

# Two decades under the influence of urbanization and infectious disease

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## Abstract

This article outlines the major aspects of Roger Keil's contributions to the study of the relationship between cities and infectious disease to date. We suggest how urban scholars have already and could in the future build on his corpus of work, not just for urban health specifically, but for our grasp of extended urbanization more generally. We do so by recounting Keil's contribution to the urban studies scholarship on various dimensions, including those pertaining to: the networking of urban health, managing urban health within the context of extended urbanization, and finally theoretically grounding urban health into a finer-grained critical grasp of urban questions in our post-anthropocentric era. In our conclusion, we highlight the urgent and continuing need to embrace Roger Keil's steadfast optimism even when facing deeply troubling urban crises—a lesson all too critical today as global affairs veer toward more turbulent and calamitous times, such as those faced in the current geopolitical situation.

## Keywords

urbanization, Roger Keil, infectious disease, urban health, governance

## Introduction

Roger Keil's work has contributed significantly to our understanding of the relationship between cities, urban health, and infectious diseases. Notably and most importantly, his corpus of work in this area has built the theoretical foundation necessary for the development of subsequent perspectives that are more distinctly informed by an urban studies approach to this relationship (see for instance, Brenner and Ghosh, 2022). Recently, Keil and his collaborators have played an especially influential role in the overall development of urban social scientific research on COVID-19. This is seen, for example, in the wide range of articles, essays, interviews, and podcasts they produced that explicitly sought to understand the myriad

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social, political, economic, and cultural factors involved in the pandemic's relationship with urbanization. We take the celebratory chance afforded to us by this review paper to outline the major aspects of his contributions on this topic to date and suggest how urban scholars could build on this work in future research at a critical juncture not just for urban health specifically, but for our grasp of extended urbanization more generally.

We do so by recounting Keil's contribution to the urban studies scholarship on several fronts, including: the network aspects of urban health, managing urban health under conditions of extended urbanization, and finally theoretically grounding the study of urban health into a fine-grained and critical grasp of urban questions in our current post-anthropocentric context. This is of course but a brisk excursion into well over three decades of urban scholarship as the other articles in this special issue of *Urban Political Ecology* demonstrates. We recognize much more could be said for instance around Keil's key contributions on urban political economy or on the study of the urban periphery. Here we note how Keil's work, with a wide cast of collaborators that has in fact included ourselves, has foregrounded much of the present understanding of how contemporary processes of extended urbanization, which include suburbanization, postsuburbanization and peri-urbanization, can result in increased vulnerability to infectious disease spread in cities. This inherently collaborative approach to urban theorizing repeatedly sought to positively break the mold of the "urban scholar" by forging, recasting, and continually re-experimenting with cross-boundary alliances of diverse bodies of scholarship. Yet at the same time, Keil's research on urban health reminds us, this can be done "at the center" of urban theorizing, rather than in outcast margins. From taking issue with the global city, to debating the role of the state in urban politics or the place of the suburban in urban studies or the recasting of urbanization across human–nonhuman contact points, Keil's pieces have had the unique foresight of theorizing the relationship between urbanization and infectious disease in constant dialogue with key debates and tropes of urban studies.

Critically, as we will see, reconstructing a short precis of Keil's scholarship through the better part of over two decades, has the advantage of reminding both current and new generations of urban scholars, the need to retain, with a flair for buoyancy and opportunity, a focus on the many dimensions of the urban, including notably the relationship of cities and infectious disease. Roger Keil constantly pushed us to question the limits of urban analyses, agog with interest for experimentation in urban scholarship and open to the reinventing of one's own positioning vis-à-vis pressing debates in areas of inquiry that can, just like SARS, Ebola, and COVID-19, inspire dread and despair in the modern urbanist. Hence, we borrow from this lineage to advocate for the distinctively Keil-esque power of an enduring inquisitiveness with the peripheries of urbanization in the context of urban health governance and sociospatial inequalities. In the conclusion, we underline the continuing potential to embrace Keil's steadfast urban optimism even when facing deeply troubling crises—a lesson all too critical as global affairs turn turbulent and calamitous, such as those faced in the present geopolitical circumstances.

### *Networked urban health*

The relationship between globalization and the spread of disease in and across cities is one of the most enduring realities for urban scholarship and practice. Fittingly, Roger Keil for a better part of his career, analyzed this relationship theoretically, but also with a sustained eye for public commentary. He maintained such a focus in analysis by studying a wide variety of infectious disease outbreaks that arose around the world—including of course the most recent COVID-19 pandemic. Keil's initial foray into this space, jointly authored with S. Harris Ali following the SARS outbreak of 2003, built on earlier work (including his own) on global city formation to productively demonstrate how globalization and interconnected urban networks contributed to the rapid spread of infectious diseases across cities and regions (see Ali and Keil,

2006; Brenner and Keil, 2006). Interestingly, such an approach was introduced at a time of deep questioning of the need to investigate “global” cities and allowed many, including ourselves, to think of this now, much criticized global city trope, not only in novel terms closely aligned and attuned to global affairs of the time, but also as a jumping off point to conceive of relationships of urbanization that connected the political economy of local and global health, with the profound transformations of an ever-intensifying urbanizing age.

Through a series of theoretically driven articles and a major edited volume on this topic, Ali and Keil presented the SARS outbreak as a methodological and conceptual challenge both for urban epidemiology and urban studies more generally. Through their detailed empirical research on the SARS outbreak in major global cities including Hong Kong, Singapore, and Toronto, Ali and Keil presented powerful evidence that the nodal connections among such cities in turn contributed to significant disease outbreaks in these cities (Ali and Keil, 2006). Consequently, they argued, the urban dynamics of Emerging Infectious Diseases (EIDs) could not be adequately understood at the scale of cities but had to be explored at the macro scale of the world city network. In this sense, globalized urbanization was responsible for producing uneven topographies of pathogenic circulation around the world. However, in a recent critique, Brenner and Ghosh (2022) have argued that, although breaking new ground, this work was primarily focused on the circulation of pathogens in human populations and thus “effectively bracketed the question of whether, and how, globalized urbanization may be causally implicated” in human–environment changes, resulting in the intensification of microbial traffic via world city networks. This critique of the lack of analytical attention to the ecological dimensions of outbreaks and pandemics have since to some degree been taken up by Keil and his colleagues in subsequent work. (e.g. Ali et al. (2025) and the authors’ response to Samaddar et al. (2025)). However, the complexity of the infectious disease—city interplay will undoubtedly require further research and theorization in the future to enable an analysis that will more fully address these critiques in a more nuanced way.

In turn, this call to better embed the “global” city perspective on networks in approaches based on conceptualizing the more fluid extended geographies of an urban planet, has led to advocating for a more explicit scholarship of urbanization that tackles head on infectious disease. Keil’s research has shed light on how urbanization and urban planning affect the spread of infectious diseases. Notably, he has highlighted the complex interplay between urban environmental and socioeconomic factors, as well as related public health outcomes. For example, by examining the complex interactions between urban planning, transportation, housing, and environmental factors, Keil has provided insights into how different aspects of the urban environment can influence various types of health outcomes, including exposure and illness from infectious disease agents. In an influential paper, Keil and colleagues argued that contemporary processes of extended urbanization, which include suburbanization, postsuburbanization, and peri-urbanization, can result in increased vulnerability to infectious disease spread (Connolly et al., 2021). This has been among Roger’s most influential work to date on this topic, having immediate impact on urban research and public discourse—likely due to the timing and special relevance of the publication during the onset of the COVID-19 pandemic. Keil was very much the driver behind this piece of work, which demonstrated his foresight in theorizing the relationship between urbanization and infectious disease. These insights built on his earlier work with Harris Ali, which hypothesized that changes in the human–environment relationship are a central mechanism underlying the intensification of the microbial traffic between rural and urban settings—and later developed more fully by Brenner and Ghosh (2022).

Since then, Keil and his collaborators have focused on the role of peri-urban zones—variously referred to as the global urban periphery, suburban or postsuburban zones, or areas of extended urbanization—as a key political-ecological niche for the spread of emerging infectious diseases due to a range of demographic, infrastructural, and governance factors (Ali et al., 2022a; Keil et al., 2020). They suggested that these factors also resulted in more severe health outcomes in peri-urban areas related to infectious disease

spread than in central city areas. Limited infrastructural networks in peri-urban areas, it was found, may have also contributed to more rapid disease spread by making infectious disease outbreaks more difficult to contain. This work has prompted both researchers and practitioners alike to develop more nuanced understandings of the specific urban political ecologies that shape the emergence and spread of emerging infectious disease and the implications these have for society and governance (Keil, 2011). For example, Finn and Cobbinah (2024) have further developed the pandemic urbanization lens to explore colonial legacies of inequalities and health crises expressed in the COVID-19 pandemic. Hung-Ying Chen et al. (2023) also adopted the concept to examine the role of density in shaping infection rates in Asian cities. Furthermore, Matthew Gandy (2021, 2023) developed the notion of zoonotic urbanization to examine how a modified urban political ecology framework and multiscalar perspective might help to illuminate emerging epidemiological risk.

Future research will inevitably build on this foundational work, by investigating the specifics of analyses of Keil and his colleagues. For instance, the question of how “the distinctive patterns and pathways of extended urbanization of the neoliberal era have engendered new circuits of multispecies, animal-to-animal disease transmission (both enzootic and epizootic) in which pathogens are dislodged from nonhuman hosts in ‘wild’ or ‘remote’ forest environments and projected into zones of hinterland industrialization and associated circuits of capital” (Brenner and Ghosh, 2022: 869; see also: Kaup, 2021). The important aspect about these emerging zoonoses, as Keil (2024: 533) asserted, “is that they underline not just the crossing of species boundaries but also an explosion of traditional understandings of urban boundaries, city limits in the conceptual and real sense”. In sum, then, Keil’s work has argued that attention needs to shift from cities as being the site where disease outbreaks occur toward the socioecological networks in which they emerge, proliferate and are confronted. This is because of the encroachment of the global urban fabric into remote and unsettled areas other structural processes that drive changes in these spatialities (Ali et al., 2022a; Connolly et al., 2021; Massé and Gladkova, 2025).

### *Managing urban health*

All the networks and connections associated with infectious disease outbreaks in global cities leads to a clear clarion call: rather than caving to its inevitability, we can turn to urban governance and ask ourselves (pro-) active questions about how we can better manage urban health within these networked relations and political economic parameters. Here we are reminded of the centrality of sociopolitical determinants of health in cities. From this point of view, Keil has critiqued the political and economic forces shaping urban health outcomes. He has examined how power structures and sociospatial inequalities influence access to health-care, sanitation, and other resources that impact disease transmission. Keil and colleagues’ research illustrated how COVID-19 exposed the social, spatial and institutional peripheries of urban society at the levels of streets and neighborhoods, care institutions, housing and labor markets (Biglieri et al., 2022). This work has demonstrated how vulnerable groups such as hospital workers or immigrants often bear the brunt of disease in terms of both health and political-economic consequences.

For example, Keil’s work brought attention to how service workers such as hotel and restaurant workers may face greater exposure to pathogens or can be laid off due to closure of their workplaces during outbreak situations (Keil, 2011, 2024). Similarly, he observed that more marginalized communities (such as Indigenous populations) are often less visible in formal pandemic response strategies at all scales of governance. These observations allude to and extend findings from his early work on SARS and arguably influenced broader societal understandings of such impacts during the recent COVID-19 pandemic (Ali et al., 2025). As such, Keil’s work offers a bridge for scholars of urban health to connect with other fields of urban inquiry through a common concern from socioeconomic inequalities and dynamics that shape

cities, while reminding us to maintain, as we sketched in the section above, a keen ear to the networked dimension of urbanization that undergirds them.

Conveniently, Keil here offers us a common ground for collaborative research, but also for urban scholars to work directly with decision-makers; enabling in process those involved in urban governance to adopt an urban health lens in policy formation. As such, his scholarship has informed policy debates and interventions aimed at addressing urban health challenges. His research has provided valuable insights for policy-makers, public health officials, and urban planners seeking to enhance the health and wellbeing of city residents in the context of infectious diseases. One of Keil's major contributions has been in helping to shift global health governance from a "national-geopolitical to an urban-geopolitical" framework, recognizing the opportunities in metropolitan governance (Keil, 2008: 37; see also: Ali and Keil, 2008). In other words, Keil (2024) has argued, along with other scholars, that we need to see the world as a (global) city (see, Acuto et al., 2020; Magnusson, 2011). This insight has influenced public health policymaking, which now takes the relationship between cities and infectious disease as a starting point on how to deal with health crises. For instance, as Beveridge and Koch (2023: 27) have observed, looking at COVID-19 through an urban lens "meant de-centring the state and foregrounding the central role of citizens, neighborhood organizations and other urban communities in terms of problem-solving initiatives as well as the articulation of the everyday problems urban residents are confronted with". This finding has also been supported in research by Roger Keil and others on the importance of community-based responses in response strategies to the Ebola epidemic (Ali et al., 2022a).

For example, at the outset of the COVID-19 pandemic, Keil and other scholars predicted that the socially most vulnerable communities—especially the informal settlements in the global South—would be disproportionately affected by such a severe infectious disease outbreak (Muggah and Florida, 2020; Wilkinson, 2020). While this was true to some extent, Keil and colleagues' work also documented how such communities managed to build considerable resilience to the outbreak, resulting from grassroots responses and support networks built by civil society groups. These observations include responses to the 2014/15 Ebola epidemic in West Africa and highlighted the community-based social capital and social infrastructures in Monrovia, Liberia and Freetown, Sierra Leone that were reactivated with the emergence of the COVID-19 Pandemic (Ali et al., 2022b, 2022c). In the Greater Toronto Area, a dense network of community-based activist policymaking and care provided a certain shield against the worst excesses of the virus and: "turned into what many considered a success story in community-based responses both to the disease directly and in furthering vaccination campaigns" (Keil, 2024: 532; see also: Ali et al., 2022a).

Inevitably, a scholarship of urban governance is then prone, as we see throughout Keil's scholarship, to engaging seriously with the science-policy practice domains of urban planning and public health. As Keil (2024: 529) noted, scholars of urban and regional governance assessed the conceptual and planning implications of changing city-regional landscapes during the onset of the global pandemic (see Biglieri et al., 2022). This included the evaluation of innovative new policies that expanded or altered the use of public space, widened or extended bicycle infrastructure, allowed for the expansion of restaurant patios into streets and the re-regulation of the use of park spaces. In this way, as Keil (2024: 530) noted, "local and regional planning often appeared as the buffer between neoliberal government policy and global austerity tendencies." Many scholars have suggested that the role of urban and regional planning should be strengthened in the management of future pandemics. Future research should thus continue to examine the role of urban planning policies and practices in shaping health outcomes related to infectious diseases and identify innovative approaches to creating healthier and more resilient urban environments. As Keil (2024: 534) has recently argued, "research on the politics and governance of public health and infectious disease is *critical* urban research as it is necessary for the survival of urban life and provides theoretical, conceptual and methodological insights into the urban future overall." This is important to keep in mind, as contemporary society seems to have unfortunately forgotten about the COVID-19 pandemic and the need to prepare for the next inevitable outbreak.

Overall, Keil's work has made a significant contribution to the field of urban studies and public health by deepening our understanding of the complex relationships between cities and infectious diseases. He and his numerous collaborators have presented a nuanced investigation of how EIDs such as SARS, Ebola and COVID-19 have circulated within and among cities and urban regions around the world. Indeed, many graduate students supervised and advised by Roger Keil have gone on to illustrious careers both within and outside academia, such as in urban health planning, disaster management, and public health. In so doing, they have also generated new theoretical and methodological insights and innovations for urban studies, while positioning infectious disease as a critical research topic in the field. For example, his work with S. Harris Ali incorporated insights from urban social theory—such as actor network theory, assemblage theory and posthumanism—in seeking to illustrate the agency of nonhuman and biophysical processes underpinning the circulation of emergent infectious disease (see Ali and Keil, 2008). Sam Biglieri, Lorenzo De Vidovich and others have also written about the relationships between health, governance, and the urban periphery (Ali et al., 2025; Biglieri et al., 2022).

Notably, several of Keil's graduate students went on to become well-known scholars and practitioners in their own right. For instance, legal scholar, Estair Van Wagner's (2008) work on the legal implications of infectious disease containment measures on civil society; geographer Paul Jackson's (2008) work on how the networked connections of food as a commodity are connected to global flows that ultimately contributed to not only outbreaks of SARS but avian influenza; as well public health scholar Sarah Sanford's work on the new public health hegemony associated with infectious disease response (Sanford and Ali, 2004), were all heavily influenced by Keil's earlier work on SARS. Recently, Raphael Aguiar has published some insightful work on the urban political ecology of antimicrobial resistance (AMR), examining how it threatens animal and ecosystem health, agriculture, water, and sanitation, posing risks to the urban society which depend upon such systems (Aguiar et al., 2024). This work has already been influential well beyond the fields of urban studies and political ecology.

### *Placing (global) urban health*

For scholarship, and a scholar, so deeply embedded with the naturally “big picture” views of the global city, urbanization and the more-than-local spread of infectious disease, much of Keil's writing refreshingly grounds us in place—the third key lesson we want to highlight here as formative for the future of similarly positioned urban research. For example, Keil has in recent years drawn our eyes to connect issues of urban resilience and adaptation, and again as per above grounded that into an attention to health equity. Keil has focused on the sustainability and resilience of cities in the face of infectious disease outbreaks. His work has highlighted the role of urban planning, infrastructure development, and community engagement in building adaptive capacity and responding to health crises. Building on this legacy, future research should investigate how urban resilience strategies can promote health equity and reduce disparities in infectious disease outcomes among different social groups within cities.

Much research in the wake of the COVID-19 pandemic has convincingly demonstrated that the challenge of global sustainability cannot be separated from either the (socio-) economic or health problematic (Menéndez and Higuera García, 2020; see also Hulme et al., 2020; Sultana, 2021). Inevitably, this calls for a greater grasp of the relationships between informal urban settlements and disease burden. Keil's work has echoed the concerns of other scholars who have observed that recent trends of rapid urbanization in the global South could pose new challenges for urban health governance at an unprecedented scale (see Bollyky, 2019; Keil, 2024). Future research could thus study the relationship between informal settlements in cities and the prevalence of infectious diseases and develop interventions to improve health outcomes in these marginalized urban areas. It will be particularly important to develop a policy for the

homeless and other alienated and vulnerable communities who are isolated from mainstream urban policy and governance. Inevitably, then, the connectivity with urban planning demonstrated above leads us to Keil's reminder of the need to facilitate further bridges between global urban health, its "global governance," and the enduring need for grounded community engagement.

What we learn from decades' worth of inquiring through infectious disease, but also its urbanization, is that we can do much more with the role of global governance structures and networks in addressing urban health challenges from highly localized community perspectives, and that the two are but sides of the same coin. Keil's inquiries stress how, in order to assess the effectiveness of international governance collaborations in improving urban health outcomes, we need to balance globalist imperatives (typical of his early 2000s work) with placed appreciations (embedded in his 2010s inquiries) as they are related to infectious diseases. As some of our work with Keil has highlighted, the rapid pace of extended urbanization and the emergence of mega-urban regions raises critical questions about who has the mandate to control outbreaks in peri-urban areas (see Connolly et al., 2021; Keil and Ali, 2007). They raise fundamentally political and politicisable questions that we should not stop asking, and that we should in fact ask *with* (in coproduction) the very communities most affected by health inequalities.

Likewise, this glocal appreciation takes the shape of a recent call to strengthen the connectivity, in urban research and practice, for attention to climate change and urban health to work even more closely together from an extended urbanization viewpoint. As Keil (2024: 529) has put it, a central question for future research should be about the impacts of the pandemic and its aftermath on urban life under the conditions of a climate emergency. Critical urban scholars should thus explore the intersection between climate change, urbanization, and infectious diseases, and examine how cities can adapt and mitigate the health impacts of climate-related threats. Fittingly, Keil (2024: 531) noted that "the pandemic has opened additional opportunities for thinking through the [economic] growth paradigm as regions were put under unforeseen and unprecedented stress" during the pandemic, which is likely to increase in future outbreaks. As Donald and Gray (2019:305) have noted, this will require critical urban scholars to "work more closely with environmental scientists, local knowledge-keepers and scholars in documenting and exploring new institutions, policies and processes to help reduce our ecological footprint in places and reduce the consumption of products and fossil fuels" through the type of interdisciplinary urban health research that Keil and his collaborators have pioneered.

From this angle, what emerges from recent scholarship by Keil is a call for urbanists to pay greater attention to the framing of "One Health" common in global health circles, but also do so from the vantage point of the emerging critical mass of Urban Political Ecology (UPE) approaches. Insights from One Health perspectives, which consider the interconnectedness of human, animal, and environmental health, can be productively applied to urban areas and urban governance, and can be put to work to examine how they could inform infectious disease management strategies. As Keil (2024) has asserted, urban health policies informed by a One Health lens must adopt a syndemic approach that considers a multiplicity of biological and social interactions, rather than taking a more anthropocentric perspective (see Horton, 2020). For instance, as some scholars have noted, despite discourses and practices of biosecurity that have become institutionalized to mitigate the threat of pathogen transmission, many vulnerabilities remain due to various "spillover" events (Gandy, 2021; Hinchliffe et al., 2013). As seen in previous outbreaks, industrial-agrarian production systems can be the source of pathogenic mutations that intensify disease virulence and generate more virulent forms of emerging infectious diseases (Brenner and Ghosh, 2022). It may also be productive to theorize and investigate empirically the political ecologies of emerging infectious disease beyond urban areas, or to connect transformations in the latter with processes of suburbanization or peri-urbanization. For instance, asking how, why and where novel pathogens emerge, circulate, and mutate among nonhuman species would be important, beyond how pathogens transfer from nonhumans—humans.

In a productive essay, Gandy (2021: 11, 12) outlined a number of transformations that urban political ecologists will have to contend with in the wake of the pandemic, including: “the proliferation of ‘edge landscapes’ or other types of zoonotic spillover zones produced by intensified forms of ecological disturbance and fragmentation; the accelerated evolutionary dynamics occurring within modified environments such as infrastructure systems or other kinds of ‘closed ecosystems’ devoid of natural predators; the emergence of new socio-ecological relations, including novel socio-ecological assemblages that favor specific pathogens; and the impact of intensified forms of connectivity or zoonotic time-space compression between different components of the global biosphere”(see, e.g., the recent work of Kaup and Austin (2025) in relation to an analysis of numerous aspects of just such themes). As Brenner and Ghosh (2022: 17) observed, such a focus brings into view the operational landscapes of urbanization as “strategic terrains for the generation of new forms of epidemiological risk,” rather than individual cities. There is thus a need for future research on the governance relationships between urban and ex-urban centers to identify areas for improvement in urban health governance, which will assist in mitigating the impact of future outbreaks. Moreover, researchers will need to contend with how urban governance performs in the management of emerging infectious disease outbreaks as they intersect with (and are compounded by) crises such as climate change, war and economic challenges, as mentioned above (see Keil, 2024).


### *An urbanism of optimism? A resilient urban ontology*

By pursuing these research agendas, scholars can further advance our understanding of the complex interactions between cities and infectious diseases and contribute to the development of evidence-based strategies for promoting urban health and wellbeing in a rapidly urbanizing world. The pursuit of this type of work would be a testament to the work of Roger Keil who, by focusing on the resilience of cities in the face of infectious disease outbreaks has remained resolutely steadfast in his optimism. His work ultimately always carries a sense of optimism in the positive role that urban planning, infrastructure development and community engagement could potentially play in building adaptive capacity to respond to health crises in cities and beyond. In particular, Keil’s recent work has called for incorporating an ethics of care in urban governance that creates trust between urban dwellers and authorities (e.g. Davis, 2022). In this sense, and despite his critical stance, Roger’s work often carries a sense of hope—something “necessary for the survival of urban life” as he rightly put it himself, still humble but explicitly urgent in his urban endeavor. Continued attention for linking this sustained pursuit, with a sense of hope for the possibilities of the urban, in an age of confrontations and divisions is, in return, a tactic we can borrow from Keil to construct a resilient urban ontology for our scholarship. In doing so we are asked to continuously evolve our theoretical positioning, by connecting with diverse and often peripheral (theoretically suburban perhaps) urban scholarships, while still speaking to the grand debates animating our discipline as Keil has done with, for instance, the “global city” and “planetary urbanization.”

Hence, we would better embrace a fundamentally collaborative, and openly experimental, mode of engaging with possible viewpoints on the city. Pushing the boundary of urban studies through co-authorship and science-policy engagement is a key lesson we draw from Keil’s work. This is a cross-disciplinary spirit that embraces continued urban experimentation in our modes of inquiry. It is perhaps perfectly embodied by Keil’s calls to go gentler with our anthropocentrism when urban political ecology teaches us about zoonotic spillovers and syndemic sensibilities that need to account for a vast multiplicity of biological and social interactions in our context of extended urbanization. This will be an especially valuable viewpoint to adopt as we face the next inevitable pandemic scenario in the future, but it also offers a broader resilient, if not outright optimistic, ontological stance for urbanists writ large, whether invested in urban health or more widely in the future of our urban species.



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