

**IMAGINATION IN URBAN FUTURES: AN INTEGRATIVE LITERATURE REVIEW
FROM 1999 TO 2024**

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INTRODUCTION

Over the past 26 years, imagination has become an increasingly relevant topic in urban studies, particularly in relation to how cities conceptualize and shape their futures. Its presence can be traced across a variety of research lines, from discourse analyses that examine how urban narratives and symbolic representations frame spatial transformation (Cochrane & Jonas, 1999; Kitchin & Kneale, 2001; Hagerman, 2007), to explorations of collective visions embedded in planning, policy and governance (Ghertner, 2020; Kellokumpu, 2023; Castán Broto, Olazabal & Ziervogel, 2024). Over time, imagination has evolved from a loosely applied analytical notion into a more structured and debated concept within urban futures studies.

This conceptual development has taken place across multiple perspectives. In some cases, imagination is studied through the lens of discourse, revealing how urban futures are envisioned, contested or legitimized. In others, it is explored through theoretical frameworks such as sociotechnical imaginaries, which emphasize how future visions are co-produced with technological systems and institutional structures (Mertia, 2017; Molden & Meehan, 2018; Cairns et al., 2022; Tiwari & Sharma, 2024). More recently, scholars have also applied imagination in practical and methodological terms, through participatory foresight, speculative design and creative experimentation, highlighting its potential to democratize the ways urban futures are thought, built and experienced (Munthe-Kaas, 2015; Mangnus et al., 2022; Felt & Sepehr, 2024).

Given that the relationship between imagination and urban futures remains a relatively recent and evolving area of study, several theoretical and practical gaps emerge that require closer attention, particularly for those aiming to contribute to the conceptual development of imagination in this field. A first gap concerns the underrepresentation of Global South perspectives, especially from Latin American cities (Tozer & Klenk, 2018; Cairns et al., 2022; Molden & Meehan, 2018; Ghertner, 2020; Kataneksa, 2024). Among the 47 articles reviewed for this study, just one case study is drawn from a few cities from Latin America, revealing a significant geographic and epistemic imbalance. A second major gap lies in the limited integration of imagination into formal urban planning instruments. Although many studies highlight the value of collective visioning and speculative practices, few demonstrate how these imaginaries translate into concrete tools, policies or institutional frameworks (Törnroth et al., 2022; Baibarac-Duignan & Medeşan, 2023; Felt & Sepehr, 2024; Glass & Addie, 2024; Bina et al., 2024).

This literature review is intended to analyze and discuss the conceptual development of imagination in the academic literature of urban futures. From a time period of 1999 to 2024, it is expected to understand the ways in which imagination is used and what are the opportunities for future research of the topic, considering the gaps mentioned. Following Torraco (2005), this integrative literature review is based on the analysis of 47 peer-reviewed articles indexed in the Web of Science database, published during the time period mentioned. After this introduction, the work is organized as follows: 1) Conceptual Framework, which explains the contextualization of imagination in Urban Futures Studies and its conceptual

development, 2) Methodology, 3) Results, presenting two categories of analysis, 4) Discussion, 5) Conclusion and 6) References.

CONCEPTUAL FRAMEWORK

Contextualization of Imagination in Urban Futures Studies

Imagination refers to the capacity to form new ideas, images or possibilities beyond what is immediately perceptible (Hajer & Versteeg, 2019). In the context of cities, this capacity is central to how people envision desirable futures and respond to contemporary challenges. It encompasses not only individual creativity, but also collective visions shaped by culture, history and power relations (Gross, Buchanan & Sané, 2019; Hajer & Versteeg, 2019; Datta, 2024; Kataneksza, 2024). Scholars have shown that imagination in urban contexts reflects desires, fears and symbolic practices, which help communities navigate the tension between aspiration and lived reality (Müller-Friedman, 2007). Whether imagining a modern house with electricity in rural Namibia (Müller-Friedman, 2007) or envisioning carbon-neutral cities in climate policies (Tozer & Klenk, 2018), these urban imaginations are not abstract ideas; they come from people's lives and have specific impacts on the way cities take shape.

To better understand how imagination operates in urban transformation, scholars have developed the concept of sociotechnical imaginaries. These are collectively held, institutionally stabilized and publicly performed visions of desirable futures that are co-produced with science, technology and cultural narratives (Gross, Buchanan & Sané, 2019; Tozer & Klenk, 2018). Through this perspective, imagination is not practiced spontaneously and in isolation; instead, it's shaped by existing infrastructures (streets, buildings, transportation), governance models and power dynamics. For example, smart city projects often reflect top-down, data-driven imaginaries that portray cities as governable through technology and surveillance (Mertia, 2017; Tiwari & Sharma, 2024). At the same time, imaginaries rooted in tradition, experience or resistance (such as those seen in informal settlements) show that imagination is also performative, shaping how people plan, act and relate to the city in the present (Molden & Meehan, 2018; Arlati, 2024; Baibarac-Duignan & Medeşan, 2023).

On the other hand, imagination is not neutral. It is contested, political and deeply connected to questions of justice and inclusion. Scholars have highlighted how dominant urban imaginaries often privilege technocratic, corporate or state-driven visions that exclude marginalized voices and limit transformative possibilities (Kataneksza, 2024; Castán Broto, Olazabal & Ziervogel, 2024). These dominant narratives may perpetrate unequal structures under the promise of modernization or sustainability, as seen in climate adaptation plans or smart city initiatives (Castán Broto, Olazabal & Ziervogel, 2024). In contrast, counter-imaginaries, rooted in grassroots practices, survival or alternative ways of knowing, offer different visions of what urban life could be (Cairns et al., 2022; Kataneksza, 2024). Some scholars call for a "deep reimagining" of urbanization, especially in the Global South, emphasizing the need to rethink how time, space and infrastructure are conceptualized (Datta,

2024; Bina et al., 2024). Imagination, then, is not just a mental skill, it is a political arena where competing futures are articulated, negotiated and sometimes silenced.

The Conceptual Development of Imagination in Urban Futures Studies

Before the conceptual consolidation brought by the framework of sociotechnical imaginaries, the study of imagination in urban contexts was often implicit, explored through metaphors, literary representations or critiques of dominant planning paradigms. Early works such as Cochrane and Jonas (1999) already pointed to the importance of imagination in urban redevelopment and political discourse. Similarly, Kitchin and Kneale (2001) introduced the notion of “imaginative geographies” to examine how fictional representations, particularly in literature, operate as cognitive and cultural tools for envisioning and critiquing urban futures.

Other foundational contributions emphasized the socially embedded and contested nature of urban imagination. Müller-Friedman (2007) examined how communities in Namibia reconfigure dominant planning frameworks through situated and embodied practices, showing that urban futures are also co-produced from below. Hagerman (2007), analyzing redevelopment projects in Oregon, questioned how discourses of “livability” were used to legitimize elite-centric investments, thus narrowing the imaginative horizon of urban transformation. Roy (2009) further challenged the epistemological centrality of Euro-American cities in shaping urban theory, calling for a pluralization of imaginaries grounded in diverse urban experiences, particularly from the Global South. These early insights revealed that imagination was already functioning as a lens to critique hegemonic visions and to propose alternative trajectories for urban development, even if the concept itself was not yet analytically stabilized.

The emergence and consolidation of the concept of sociotechnical imaginaries in urban studies marked a significant conceptual shift. Building on Jasanoff and Kim’s (2009) framework, scholars began to treat imagination not merely as individual speculation or cultural narrative, but as institutionally stabilized visions that shape and are shaped by infrastructures, technologies and governance systems. This shift allowed for a more systemic understanding of how urban futures are produced. Mertia (2017), for example, used the concept to analyze smart city initiatives in Delhi, exposing the disjuncture between techno-optimistic visions and the socio-material realities of urban life in postcolonial contexts. Similarly, Tozer and Klenk (2018) and Gross, Buchanan and Sané (2019) demonstrated how climate governance and air quality policies respectively function as scripts for producing specific urban futures, often privileging centralized control, economic growth or technologically driven solutions.

Following this conceptual development, a significant body of work began to explore how sociotechnical imaginaries interact with local cultures, politics and everyday practices. Molden and Meehan (2018) analyzed how traditional water infrastructure in Nepal became part of hybrid development models that challenged the dominant technocratic imaginaries. Baibarac-Duignan and Medeşan (2023) similarly showed how community-based initiatives in Romania activated context-specific sustainability imaginaries rooted in participatory design and everyday experience. These studies indicate that imaginaries are performative and situated, they are produced through social practices and material interventions, and in turn, shape how urban life is organized, experienced and transformed.

At the same time, critical research has warned against the homogenization and depoliticization of imagination in urban planning. Bina, Inch and Pereira (2020), Fraser and Wilmott (2020), and Kellokumpu (2023) critique how smart city discourses and visionary planning strategies often erase historical memory, cultural diversity and socio-political complexity under the guise of innovation and efficiency. Such imaginaries tend to reproduce existing power asymmetries by centering corporate and state-led interests, thereby limiting the potential for genuinely transformative futures. In the same line, scholars like Castán Broto, Olazabal and Ziervogel (2024) and Datta (2024) argue for the need to disrupt dominant adaptation imaginaries and to ground future-oriented thinking in lived experience, local knowledge and the political realities of marginalized groups.

This critique has given rise to alternative approaches that reclaim imagination as a political and emancipatory practice. Studies like Kataneksza (2024), Dantzler (2022), and Dasgupta and Prins (2023) foreground counter-imaginaries emerging from grassroots movements, informal practices and historically excluded communities. These visions contest dominant paradigms and articulate urban futures centered on justice, survival and inclusion. For instance, in Harare, Zimbabwe, residents reimagine the city through community networks and informal infrastructures, resisting exclusionary visions of modernity (Kataneksza, 2024). Likewise, the Black Lives Matter movement in the USA reframes urban space as a terrain of resistance and alternative spatial imaginaries (Dantzler, 2022). These cases highlight the multiplicity of imaginaries and the uneven power relations that shape whose visions of the future are heard, validated or suppressed.

During the last years, there has been an increasing effort to operationalize imagination as a methodological and pedagogical tool in urban studies. Initiatives such as the “Create Your City” project (Munthe-Kaas, 2015), the Utrecht2040 game (Mangnus et al., 2022) and the participatory Three Horizons workshops (Bina et al., 2024) show how imagination can be cultivated and harnessed through structured interventions. These methods include co-design, storytelling, speculative fiction and participatory sketching, all aimed at fostering a collective and situated futuring capacity. Scholars argue that these imaginative practices are essential for navigating complex challenges such as climate change, inequality and technological disruption, not just by predicting futures, but by enabling communities to desire, co-create and perform them.

METHODOLOGY

Following Torracco (2005), this study is an integrative literature review that systematically examines the conceptualization and use of imagination in urban futures studies. Web of Science was the database selected, considering its soundness of citation data and interdisciplinary coverage (Silva & Gützmänn, 2023).

The collection of articles comprises 47 peer-reviewed articles published between 1999 and 2024. The selection of this material followed a multi-stage filtering process (Silva & Gützmänn, 2023). First, a search query using the topic keywords “*Urban Future**” and “*Imagina**” returned 80 documents. From those, 71 were classified as academic articles. After a preliminary screening based on abstracts and keywords, 24 articles were excluded for not explicitly addressing the relationship between imagination and urban futures, whether conceptually, methodologically or empirically.

The final set of 47 articles was critically analyzed to explore how imagination has been conceptualized within the field of urban futures studies (Torraco, 2005). The analysis led to the creation of two main categories of analysis: 1) Imagination as a Narrative and 2) Imagination as a Tool. This structure enables a critical understanding of how the notion of imagination has been used and discussed over the last 26 years in connection with the idea of urban futures (Torraco, 2005).

This literature review is intended to analyze and discuss the conceptual development of imagination in the academic literature of urban futures, trying to get new understandings so subsequent studies could follow (Torraco, 2005). In Table 1 is presented the review steps followed (Silva & Gützmänn, 2023).

Review steps	Description of steps	Results obtained
Step 1: Selection criteria	Database	Web of Science
	Search Terms	“Urban Future*” and “Imagina*”
	Years of Search	1999 - 2024
	Partial Articles Total	80
	Academic Articles Total	71
	Reading and Deleting Articles Out of Scope	24 articles excluded
	Total Articles for Analysis	47
Step 2: Analysis criteria	Analysis of the 47 articles	
	Construction of Categories	
	Critical Analysis	

Table 1. Stages of the integrative literature review

RESULTS

Imagination as a Narrative

Across the literature, imagination has emerged as a powerful narrative and discursive force in shaping how cities are conceptualized, contested and planned. Early studies such as Cochrane and Jonas (1999) emphasized how political discourse and urban redevelopment are embedded in imaginative projections of globalization and pro-growth ideology. Works like these proved that imagination is not an abstract or apolitical act; rather, it functions as a symbolic framework through which urban futures are legitimized, negotiated and, sometimes, resisted. Kitchin and Kneale (2001) advanced this perspective by introducing the concept of "imaginative geographies", which are fictional but spatially meaningful constructs that reveal anxieties and aspirations about technologically mediated, surveilled and privatized urban life.

The narrative quality of imagination has also been explored through critical discourse analyses that unveil the political assumptions embedded in policy language. Hagerman

(2007), for example, showed how the discourse of “livability” in Oregon’s waterfront redevelopment plans obscured elite interests and marginalized communities, thereby limiting the imaginative horizon of what urban transformation could be. Similarly, Bhan (2014) critiqued the rise of “urban fantasies” in African cities, arguing that speculative master plans driven by global architectural firms reinforce aestheticized and market-centric visions while ignoring democratic participation. These critiques underscore a key limitation: dominant narratives often reflect a narrow set of values like efficiency, innovation and order, that exclude alternative, justice-oriented urban futures.

A significant shift in the literature came with the incorporation of sociotechnical imaginaries, which expanded the analysis of narrative imagination beyond rhetoric to include institutionalized visions co-produced with technology and infrastructure. Mertia (2017), Gross, Buchanan and Sané (2019), and Tozer and Klenk (2018) demonstrated how air quality policies, smart city strategies and carbon neutrality goals operate as scripts that enact particular futures. These imaginaries, although performative and collectively held, tend to reproduce technocratic logics and centralize decision-making power. However, as scholars like Castán Broto, Olazabal and Ziervogel (2024) and Datta (2024) have argued, these discourses are not neutral; they obscure socio-spatial inequalities and silence local knowledges under the promise of sustainability or modernization.

Counter-narratives and dissident imaginaries thus become critical sites of resistance. The work of Kataneksza (2024) in Harare, Dantzler (2022) on Black spatial imaginaries, and Cairns et al. (2022) in Kenya, illustrates how marginalized communities generate alternative discourses rooted in survival, justice and cultural heritage. These bottom-up imaginaries challenge dominant scripts not only by contesting their content but also by reconfiguring the temporalities and spatialities through which urban futures are imagined.

Imagination as a Tool

In parallel to its discursive function, imagination has also been operationalized as a practical tool, enabling citizens, planners and scholars to co-create and experiment with alternative urban futures. A growing number of studies have embraced participatory and design-based methodologies to activate imagination in specific urban settings, as it’s shown in Image 1. Munthe-Kaas (2015), through the “Create Your City” initiative in Copenhagen, demonstrated how co-design processes allow planners and residents to collaboratively envision urban transformations. Despite institutional constraints, such interventions revealed the latent creative capacity of communities to reimagine space through physical engagement.

Case studies such as Mangnus et al. (2022), van den Eijnden et al. (2022) in the Netherlands and Pauw et al. (2018) specifically in secondary schools highlight the value of gamified and educational formats to foster imaginative thinking. These structured activities were successful in raising awareness, optimism and agency among participants, even though their short duration limited deeper integration between imagination and spatial reasoning. Similarly, workshops developed by Bina et al. (2024) across Latin America and Europe using the “Three Horizons framework” succeeded in generating hopeful, nature-centered urban futures. These experiences suggest that imagination can be cultivated and guided through creative, future-oriented methodologies, yet their impact is often constrained by institutional bureaucracy, lack of follow-through or limited inclusion of marginalized voices.

It’s important to add that these interventions are situated in particular physical and socio-political contexts. For instance, Baibarac-Duignan and Medeşan (2023) in Cluj-Napoca

activated local sustainability imaginaries through the civic initiative “La Terenuri,” while Molden and Meehan (2018) showed how traditional water infrastructure in Nepal was reimagined as part of a hybrid development strategy. In both cases, imagination was not a speculative abstraction, but a performative force shaped by situated practices, historical memory and community engagement. This confirms that imaginaries are deeply entangled with place, materiality and everyday life.

Nevertheless, the literature reveals significant challenges in scaling or institutionalizing these imaginative tools. Some participatory efforts remain symbolic, as seen in the critique of Vienna’s smart city initiatives by Felt and Sepehr (2024), where citizen input was often relegated to validating pre-defined solutions. Similarly, speculative approaches, whether artistic, literary, or digital, while rich in affective and cognitive potential (Kiguru, 2021; Tyszczyk, 2021; Rivero Moreno, 2020), may struggle to influence formal urban planning processes. Moreover, many of these tools require skilled facilitation, time and resources, raising concerns about accessibility and sustainability.



Image 1. Imagination in practical cases around the world

DISCUSSION

This integrative literature review set out to analyze and discuss the conceptual development of imagination in the academic literature on urban futures, with the goal of generating new understandings that may guide future research (Torraco, 2005). The findings reveal that imagination has evolved from a marginal and often implicit idea to a central analytical lens in urban futures studies, articulated both as a discursive force and a practical tool. Through a wide range of empirical and theoretical contributions, the literature shows that imagination is not a neutral or purely speculative act, it is a situated, performative and political process deeply embedded in questions of power, identity and urban transformation (Datta, 2024; Castán Broto, Olazabal & Ziervogel, 2024; Hajer & Versteeg, 2019).

From a conceptual perspective, this review contributes to the field by clarifying how imagination has been influenced by the framework of sociotechnical imaginaries (Image 2), which allows researchers to understand the institutional, material and narrative infrastructures through which urban futures are envisioned and contested (Gross, Buchanan & Sané, 2019; Tozer & Klenk, 2018). At the same time, the review highlights how counter-imaginaries, rooted in survival, justice and cultural memory, emerge as critical forms of resistance and alternative future-making (Kataneksza, 2024; Dantzler, 2022; Cairns et al., 2022). On the practical side, the analysis shows a growing experimentation with imaginative methodologies, such as storytelling, co-design, futuring games and participatory workshops, which demonstrate the potential to engage communities and activate collective visions (Munthe-Kaas, 2015; Mangnus et al., 2022; Bina et al., 2024). However, these methods often face structural constraints related to institutional bureaucracy, lack of long-term integration or limited accessibility and inclusion (Felt & Sepehr, 2024; Törnroth et al., 2022; Bhan, 2014).

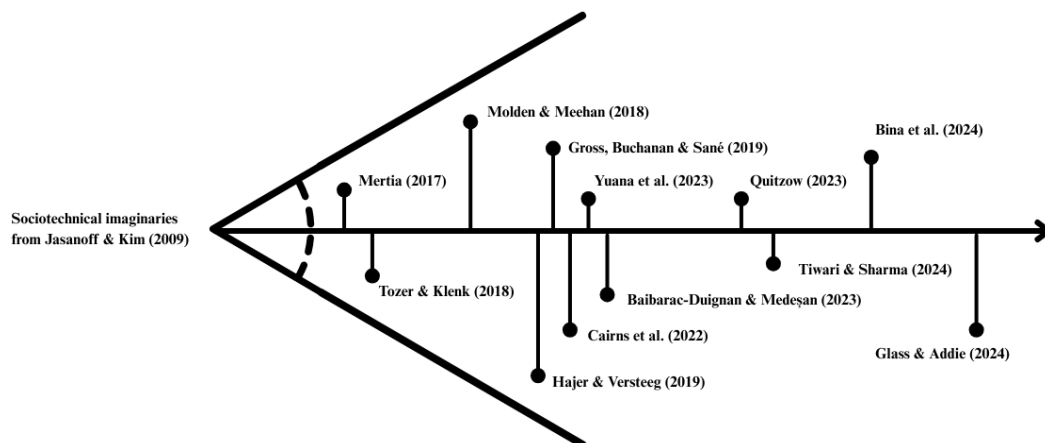


Image 2. Articles influenced by the introduction of sociotechnical imaginaries.

By synthesizing these contributions, this review not only maps the current state of the field but also identifies key opportunities for future research. These include exploring how imaginaries evolve across time and governance scales (Yuana et al., 2023; Kataneksza, 2024), engaging with non-Western and artistic forms of urban imagination (Kiguru, 2021; Mankulam, 2024; Tyszczyk, 2021) and investigating how participatory tools can be institutionalized without losing their transformative capacity (Baibarac-Duignan & Medeşan, 2023; Bina et al., 2024). Ultimately, the review is an invitation to scholars to approach imagination not as an abstract exercise, but as an important urban practice, one that shapes the futures we are able to see, desire and pursue (Datta, 2024; Dasgupta & Prins, 2023; Tiwari & Sharma, 2024).

CONCLUSION

Over the past 26 years, imagination has evolved from an implicit notion to a central analytical and methodological concept in urban futures studies (Cochrane & Jonas, 1999; Kitchin & Kneale, 2001; Hajer & Versteeg, 2019). This integrative review reveals that imagination functions not only as a narrative force that legitimizes, contests or reframes urban transformations (Hagerman, 2007; Bhan, 2014; Castán Broto, Olazabal & Ziervogel, 2024), but also as a practical tool capable of mobilizing citizens and institutions toward more inclusive futures (Munthe-Kaas, 2015; Mangnus et al., 2022). It's important to say that, the framework of sociotechnical imaginaries (Gross, Buchanan & Sané, 2019) has played a pivotal role in the conceptual development of imagination, emphasizing how future visions are co-produced with infrastructure, governance and cultural discourse. Yet, these imaginaries are not neutral, they reflect and reproduce existing power asymmetries and often exclude some voices (Datta, 2024; Kataneksza, 2024).

The review also shows that participatory methodologies, such as co-design (Baibarac-Duignan & Medeşan, 2023), speculative workshops (Felt & Sepehr, 2024) and futuring games (Mangnus et al., 2022; Bina et al., 2024), hold transformative potential when grounded in specific urban contexts. However, their impact remains uneven and often limited by institutional constraints (Felt & Sepehr, 2024; Törnroth et al., 2022). Questions persist about who is allowed to imagine, under what conditions and how those imaginaries are translated into planning and policy. Also, the divide between imagination as discourse and imagination as tool points to the need for integrated approaches that can bridge visionary thinking with material transformation (Bina, Inch & Pereira, 2020; Fraser & Wilmott, 2020).

Looking forward, future research should engage more critically with three key challenges. First, addressing the epistemic and geographical imbalances in the field, particularly the underrepresentation of Global South perspectives (Roy, 2009; Ghertner, 2020; Cairns et al., 2022). Second, exploring how imaginative methodologies can be institutionalized without compromising their critical and emancipatory edge (Molden & Meehan, 2018; Baibarac-Duignan & Medeşan, 2023). And third, deepening the understanding of how sociotechnical imaginaries are formed, contested and circulated across different socio-spatial and political contexts, especially in places marked by informality or resistance (Dasgupta & Prins, 2023; Tiwari & Sharma, 2024).

REFERENCES

- Arlati, A. (2024). Navigating urban futures: Exploring NbS upscaling discourses, practices, and relations in reimagining human–nature relationships. *Futures*, *161*, 103403. <https://doi.org/10.1016/j.futures.2024.103403>
- Baibarac-Duignan, C., & Medeşan, S. (2023). ‘Gluing’ alternative imaginaries of sustainable urban futures: When commoning and design met in the post-socialist neighbourhood of Mănăştur, Romania. *Futures*, *153*, 103233. <https://doi.org/10.1016/j.futures.2023.103233>
- Bhan, G. (2014). The real lives of urban fantasies. *Environment & Urbanization*, *26*(1), 232–235. <https://doi.org/10.1177/0956247813514305>
- Bina, O., Baptista, M. D., Pereira, M. M., Inch, A., Falanga, R., Alegría, V., Caquimbo-Salazar, S., Duarte, D. H. S., Mercado, G., Valenta, A. T., Vásquez, A., & Verellen, T. (2024). Exploring desired urban futures: The transformative potential of a nature-based approach. *Futures*, *159*, 103362. <https://doi.org/10.1016/j.futures.2024.103362>
- Bina, O., Inch, A., & Pereira, L. (2020). Beyond techno-utopia and its discontents: On the role of utopianism and speculative fiction in shaping alternatives to the smart city imaginary. *Futures*, *115*, 102475. <https://doi.org/10.1016/j.futures.2019.102475>
- Cairns, R., Onyango, J., Stirling, A., & Johnstone, P. (2022). Imagining urban transformation in Kenya. *Environmental Science & Policy*, *135*, 86–95. <https://doi.org/10.1016/j.envsci.2022.04.016>
- Castán Broto, V., Olazabal, M., & Ziervogel, G. (2024). Disrupting the imaginaries of urban action to deliver just adaptation. *Buildings and Cities*, *5*(1), 199–214. <https://doi.org/10.5334/bc.456>
- Cochrane, A., & Jonas, A. (1999). Reimagining Berlin: World city, national capital or ordinary place? *European Urban and Regional Studies*, *6*(2), 145–164. <https://doi.org/10.1177/096977649900600204>
- Dantzer, P. A. (2022). Black Lives Matter and the spatial imaginaries of urban political resistance. *Canadian Review of Sociology / Revue canadienne de sociologie*, *59*(4), 553–556. <https://doi.org/10.1111/cars.12403>
- Dasgupta, S., & Prins, A. (2023). “Worlding” Bangladeshi urbanism through water. *Urban Geography*, *44*(5), 1021–1034. <https://doi.org/10.1080/02723638.2023.2184583>
- Datta, A. (2024). Distant time: The future of urbanisation from ‘there’ and ‘then’. *Dialogues in Human Geography*, *14*(2), 1–21. <https://doi.org/10.1177/20438206241253567>
- Felt, U., & Sepehr, P. (2024). Infrastructuring citizenry in Smart City Vienna: Investigating participatory smartification between policy and practice. *Journal of Responsible Innovation*, *11*(1), 2313303. <https://doi.org/10.1080/23299460.2024.2313303>
- Fraser, E., & Wilmott, C. (2020). Ruins of the smart city: A visual intervention. *Visual Communication*, *19*(3), 353–368. <https://doi.org/10.1177/1470357220919265>

- Ghertner, D. A. (2020). Lively lands: The spatial reproduction squeeze and the failure of the urban imaginary. *International Journal of Urban and Regional Research*, 44(4), 561–581. <https://doi.org/10.1111/1468-2427.12926>
- Glass, M. R., & Addie, J.-P. D. (2024). Bridging ‘infrastructural solutions’ and ‘infrastructures as solution’: Regional promises and urban pragmatism. *Urban Studies*, 61(7), 1234–1256. <https://doi.org/10.1177/00420980241262232>
- Gross, P. L., Buchanan, N., & Sané, S. (2019). Blue skies in the making: Air quality action plans and urban imaginaries in London, Hong Kong, and San Francisco. *Energy Research & Social Science*, 48, 85–95. <https://doi.org/10.1016/j.erss.2018.09.019>
- Hajer, M., & Versteeg, W. (2019). Imagining the post-fossil city: Why is it so difficult to think of new possible worlds? *Territory, Politics, Governance*, 7(2), 122–134. <https://doi.org/10.1080/21622671.2018.1510339>
- Hagerman, C. (2007). Shaping neighborhoods and nature: Urban political ecologies of urban waterfront transformations in Portland, Oregon. *Cities*, 24(4), 285–297. <https://doi.org/10.1016/j.cities.2006.12.003>
- Kataneksa, J. (2024). Provisioning the counter-city: Alternative imaginaries of urban futures from Harare, Zimbabwe. *Cities*, 145, 104724. <https://doi.org/10.1016/j.cities.2023.104724>
- Kellokumpu, V. (2023). Depoliticizing urban futures: Visionary planning and the politics of city-regional growth. *Regional Studies*, 57(4), 617–628. <https://doi.org/10.1080/00343404.2021.1980206>
- Kiguru, D. (2021). Speculative fiction and African urban futures: Writing food in Billy Kahora’s edited collection *Imagine Africa 500*. *Tydskrif vir Letterkunde*, 58(1), 98–106. <https://doi.org/10.17159/tl.v58i1.8426>
- Kitchin, R., & Kneale, J. (2001). Science fiction or future fact? Exploring imaginative geographies of the new millennium. *Progress in Human Geography*, 25(1), 19–35. <https://doi.org/10.1191/030913201673103448>
- Mangnus, A. C., Rebel, K. T., Vervoort, J. M., Dotinga, R.-A., Hoogendoorn, E., Driessen, P. P. J., & Hajer, M. A. (2022). Picture the future, play the present: Re-imagining sustainable cities through a large-scale location-based game. *Futures*, 135, 102858. <https://doi.org/10.1016/j.futures.2021.102858>
- Mankulam, D. (2024). Imagined utopias and lived dystopias: Literary imagination of the urban future in *The Black Dwarves of the Good Little Bay*. *Agathos*, 15(2), 163–176. <https://doi.org/10.5281/zenodo.13948983>
- Mertia, S. (2017). Socio-technical imaginaries of a data-driven city: Ethnographic vignettes from Delhi. *Fibreculture Journal*, 29, 1–21. <https://doi.org/10.15307/fcj.29.217.2017>
- Molden, O. C., & Meehan, K. (2018). Sociotechnical imaginaries of urban development: Social movements around “traditional” water infrastructure in the Kathmandu Valley. *Urban Geography*, 39(5), 763–782. <https://doi.org/10.1080/02723638.2017.1393921>

- Munthe-Kaas, P. (2015). Agonism and co-design of urban spaces. *Urban Research & Practice*, 8(2), 218–237. <https://doi.org/10.1080/17535069.2015.1050207>
- Müller-Friedman, F. (2007). Of Boers and plaasjapies: ‘Resistance’, know-how and the urban imagination in north west Namibia. *South African Geographical Journal*, 89(2), 151–160. <https://doi.org/10.1080/03736245.2007.9713885>
- Pauw, I., Bénéker, T., van der Schee, J., & van der Vaart, R. (2018). Students’ abilities to envision scenarios of urban futures. *Journal of Futures Studies*, 23(2), 45–65. [https://doi.org/10.6531/JFS.201812_23\(2\).0004](https://doi.org/10.6531/JFS.201812_23(2).0004)
- Prins, A. (2023). Fast futures and everyday endurance: Mobility, temporality, and cycle-rickshaws in Dhaka. *City & Society*, 35(2), 121–131. <https://doi.org/10.1111/ciso.12452>
- Rivero Moreno, L. D. (2020). Sustainable city storytelling: Cultural heritage as a resource for a greener and fairer urban development. *Journal of Cultural Heritage Management and Sustainable Development*, 10(4), 399–412. <https://doi.org/10.1108/JCHMSD-05-2019-0043>
- Roy, A. (2009). The 21st-century metropolis: New geographies of theory. *Regional Studies*, 43(6), 819–830. <https://doi.org/10.1080/00343400701809665>
- Silva, J.P.N., & Grützmann, A. (2023). The evolution of the disruptive ecosystem: a framework integrating disruption, ecosystems, and business models. *European Journal of Innovation Management*, 26(5), 1255–1270. <https://doi.org/10.1108/EJIM-07-2021-0368>
- Tiwari, A., & Sharma, P. (2024). Preference-based grey theory model and its application in waste disposal selection: a case study. *Sādhanā*, 49(64), 1–14. <https://doi.org/10.1007/s12046-023-02413-8>
- Tozer, L., & Klenk, N. (2018). Discourses of carbon neutrality and imaginaries of urban futures. *Energy Research & Social Science*, 35, 174–181. <https://doi.org/10.1016/j.erss.2017.10.017>
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4(3), 356–367. <https://doi.org/10.1177/1534484305278283>
- Törnroth, S., Day, J., Fürst, M. F., & Mander, S. (2022). Participatory utopian sketching: A methodological framework for collaborative citizen (re)imagination of urban spatial futures. *Futures*, 139, 102938. <https://doi.org/10.1016/j.futures.2022.102938>
- Tyszczyk, R. (2021). Collective scenarios: Speculative improvisations for the Anthropocene. *Futures*, 134, 102854. <https://doi.org/10.1016/j.futures.2021.102854>
- van den Eijnden, T., Baibarac-Duignan, C., de Lange, M., & de Goede, M. (2022). Materials and modes of translation: Re-imagining inclusive "zero"-waste futures. *Frontiers in Sustainable Cities*, 4, 958423. <https://doi.org/10.3389/frsc.2022.958423>
- Yuana, S. L., Boon, W., Raven, R., Hajer, M. A., Sengers, F., & Ghosh, B. (2023). Pluralizing urban futures: A multicriteria mapping analysis of online taxis in Indonesia. *Futures*, 154, 103260. <https://doi.org/10.1016/j.futures.2023.103260>