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Understanding local destabilization policies in the mobility sector: A comparison of mobility governance in Amsterdam, London and Munich

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This work addresses the following topic(s) from the Call for Contributions:
(Please check at least one box)

- Placemaking to integrate urban spaces and mobility
- Promoting sustainable mobility choices in metropolitan regions
- Governing responsible mobility innovations
- Shaping the transition towards mobility justice
- System analysis, design, and evaluation
- other: _____

Extended Abstract

From here 700-1000 words, grouped by the following sections:

Problem statement

It has been widely established in the literature that transformation of socio-technical systems requires active intervention and steering by public decision-makers (Patterson et al., 2017). One of the efforts to change the established socio-technical systems, which has been increasingly discussed and embraced by policy practitioners, is the transformation away from dominant car-dependent urban mobility systems. While modern cities have typically been built around cars as the main mode of transportation, the growing negative impacts of cars and car-based infrastructure, including air pollution, noise, greenhouse gas emissions and excessive land use, have prompted many city officials to adopt measures to restrict and discourage car usage. Local sustainable mobility efforts are needed because of the multiple local co-benefits such as health benefits, more green spaces, improving air quality, avoiding noise, mitigating climate change, redistributing road space and improving the quality of life for residents. Political pressure to take action for transforming mobility systems is urgent (Spiegel-Feld et al., 2023) since transport-related emissions must be reduced in order for climate policy to be successful.

There is a growing scholarly consensus that sustainable transformations of socio-technical systems require a mix of policy measures that both support niche innovations and destabilize the existing regime structure (Kivimaa und Kern 2016; Rosenbloom und Rinscheid 2020). While the existing literature has largely focused on the niche

promotion side (Smith und Raven 2012), destabilization policies have attracted the increasing attention recently (Turnheim 2022). However, the multifaceted character of destabilization policies has not yet been properly understood and conceptualized. Moreover, the majority of studies have investigated destabilization policies at the national level while the distinctive character of destabilization efforts at the local level has remained largely unexplored (as exceptions see Bjerkan et al. 2021; Kuss und Nicholas 2022; Graaf et al. 2021).

Research objectives

In this paper, we seek to advance the conceptual and empirical understanding of local destabilization policies in the mobility sector. The mobility sector has proved particularly challenging to decarbonize over the past decades (Berger et al. 2014). While destabilization policies in the mobility sector can be found at different government levels, cities have a particularly important role to play in transforming the mobility system (Betsill und Bulkeley 2007). To this end, cities can employ a variety of policy instruments and strategies to destabilize the dependence on internal combustion engine cars or to entirely move away from car-based mobility systems.

Our study adds to the emerging literature on the destabilization of existing systems as an emerging research and policy concern related to socio-technical transitions (Turnheim, 2022). First, our conceptualization helps to better understand the policy design of the emerging number and nature of disruptive policies. Second, we add to a growing body of literature on analyzing cities as important actors in the governance of innovation processes spanning across multiple governance levels (Callorda Fossati et al., 2022)

Methodological approach

We first conduct a systematic review of the literature to develop a novel conceptualization of the different types of destabilization policies in the mobility sector at the local level. We then apply the proposed framework to demonstrate its value and qualitatively scrutinize the destabilization mobility policies in three major European cities: London, Amsterdam and Munich. Our framework for understanding the design of disruptive urban mobility policies is informed by Rogge und Reichardt (2016)'s extended concept of policy mixes for sustainability transitions and literature on comparative measure of climate policy output (Schaffrin et al., 2015). Drawing on Rogge and Reichardt's framework and the broader literature on sustainability transition policies, and urban mobility policies specifically, we identify nine defining features of disruptive urban mobility policies (Table 1).

The scope of our analysis is limited to the most policy recent developments between 2019 and early 2023. Depending on data availability, we also refer to the historical evolution of policies in some cases. The sampling strategy was to identify key documents via local governments' websites, local newspapers, grey literature, and journal articles. This led to around 30 policy documents and strategies that were investigated via qualitative document analysis. The three selected cities have made considerable progress in transforming their mobility systems but also exhibit differences in terms of the broader context and specific challenges in transforming urban mobility. This offers a good setting for understanding how destabilization policies are designed and implemented in different urban contexts.

(Expected) results

Our study yields important new conceptual and empirical insights into different designs of destabilization policy in the mobility sector at the local level and the factors that contribute to the emergence and effectiveness of different destabilization policy instruments. Preliminary results start from the following observations: City governments want to achieve a range of sustainability goals that with their transport strategies and policies. Among the case studies, Amsterdam's city council follows the most comprehensive plans and disruptive policies are embedded in long-term strategies in both Amsterdam and London. While the city of London targets the most varied types of cars with its policies, Munich offers most exemptions for varied target groups. Disruptive policies focusing on the flipside of innovation are weakest in Munich's mobility governance compared to both Amsterdam and London. (tba)

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