

REVIEW ARTICLE OPEN ACCESS

The Place of Experimentation in Public Policymaking: Mobilities, Situations and Temporalities

Diogo Gaspar Silva¹  | Kevin Ward² 

¹Centre of Geographical Studies, Institute of Geography and Spatial Planning, University of Lisbon, Lisbon, Portugal | ²Urban Studies Institute, Georgia State University, Atlanta, Georgia, USA

Correspondence: Diogo Gaspar Silva (diogosilva4@edu.ulisboa.pt)

Received: 26 June 2025 | **Revised:** 23 September 2025 | **Accepted:** 6 October 2025

Funding: This work was supported by the Fundação para a Ciência e a Tecnologia, I.P. [grant numbers 2020.06080.BD; LA/P/0092/2020; UID/295/2025].

Keywords: experimentation | policy mobilities | politics | public policy | public policymaking | temporalities | translation

ABSTRACT

The object of this paper is to offer a theorisation of experimentation in public policy, building upon insights from the study of policy mobilities. Drawing on the recent attention to time and temporalities in this academic literature, the paper argues that experimentation is an integral component of public policymaking, shaping the framing, learning, mediation and translation of public policies. The paper introduces four mid-level framings—experiments as: (i) situated; (ii) power-laden constructs; (iii) learning sites; and (iv) translation instances. These illustrate how experimentation can generatively advance the processual, relational, and socio-constructivist nature of policy mobilities studies. The paper concludes by highlighting how experimentation and policy mobilities are mutually generative lenses for theorising the making-up of public policymaking in the twenty-first century.

1 | Introduction

Over the last couple of decades, experimentation has become a significant feature of public policymaking. Here, we use the term ‘public’ policymaking to convey our focus on ‘anything a government chooses to do or not to do’ (Dye 1972, 3). This includes actions taken directly by the state, as well as those undertaken indirectly through arrangements with academia, firms, and non-governmental organisations. While we acknowledge the longstanding and often thorny debates over the meaning of ‘policy’, particularly amongst those in political science and public administration (Simeon 1976; Howlett and Cashore 2014), our usage of ‘public policy’ serves to clearly demarcate the boundaries of our critical review. In it, we stop short of citing and discussing that academic literature on inter-organisational exchange, learning, and networks (e.g., see Faulconbridge 2010). While overlapping crises—from climate breakdowns, to fiscal austerity to global pandemics—have often been framed as important backdrops to fast-track responses, the experimental turn is equally bound up with longer genealogies

of entrepreneurial governance (K. Hartley et al. 2019; Hilbrandt and Ren 2025). Crisis-driven experimentation is, of course, not entirely new. Urban political economy studies have long argued that since the 1970s public policymaking has been permeated by paradigmatic forms of regulatory experimentation through which particular versions of public policies are scanned, arrived at, and mobilised (Brenner et al. 2010; Peck and Theodore 2015). What distinguishes the first decades of the twenty-first century, however, is the growing normalisation of experimentation as a mundane component of public policymaking (Acuto 2020; McGuirk et al. 2021). Illustrating this is the emergence of what Temenos (2022) describes as crisis public policymaking: a reactive and fast-paced condition of decision-making that is simultaneously extrospective and experimental in nature.

The mounting pressure on public policymakers to respond to ongoing crises has found its clearest expression in their increasing reliance on experimentation as a governing practice. Far from being a purely technocratic procedure, experimentation functions as a governing mechanism through which policymakers defer

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). *Geography Compass* published by John Wiley & Sons Ltd.

political commitment, manage uncertainty, and frame, test, and fine-tune governance arrangements or policy models, typically implemented within controlled and situated settings, often over pre-set time horizons (McGann et al. 2018; Timeus and Gascó 2018). Indeed, enthusiasm for experimentation has emerged, in part, as a corrective to earlier waves of ‘fast policy’ transfer, which were often marked by the rapid adoption of so-called best practices on the premise that what worked in one place would prove transformative elsewhere (Baker and Walker 2019; McCann and Ward 2011). Such assumptions frequently produced premature institutionalisation—or abandonment—of transferred public policies, often without clear evidence of what worked, how it might work in different contexts, and for whom (Ansell and Bartenberger 2016; Voß and Simons 2018). In this normative framing, experimentation holds the potential to slow down, localise, and legitimise policy interventions by grounding them in situated practices. However, as Temenos (2022) suggests, under crisis conditions, experimentation frequently unfolds through compressed temporalities and power-laden processes that resemble ‘fast policy’ logics.

This paper argues that the recent uptick in experimentation within twenty-first-century public policymaking demands renewed critical attention, particularly in light of how public policies travel and materialise in messy, relational, and context-dependent ways across differing places and temporalities. A useful starting point is the longstanding Science and Technology Studies (STS) literature on ‘laboratisation’, which conceptualises experiments as socially constructed sites of knowledge production, embedded within specific epistemic, institutional, and spatial arrangements (Kohler 2002; Latour 1987). Even if not overtly concerned with public policymaking, this foundational work has informed a range of more recent academic literature that engage with experimentation in governance contexts. A growing body of scholarship in political anthropology (Biehl and Petryna 2013), political science (Green and John 2010; Huitema et al. 2018), public administration and management (McGann et al. 2021; Tönurist et al. 2017), the sociology of policy (Edwards and Moschetti 2021) and urban transition studies (Bulkeley et al. 2018; Voytenko et al. 2016) has each offered important, albeit partial, contributions.

Geographers, however, have been relatively absent from many of these debates, notwithstanding notable contributions from scholars such as Harriet Bulkeley and James Evans. Their work, often co-authored with colleagues in urban transition and sustainability studies, exemplifies how geographical perspectives can enrich discussions of experimentation. At the same time, a distinctly geographical approach has emerged for examining how public policies are made mobile, adapted, and reassembled across places: the policy mobilities scholarship (Haupt 2023; Temenos and McCann 2013; Ward 2024). We draw on this body of work not simply because it remains prominent, but because it provides a processual, relational, and socio-constructivist lens well suited to examining how experimental practices, themselves constitutive of public policymaking, are constituted and reconstituted across sites and temporalities. This relative absence is especially conspicuous given recent moves within policy mobilities to foreground the non-linear, multi-scalar role of time and temporality in public policymaking (Baker and McCann 2020; Lorne 2024; Morais 2024; Wood 2015). As Lovell

et al. (2023) observe, existing work has not always clearly distinguished between how public policies are received and adapted in a place and how they are projected outward—two relational facets central to a policy’s full temporal trajectory. There are, of course, notable exceptions. For instance, Bok (2020), Chang (2017) and Chang et al. (2020) highlight this relational framing, showing how ‘global’ public policies are never simply transferred but are reinterpreted and reconfigured in place, and how these reassembled ‘successes’ become, often only temporarily, reference points circulated outward as part of positioning cities within global policy circuits.

Building on all of these contributions, this paper brings together insights from existing scholarship on experimentation into dialogue with the approach of policy mobilities. The aim is to frame experimentation as a distinct and formative moment within the broader arc of public policymaking, constitutive of a provisional institutional process that may subsequently become reconfigured and institutionalised within governance practices (Silva and Ward 2024). The paper begins by reviewing the extensive academic literature on experimentation—particularly focussing on studies examining laboratories as institutional arenas that host and structure experimental processes, mediating public policymaking and at times orienting it toward transformative futures—to reflect on their contributions to how we understand contemporary governance. This work largely includes public sector innovation laboratories examined by public administration and management scholars (McGann et al. 2018; Tönurist et al. 2017), as well as urban living laboratories explored in urban transition studies (Karvonen and van Heur 2014; Voytenko et al. 2016). The paper then introduces four mid-level framings as a heuristic device to outline the presence and role of experimentation in public policymaking. These are: (i) situated; (ii) power-laden constructs; (iii) learning sites; and (iv) translation instances. It concludes by outlining a future research agenda that conceptualises experimentation as a distinct, pre-institutional stage of public policymaking and as a process constituted through multiple temporalities that may shape the trajectories of public policies.

2 | A Policy Mobilities Lens on Experimentation in Public Policymaking

It has been a decade since Peck and Theodore (2015, 224) observed ‘the ascendancy of a transnational regime of systematic “experimentality” in policy formation’, marked by growing reliance on demonstration effects and evaluation-driven public policymaking. This experiment-oriented turn in public policymaking is closely tied to the broader momentum of New Public Management and has been intensified by what some describe as “a perfect storm of global crises” (K. Hartley et al. 2019, 164), which continues to confront public policymakers (Hilbrandt and Ren 2025). These crises have repeatedly exposed the limitations of earlier policy frameworks, driving demand for more adaptive governing mechanisms without excessive concerns with failure—particularly in times of uncertainty—as ways to generate and test transformative solutions and offer guidance for subsequent decision-making (Lewis et al. 2020; McGuirk et al. 2021; Timeus and Gascó 2018).

This turn to experimentation resonates with STS accounts of the laboratory as a ‘world on trial’, where controlled environments are used to delimit real-world complexity, isolate causal mechanisms, and produce actionable knowledge (Kohler 2002; Krohn and Weyer 1994). For this knowledge to hold beyond the lab, Latour (1987) and Callon et al. (2009) argue, the world must be reconfigured to mimic the lab conditions. Public policymaking increasingly mirrors this ‘scientific’ logic by assembling temporary, geographically-bounded arenas where particular solutions are framed, tested, refined, and legitimised by a range of actors (through triple- or quadruple-helix governance models) under quasi-real-world conditions to create transformative futures (J. Hartley et al. 2013; Hossain et al. 2019; Karvonen and van Heur 2014; McFadgen and Huitema 2018).

Accompanying this experimental turn in public policymaking, fields such as political science, public administration and management, and urban transition studies have argued that experimentation is a central feature of contemporary governance (Huitema et al. 2018; McGann et al. 2018; Tönurist et al. 2017; Voytenko et al. 2016). The distinction between formal and informal experimentation is not merely classificatory; it broadens what counts as experimental in public policymaking. Formal experiments, which have shaped much of policy and academic discourse, are typically government-led, institutionally sanctioned, and designed as discrete, measurable interventions aligned with agendas for transformative and scalable futures (Bulkeley et al. 2018; Hossain et al. 2019). Informal experiments, by contrast, unfold through more contingent, ad hoc or grassroots ways, testing ideas under real-world conditions without being formally codified as experiments (Abbott 2017; Hou 2020). While absent from the policy mobilities literature, this distinction is crucial for tracing experimentation as a relational and provisional moment in the making of mobile policies. Of course, most experiments are institutional in some way—whether formally authorised or more informally sanctioned—but not stabilised. This shifts the ontological focus from experimentation as a fixed method to a governing logic operating across varying degrees of formality and control, opening space to conceptualise it as a processual and relational practice embedded in broader trajectories and temporalities. In this intellectual context, we position policy mobilities as a particularly generative lens because it emphasises the processual, relational, and temporal politics through which experimentation is constituted, reconfigured, and potentially translated into public policymaking.

The paper introduces four mid-level framings as heuristic devices for outlining the role of experimentation in twenty-first-century public policymaking. Rather than conceptualising experiments as fixed arenas, these framings foreground experimentation as a situated, relational, and temporally uneven process. Each draws on a recurring theme in the experimentation literature—situatedness, power relations, learning, and policy translation—and reworks it through the geographical lens of policy mobilities, aligned with a broader turn toward the multiple, non-linear temporalities of policymaking (Baker and McCann 2020; Bok 2020; Lorne 2024; Morais 2024; Wood 2015). As such, they offer a point of departure for examining experimentation as a distinct and formative moment within the uneven trajectories of mobile public policies, which continue to shape twenty-first-century public policymaking.

2.1 | Experiments as Situated

In this framing, we argue that experimentation should be understood as spatially situated, temporally contingent, and relationally produced. This reconsideration foregrounds experiments as being simultaneously produced by the contingencies of local settings and timeframes, and by the mobilities of globally circulating policy models. This framing builds, in part, on the general assumption that much of the scholarship on experimentation has conceptualised—and empirically approached—experiments as territorially bounded and time-limited interventions embedded within local configurations (Hossain et al. 2019; McCrory et al. 2020; Voytenko et al. 2016). These features are often presented as enabling flexibility and responsiveness to context-sensitive challenges, while supporting path-dependent transformations toward locally defined futures (Blomkamp 2018; Sharp and Raven 2021; van der and Heijden 2016). However, particularly in a world of mobile public policymaking, it is reasonable to argue that many experiments are also inherently extrospective, as their ‘local’ embedding often draws on globally circulating ideas, models, and repertoires. Experiments linked to the localisation of the UN Sustainable Development Goals (Grundel and Trygg 2024; Patel et al. 2017) and smart city initiatives (Chang et al. 2020; Nciri and Levenda 2020; Quitzow and Rohde 2021) illustrate the mutually constitutive relations between locally grounded experimentation and *trans*-local policy imaginaries.

Problematically, despite claims of context-sensitivity, a substantial strand of scholarship has shown how experimentation in public policymaking often unfolds within a rational-formalist frame. Here, experiments operate as technocratic apparatuses assembled to replicate and transfer solutions, privileging evaluation, demonstration, and scalability over grounded adaptation (Castán Broto 2017; Ettelt et al. 2015a, 2015b). Many experiments are ‘dropped into’ places with limited or superficial adjustment to local economic, politico-institutional, socio-spatial, and temporal contingencies (Chatterton et al. 2018; Hodson et al. 2018; Hodson and Marvin 2009; Suitner and Krisch 2023). These critiques highlight partial forms of localisation, where ‘worlding models’ are enacted as ready-made, one-size-fits-all solutions with minimal regard for local conditions at specific temporal junctures. For instance, McGuirk et al. (2022) and Cinar et al. (2024) suggest that strands of public administration and management work on public sector innovation laboratories—government-led organisational arrangements that host and legitimise experimental practices intended to inform policy futures—have adopted a rational-formalist ontological approach, largely overlooking the uneven differences that (national) contexts make. Similarly, urban-focused studies show how experiments with globally mobile repertoires, such as smart grids and other urban planning frameworks, often mimic dominant urban imaginaries while overlooking place-specific complexities (Cugurullo 2017; Levenda 2018; Montero et al. 2023). Of course, there are exceptions. Some studies attend to the diverse configurations shaping experimentation in place and time (see Kronsell and Mukhtar-Landgren 2018; While et al., 2020). Yet, the dominant tendency in policy and academic discourse continues to prioritise transferability over contextually grounded adaptation. As such, experimentation risks becoming a technocratic manoeuvre

marked by geographical and temporal naiveté—one that legitimises pre-existing agendas without recognising it as a socially and spatially embedded process produced through the intertwining of selective pasts, urgent presents, and projected futures (Haugland and Skjølsvold 2020; Naus and van der Horst 2016; Rahmawan-Huizenga and Ivanova 2022; Temenos 2022).

Emerging from these debates is an uneven theorisation of how situatedness—understood here as both spatial and temporal—is produced and reproduced in a world of mobile public policy-making. Foundational policy mobilities studies, including Jacobs' (2012) reflections on the fixity-mobility dialectic and Robinson's (2015) work on how cities 'arrive at' public policies through topological entanglements, have already foregrounded the relational and contingent nature of situated public policy-making. By contrast, experimentation studies have often emphasised bounded framings, overlooking how experiments are shaped by ongoing practices of *trans*-local comparison and referencing (Baker and Walker 2019; McCann and Ward 2011). In response, we argue that experimentation in twenty-first-century public policymaking is best framed as a situated *and* relational process. We therefore use the notion of 'situated experimentation' to capture forms of experimentation shaped simultaneously by the contingencies of local settings and temporalities and by the mobilities of globally circulating policy models. Indeed, as Lorne (2024) argues, policy mobilities compress pasts, presents, and futures, with politics shaping which temporal frames are mobilised or resisted. This reinforces our claim that situated experimentation is not only spatially embedded but also temporally contingent, as experiments selectively mobilise past experiences, frame urgent presents, and project particular futures. In this sense, situated experimentation is reproduced through a dialectical nexus of fixity and mobility (Jacobs 2012) and through the topological entanglements by which places 'arrive at' public policies (Robinson 2015). Rather than treating 'situatedness' as a bounded or self-enclosed container, we argue that it is relationally constructed through globally circulating models and place-specific arrangements (McCann and Ward 2010; Temenos and McCann 2013). From this ontological stance, experimentation 'is formed not simply in place but through multiple knowledges that run through and call into being various spaces' (McFarlane 2011, 364). Taken together, this framing underscores that experiments are situated in both time and place, emerging from specific occasions and policy demands, sedimenting over longer path dependencies, and increasingly entangled with 'worlding models' whose temporal regimes span a spectrum from fast to slow across contexts.

2.2 | Experiments as Power Constructs

This framing argues that the discursive and material practices of experimentation are not neutral or rational-technocratic, but inherently social, performative, and power-laden manoeuvres. As Huitema et al. (2018) and Savini and Bertolini (2019) emphasise, the very discourse of 'experimentation' is political. Deciding *when* and *why* public policymaking is framed as experimental is seldom neutral but itself an orientation or disposition that channels authority in particular directions. Advancing this framing builds on

three intellectual strands. At its core is the notion that experimentation is *peopled*, involving multiple social actors generating and testing 'local' responses to 'wicked problems' (Blomkamp 2018; Bulkeley et al. 2016; Nguyen et al. 2022). These include city networks, corporate actors and transition intermediaries (Ehnert 2023; Smeds and Acuto 2018), community-based organisations (Frantzeskaki et al. 2018), state delegates (Eneqvist and Karvonen 2021; Kronsell and Mukhtar-Landgren 2018), and universities (Addie 2017). Reflecting relational understandings of power, several contributions highlight how experiments are shaped by uneven agendas, forms of expertise, and contested agency (Lewis et al. 2020; McGann et al. 2021; Sierhuis et al. 2023; Torrens et al. 2018). Some argue that public actors frequently orchestrate experimental practices to channel action in specific directions (Eneqvist et al. 2022; Evans and Karvonen 2014; Mei and Liu 2014; Sørensen and Torfing 2016a, 2016b; Trei et al. 2021; While et al. 2021). For example, Chang et al. (2020) show how government-led smart city experiments in Taipei, discursively framed as depoliticised, nonetheless enabled the restructuring of coalitions and the consolidation of new legitimacy claims. Others reveal how transnational corporations and networks assemble 'experiments' as 'ready-made' solutions privileging dominant interests while sidelining alternatives (Cugurullo 2017; McLean et al. 2015; Nciri and Levenda 2020; Quitzow and Rohde 2021; Savini and Bertolini 2019; Sørensen and Torfing 2011).

Of course, experiments are not monolithic. Their dispositions shift over time as political motivations, institutional priorities, and material conditions evolve, reshaping what experiments are meant to do, who is involved, and how authority is distributed (Kronsell and Mukhtar-Landgren 2018; Timeus and Gascó 2018; Vallance et al. 2020; van et al. 2017). This underscores the temporal politics of experimentation. A key insight here is that agency shapes *how* experiments are discursively and materially configured and governed (Nguyen et al. 2022; While et al., 2021). Much of this work has developed typologies to capture these differences. Kronsell and Mukhtar-Landgren (2018) distinguish between local authorities as promoters, enablers, and partners (see also Eneqvist and Karvonen 2021; Mukhtar-Landgren et al. 2019), while Crosby et al. (2017) map local leaders as sponsors, champions, catalysts, and implementers. Bulkeley et al. (2018) further differentiate between strategic, civic, and organic experiments, depending on whether experiments are steered by national or corporate actors, municipal and civic organisations, or community-based groups. Taken together, these contributions highlight that experiments provide multiple entry points into public policymaking (Gordon 2018; Hermans et al. 2024; Hossain et al. 2019). This invites scrutiny of the criteria against which experimentation is named, as well as who makes such claims, under what institutional arrangements, and with what consequences. Scholars have pointed to the institutional roles municipalities adopt (Eneqvist and Karvonen 2021), the political logics of scaling (Pfothenhauer et al. 2021), and the shifting imaginaries underpinning experiments (Quitizow and Rohde 2021) as indicative benchmarks.

A third strand of work calls for greater attention to the everyday practices through which social actors construct, enact, and contest experiments (Mukhtar-Landgren et al. 2019; Rahmawan-Huizenga and Ivanova 2022). Yet such performative, interpersonal, and

embodied practices remain under-theorised. This is perhaps unsurprising given the rational-formalist foundations shaping much experimentation literature, especially in public administration and management (Ball and Head 2021; Sierhuis et al. 2023; Voß and Simons 2018). More unexpectedly, as Savini and Bertolini (2019, 832) note, urban transition studies often lack ‘critical reflection on the political logics that drive experimental action today and ... determine the way experiments are identified and promoted or, alternatively, suppressed’.

Building on this gap, and synthesising these three strands of work, we argue that the processual and socio-constructivist lens of policy mobilities offers a valuable entry point for bringing them into dialogue. This is especially relevant when considering how politics actively manipulates and negotiates which temporal frames are mobilised or resisted in public policy (Lorne 2024). Efforts to reconfigure policies or deploy counter-mobilising strategies against existing ‘exemplars’ are themselves a form of temporal power-play, reinforcing the notion that experiments, and their afterlives, are constantly shifting. A policy mobilities lens allows us to trace the everyday practices of power—discursive, material, and embodied—through which actors, including those near and from afar, induce, persuade, manipulate or seduce others into particular experimental framings while silencing others in local and *trans*-local policy-making arenas (Rapoport 2015; Rapoport and Hult 2017; Smeds and Acuto 2018). Recognising such distributed agency is essential if, as we argue, ‘worlding models’ underpin much of contemporary experimentation (McCann and Ward 2013; Peck and Theodore 2015). Put differently, experiments themselves carry agentic potential, as claims of ‘success’ may turn them into mobile referents *elsewhere*. In this sense, as power-laden constructs, (parts of) experiments are selected, framed, and promoted by multiple actors whose shifting agendas unfold across place and time, shaping how they are ultimately introduced, implemented, and reproduced in public policymaking.

2.3 | Experiments as Learning Sites

The third framing argues that the inherently non-linear, open-ended, and political nature of experimentation positions experiments as arenas for the mediation, production, and exchange of knowledge, embedded within the informational infrastructures that facilitate policy mobilities. While experiments are situated within broader informational infrastructures, they can also be constitutive of those infrastructures, serving as referential sites that package, circulate and mediate policy knowledge. Structuring this framing is the archetypal notion that the ethos of experimentation aims to draw ‘quasi-scientific’, evidence-based knowledge through which social actors may consolidate, challenge or generate alternative practices and policy futures (Blomkamp 2018; Ettelt et al. 2015a; Hughes et al. 2020; McAslan et al. 2021). Experiments thus function as learning sites that, McFadgen and Huitema (2017) note, generate knowledge about causal mechanisms behind specific challenges (*cognitive learning*); prompt reconfigurations in assumptions, practices and in the framings of problems and solutions (*normative learning*); and enhance shared meaning among social actors (*relational learning*). Crucially, learning is not confined to ‘success’.

Experiments are protected yet indeterminate spaces where openness to the unforeseen and to ‘failure’ becomes central. The notion of generative experimentation-cum-learning highlights that both ‘success’ and ‘failure’ are relationally produced through time, with unexpected outcomes and setbacks engendering self-critical reflection and recursive processes that open further possibilities for knowledge creation (Ansell and Bartenberger 2016; Weiland et al. 2017). Yet this sits uneasily with the political imperative for rapid, innovative, and visibly ‘successful’ outcomes. Cases such as Masdar City, where abandoned ambitions nonetheless informed new sustainability standards and energy reforms, illustrate how failure can be productive, even as political acceptance of it remains constrained under pressures to demonstrate success (Griffiths and Sovacool 2020; Sharp and Raven 2021). These tensions suggest that learning is not confined to project-specific outcomes but is mediated through wider infrastructures in which knowledge is compared, exchanged, and mobilised.

Building on this, a small-yet-growing body of scholarship has begun to conceptualise more complex, multilateral modes through which is produced such learning. In particular, it draws attention to the introspective, self-referential, and extrospective, relational forms through which codified and tacit knowledge emerge (Newig et al. 2016; Torrens et al. 2019). Given the emphasis on the ‘situated’ nature of experiments, the unsurprising focus of much experimental literature has fallen on introspective learning arenas. For instance, Edwards-Schachter et al. (2012) find that conferences, seminars, and training forums serve as venues to strengthen cooperation among local experiment participants (see also Sørensen and Torfing 2016a; van Popering-Verkerk and van Buuren 2017). Others describe drop-in sessions, focus groups, and scenario-building as micro-spaces where ‘local’ problems are framed, solutions envisioned, and designs moulded (Laakso et al. 2017; Rocle and Salles 2018; Vallance et al. 2020). Augmenting the notion that experimentation is embedded in everyday life, further contributions suggest that award ceremonies and technical workshops facilitate the documenting and exchange of tacit knowledge of ‘what works’ among local and national actors (Hughes et al. 2020; Sørensen and Torfing 2016b; van der and Heijden 2016).

Alongside these introspective accounts, another strand has examined extrospective learning arenas that emerge in and through experiments. Under the banner of ‘networked experimentation’, it explores the involvement of global organisations and *trans*-local networks in the framing, production, and showcasing of knowledge (Coenen et al. 2019; Gordon 2018; J. Hartley et al. 2013; Smeds and Acuto 2018; Torrens et al. 2019). Here, Montero et al. (2023) argue that public sector innovation laboratories in Latin America emerged through support from the World Bank, the Inter-American Development Bank, and UN-Habitat (see also Patel et al. 2017). Similarly, Trencher et al. (2016) show that city networks such as C40 reference and circulate ‘experimental best practices’, amplifying certain agendas and putting certain places ‘on-the-map’. Yet few studies explore how this works in practice (but see Levenda 2018; Nciri and Levenda 2020). Illustrative cases, such as Amsterdam’s ‘Climate Street’ and Rotterdam’s ‘BlueCity’, suggest that *trans*-urban delegations undertook study tours to observe these experimental initiatives first-hand (van Winden and van den

Buuse 2017; von Wirth et al. 2019). Alongside such encounters, scholarship on experimentation has often listed the plethora of materials and tools, including benchmarking datasets, dashboards, institutional documents, and online platforms, as part of the wider learning ecosystem (Cugurullo 2017; McGann et al. 2021; Sørensen and Torfing 2016b; Stead 2016). However, across both introspective and extrospective accounts, such assemblages are often approached as self-evident, with little critical attention to how they selectively frame, legitimise, and promote certain forms of experimental knowledge, while silencing others.

To advance this framing, it is conceptually and empirically generative to draw on the processual and socio-constructivist grammar of policy mobilities to approach experiments as informational infrastructures in their own right. Here, we extend McCann's (2008, 897) formulation of informational infrastructures as 'institutions, organizations, and technologies that, in various ways, frame and package knowledge about best policy practices ... and then present that information to specific audiences'. Within this framing, such infrastructures operate as de facto criteria for what counts as 'experimental', shaping which knowledge is legitimised and eventually translated. This underscores the role of experiments in educating audiences and serving as referential sites through which knowledge is socially constructed, interpreted, and mobilised by diverse actors to inform their policymaking practices (Andersson and Cook 2019; Baker and McGuirk 2019). Crucially, experiments should be seen not only as situated within informational infrastructures but also as constitutive of them—that is, as arenas where introspective *and* extrospective learning are generated and contested. This invites attention to the mundane practices through which experimental knowledge is iteratively and recursively produced—not only the sites and resources through which ideas are shared, but also the conditions under which particular framings become authoritative, both *within* and *beyond* experiments. Such an approach shifts focus from cataloguing informational infrastructures to critically interrogating the politics of experimental knowledge production—and, crucially, how these infrastructures shape the iterative and stop-start tempos under which experimental knowledge is potentially translated into subsequent temporalities of public policymaking. In this sense, experiments are informational infrastructures whose authority and afterlives are mediated by the iterative and uneven rhythms of knowledge production, where learning is inherently recursive and unfolds through unpredictable starts, pauses, and returns across time and space.

2.4 | Experiments as Translation Instances

The fourth and final framing foregrounds the translational role of experiments in the circulation, reinterpretation, and institutionalisation of knowledge into public policies. It moves beyond the narrow view of experimentation as a discrete or transitory moment in public policymaking to emphasise its post-experimental afterlives, including the sedimentation of experimental approaches themselves into routinised 'prototypes' for subsequent public policies. This framing extends the normative aims of experiments as learning sites designed to 'scale' beyond

their original settings and inform the making-up of policy futures (Eneqvist et al. 2022; Hughes et al. 2020; Huitema et al. 2018; Laakso et al. 2017; McAslan et al. 2021; Schreiber et al. 2023). Of course, this capacity to translate into public policies is uneven. Translation often hinges on an experiment's ability to penetrate existing institutional agendas and regimes (Bulkeley et al. 2018; Heijden and Hong 2020). Formal, government-led initiatives are usually better placed to sediment into 'prototypes', while informal experiments, though rich in learning-cum-transformative potential, often struggle to institutionalise (Hermans et al. 2024).

This unevenness has spurred growing intellectual attention to the processes and practices of empiricisation and monitoring that shape which experiments are deemed 'successful' and therefore diffused. More fundamentally, von Wirth et al. (2019) argue that much of this debate has centred on three key interrelated processes: embedding, scaling and translation. Scaling—typically understood as the replication (often with minimal or no mutation) or expansion of 'successful' experiments across similar contexts—has received particular attention. This includes vertical diffusion (*scaling-up*), where the same intervention is deepened or extended *within the same* jurisdiction but at a broader scope, and horizontal diffusion (*scaling-out*), where the experiment is replicated *across different* locations or governance levels (Smeds and Acuto 2018; Sørensen and Torfing 2016b; van Winden and van den Buuse 2017). As Ettelt et al. (2015a) and Pfothenhauer et al. (2021) note, this intellectual gravitas around scalability is unsurprising, reflecting the dominant rational-technocratic foundations of evidence and evaluation in both policy sciences and policymaking practices—a logic in which, Hossain et al. (2019, 984) observe, the 'success of living labs depends on *transferring* knowledge between different parties'.

However, many of these debates convey a discursive slippage between 'scaling' and 'translation'. While scaling is often framed as 'black-box' replication of successful experiments, closer scrutiny reveals emerging scholarship that explores the processes of reinterpretation, negotiation, and contextualisation shaping the 'diffusion' of experiments (Haugland and Skjølsvold 2020; Hughes et al. 2020; Savini and Bertolini 2019; van Winden and van den Buuse 2017). What, thus, is often labelled as scaling may, in fact, constitute a form of translation—not as replication, but as a process that 'emphasises the spatialities through which knowledge moves and ... how they make a difference, whether through hindering, facilitating, amplifying, distorting, contesting or radically repackaging knowledge' (McFarlane 2011, 363).

Against this backdrop, we argue that policy mobility scholars are well-positioned to examine the context-specific and path-dependent forms of agency shaping how knowledge produced in and through experiments is constituted and reconstituted as it moves across different places and temporalities (McCann and Ward 2013; Silva and Ward 2024; Temenos and McCann 2013). This fundamentally calls for a topological understanding of the processual ways in which experimental knowledge is potentially made mobile, reinterpreted, and reconfigured within public policymaking: in and through the process of mobilisation (*mutation in movement*); upon its 'arrival', in more or less institutionalised forms, across multiple elsewhere (*mutation on arrival*); and in how such mobilities may reshape the broader contexts they pass through (*mutation in context*). Together, these elements reveal

TABLE 1 | Summary of mid-level framings of experimentation and pathways for future research in policy mobilities studies.

Mid-level framing	Insights from the experimentation literature	Remaining research gaps	Policy mobilities contributions/ future research agendas
Experiments as situated	<ul style="list-style-type: none"> Experiments as territorially bounded and time-limited (micro-) local interventions Focus on rationalist-techno-formalist approaches (transfer, implementation → evaluation → scaling) 	<ul style="list-style-type: none"> Under-theorisation of the spatial and temporal ‘situatedness’ of experiments as relationally constituted Risks of geographical naiveté: Limited engagement with the frictions, negotiations, and selective uptake shaping experimentation 	<ul style="list-style-type: none"> Advance relational-territorial, fixity-mobility and topological approaches of experimentation Investigate the role of ‘situated experimentation’ in configuring or reconfiguring mobile public policies through frictions, negotiations, and selective uptake
Experiments as power constructs	<ul style="list-style-type: none"> Experiments as ‘peopled’: Multiple and shifting agendas, actors, and forms of expertise Focus on identifying and categorising experiments: Design, dispositions and social actors Recent attention to the everyday practices mediating the making-up of experiments 	<ul style="list-style-type: none"> Under-theorisation of the embodied, mundane, and performative practices through which agency and power is relationally produced in and through experiments Limited reflection on the socially and politically constructed aspects or practices that legitimise or halt certain experimental narratives, including over shifting temporal frames 	<ul style="list-style-type: none"> Advance processual and socio-constructivist approaches to experimentation in policymaking Trace the uneven social labour shaping the adoption or non-adoption of certain experimental narratives and their temporal power-plays Examine the making (im)mobile of experiments as they become referents ‘here’ and ‘elsewhere’
Experiments as learning sites	<ul style="list-style-type: none"> Experiments as ‘protected’ spaces of knowledge production: ‘Success’ and ‘failure are generative Treated as taken-for-granted sites of introspective and (increasingly) extrospective learning Focus on identifying arenas that facilitate knowledge production, particularly <i>within</i> experiments 	<ul style="list-style-type: none"> Micro-arenas of knowledge production are often catalogued rather than critically interrogated Limited attention to how certain forms of knowledge are legitimised while others are silenced Under-theorisation of uneven power relations in framing, mediating, and circulating experimental knowledge Limited engagement with how failure, recursion, and indeterminacy shape knowledge production and circulation 	<ul style="list-style-type: none"> Advance processual and socio-constructivist approaches to experimentation in policymaking Conceptualise experiments as situated <i>within</i> but also <i>constitutive of</i> informational infrastructures Interrogate how experiments as informational infrastructures selectively mobilise and legitimise some narratives while silencing others Explore how experimental ‘success’ and ‘failure’ is made mobile and co-produced over time
Experiments as translation instances	<ul style="list-style-type: none"> Focus on rationalist-techno-formalist approaches (transfer → implementation → evaluation → scaling) Intellectual emphasis on <i>scalability</i> as replication of ‘successful’ experiments Growing recognition that <i>scaling</i> often entails <i>translation</i> 	<ul style="list-style-type: none"> Discursive slippage between <i>scaling</i> and <i>translation</i> obscures processes of mutation, reinterpretation, and contestation Under-theorisation of the afterlives of experiments: How experimental knowledge is mobilised, reconfigured, institutionalised or abandoned across multiple temporalities of policymaking 	<ul style="list-style-type: none"> Advance processual and socio-constructivist approaches to experimentation in policymaking Examine context-specific forms of reinterpretation and reconfiguration across temporalities: <i>Mutation in movement, on arrival and in context.</i> Trace how adoption/non-adoption of experimental knowledge reshape policymaking across place, scale, and time

what Jacobs (2012, 418) terms ‘the multiplicity of add-ons that [may] contribute, often in unpredictable and varying ways, to the transportation, arrival, adoption and... non-arrival and non-adoption’ of experimental knowledge, particularly in a world of mobile public policymaking. In this sense, as translation

instances, experiments traverse time as much as space. They live on through temporal afterlives of movement, mutation, and (non-)adoption, as the knowledge they generate is reinterpreted, delayed, or reformulated in different settings. Overall, this framing highlights that experiments are not discrete events but

provisional and iterative arenas of knowledge production, whose afterlives may unfold across time, space, and scale, contributing to the ongoing reinvention of twenty-first-century public policymaking.

3 | Conclusion

It has been just over a decade since Temenos and McCann (2013) reviewed the geographic literature on policy mobilities in this journal. At the time, they called for stronger intellectual conversations between the then-nascent approach of policy mobilities and the well-established ‘laborisation’ tradition in STS. This, they argued, would ‘encourage conceptual nuance around the ‘mundane’ practices of policy-making’ and enable ‘a deep investigation into the politics of policy mobilities’ (p. 355). Since then—and despite further critical reviews in this journal (Haupt 2023; Ward 2024) and in others (Silva and Ward 2024; Temenos and Ward 2025)—there has been little attention to the theorisation of experimentation in twenty-first-century public policymaking. This oversight has become harder to ignore, particularly in the wake of the COVID-19 pandemic, when experimentation re-emerged as a mundane practice of public policymaking (Acuto 2020; McGuirk et al. 2021).

Building on the recent ‘temporal turn’ within policy mobilities (Baker and McCann 2020; Bok 2020; Lorne 2024; Morais 2024; Wood 2015), this paper brings experimentation into dialogue with policy mobilities to argue for renewed focus on the multiple *stages* and *tempos* through which experiments unfold. We take up this approach because it provides the conceptual and ontological architecture to interrogate experimentation as a process constituted through relational practices, socio-constructivist dynamics, and temporal politics. Situated within these debates, we outline four mid-level framings as a heuristic framework to explore what experimentation—often as part of the institutional apparatus constitutive of the formative and provisional process within public policymaking—might offer to theorising the making-up of public policies. These are: (i) experiments as *situated*; (ii) experiments as *power-laden constructs*; (iii) experiments as *learning sites*, and (iv) experiments as *translation instances*. Taken together, these framings underscore the central contribution of this paper by rejecting narrow, technocratic and rational-formalist understandings of experimentation as a discrete stage and instead repositioning it as a generative ground for advancing processual, relational, and socio-constructivist accounts of understanding public policymaking as a practice unfolding across multiple temporalities. Table 1 summarises these mid-level framings, highlighting the intellectual contributions of existing experimentation scholarship and its remaining research gaps, and the distinctive contributions that the policy mobilities perspective can bring to future research agendas.

This paper has argued that experimentation and the geographical literature on policy mobilities are mutually enriching approaches for theorising contemporary public policymaking. A focus on experimentation advances geographical understandings by relocating intellectual attention from formal policy outputs to the contingent sites and situated practices through which policy ideas are discursively and materially assembled, tested, and

authorised. Rather than a linear sequence of cycles from design to implementation, experiments make visible the work of governance-in-the-making, thereby revealing public policy-making as a relational, processual, and socio-constructivist process. Experiments constitute, and are constitutive of, informational infrastructures that frame, package, and circulate policy knowledge, shaping not only what is considered governable, but also where and by whom such knowledge gains traction. They draw attention to the afterlives of policy work, tracing how experimental elements are taken up, transformed, or abandoned, across space and time. Here, the geographical literature of policy mobilities offers critical insight into the spatial and temporal politics of experimentation. It shows how experiments are not simply local or time-bound phenomena but their entanglement in relational circuits of comparison-cum-referencing that produce uneven geographies of visibility, credibility, and benefit. A processual and socio-constructivist lens further reveals how experiments compress and sequence time and makes visible the curation of exemplars and the enacting of exclusions. Together, experimentation and geography offer a shared conceptual grammar—articulated through the four mid-level framings outlined in this paper—for understanding the making of public policies thinkable, actionable, and mobile. This becomes especially urgent in the current conjuncture of crisis public policy-making, where demands for rapid, demonstrable solutions often collide with the indeterminate, recursive nature of experimental governance. Looking forward, this invites geographers to engage experimentation not only as an object of study, but as a terrain through which policy futures are assembled, contested, and reimaged across scale, space, and time.

Acknowledgements

We thank the Political section editor of *Geography Compass*, Nicholas Crane, the three anonymous reviewers, and Jean-Paul Addie for their support and constructive comments on earlier versions of this paper. The responsibility for any flaws or errors lies, of course, with us.

Conflicts of Interest

The authors declare no conflicts of interest.

References

- Abbott, K. W. 2017. “Orchestrating Experimentation in Non-State Environmental Commitments.” *Environmental Politics* 26, no. 4: 738–763. <https://doi.org/10.1080/09644016.2017.1319631>.
- Acuto, M. 2020. “Engaging With Global Urban Governance in the Midst of a Crisis.” *Dialogues in Human Geography* 10, no. 2: 221–224. <https://doi.org/10.1177/2043820620934232>.
- Addie, J.-P. D. 2017. “From the Urban University to Universities in Urban Society.” *Regional Studies* 51, no. 7: 1089–1099. <https://doi.org/10.1080/00343404.2016.1224334>.
- Andersson, I., and I. R. Cook. 2019. “Conferences, Award Ceremonies and the Showcasing of ‘Best Practice’: A Case Study of the Annual European Week of Regions and Cities in Brussels.” *Environment and Planning C: Politics and Space* 37, no. 8: 1361–1379. <https://doi.org/10.1177/2399654419825656>.
- Ansell, C. K., and M. Bartenberger. 2016. “Varieties of Experimentalism.” *Ecological Economics* 130: 64–73. <https://doi.org/10.1016/j.ecolecon.2016.05.016>.

- Baker, T., and E. McCann. 2020. "Beyond Failure: The Generative Effects of Unsuccessful Proposals for Supervised Drug Consumption Sites (SCS) in Melbourne, Australia." *Urban Geography* 41, no. 9: 1179–1197. <https://doi.org/10.1080/02723638.2018.1500254>.
- Baker, T., and P. McGuirk. 2019. "'He Came Back a Changed Man': The Popularity and Influence of Policy Tourism." *Area* 51, no. 3: 561–569. <https://doi.org/10.1111/area.12505>.
- Baker, T., and C. Walker. 2019. "Introduction: The Centrality of Arenas, Agents and Actions." In *Public Policy Circulation: Arenas, Agents and Actions*, edited by T. Baker and C. Walker, 2–24. Elgar. <https://doi.org/10.4337/9781788119153.00008>.
- Ball, S., and B. W. Head. 2021. "Behavioural Insights Teams in Practice: Nudge Missions and Methods on Trial." *Policy & Politics* 49, no. 1: 105–120. <https://doi.org/10.1332/030557320X15840777045205>.
- Biehl, J., and A. Petryna. 2013. *When People Come First: Critical Studies in Global Health*. Princeton University Press. <http://www.jstor.org/stable/j.ctt2jc895>.
- Blomkamp, E. 2018. "The Promise of Co-Design for Public Policy." *Australian Journal of Public Administration* 77, no. 4: 729–743. <https://doi.org/10.1111/1467-8500.12310>.
- Bok, R. 2020. "The Relational Co-Production of "Success" and "Failure," or the Politics of Anxiety of Exporting Urban "Models" Elsewhere." *Urban Geography* 41, no. 9: 1218–1239. <https://doi.org/10.1080/02723638.2020.1802932>.
- Brenner, N., J. Peck, and N. Theodore. 2010. "After Neoliberalization?" *Globalizations* 7, no. 3: 327–345. <https://doi.org/10.1080/14747731003669669>.
- Bulkeley, H., L. Coenen, N. Frantzeskaki, et al. 2016. "Urban Living Labs: Governing Urban Sustainability Transitions." *Current Opinion in Environmental Sustainability* 22: 13–17. <https://doi.org/10.1016/j.cosust.2017.02.003>.
- Bulkeley, H., S. Marvin, Y. V. Palgan, et al. 2018. "Urban Living Laboratories: Conducting the Experimental City?" *European Urban and Regional Studies* 26, no. 4: 317–335. <https://doi.org/10.1177/0969776418787222>.
- Callon, M., P. Lascoumes, and Y. Barth. 2009. *Acting in an Uncertain World: An Essay on Technical Democracy*. MIT Press.
- Castán Broto, V. 2017. "Urban Governance and the Politics of Climate Change." *World Development* 93: 1–15. <https://doi.org/10.1016/j.worlddev.2016.12.031>.
- Chang, I.-C. C. 2017. "Failure Matters: Reassembling Eco-Urbanism in a Globalizing China." *Environment and Planning A: Economy and Space* 49, no. 8: 1719–1742. <https://doi.org/10.1177/0308518X16685092>.
- Chang, I.-C. C., S.-C. Jou, and M.-K. Chung. 2020. "Provincialising Smart Urbanism in Taipei: The Smart City as a Strategy for Urban Regime Transition." *Urban Studies* 58, no. 3: 559–580. <https://doi.org/10.1177/0042098020947908>.
- Chatterton, P., A. Owen, J. Cutter, G. Dymiski, and R. Unsworth. 2018. "Recasting Urban Governance Through Leeds City Lab: Developing Alternatives to Neoliberal Urban Austerity in Co-production Laboratories." *International Journal of Urban and Regional Research* 42, no. 2: 226–243. <https://doi.org/10.1111/1468-2427.12607>.
- Cinar, E., S. Christopher, T. Paul, and M. A. Demircioglu. 2024. "Public Sector Innovation in Context: A Comparative Study of Innovation Types." *Public Management Review* 26, no. 1: 265–292. <https://doi.org/10.1080/14719037.2022.2080860>.
- Coenen, L., K. Davidson, and B. Gleeson. 2019. "Situating C40 in the Evolution of Networked Urban Climate Governance." *Global Policy* 10, no. 4: 723–725. <https://doi.org/10.1111/1758-5899.12759>.
- Crosby, B. C., H. Paul t, and J. Torfing. 2017. "Public Value Creation Through Collaborative Innovation." *Public Management Review* 19, no. 5: 655–669. <https://doi.org/10.1080/14719037.2016.1192165>.
- Cugurullo, F. 2017. "Exposing Smart Cities and Eco-Cities: Frankenstein Urbanism and the Sustainability Challenges of the Experimental City." *Environment and Planning* 50, no. 1: 73–92. <https://doi.org/10.1177/0308518X17738535>.
- Dye, T. R. 1972. *Understanding Public Policy*. Prentice-Hall.
- Edwards, D. B., and M. Moschetti. 2021. "The Sociology of Policy Change Within International Organisations: Beyond Coercive and Normative Perspectives – Towards Circuits of Power." *Globalisation, Societies and Education* 19, no. 1: 55–69. <https://doi.org/10.1080/14767724.2020.1806043>.
- Edwards-Schachter, M. E., C. E. Matti, and E. Alcántara. 2012. "Fostering Quality of Life Through Social Innovation: A Living Lab Methodology Study Case." *Review of Policy Research* 29, no. 6: 672–692. <https://doi.org/10.1111/j.1541-1338.2012.00588.x>.
- Ehnert, F. 2023. "Bridging the Old and the New in Sustainability Transitions: The Role of Transition Intermediaries in Facilitating Urban Experimentation." *Journal of Cleaner Production* 417: 138084. <https://doi.org/10.1016/j.jclepro.2023.138084>.
- Eneqvist, E., A. Jessica, J. Christian, and A. Karvonen. 2022. "Legitimacy in Municipal Experimental Governance: Questioning the Public Good in Urban Innovation Practices." *European Planning Studies* 30, no. 8: 1596–1614. <https://doi.org/10.1080/09654313.2021.2015749>.
- Eneqvist, E., and A. Karvonen. 2021. "Experimental Governance and Urban Planning Futures: Five Strategic Functions for Municipalities in Local Innovation." *Urban Planning* 6, no. 1: 183–194. <https://doi.org/10.17645/up.v6i1.3396>.
- Ettelt, S., N. Mays, and P. Allen 2015a. "The Multiple Purposes of Policy Piloting and Their Consequences: Three Examples From National Health and Social Care Policy in England." *Journal of Social Policy* 44, no. 2: 319–337. <https://doi.org/10.1017/S0047279414000865>.
- Ettelt, S., N. Mays, and P. Allen. 2015b. "Policy Experiments: Investigating Effectiveness or Confirming Direction?" *Evaluation* 21, no. 3: 292–307. <https://doi.org/10.1177/1356389015590737>.
- Evans, J., and A. Karvonen. 2014. "'Give Me a Laboratory and I Will Lower Your Carbon Footprint!' — Urban Laboratories and the Governance of Low-Carbon Futures." *International Journal of Urban and Regional Research* 38, no. 2: 413–430. <https://doi.org/10.1111/1468-2427.12077>.
- Faulconbridge, J. R. 2010. "Global Architects: Learning and Innovation Through Communities and Constellations of Practice." *Environment and Planning A: Economy and Space* 42, no. 12: 2842–2858. <https://doi.org/10.1068/a4311>.
- Frantzeskaki, N., F. van Steenbergen, and R. C. Stedman. 2018. "Sense of Place and Experimentation in Urban Sustainability Transitions: The Resilience Lab in Carnisse, Rotterdam, the Netherlands." *Sustainability Science* 13, no. 4: 1045–1059. <https://doi.org/10.1007/s11625-018-0562-5>.
- Gordon, D. J. 2018. "Global Urban Climate Governance in Three and a Half Parts: Experimentation, Coordination, Integration (And Contestation)." *WIREs Climate Change* 9, no. 6: e546. <https://doi.org/10.1002/wcc.546>.
- Green, D. P., and P. John. 2010. "Field Experiments in Comparative Politics and Policy." *Annals of the American Academy of Political and Social Science* 628, no. 1: 6–10. <https://doi.org/10.1177/0002716209351498>.
- Griffiths, S., and B. K. Sovacool. 2020. "Rethinking the Future Low-Carbon City: Carbon Neutrality, Green Design, and Sustainability Tensions in the Making of Masdar City." *Energy Research & Social Science* 62: 101368. <https://doi.org/10.1016/j.erss.2019.101368>.
- Grundel, I., and K. Trygg. 2024. "A Tale of Urban Experimentation in Three Swedish Municipalities." *European Planning Studies* 32, no. 8: 1713–1730. <https://doi.org/10.1080/09654313.2024.2353697>.
- Hartley, J., E. Sørensen, and J. Torfing. 2013. "Collaborative Innovation: A Viable Alternative to Market Competition and Organizational

- Entrepreneurship." *Public Administration Review* 73, no. 6: 821–830. <https://doi.org/10.1111/puar.12136>.
- Hartley, K., G. Kuecker, and J. J. Woo. 2019. "Practicing Public Policy in an Age of Disruption." *Policy Design and Practice* 2, no. 2: 163–181. <https://doi.org/10.1080/25741292.2019.1622276>.
- Haugland, B. T., and T. M. Skjølsvold. 2020. "Promise of the Obsolete: Expectations for and Experiments With Self-Driving Vehicles in Norway." *Sustainability: Science, Practice and Policy* 16, no. 1: 37–47. <https://doi.org/10.1080/15487733.2020.1765677>.
- Haupt, W. 2023. "Policy Diffusion, Policy Transfer, and Policy Mobilities Revisited: A Call for More Interdisciplinary Approaches in Human Geography." *Geography Compass* 17, no. 5: e12688. <https://doi.org/10.1111/gec3.12688>.
- Hermans, M., J. de Kraker, and C. Scholl. 2024. "The Shrinking City as a Testing Ground for Urban Degrowth Practices." *Urban Planning* 9: 1–19. <https://doi.org/10.17645/up.8008>.
- Hilbrandt, H., and J. Ren. 2025. "Doing Urban Geography in Times of Crisis: Introduction to the Forum 'Urban Geography in Times of Crisis.'" *Geographica Helvetica* 80, no. 1: 23–29. <https://doi.org/10.5194/gh-80-23-2025>.
- Hodson, M., J. Evans, and G. Schliwa. 2018. "Conditioning Experimentation: The Struggle for Place-based Discretion in Shaping Urban Infrastructures." *Environment and Planning C* 36, no. 8: 1480–1498. <https://doi.org/10.1177/2399654418765480>.
- Hodson, M., and S. Marvin. 2009. "Cities Mediating Technological Transitions: Understanding Visions, Intermediation and Consequences." *Technology Analysis & Strategic Management* 21, no. 4: 515–534. <https://doi.org/10.1080/09537320902819213>.
- Hossain, M., S. Leminen, and M. Westerlund. 2019. "A Systematic Review of Living Lab Literature." *Journal of Cleaner Production* 213: 976–988. <https://doi.org/10.1016/j.jclepro.2018.12.257>.
- Hou, J. 2020. "Guerrilla Urbanism: Urban Design and the Practices of Resistance." *Urban Design International* 25, no. 2: 117–125. <https://doi.org/10.1057/s41289-020-00118-6>.
- Howlett, M., and B. Cashore. 2014. "Conceptualizing Public Policy." In *Comparative Policy Studies: Conceptual and Methodological Challenges*, edited by I. Engeli and C. R. Allison, 17–33. Palgrave Macmillan. https://doi.org/10.1057/9781137314154_2.
- Hughes, S., S. Yordi, and L. Besco. 2020. "The Role of Pilot Projects in Urban Climate Change Policy Innovation." *Policy Studies Journal* 48, no. 2: 271–297. <https://doi.org/10.1111/psj.12288>.
- Huitema, D., A. Jordan, S. Munaretto, and M. Hildén. 2018. "Policy Experimentation: Core Concepts, Political Dynamics, Governance and Impacts." *Policy Sciences* 51, no. 2: 143–159. <https://doi.org/10.1007/s11077-018-9321-9>.
- Jacobs, J. M. 2012. "Urban Geographies I: Still Thinking Cities Relationally." *Progress in Human Geography* 36, no. 3: 412–422. <https://doi.org/10.1177/0309132511421715>.
- Jowell, R. 2003. "Trying It out the Role of 'Pilots' in Policy-Making."
- Karvonen, A., and B. van Heur. 2014. "Urban Laboratories: Experiments in Reworking Cities." *International Journal of Urban and Regional Research* 38, no. 2: 379–392. <https://doi.org/10.1111/1468-2427.12075>.
- Kohler, R. E. 2002. "Labsapes: Naturalizing the Lab." *History of Science* 40, no. 4: 473–501. <https://doi.org/10.1177/007327530204000405>.
- Krohn, W., and J. Weyer. 1994. "Society as a Laboratory: The Social Risks of Experimental Research." *Science and Public Policy* 21, no. 3: 173–183. <https://doi.org/10.1093/spp/21.3.173>.
- Kronsell, A., and D. Mukhtar-Landgren. 2018. "Experimental Governance: The Role of Municipalities in Urban Living Labs." *European Planning Studies* 26, no. 5: 988–1007. <https://doi.org/10.1080/09654313.2018.1435631>.
- Laakso, S., A. Berg, and M. Annala. 2017. "Dynamics of Experimental Governance: A Meta-Study of Functions and Uses of Climate Governance Experiments." *Journal of Cleaner Production* 169: 8–16. <https://doi.org/10.1016/j.jclepro.2017.04.140>.
- Latour, B. 1987. *Science in Action: How to Follow Scientists and Engineers Through Society*. Harvard University Press. <https://books.google.pt/books?id=sC4bk4DZXTQC>.
- Levenda, A. M. 2018. "Mobilizing Smart Grid Experiments: Policy Mobilities and Urban Energy Governance." *Environment and Planning C: Politics and Space* 37, no. 4: 634–651. <https://doi.org/10.1177/2399654418797127>.
- Lewis, J. M., M. McGann, and E. Blomkamp. 2020. "When Design Meets Power: Design Thinking, Public Sector Innovation and the Politics of Policymaking." *Policy & Politics* 48, no. 1: 111–130. <https://doi.org/10.1332/030557319X15579230420081>.
- Lorne, C. 2024. "Repoliticising National Policy Mobilities: Resisting the Americanization of Universal Healthcare." *Environment and Planning C: Politics and Space* 42, no. 2: 231–249. <https://doi.org/10.1177/23996544211068724>.
- Lovell, H., C. Nixon, and A. Betzold. 2023. "Policy Mobilities and the Policy Cycle: An Analysis Using Two Smart Grid Case Studies." *Geoforum* 144: 103818. <https://doi.org/10.1016/j.geoforum.2023.103818>.
- McAslan, D., F. Najar Arevalo, D. A. King, and T. R. Miller. 2021. "Pilot Project Purgatory? Assessing Automated Vehicle Pilot Projects in U.S. Cities." *Humanities and Social Sciences Communications* 8, no. 1: 325. <https://doi.org/10.1057/s41599-021-01006-2>.
- McCann, E. 2008. "Expertise, Truth, and Urban Policy Mobilities: Global Circuits of Knowledge in the Development of Vancouver, Canada's 'Four Pillar' Drug Strategy." *Environment and Planning A: Economy and Space* 40, no. 4: 885–904. <https://doi.org/10.1068/a38456>.
- McCann, E., and K. Ward. 2010. "Relationality/territoriality: Toward a Conceptualization of Cities in the World." *Geoforum* 41, no. 2: 175–184. <https://doi.org/10.1016/j.geoforum.2009.06.006>.
- McCann, E., and K. Ward. 2011. In *Mobile Urbanism: Cities and Policymaking in the Global Age*, edited by E. McCann and K. Ward. 1st ed. University of Minnesota Press.
- McCann, E., and K. Ward. 2013. "A Multi-Disciplinary Approach to Policy Transfer Research: Geographies, Assemblages, Mobilities and Mutations." *Policy Studies* 34, no. 1: 2–18. <https://doi.org/10.1080/01442872.2012.748563>.
- McCrary, G., N. Schöpke, J. Holmén, and J. Holmberg. 2020. "Sustainability-Oriented Labs in Real-World Contexts: An Exploratory Review." *Journal of Cleaner Production* 277: 123202. <https://doi.org/10.1016/j.jclepro.2020.123202>.
- McFadgen, B., and D. Huitema. 2017. "Stimulating Learning Through Policy Experimentation: A Multi-Case Analysis of How Design Influences Policy Learning Outcomes in Experiments for Climate Adaptation." *Water* 9, no. Issue 9: 648. <https://doi.org/10.3390/w9090648>.
- McFadgen, B., and D. Huitema. 2018. "Experimentation at the Interface of Science and Policy: A Multi-Case Analysis of How Policy Experiments Influence Political Decision-Makers." *Policy Sciences* 51, no. 2: 161–187. <https://doi.org/10.1007/s11077-017-9276-2>.
- McFarlane, C. 2011. "The City as a Machine for Learning." *Transactions of the Institute of British Geographers* 36, no. 3: 360–376. <https://doi.org/10.1111/j.1475-5661.2011.00430.x>.
- McGann, M., E. Blomkamp, and J. M. Lewis. 2018. "The Rise of Public Sector Innovation Labs: Experiments in Design Thinking for Policy." *Policy Sciences* 51, no. 3: 249–267. <https://doi.org/10.1007/s11077-018-9315-7>.
- McGann, M., W. Tamas, and E. Blomkamp. 2021. "Innovation Labs and Co-Production in Public Problem Solving." *Public Management Review* 23, no. 2: 297–316. <https://doi.org/10.1080/14719037.2019.1699946>.

- McGuirk, P., T. Baker, A. Sisson, R. Dowling, and S. Maalsen. 2022. "Innovating Urban Governance: A Research Agenda." *Progress in Human Geography* 46, no. 6: 1391–1412. <https://doi.org/10.1177/03091325221127298>.
- McGuirk, P., R. Dowling, S. Maalsen, and T. Baker. 2021. "Urban Governance Innovation and COVID-19." *Geographical Research* 59, no. 2: 188–195. <https://doi.org/10.1111/1745-5871.12456>.
- McLean, A., H. Bulkeley, and M. Crang. 2015. "Negotiating the Urban Smart Grid: Socio-Technical Experimentation in the City of Austin." *Urban Studies* 53, no. 15: 3246–3263. <https://doi.org/10.1177/0042098015612984>.
- Mei, C., and Z. Liu. 2014. "Experiment-Based Policy Making or Conscious Policy Design? The Case of Urban Housing Reform in China." *Policy Sciences* 47, no. 3: 321–337. <https://doi.org/10.1007/s11077-013-9185-y>.
- Montero, S., R. A. Whitney, and I. Peñaranda. 2023. "Experimental Urban Planning: Tensions Behind the Proliferation of Urban Laboratories in Latin America." *Planning Theory & Practice* 24, no. 4: 473–488. <https://doi.org/10.1080/14649357.2023.2262420>.
- Morais, F. 2024. "Beyond 'Fast' and 'Slow': Explicating the Multiple Temporalities of Policy Mobilities." *Mobilities* 19, no. 4: 756–772. <https://doi.org/10.1080/17450101.2023.2292609>.
- Mukhtar-Landgren, D., K. Annica, V. P. Yuliya, and T. von Wirth. 2019. "Municipalities as Enablers in Urban Experimentation." *Journal of Environmental Policy and Planning* 21, no. 6: 718–733. <https://doi.org/10.1080/1523908X.2019.1672525>.
- Naus, J., and H. M. van der Horst. 2016. "Accomplishing Information and Change in a Smart Grid Pilot: Linking Domestic Practices With Policy Interventions." *Environment and Planning C: Politics and Space* 35, no. 3: 379–396. <https://doi.org/10.1177/0263774X16662470>.
- Nciri, A., and A. Levenda. 2020. "Urban Policy (Im)Mobilities and Refractory Policy Lessons: Experimenting With the Sustainability Fix." *Urban Geography* 41, no. 9: 1158–1178. <https://doi.org/10.1080/02723638.2019.1575154>.
- Newig, J., E. Kochskämper, E. Challies, and N. W. Jager. 2016. "Exploring Governance Learning: How Policymakers Draw on Evidence, Experience and Intuition in Designing Participatory Flood Risk Planning." *Environmental Science & Policy* 55: 353–360. <https://doi.org/10.1016/j.envsci.2015.07.020>.
- Nguyen, H. T., P. Marques, and P. Benneworth. 2022. "Living Labs: Challenging and Changing the Smart City Power Relations?" *Technological Forecasting and Social Change* 183: 121866. <https://doi.org/10.1016/j.techfore.2022.121866>.
- Patel, Z., S. Greyling, D. Simon, et al. 2017. "Local Responses to Global Sustainability Agendas: Learning From Experimenting With the Urban Sustainable Development Goal in Cape Town." *Sustainability Science* 12, no. 5: 785–797. <https://doi.org/10.1007/s11625-017-0500-y>.
- Peck, J., and N. Theodore. 2015. In *Fast Policy: Experimental Statecraft at the Thresholds of Neoliberalism*, edited by J. Peck and N. Theodore. 1st ed. University of Minnesota Press.
- Pfotenhauer, S., B. Laurent, K. Papageorgiou, and J. Stilgoe. 2021. "The Politics of Scaling." *Social Studies of Science* 52, no. 1: 3–34. <https://doi.org/10.1177/03063127211048945>.
- Quitrow, L., and F. Rohde. 2021. "Imagining the Smart City Through Smart Grids? Urban Energy Futures Between Technological Experimentation and the Imagined low-carbon City." *Urban Studies* 59, no. 2: 341–359. <https://doi.org/10.1177/00420980211005946>.
- Rahmawan-Huizenga, S., and D. Ivanova. 2022. "The Urban Lab: Imaginative Work in the City." *International Journal of Urban and Regional Research* 46, no. 4: 542–557. <https://doi.org/10.1111/1468-2427.13123>.
- Rapoport, E. 2015. "Globalising Sustainable Urbanism: The Role of International Masterplanners." *Area* 47, no. 2: 110–115. <https://doi.org/10.1111/area.12079>.
- Rapoport, E., and A. Hult. 2017. "The Travelling Business of Sustainable Urbanism: International Consultants as Norm-Setters." *Environment and Planning A: Economy and Space* 49, no. 8: 1779–1796. <https://doi.org/10.1177/0308518X16686069>.
- Robinson, J. 2015. "Arriving At' Urban Policies: The Topological Spaces of Urban Policy Mobility." *International Journal of Urban and Regional Research* 39, no. 4: 831–834. <https://doi.org/10.1111/1468-2427.12255>.
- Rocle, N., and D. Salles. 2018. "'Pioneers But Not Guinea Pigs': Experimenting With Climate Change Adaptation in French Coastal Areas." *Policy Sciences* 51, no. 2: 231–247. <https://doi.org/10.1007/s11077-017-9279-z>.
- Savini, F., and L. Bertolini. 2019. "Urban Experimentation as a Politics of Niches." *Environment and Planning* 51, no. 4: 831–848. <https://doi.org/10.1177/0308518X19826085>.
- Schreiber, F., J. Fokdal, and A. Ley. 2023. "A Catalyst for Innovation? A Conceptual Framework for Analyzing the Potential of Urban Experiments to Transform Urban Planning Practices." *Planning Theory & Practice* 24, no. 2: 224–241. <https://doi.org/10.1080/14649357.2023.2199460>.
- Sharp, D., and R. Raven. 2021. "Urban Planning by Experiment at Precinct Scale: Embracing Complexity, Ambiguity, and Multiplicity." *Urban Planning* 6, no. 1: 195–207. <https://doi.org/10.17645/up.v6i1.3525>.
- Sierhuis, D., L. Bertolini, and W. Van Winden. 2023. "'Recovering' The Political: Unpacking the Implications of (De)Politicization for the Transformative Capacities of Urban Experiments." *Environment and Planning C: Politics and Space* 42, no. 2: 303–321. <https://doi.org/10.1177/23996544231205256>.
- Silva, D., and K. Ward. 2024. "Urban Policy Mobilities: Recent Debates and Future Research Agendas." *Geographical Review*: 1–25. <https://doi.org/10.1080/00167428.2024.2429573>.
- Simeon, R. 1976. "Studying Public Policy." *Canadian Journal of Political Science* 9, no. 4: 548–580. <https://doi.org/10.1017/S000842390004470X>.
- Smeds, E., and M. Acuto. 2018. "Networking Cities After Paris: Weighing the Ambition of Urban Climate Change Experimentation." *Global Policy* 9, no. 4: 549–559. <https://doi.org/10.1111/1758-5899.12587>.
- Sørensen, E., and J. Torfing. 2011. "Enhancing Collaborative Innovation in the Public Sector." *Administration & Society* 43, no. 8: 842–868. <https://doi.org/10.1177/0095399711418768>.
- Sørensen, E., and J. Torfing. 2016a. "Metagoverning Collaborative Innovation in Governance Networks." *American Review of Public Administration* 47, no. 7: 826–839. <https://doi.org/10.1177/0275074016643181>.
- Sørensen, E., and J. Torfing. 2016b. "Co-Initiation of Collaborative Innovation in Urban Spaces." *Urban Affairs Review* 54, no. 2: 388–418. <https://doi.org/10.1177/1078087416651936>.
- Stead, D. 2016. "Key Research Themes on Governance and Sustainable Urban Mobility." *International Journal of Sustainable Transportation* 10, no. 1: 40–48. <https://doi.org/10.1080/15568318.2013.821008>.
- Suitner, J., and A. Krisch. 2023. "Navigating Context in Experiments: The 'Real,' The Roots, The Rationale." *European Urban and Regional Studies* 31, no. 3: 302–316. <https://doi.org/10.1177/09697764231205218>.
- Temenos, C. 2022. "Troubling Austerity: Crisis Policy-Making and Revanchist Public Health Politics." *ACME: An International Journal for Critical Geographies* 21, no. 6: 728–749. <https://doi.org/10.14288/acme.v21i6.2219>.
- Temenos, C., and E. McCann. 2013. "Geographies of Policy Mobilities." *Geography Compass* 7, no. 5: 344–357. <https://doi.org/10.1111/gec3.12063>.

- Temenos, C., and K. Ward. 2025. "The Persistence of Policy Mobilities: Multiple Origins, Interdisciplinary Developments and Future Research Agendas." *Finisterra* 60, no. 128: e36541. <https://doi.org/10.18055/Finis36541>.
- Timeus, K., and M. Gascó. 2018. "Increasing Innovation Capacity in City Governments: Do Innovation Labs Make a Difference?" *Journal of Urban Affairs* 40, no. 7: 992–1008. <https://doi.org/10.1080/07352166.2018.1431049>.
- Tönurist, P., K. Rainer, and V. Lember. 2017. "Innovation Labs in the Public Sector: What They are and What They Do?" *Public Management Review* 19, no. 10: 1455–1479. <https://doi.org/10.1080/14719037.2017.1287939>.
- Torrens, J., P. Johnstone, and J. Schot. 2018. "Unpacking the Formation of Favourable Environments for Urban Experimentation: The Case of the Bristol Energy Scene." *Sustainability* 10, no. 3: 879. <https://doi.org/10.3390/su10030879>.
- Torrens, J., J. Schot, R. Raven, and P. Johnstone. 2019. "Seedbeds, Harbours, and Battlegrounds: On the Origins of Favourable Environments for Urban Experimentation With Sustainability." *Environmental Innovation and Societal Transitions* 31: 211–232. <https://doi.org/10.1016/j.eist.2018.11.003>.
- Trei, D. T., J. Hornung, J. Rychlik, and N. C. Bandelow. 2021. "From Political Motivation to Scientific Knowledge: Classifying Policy Labs in the Science-Policy Nexus." *European Planning Studies* 29, no. 12: 2340–2356. <https://doi.org/10.1080/09654313.2021.1941785>.
- Trencher, G., V. Castán Broto, T. Takagi, Z. Sprigings, Y. Nishida, and M. Yarime. 2016. "Innovative Policy Practices to Advance Building Energy Efficiency and Retrofitting: Approaches, Impacts and Challenges in Ten C40 Cities." *Environmental Science & Policy* 66: 353–365. <https://doi.org/10.1016/j.envsci.2016.06.021>.
- Vallance, P., M. Tewdwr-Jones, and L. Kempton. 2020. "Building Collaborative Platforms for Urban Innovation: Newcastle City Futures as a Quadruple Helix Intermediary." *European Urban and Regional Studies* 27, no. 4: 325–341. <https://doi.org/10.1177/0969776420905630>.
- van der Heijden, J. 2016. "Experimental Governance for Low-Carbon Buildings and Cities: Value and Limits of Local Action Networks." *Cities* 53: 1–7. <https://doi.org/10.1016/j.cities.2015.12.008>.
- van der Heijden, J., and S.-H. Hong. 2020. "Urban Climate Governance Experimentation in Seoul: Science, Politics, or a Little of Both?" *Urban Affairs Review* 57, no. 4: 1115–1148. <https://doi.org/10.1177/1078087420911207>.
- van Popering-Verkerk, J., and A. van Buuren. 2017. "Developing Collaborative Capacity in Pilot Projects: Lessons From Three Dutch Flood Risk Management Experiments." *Journal of Cleaner Production* 169: 225–233. <https://doi.org/10.1016/j.jclepro.2017.04.141>.
- van Winden, W., and D. van den Buuse. 2017. "Smart City Pilot Projects: Exploring the Dimensions and Conditions of Scaling up." *Journal of Urban Technology* 24, no. 4: 51–72. <https://doi.org/10.1080/10630732.2017.1348884>.
- von Wirth, T., F. Lea, F. Niki, and L. Coenen. 2019. "Impacts of Urban Living Labs on Sustainability Transitions: Mechanisms and Strategies for Systemic Change Through Experimentation." *European Planning Studies* 27, no. 2: 229–257. <https://doi.org/10.1080/09654313.2018.1504895>.
- Voytenko, Y., K. McCormick, J. Evans, and G. Schliwa. 2016. "Urban Living Labs for Sustainability and Low Carbon Cities in Europe: Towards a Research Agenda." *Journal of Cleaner Production* 123: 45–54. <https://doi.org/10.1016/j.jclepro.2015.08.053>.
- Voß, J.-P., and A. Simons. 2018. "A Novel Understanding of Experimentation in Governance: Co-Producing Innovations Between "Lab" and "Field."." *Policy Sciences* 51, no. 2: 213–229. <https://doi.org/10.1007/s11077-018-9313-9>.
- Ward, K. 2024. "Policy Mobilities, 'Informational Infrastructures' and the 'Digital Turn': Towards a Research Agenda." *Geography Compass* 18, no. 7: e12765. <https://doi.org/10.1111/gec3.12765>.
- Weiland, S., A. Bleicher, C. Polzin, F. Rauschmayer, and J. Rode. 2017. "The Nature of Experiments for Sustainability Transformations: A Search for Common Ground." *Journal of Cleaner Production* 169: 30–38. <https://doi.org/10.1016/j.jclepro.2017.06.182>.
- While, A. H., S. Marvin, and M. Kovacic. 2021. "Urban Robotic Experimentation: San Francisco, Tokyo and Dubai." *Urban Studies* 58, no. 4: 769–786. <https://doi.org/10.1177/0042098020917790>.
- Wood, A. 2015. "Multiple Temporalities of Policy Circulation: Gradual, Repetitive and Delayed Processes of BRT Adoption in South African Cities." *International Journal of Urban and Regional Research* 39, no. 3: 568–580. <https://doi.org/10.1111/1468-2427.12216>.