

# Beyond scalable impacts: Roles of mobility experiments in local transition governance

*The impact of short-term, localized real-world experiments on sustainable change is debated. Our analysis of three mobility experiments shows that even in the absence of quantifiable results, these experiments are still perceived as successful. By highlighting the underlying collective discursive strategies, we emphasize the different roles of experimentation in local mobility transitions and the importance of social learning and collective understanding in urban experimentation.*

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### Abstract

In this article, we explore the role of real-world experiments in local transition governance, focusing on the negotiation between measurable impacts and the evaluation of localized, tangible outcomes. In our qualitative comparative analysis, we examine three distinct mobility experiments aimed at advancing sustainable transformation in mobility and urban planning, namely the co-creative research project *City2Share* in Munich, the political program of the *Superblocks* in Barcelona, and the real-world test bed for automated shuttles *Digibus Austria* in Koppl near Salzburg. Despite the structural limitations of the temporal, spatial, and legal framework and the uncertainties in measuring the impact, all experiments were presented as successful. This success was negotiated and re-framed via five discursive strategies: mobilizing citizen engagement, highlighting small achievements, manifesting institutional embedding, generating political momentum, and delegating responsibility. As we argue, success and scaling are not just the result of scientific proof, but also a matter of negotiating the political issues raised by the experiment.

### Keywords

autonomous driving, impact assessment, living labs, mobility, scaling, shared spaces, superblock, urban experiments

## Experimenting on notorious mobility problems

In Europe, it is widely acknowledged that urban areas are plagued by noise and air pollution, traffic congestion, lack of parking space, and safety issues, while suburban and rural areas have long been suffering from car dependency (European Commission 2017). Governments are urged to address such mobility problems. Real-world experimentation is increasingly viewed as a crucial governance tool, promising to create more socially robust solutions and to induce social and technological change simultaneously (Bulkeley et al. 2015).

In many sectors, real-world experimentation, such as test beds, living labs, and real-world laboratories<sup>1</sup>, has emerged as a fundamental component of transdisciplinary laboratories (Beecroft and Parodi 2016, Wagner and Grunwald 2015) and a popular instrument for innovation. In the light of pressing climate challenges, scholars and governmental actors are increasingly questioning how experiments can have an impact beyond their original scope, given their temporal and spatial limitations (Wentland and Jung 2021, Sengers et al. 2021). Thus, experiments are co-designed with the goal of creating scalable solutions (Pfothner et al. 2021). Researchers in the fields of transdisciplinarity, transitions, and urban governance have proposed success factors for impactful experiments (Bergmann et al. 2021), processes for scaling (von Wirth et al. 2019, Lam et al. 2020), and mechanisms for measuring impact (Augenstein et al. 2022, Williams and Robinson 2020)<sup>2</sup>. Others have argued that the transformative potential of experiments lies in the multiplicity of their effects rather than in linear scaling (Torrens and von Wirth 2021, Karvonen 2018, Bulkeley et al. 2015).

Science and Technology Studies (STS) scholars have demonstrated that real-world experiments have to navigate the tension between the specificities of individual, local contexts and the

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- 1 While a clearer definition of these terms is useful in many cases, we use them without clear demarcation because our interest lies in the shared phenomenon of the creation of experimental spaces under real conditions.
- 2 See also Erisman et al. (2024, in this issue) who also identify measuring the impact of labs as one of four overarching challenges related to assessing and understanding impact in practice.

challenge of scalability (Engels et al. 2019). Regarding the question of what comes after an experiment, this tension makes it difficult to assess scalability, whereas it is more feasible to evaluate localized, tangible elements. Since the problems of mobility are well known, it is particularly interesting to assess how experiments address these issues at the local level beyond their limited scope. We argue that the success of experimentation depends

on the negotiation of real-world experiments is inherently uncertain and lacks clarity regarding their impact on mobility problems – impacts that could potentially justify scaling the experiment. We subsequently show that measurable impacts are not crucial for the experiments' status as models. Instead, as we empirically illustrate, actors collectively define success within their contexts. We propose that this negotiation of the success of real-world experi-

*The success of such experiments hinges less on delivering scalable solutions and definitive impact than on serving the specific needs of the governance context, which varies by location. Understanding these variations is vital for addressing questions of scalability and transferability of experimental settings.*

less on the creation of scalable solutions than on the local context of transition governance. To better understand the role of experimentation in sustainable transitions, it is crucial to pay more attention to its role and function within its specific local context of transition and innovation governance. The differences in these roles between places have implications for the transferability of sustainable solutions. In this contribution, we compare three mobility experiments conducted in three different regions in Europe. We ask, how do governments and experimental actors negotiate an experiment's success when it cannot demonstrate measurable impacts on the articulated problems, and what does this negotiation reveal about the experiment's role in local transition governance?

We adopt a co-productionist perspective to analyze how government actors and experimenters navigate the tension between assessing scalable impact and evaluating local, tangible outcomes for local transition efforts. We suggest that transformations in social and technical orders are symmetrically intertwined (Jasanoff 2004). Early STS work has argued that the configuration of experiments implies reconfiguring social orders (Shapin and Schaffer 1985). Hence, experiments on new mobility configurations simultaneously test societal responses (Engels et al. 2019). This perspective enables us to reflect on how local social and political contexts co-shape the role of experimentation and its success as a model for replication. In other words, co-production serves as a lens to examine emergent forms of assessment and discursive strategies that deem experiments successful despite the absence of objectifiable outcomes, and stabilize specific experiments as replicable models within their transition governance context. From this perspective, we view evaluation as emergent articulations of the effects and impacts of experiments, rather than as a predefined project task. Thus, we avoid judging the experiments in terms of their success; instead, we focus on success as a category created by the respective governments and actors involved in the experiments.

First, we present our comparative research design. Then, we introduce the three cases and demonstrate that the planned eval-

uation of real-world experiments is inherently uncertain and lacks clarity regarding their impact on mobility problems – impacts that could potentially justify scaling the experiment. We subsequently show that measurable impacts are not crucial for the experiments' status as models. Instead, as we empirically illustrate, actors collectively define success within their contexts. We propose that this negotiation of the success of real-world experi-

### Design of the comparative analysis

For our qualitative comparative analysis, we selected three real-world experiments: the *City2Share* co-creative research project in Munich, the *Superblocks* political program in Barcelona, and the *Digibus Austria* automated shuttle real-world test bed in Koppl, Salzburg. These examples were chosen because they serve as model experiments in their particular interpretation of a mobility transition. Our selection was, moreover, influenced by practical considerations such as accessible field sites (Munich and Koppl) and international recognition (Barcelona). In this brief paper, our comparative research design, following Yin (2018), cannot present full-fledged case studies, but uses the three examples as empirical resources that illustrate common patterns of negotiating success in situated contexts. We argue that the variability among the examples – in terms of organizational structure, scale and scope of intervention, and the interplay between technology and political reform – enriches the findings. However, it is important to note the study's limitations, particularly since our comparison is limited to Europe, which necessitates caution in extending our conclusions beyond these cases.

Our analysis uses a mixed-methods approach, combining qualitative data from 31 semi-structured interviews with stakeholders involved in the experiments, including government officials, private companies, researchers, and local residents; as well as extensive field ethnography for each case; and analysis of documents such as local policy documents, reports, websites, online participation documentation, and press coverage. Our research on the negotiation of what constitutes success, even when there is little measurable impact, is informed by newer grounded theory methods as outlined by Charmaz (2006), involving initial in vivo coding followed by axial coding of our data. We acknowledge that

selecting certain voices over others is a significant analytical choice, for instance, protesters are underrepresented in our sample. We emphasize that our argument that the impacts are hardly measurable does not mean that the experiments don't affect people's lives. Our analysis, conducted from the perspective of external researchers, does not aim to evaluate the success or impact of these experiments. Instead, we seek to empirically demonstrate how they successfully serve the needs of the local transition governance.

### Three mobility experiments and the constraints of measuring impact

The three mobility experiments vary significantly in their organizational structures and envisioned approaches to mobility. Despite these differences, the impact of each experiment on the well-known mobility challenges has been a subject of intensive debate, ultimately yielding inconclusive results.

**City2Share in Munich:** This initiative represents a four-year real-world experiment funded by federal ministry, involving a consortium that includes public sector actors, universities, research institutes, and private companies. Its aim was to generate knowledge about motorized individual traffic and to explore new configurations of mobility spaces. A key aspect of the project involved transforming a parking lot into a shared mobility station and meeting space. The organizers engaged the community through workshops and online participation. The project included a collaborative work package to assess the mobility “impacts and user acceptance” of the intervention as well as its transferability to help guide city governments in experimenting with mobility (BMUB et al. 2016, p. 31). The municipality was particularly interested in “what measurable findings can ultimately be targeted with regard to CO<sub>2</sub> emissions so that one can also provide numbers for the overarching goal of climate neutrality” (I-M01, employee of the city administration, June 2020<sup>3</sup>). When evaluating, the researchers were uncertain whether the impact on traffic density was due to the mobility station or to the reopening of a nearby side street. Similarly, interpreting the number of users of the e-car-sharing service proved difficult due to the dynamics of the car-sharing market. The spatial dimension delimited tangible changes by the mobility stations since the “effects will only be able to develop with sufficient supply density in the city” after scaling the network (Bauer et al. 2020, p. 52).

**Barcelona's Superblock pilot:** In response to the long-standing problem of noisy and congested streets, this project sought to transform over 500 blocks of 3 x 3 residential blocks into traffic-calmed, greener, and shared public spaces. While traffic flows in all directions around the *Superblocks*, the area within the nine blocks is closed to through traffic, giving priority to pedestrians and cyclists. The then newly elected mayor, Ada Colau, adopted the already-drafted *Superblock* model as part of her political pro-

gram, with the slogan “Let's fill the streets with life,” and implemented it as a pilot project during her four-year term from 2015 to 2019 (Barcelona City Council 2016). The implementation of the first 3 x 3 *Superblock* in Poblenou by architecture students caught residents off guard, leading to overwhelming protests referred to as the “*Superblock* crisis” (I-B01, employee of the city administration, March 2020). The crisis led to extensive participatory measures, and soon after, the residents formed two opposing collectives, one in favor of the *Superblock* and the other against it.<sup>4</sup> Although the administration planned to monitor compliance with project goals through an evaluation scheme (Barcelona City Council 2016), the need to react to the crisis pushed this scheme into the background. Instead, public disputes over the correct assessment methods received attention. After the collective opposed to the *Superblock* organized a vote, those in favor of the concept challenged the results. They argued that the concept's benefits would become apparent only when applied to a large area of the city. Therefore, it was invalid to poll the neighborhood after implementing only a pilot project. In the controversy regarding traffic reduction, critics counted cars and argued that the *Superblock* increased peripheral traffic, a claim contested by proponents who believed that the slight increase in traffic was due to a new tunnel that had opened at a nearby crossroads.

**Digibus Austria:** This consortium aimed to enhance rural mobility through an automated shuttle service, intended to complement public transport and reduce dependency on private cars. Over a period of three years, funded by the Austrian Research Promotion Agency, research organizations, industry, and the municipality collaborated to test the automated shuttle on a public road. The project strove for more sustainable and safer mobility spaces to ensure that public spaces remain livable (BMVIT 2018, p. 23). The main 1.4-kilometer test track was located on the road leading from a remote village to a highly frequented bus station, addressing the issue of public transport in rural areas and the so-called last mile. The evaluation goals for the experiment were expressed through the shared research interests to create social interaction concepts with the shuttle and between passengers, and its integration into regular transport services, aiming to inform regulatory governance of autonomous driving (Digibus Austria 2020). While the shuttle could be integrated into the public transport service twice, each for a period of three weeks, this short duration did not allow residents to become thoroughly acquainted with the new mode of transport. Thus, changes in private car use were not quantifiable. Since the time to develop interaction routines with other road users was too short, the final report notes that “to date, this has been mostly unresolved or non-existent, resulting in situations, in which it was not clear to other traffic participants how the shuttle would behave and what would be an appropriate response” (BMK 2022, p. 65).

<sup>3</sup> Citations of project participants have been coded.

<sup>4</sup> See also Klaever et al. (2024, in this issue) who address the role of conflict and conflict management in a public space redesign project in Berlin.

Across these cases, evaluating the impact on mobility issues such as private car use, traffic volume, and autonomous vehicle interaction proved challenging. However, these difficulties were partly anticipated due to the experiments' short duration and limited spatial scope. In other words, the actors involved in the mobility experiments had to navigate the evaluation in the tension between barely measurable impacts that would be scalable to counter the mentioned mobility problems on a large scale and assessing more localized, tangible outcomes.

## Negotiating success in the local governance context

In this section, we explore how the perceived success of mobility experiments can be interpreted as a consequence of discursive practices within the local governance framework. By applying iterative axial coding to our empirical data and comparing the three case studies, we identified five distinct discursive strategies employed by governmental bodies and experiment actors. These strategies, summarized in table 1 (p. 84), aim to frame the experiments as successful despite their minimal measurable impacts on the pressing mobility problems. We define discursive strategies as – potentially powerful and culturally embedded – frameworks that declare certain outcomes as beneficial towards sustainable transformation. The perceived success, as endorsed by dominant actors of the experiment, may be challenged by other groups, since the evolution of experiments reflects cultural values and a reconfiguration of political orders (Laurent and Pontille 2018). Any agreement on what constitutes success should be regarded as a temporary stabilization rather than a final verdict. Our analysis does not seek to judge the “real” success of these experiments but rather to demonstrate how these discursive strategies elucidate and affirm the experiments' role and value within the local governance context of transition.

### Mobilizing citizen engagement

*City2Share* was deemed successful as the neighborhood established a citizens' initiative that assumed responsibility for the Piazza Zenetti. Moreover, the consortium partners highlighted the project's role in promoting public discourse, with one stating, “all this has already led to a greater willingness to redistribute public space because one has simply seen, it works, it can work, we just have to scale it” (I-M02, employee of a nongovernmental organization, July 2020). Similarly, in Barcelona, the goal was “to transform the imagination of the people since seeing how everything is working helps to say: we are expanding” (I-B02, employed researcher of a university, March 2020). Here, too, participatory measures not only spurred enthusiasm but also resulted in the establishment of citizens' initiatives. The success of the *Digibus Austria* automated shuttle real-world test bed can be attributed to providing citizens with the opportunity to engage with new technology, offering a tangible understanding of its potential.

The strategy of foregrounding citizen engagement sheds light on the meaning and value of participation in transition government. In Munich and Barcelona, the community's embrace of project interventions was a critical contribution of the experiment to the mobility transition. In Koppl, Salzburg, the first contact with an automated shuttle for a few citizens was an important result, as the positive reactions paved the way for future tests.

### Highlighting tangible achievements

The *City2Share* consortium reflected on the initial challenges, organized workshops with different cities to share observations, and developed guidelines for the transferability of interventions. In Barcelona, the experiences gained led to the introduction of a detailed participation process for future *Superblocks* and a revision of the overarching concept, complemented by regular progress reports from the city government. The automated shuttle test in Koppl was interesting because of “all these minute details” of the shuttle's behavior in non-static environments (I-K01, employed researcher of a participating research institute, March 2021). These findings were detailed in the consortium's annual report, along with the call for ongoing research into the safe operation of automated shuttle. The partners also developed a process model for implementing similar test beds in Austria.

The emphasis on such tangible achievements, beyond merely addressing broader mobility issues, sheds light on critical milestones within the respective transition contexts to create networks, document progress, and provide guidance. The national presentation of the *City2Share* project stabilized networks and the exchange for a sustainable transition. In Barcelona, the new template for the participation process was a pivotal element for the *Superblock* model's expansion. For Austria, the process model for implementing test beds facilitated further consecutive experiments.

### Manifesting institutional embedding

In Munich, the experiment transitioned into a permanent reconfiguration, leading to the establishment of a permanent working group within the city administration focused on shared mobility. In Barcelona, the *Superblock* intervention was scaled up beyond the pilot period to become a permanent feature in several neighborhoods. This scaling up of the intervention as a structured process in city government was considered a success in terms of its impact on urban planning and design. In Koppl, the *Digibus* test bed was extended through a follow-up research project, underscoring the initial experiment's success. Experience from *Digibus* also served as a basis for regulatory considerations for automated mobility experiments in Austria.

This approach to institutional embedding, encompassing temporal, spatial, and structural integration as outlined by Sengers et al. (2021), demonstrates its efficacy. In the context of Munich, for example, the structural embedding of the working group was a notable success because it contributed to the foundation of a new department in the city administration, which catalyzed the local mobility transition.

**TABLE 1:** Five discursive strategies for negotiating successful transformations. The specific outcomes associated with each strategy are delineated across the three real-world experiments *City2Share* (Munich, Germany), *Superblock* (Barcelona, Spain) and *Digibus Austria* (Koppl, near Salzburg, Austria).

	CITY2SHARE	SUPERBLOCK	PROJECT	DIGIBUS AUSTRIA
<b>mode of mobility</b>	<ul style="list-style-type: none"> <li>shared mobility and shared spaces</li> </ul>	<ul style="list-style-type: none"> <li>shared spaces and shared spaces</li> </ul>	<ul style="list-style-type: none"> <li>shared spaces and priority to pedestrians and cyclists</li> </ul>	<ul style="list-style-type: none"> <li>automated public transport</li> </ul>
<b>institutional integration</b>	<ul style="list-style-type: none"> <li>consortium research project (four years funding)</li> </ul>	<ul style="list-style-type: none"> <li>city government initiative (four years legislative period)</li> </ul>	<ul style="list-style-type: none"> <li>consortium research project (three years funding)</li> </ul>	<ul style="list-style-type: none"> <li>consortium research project (three years funding)</li> </ul>
<b>1 MOBILIZING CITIZEN ENGAGEMENT</b>	<ul style="list-style-type: none"> <li>citizens tried new modes of mobility</li> <li>citizens' initiative took over responsibility for the space</li> </ul>	<ul style="list-style-type: none"> <li>citizens learnt to use the space, increasing acceptance</li> <li>citizens' initiative took over the space</li> </ul>	<ul style="list-style-type: none"> <li>tests increased passengers' acceptance</li> <li>citizens provided with a more realistic image of technology</li> </ul>	<ul style="list-style-type: none"> <li>tests increased passengers' acceptance</li> <li>citizens provided with a more realistic image of technology</li> </ul>
<b>2 HIGHLIGHTING TANGIBLE ACHIEVEMENTS</b>	<ul style="list-style-type: none"> <li>lessons learnt about resistances and transferability of interventions</li> <li>reporting of guidelines and exchange in practitioners' network</li> </ul>	<ul style="list-style-type: none"> <li>development of a participation process</li> <li>occasionally releasing information about achievements</li> <li>updating the overall concept</li> </ul>	<ul style="list-style-type: none"> <li>lessons learnt about current challenges of automated driving</li> <li>development of a process model for further test beds</li> </ul>	<ul style="list-style-type: none"> <li>lessons learnt about current challenges of automated driving</li> <li>development of a process model for further test beds</li> </ul>
<b>3 MANIFESTING INSTITUTIONAL EMBEDDING</b>	<ul style="list-style-type: none"> <li>making the intervention permanent</li> <li>administrative restructuring</li> </ul>	<ul style="list-style-type: none"> <li>making the intervention permanent</li> <li>duplicating the <i>Superblock</i></li> </ul>	<ul style="list-style-type: none"> <li>prolongation of the test bed</li> <li>starting reflections on regulatory framework</li> </ul>	<ul style="list-style-type: none"> <li>prolongation of the test bed</li> <li>starting reflections on regulatory framework</li> </ul>
<b>4 GENERATING POLITICAL MOMENTUM</b>	<ul style="list-style-type: none"> <li>city council approved new methods of urban planning</li> <li>requests from other districts</li> </ul>	<ul style="list-style-type: none"> <li>re-elections confirmed municipal government</li> <li>attracting scientific studies from around the world</li> <li>(international) media recognition</li> <li>interest of other cities</li> </ul>	<ul style="list-style-type: none"> <li>re-elections confirmed municipal government</li> <li>attracting scientific studies from around the world</li> <li>(international) media recognition</li> <li>interest of other cities</li> </ul>	<ul style="list-style-type: none"> <li>mayors of other cities requested similar test beds</li> </ul>
<b>5 DELEGATING RESPONSIBILITY</b>	<ul style="list-style-type: none"> <li>references to the findings of other studies on shared mobility</li> <li>decisions lie with politicians</li> <li>need for complementary actions</li> </ul>	<ul style="list-style-type: none"> <li>need for complementary actions</li> </ul>	<ul style="list-style-type: none"> <li>need for more research</li> </ul>	<ul style="list-style-type: none"> <li>need for more research</li> </ul>

#### FIVE DISCURSIVE STRATEGIES

### Generating political momentum

The reach of the mobility experiments was not limited to the local level, as they gained attention and recognition beyond their respective cities. The *City2Share* initiative in Munich prompted inquiries from other districts interested in replicating the measures, leading to the launch of a follow-up research project. Similarly, the *Superblock* project in Barcelona gained international recognition, becoming a focal point in scientific research, urban initiatives, and media coverage, while also attracting visits from representatives of other municipalities. The institutional context of the experiment was primarily political, and the success of the *Superblock* concept was reflected in the mayor's re-election in 2019 and her administration's continued efforts to redesign public spaces with a revised *Superblock* concept. The *Digibus* project received several replication requests from other mayors, highlighting its potential impact.

The generation of political momentum through these experiments was perceived as a success within their respective contexts. The interest and requests from other municipalities, mobility actors, and researchers not only lent credibility to the experiments but also played a crucial role in their stabilization. Nonetheless, the continuation or expansion of each experiment ultimately rested on political decisions. The *Superblocks'* success, for example, was democratically validated through the mayor's re-election, rather than through expert validation of its quantitative impacts. Similarly, political authorities at the city or state level sanctioned the extension of research projects in Munich and Koppl. This strategy shows how the political resonance of the experiments is of great value to the experiments in their respective transition governance contexts.

### Delegating responsibility

Acknowledging the limited impact of their project on prevailing mobility challenges, *City2Share* participants called for complementary political actions to address these issues. They also referenced other studies highlighting the potential benefits of shared mobility initiatives. In Barcelona,

the *Superblock* pilot's modest outcomes prompted the city administration to seek additional strategies for reducing private car traffic, such as implementing a city-wide speed limit of 30 kilometers per hour. The autonomous shuttle project in Koppl underscored the need for further research into how automated mobility options could transform existing mobility patterns and practices.

This strategy of delegating responsibility to other actors or studies illustrates how the local transition governance envisions the role of the experiments. In Munich and Barcelona, the experiments are viewed not as isolated endeavors but as components of a broader suite of interventions. The value of the experiments is not in proving their impact on solving mobility problems, but in identifying necessary complementary measures. In Austria, the experiment with the autonomous shuttle was just one early step, with no immediate expectation to demonstrate a significant impact on car dependency. It was deemed sufficient to mark the beginning of a prolonged journey towards integrating autonomous shuttles.

Analyzing these discursive strategies reveals how real-world experiments contribute to local sustainable transformations and innovation policy, fostering a generative moment despite uncertainties about scalable solutions and their impact on recognized mobility problems. For instance, *City2Share* notably enhanced Munich's transition governance by uniting administrative actors for future similar experiments, according to our interviewees. The *Superblock* experiment became a key political issue legitimizing the model's expansion through the mayor's re-election. Conversely, the *Digibus* project has accurately documented and safely demonstrated how Austria could begin the long road of experimentation toward autonomous shuttles in rural areas. Given the diverse roles these experiments play for different actors, it is crucial to recognize that actors might use the discursive strategies in different ways at the same time when tensions or conflicts arise. Hence, experimentation can serve various purposes even in the same context. In this paper, we focus on comparing the prevailing functions of experimentation for the respective governance. With our analysis, we aim to illustrate that the success of such experiments hinges less on delivering scalable solutions and definitive impact than on serving the specific needs of the governance context, which varies by location. Understanding these variations is vital for addressing questions of scalability and transferability of experimental settings.

## Reflecting on experiments in their governance context

Delving into three mobility experiments to better comprehend the role of real-world experimentation within their local context of transition governance, we explored the negotiation process among government and experiment actors around the challenge of balancing the assessment of scalable impacts against evaluat-

ing local, tangible outcomes. Given the temporal, spatial, and legal limitations of real-world experiments, accurately measuring the success of changes in mobility practices and technology interactions poses a significant challenge. We contend that the perceived success of real-world experimentation is not solely reliant on quantifiable impacts. Rather, success is collectively constructed and redefined by local actors and external observers through the use of discursive strategies. These strategies highlight the perceived significance of experiments in facilitating local mobility transition. Understood as a social process embedded in both local socio-material interactions and larger cultural imaginaries, these experiments reveal their politics of knowledge production.

Our objective is not to critique the experiments for their inevitable limitations in scope nor to question their success. On the contrary, we aim to underpin the success of the experiments by claiming that real-world experimentation plays different, situated roles in the respective transition contexts. These roles extend beyond the demonstration of measurable impacts on mobility problems such as usage of private cars. Since most urban experiments are designed and evaluated on the basis of measurable outcomes, often tied to preconceived notions of scalability, our study encourages practitioners and policymakers to recognize and foster such interventions as sites of collective sense-making and social learning (Schäpke et al. 2018). In this sense, experimentation can be understood as a local technique of futuring (Oomen et al. 2022). Project evaluators should take this open-ended character of collective deliberation into account when assessing the success of government interventions in urban mobility. Our contribution to this special issue invites to reflect on the localized role of real-world experimentation in particular contexts of transition governance. Such a perspective can strengthen local transdisciplinary research projects and contribute to a more nuanced experimentation practice.

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