

Reframing the Nexus Between Forced Migration and Urban Resilience: Discussing Impacts on Urban Futures

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Abstract

The relationship between forced migration and urban resilience is an under-researched topic within both the local resilience and migration discourses. While discussions tend to focus on institutional and psychological resilience, we argue that forced migration should be considered a systemic component of urban resilience and the future of cities. As resilience is currently understood in many different ways, even in contrasting ways, we contend that true resilience requires counteracting the pervasive “threat” of arrival and its criminalisation. There is a need to establish counter-narratives that replace narratives of fear, hate, and division with narratives that uphold everyone’s human dignity. These narratives should emphasise what urban societies have in common and demonstrate how inclusion can shape urban futures. While there is no reason to romanticise the “productive moments” of disruptions induced by forced migration, these moments are crucial for learning how to navigate urban realities and futures in arrival and postmigrant societies. They are also indispensable for building societal resilience in times of crisis. Likewise, we need to be more aware of the risk of depoliticising the discourse on local resilience by viewing a “broad consensus” as a resilient solution—this tends to silence critical voices.

Keywords

crisis; disruption; forced migration; reframing; urban futures; urban resilience

1. Introduction

In the urban resilience discourse, the subject of forced migration has received little attention. While the relationship between forced migration and resilience is discussed in many global political and climate change

science debates, the discourse referring to the local level is largely dominated by and restricted to topics such as institutional resilience in forced migration governance and the psychological resilience of forced migrants during the process of fleeing, arriving, and settling in a new place.

Drawing on our research experience in EU countries, with a particular focus on Germany, this commentary argues that forced migration should be considered a systemic factor in discussions about urban resilience and the future of cities in times of crisis and disruption. We understand urban resilience as a strategy to ensure local stability and cohesion in turbulent times, and to withstand antidemocratic and authoritarian threats. There has been an increase in both progressive and regressive narratives in the discourse on forced migration, with a struggle between them. In this context, questions arise concerning the direction of local resilience and future-making strategies and how forced migration is being placed and framed within them. Our reflections aim to demonstrate the multifaceted relationship between forced migration and urban resilience. We show that the correlation between both can be conceptualised in various ways. We also address the current and future requirements for research, including the need to reconsider or reframe approaches and concepts, as well as the need for a more systematic integration of urban and migration debates.

2. Forced Migration as a Systemic Factor of Urban Resilience and Urban Futures

To date, forced migration has not been adequately addressed by urban resilience researchers. However, urban migration research has recently begun to establish a stronger link between resilience and coping with forced migration. Scholars started to explicitly look at forced migration in a local/urban resilience framework since, in their view, the urban resilience lens “can improve understandings of how state regulations and structures today challenge the capacities of cities...to absorb migration and ethnic-related pressures” (Zapata-Barrero, 2023, p. 2835). From the perspective of migration studies, the insights on forced migration and resilience are conceptually reframed. They intersect with discussions that have been going on for some time, e.g., on governance of arrival (Hinger & Schäfer, 2019; Werner et al., 2018) or on urban spaces of arrival (Franz & Hanhörster, 2020; Meeus et al., 2019).

A discussion has been initiated regarding how cities can enhance institutional resilience and preparedness for forced migration events (Ratzmann et al., 2024). The concept of “institutional resilience” involves understanding how diverse institutional sectors collaborate to formulate and implement coping strategies and practices. The 2015–2016 and 2022 forced migration events highlighted the vital role of civil society and its resources in fostering institutional resilience.

The debate on institutional resilience centres on the management of forced migration in terms of local governance. However, this approach may be too narrow to capture the complexities of the effects of forced migration on urban resilience today and in the future, including its uncertainties, wickedness, conflicts, practical shaping, and “ownership.” This debate intersects with research on the potential and challenges of using urban resilience as a framework for thinking about the future of cities (Triandafyllidou & Yeoh, 2023). However, the topic of forced migration has not yet played a decisive role in this research.

The issue of forced migration as a systemic factor for resilient urban futures has not received significant discussion. Forced migration requires action at various decision-making levels within cities, as well as in a variety of policy areas. Poor management of forced migration may also affect a city’s or a community’s

general resilience performance and makes them more vulnerable in a context of crisis and disruption. We suggest a nexus between urban resilience and forced migration, which is of a systemic nature. Therefore, it is imperative for cities, which are the main destinations of forced migration, to incorporate this factor when shaping resilient futures. The term “systemic factor” is defined as the comprehensive, multifaceted domain of urban policy encompassing various sectors, actors, and agencies.

3. Rethink and Reframe: How Urban Resilience and Forced Migration Intersect and Interact

Given that we understand and explain our world through a variety of frames, it is crucial to understand how these frames are built, how they work, and who/what drives them. Rethinking frames, or reframing, involves reconsidering one’s own assumptions and conceptual foundations, as well as challenging the predominant frames or how they are discussed and used. Reframing can thus be an act of resistance (McCall, 2020); the establishment of counter-frames can be understood as a way to critique dominant narratives or the search for alternative ways of understanding (Prendeville & Syperek, 2021); in this way, reframing may also be seen as a method to reshape debates on urban futures.

The discourse on forced migration is characterised by emotional intensity and contrasting positions. Public discourse is widely dominated by discursive notions of forced migration as a “crisis” (Cantat et al., 2023), or as a “threat” (Garcés, 2022). Discussions on how to cope with forced migration mainly take place through these frames. This constitutes a need to rethink and reframe the discourse itself, making it especially important for justice—and dignity-based migration research to: (a) deconstruct the new narratives that pit the resilience needs of receiving societies against the principles of solidarity and human rights; and (b) seek counter-narratives, images, and frames that challenge vulnerabilities and reclaim agency over narratives and the production of knowledge (Prendeville & Syperek, 2021). Such an approach clearly and unambiguously prioritises human dignity and solidarity.

We will now briefly explain the key aspects of the intersection and interaction of urban resilience and forced migration. These are particularly relevant to research on the current situation of the cities in the destination countries of arrival. We view these reflections as thoughts on the topic and building blocks for a future research agenda.

3.1. Forced Migration as a Systemic Factor of Urban Resilience

Despite its “wicked nature,” forced migration has become a systemic factor in today’s urban realities and must therefore be considered a constitutive factor in local resilience thinking and planning. Current debates on urban resilience and forced migration do not yet sufficiently acknowledge this fact.

The relationship between forced migration and local resilience is far-reaching, affecting almost all spheres of urban life. It is a challenge for an intersectional perspective on forced migration and resilience because issues like uncertainty, lack of planning, and unforeseeable futures are too complex to be fully addressed within the scope of resilience strategies. The adoption of a resilience-based approach to planning urban futures in the field of forced migration represents something like “squaring the circle.” By some authors, either forced migration itself or migration governance is referred to as a “wicked problem” (Raadschelders et al., 2019;

Zapata-Barrero, 2023, p. 2839). With the concepts of local resilience and the “local turn” in migration research, we believe that it is essential to consider both the city as a whole and neighbourhoods individually. The ways in which forced migration and related conflicts are negotiated at the city and neighbourhood levels will be crucial in determining the resilience of urban futures (cf. Grubbauer et al., 2024).

3.2. Polarised and Normative Landscapes of Resilience Thinking

The discourse on the relationship between urban resilience and forced migration is characterised by polarisation and contrasting perspectives. This highly normative landscape poses a challenge to urban resilience thinking.

Resilience is often used as a “neutral” concept to analyse how well cities deal with shocks or crises based on defined criteria. However, it is always linked to normative questions (Cote & Nightingale, 2012). Or, as McGreavy (2016, p. 105) put it: “A primary problem with resilience is that it ignores its own discursivity.” This constrains how we might understand and approach resilience differently. The form and outcome of resilience thinking and policies depend on the setting; ideas of resilience may also conflict. Inclusive resilience frames are used in many current scientific discussions on forced migration. They argue that treating forced migrants with solidarity and empathy promotes urban society’s resilience and forms the basis for governance of arrival and integration. Large-scale forced migration events demonstrate this. However, such extensive support is not sustainable in the long term as there is a risk of overload and compassion fatigue (Sharp, 2025). There is also a danger of romanticising a “precarious resilience” based on the responsabilisation of civil society actors or of downplaying challenges (Karakayali & Kleist, 2016), as opposed to long-term, robust resilience. Regressive, negative, or undesired resilience narratives remain underexposed. Therefore, the current concept of resilience and the narratives underlying it in politics, decision-making, and public discourse require critical examination. What is being discussed, how is it being discussed, and who is involved in developing arguments and what roles are they taking? On the one hand, forced migration is often seen as a “threat” to the receiving society, with the arrival of large numbers of forced migrants described as a “disturbing disruption.” The examination of public and policy discourse shows that critics of migration rarely use the term “resilience,” instead arguing that receiving societies are at risk of being overwhelmed by the costs and impacts of forced migration. Migrants are blamed for existing problems, such as a lack of affordable housing and insufficient resources for kindergartens and schools, and are portrayed as scapegoats for issues such as the loss of prosperity and bottlenecks leading to competition for doctors’ appointments and nursery places. While there are real challenges for politics and society in these areas, some attribute the problems to migration. In such views, forced migration must be limited to avoid risking the stability of society. In other words: Avoidance, withdrawal, and rejection may serve as future resilience strategies (Braun & Schwarz, 2025). Consequently, resilience would mean counteracting the “threat” and criminalising arrival.

3.3. Addressing Regressive Shifts on Forced Migration to Create Resilient Urban Futures

In order to address the current shift towards “regressive” understandings of the relationship between forced migration and urban resilience, it is necessary to challenge approaches that problematise, criminalise, racialise, or securitise migration, and replace them with approaches that prioritise dignity, human rights, and justice.

While the aforementioned “threat” and “problem” narratives are indicative of a problematic shift to the right in public debates on migration and arrival, they can also be viewed as an opportunity to establish counter-narratives. These counter-narratives aim to replace narratives of fear, hate, and division with ones that uphold everyone’s human dignity, focusing on what urban societies have in common and how inclusion can guide the shaping of urban futures (Glorius et al., 2021). Rather than focusing on exclusion, such narratives aim to foster a new sense of “us” that embraces and empowers all members of society. These narratives are based on the promise of equal rights for all citizens, enabling social advancement and the fair distribution of opportunities. Diversity, contradictions, and solidarity are seen as key strengths that contribute to this resilience. Migrants are given a voice and showcase the people who welcome them in urban societies. This is an inevitable prerequisite and indispensable ingredient of urban resilience. This highlights that any resilience strategy has normative foundations that shape our understanding of resilience. Therefore, discussions about the connection between urban resilience and forced migration, as well as questions of reframing, cannot be “neutral,” but rather require normative anchor points.

3.4. Productive Moments of Disruption as Groundwork for Learning and Innovation

The debate on urban resilience has gained momentum in the wake of the current polycrisis. While the risks and dangers of crisis and disruptive contexts are widely discussed, the opportunities they present for building resilience are less well known. The “productive moments” of crisis and disruption fostering local-level learning, understanding, and practice remain under-researched and underestimated.

Looking beyond the dominant discourse of forced migration as a threat and a problem reveals its potential to create “productive moments of change,” offering opportunities for innovation and overcoming inertia (Gkeredakis et al., 2021). Crises can foster transformations that would not be possible under normal conditions; for example, the solidarity and support shown to Syrian and Ukrainian forced migrants in 2015–2016 and 2022 (Haase et al., 2024). The pressure to cope with an ad hoc challenge such as forced migration can promote processes that are key to societal resilience, such as overriding established processes, and accelerating the adoption of new ideas. Coping with Ukrainian forced migration in many European cities in 2022 became a “sandbox” for change, providing a context in which even the most unconventional approaches were worth testing (Jelínková et al., 2023). This was evident in administrative responses, cooperation between supporting organisations, and the involvement of significant portions of civil society. It encompassed coping with the influx of forced migrants and, indirectly, addressing the emergencies resulting from an aggressive war, on a local scale in numerous European cities. This demonstrates the interconnectedness of local and upper-level resilience. Disruptive events, such as the arrival of forced migrants, force local societies to confront their limitations in terms of local resilience and to seek alternatives. This creates an environment in which innovation can thrive, ultimately yielding solutions that are more resilient, efficient, and advanced (Kivimaa et al., 2021). Geels and Schot (2007) argue that crises can trigger “symbiotic innovations” which solve local problems and trigger further innovations throughout the system. However, emergencies can also highlight flaws in existing systems, as shown by the lack of shelter for millions of Ukrainians in 2022. New models of “emergency cooperation” between the state, civil society, and intermediaries showed how to cooperate in times of crisis and/or disruption. Innovative governance of arrival can create opportunities for both the receiving society and the forced migrants (Phillimore, 2021). These models could inform long-term resilience thinking, planning, and strategies (Triandafyllidou & Yeoh, 2023). At first glance, the realisation of such benefits may seem very demanding.

In order to recognise them as such, there must be a basic agreement that migration can make shrinking and ageing receiving communities more resilient. Clearly, resilience strategies and measures are inefficient and insufficient without community-wide resilience thinking. That said, we are well aware that there are many uncertainties and that the aforementioned potential benefits do not exist independently of many challenges and negative “companions,” such as compassion fatigue, selective solidarity, and the coexistence of solidarity and rejection. Consequently, much of the theoretical potential cannot be realised, which poses a real threat to resilience thinking and planning. So, while there is no reason to romanticise the “productive moments” of crises or disruptions, these moments are crucial for learning how to navigate urban realities and futures in arrival and postmigrant societies.

3.5. Urban Resilience for Whom? The Need for More Inclusive Approaches

A dignity-based and inclusive understanding of social and societal resilience in relation to forced migration can only arise and persist if it is based on and supported by a fundamental consensus among large parts of the community. This must include the ongoing renegotiation of the consensus, as well as the proactive involvement of various groups within urban societies, particularly domestic civil society and forced migrants.

Taking an inclusive approach to urban resilience would address the question “Urban resilience for whom?” (Meerow & Newell, 2019), answering it with “For the society as a whole.” With respect to forced migration, this would mean integrating a wide range of voices into the development of future resilience structures, facilities, practices, and mindsets. In particular, this would involve strengthening the voices of those who are often marginalised, such as forced migrants themselves. One way to bring this aspiration to life would be to adopt approaches such as local or urban citizenship (García, 2006; Harper, 2023)—a concept that aims to promote the social and political participation of all community members. When talking about forced migration, it may help to change the focus: Instead of seeing migrants as victims, we should see the opportunities they bring to urban resilience and how they shape our cities. Narratives of resilience should give migrants and activists a stronger voice, enabling them to contribute their perspectives and challenge existing narratives if they wish. A broad understanding of who constitutes “societal resilience” has the potential to strengthen the resilience of a city and all its residents, including new arrivals, by empowering them to play an active role in shaping the urban future. However, in the current context of migration policy, it must be recognised that the benefits of urban citizenship and the active involvement of forced migrants in shaping urban futures in their new place of residence often come with conditions. Under the present circumstances, these benefits seem very theoretical and illusory and benefit only a select few. There is the tendency to exclude more underprivileged and quieter voices, ultimately undermining the resilience potential of local (urban) societies as a whole. At the same time, there is a risk of depoliticising the local resilience discourse by viewing a “broad consensus” as a resilient solution that tends to, or even intends to, exclude critical voices.

4. How Do We Move Forward From Here?

There is no simple answer to any of the presented thoughts. Adopting a systemic approach to the interconnection between forced migration and urban resilience requires us to consider different disciplinary perspectives, such as urban studies, migration studies, equity studies, and political participation studies, in tandem. Applying these different perspectives will help us understand the complexity of the issue and “de-centre” the way we view forced migration, incorporating it into a broader discussion on locally based

social, political, and community resilience. Focusing solely on migration can hide deeply rooted issues and patterns of social inequity. This often manifests as competition among disadvantaged groups for scarce resources, such as housing and access to healthcare, in cities. “Migration” is often used as a way of avoiding dealing with these fundamental issues. A more resilient approach based on sustainability, inclusiveness, and dignity is needed to address the underlying challenges obscured by superficial discussions about the “migration problem.” However, current political and public discourse merely pretends to offer a more resilient future with fewer migrants. What is needed here are more nuanced and fact-based discussions that consider the different interests and ideas on how resilient urban futures can be conceived, negotiated, and shaped in times of polycrisis, when forced migration in more or less disruptive form is increasingly likely. Lastly, it is important to stress that resilient urban futures are less likely to be achieved without addressing the difficult issues surrounding forced migration.

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Conflict of Interests

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References

- Braun, J., & Schwarz, A. (2025). Regression als Aufbruch? Kritische Geographien rechter Zukunftsentwürfe. *sub\urban*, 13(1), 101–111. <https://doi.org/10.36900/suburban.v13i1.1021>
- Cantat, C., Pécoud, A., & Thiollet, H. (2023). Migration as crisis. *American Behavioral Scientist*, 69(6), 627–649. <https://doi.org/10.1177/00027642231182889>
- Cote, M., & Nightingale, A. J. (2012). Resilience thinking meets social theory: Situating social change in socio-ecological systems (SES) research. *Progress in Human Geography*, 36(4), 475–489. <https://doi.org/10.1177/0309132511425708>
- Franz, Y., & Hanhörster, H. (Eds.). (2020). Urban arrival spaces: Social co-existence in times of changing mobilities and local diversity [Thematic issue]. *Urban Planning*, 5(3). <https://doi.org/10.17645/up.i183>
- Garcés, B. (2022). Migration as a ‘threat.’ In *IEMed Mediterranean yearbook 2022* (pp. 345–347). European Institute of the Mediterranean. <https://www.iemed.org/wp-content/uploads/2022/10/Migration-as-a-Threat-Garces-IEMedYearbook2022.pdf>
- García, M. (2006). Citizenship practices and urban governance in European cities. *Urban Studies*, 43(4), 745–765. <https://doi.org/10.1080/00420980600597491>
- Geels, F. W., & Schot, J. (2007). Typology of sociotechnical transition pathways. *Research Policy*, 36(3), 399–417. <https://doi.org/10.1016/j.respol.2007.01.003>
- Gkeredakis, M., Lifshitz-Assaf, H., & Barrett, M. (2021). Crisis as opportunity, disruption and exposure: Exploring emergent responses to crisis through digital technology. *Information and Organization*, 31(1), Article 100344. <https://doi.org/10.1016/j.infoandorg.2021.100344>

- Glorius, B., Bürer, M., & Schneider, H. (2021). Integration of refugees in rural areas and the role of the receiving society: Conceptual review and analytical framework. *Erdkunde*, 75(1), 51–60. <https://www.jstor.org/stable/27090855>
- Grubbauer, M., Manganelli, A., & Volont, L. (Eds.). (2024). *Conflicts in urban future-making. Governance, institutions, and transformative change*. Transcript.
- Haase, A., Arroyo, I., Astolfo, G., Franz, Y., Laksevics, K., Lazarenko, V., Nasya, B., Reeger, U., & Schmidt, A. (2024). Housing refugees from Ukraine: Preliminary insights and learnings from the local response in five European cities. *Urban Research & Practice*, 17(1), 139–145. <https://doi.org/10.1080/17535069.2023.2225333>
- Harper, R. A. (2023). What do citizens do? Immigrants, acts of citizenship and state expectations in New York and Berlin. *Central and Eastern Europe Migration Review*, 12(1), 81–102. <https://doi.org/10.54667/ceemr.2023.12>
- Hinger, S., & Schäfer, P. (2019). Making a difference—The accommodation of refugees in Leipzig and Osnabrück. *Erdkunde*, 73(1), 63–76. <https://doi.org/10.3112/erdkunde.2019.01.06>
- Jelínková, M., Plaček, M., & Ochrana, F. (2023). The arrival of Ukrainian refugees as an opportunity to advance migrant integration policy. *Policy Studies*, 45(3/4), 507–531. <https://doi.org/10.1080/01442872.2023.2289576>
- Karakayali, S., & Kleist, J. O. (2016). Volunteers and asylum seekers. *Forced Migration Review*, 51, 65–67.
- Kivimaa, P., Laakso, S., Lonkila, A., & Kaljonen, M. (2021). Moving beyond disruptive innovation: A review of disruption in sustainability transitions. *Environmental Innovation and Societal Transitions*, 38, 110–126. <https://doi.org/10.1016/j.eist.2020.12.001>
- McCall, S. (2020). Re-framing, de-framing, and shattering the frames: Indigenous writers and artists on representing residential school narratives. *Studies in American Indian Literatures*, 32(1/2), 1–25. <https://doi.org/10.5250/studamerindilite.32.1-2.0001>
- McGreavy, B. (2016). Resilience as discourse. *Environmental Communication*, 10(1), 104–121. <https://doi.org/10.1080/17524032.2015.1014390>
- Meerow, S., & Newell, J. P. (2019). Urban resilience for whom, what, when, where, and why? *Urban Geography*, 40(3), 309–329. <https://doi.org/10.1080/02723638.2016.1206395>
- Meeus, B., van Heur, B., & Arnaut, K. (2019). Migration and the infrastructural politics of urban arrival. In B. Meeus, K. Arnaut, & B. van Heur (Eds.), *Arrival infrastructures: Migration and urban social mobilities* (pp. 1–32). Palgrave Macmillan.
- Phillimore, J. (2021). Refugee-integration-opportunity structures: Shifting the focus from refugees to context. *Journal of Refugee Studies*, 34(2), 1946–1966. <https://doi.org/10.1093/jrs/feaa012>
- Predeville, S., & Syperek, P. (2021). Counter-framing design: Politics of the ‘new normal.’ In E. Brandt, T. Markussen, E. Berglund, G. Julier, & P. Linde (Eds.), *Nordes 2021: Matters of scale* (pp. 104–113). Design Research Society. <https://doi.org/10.21606/nordes.2021.9>
- Raadschelders, J. C. N., Larrison, J., & Thapar, A. V. (2019). Refugee migration as a “wicked problem.” *World Affairs*, 182(3), 228–255. <https://www.jstor.org/stable/26770607>
- Ratzmann, N., Zeković, D., Blunert, J., Kokonowskyj, L., & Nowicka, M. (2024). *Chancen statt “Krise”: Resiliente Kommunen im Kontext von Migration, Integration und Teilhabe. Abschlussbericht*. Deutsches Zentrum für Integrations- und Migrationsforschung.
- Sharp, R. (2025). Discourses of solidarity fatigue as ambivalent recognition among German and Polish actors in relation to Ukrainian displacement. *International Journal of Cultural Studies*, 28(6), 1173–1191. <https://doi.org/10.1177/13678779251345150>

- Triandafyllidou, A., & Yeoh, B. S. A. (2023). Sustainability and resilience in migration governance for a post-pandemic world. *Journal of Immigrant & Refugee Studies*, 21(1), 1–14. <https://doi.org/10.1080/15562948.2022.2122649>
- Werner, F., Haase, A., Renner, N., Rink, D., Rottwinkel, M., & Schmidt, A. (2018). The local governance of arrival in Leipzig: Housing of asylum-seeking persons as a contested field. *Urban Planning*, 3(4), 116–128. <https://doi.org/10.17645/up.v3i4.1708>
- Zapata-Barrero, R. (2023). Urban migration governance under the resilience lens: Conceptual and empirical insights. *Ethnic and Racial Studies*, 46(13), 2833–2862. <https://doi.org/10.1080/01419870.2023.2166793>

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