation remains not just a means of street activation, but a vehicle for deeper urban transformation (Bertolini, 2025).

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