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**Urban Public Health Emergencies and the COVID-19 Pandemic (2):
Infrastructures, urban governance and civil society**

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Urban Public Health Emergencies and the COVID-19 Pandemic (2): Infrastructures, urban governance and civil society

Abstract

COVID-19 had sudden and dramatic impacts on the organisation and governance of urban life. In part Two of this Special Issue on public health emergencies we question the extent to which the pandemic ushered in fundamentally new understandings of urban public health, noting that ideas of urban pathology, and the relation of dirt, disease and danger in cities, have long informed practices of planning. Emphasising important continuities in the way pandemics are associated with minoritized and vulnerable groups, past and present, we note that public health initiatives can often exacerbate existing health divides, and actually deepen health crises. Against this, we document the emergence of participatory, community-led responses to pandemic that offered the promise of more inclusive urban policy, often characterised by self-organisation. While we argue that any public health policy needs to be mindful of local contingencies, the promise of inclusive policies is that they will lead to healthier cities for all, not simply protect the health of the wealthy few.

Keywords

COVID-19, pandemic, infrastructure, urban governance, civil society

1. Introduction

Living in urban areas comes with distinct health advantages and challenges. Urban form, urban infrastructure availability and quality, as well as urban governance

practices, play important roles in shaping whether, when, and how people are exposed to health risks. As urbanization presents both health opportunities and risks, public health crises such as the COVID-19 pandemic spark debates about how cities should be built and governed to be better prepared for future public health emergencies.

Historical research demonstrates that pandemics in particular have often enabled and legitimized the emergence of new planning and governance paradigms (Manzano Gómez, this issue; Shatkin et al, this issue). Notably, previous pandemic diseases such as cholera and the Spanish flu have had far-reaching impacts on how urban places are designed, managed and governed. Indeed, practices of town planning and now-established bodies of ‘municipal law’ often initially emerged from a fixation with communicable diseases, with sanitary reform a direct spur to regulatory measures that aimed to order, ventilate and otherwise improve the city (Usher, 2014). Innovations in urban design, housing reform, the provision of parks, and the construction of water and sewage infrastructures have all been driven in some way or other by public health concerns (Kawlrá & Sakamoto, this issue), to the extent that models of the healthy body and the healthy city have often become synonymous (Sennett, 1995).

Here, it is evident that associations between disease, dirt and danger have entwined with ideas of morality to produce forms of spatial pathologisation (Craddock, 2000). These connect the circulation of illness and disease to the lifestyles and practices of particular urban populations, often those maligned as an underclass. Urban researchers have hence used concepts such as Melosi's (2000) "sanitary city" and Gandy's (2006) "bacteriological city" to delineate early ideologies of urban cleanliness and how these ideologies led to the formation of a technocratic and rational paradigm of municipal managerialism that nonetheless remains infused with class- and race-based assumptions about dirt and disease. As Shatkin et al. (this issue) puts it, "In the midst of wrenching experiences of disaster and upheaval, planners and urbanists have spun new theories of an ideal city, and of the mechanisms of governance, technocratic management, control, and sometimes repression that might be required to achieve it" (*page numbers, this issue*).

Contemporary urban planning and governance in both the Global North and the Global South has then generally moved away from sanitary regulations such as slum-clearance operations and spatial segregation processes that disproportionately target the most vulnerable communities. For example, in the midst of the 1900-1904 outbreak of bubonic plague in San Francisco – the first in the history of the US – it was Chinatown that was deemed in need of particular attention, the district locked down and subject to spatial quarantine laws (Craddock, 2000). But even if such

overtly discriminatory and segregationist impulses are now historically distant, with COVID-19 largely being dealt with in a more even-handed manner, these historic imaginings of insalubrious neighbourhoods created enduring urban structures of deprived and vulnerable neighbourhoods that continue to perpetuate ethnic divides. Much of the research in Part One of this Special Issue demonstrated that the enduring presence of urban inequality and vulnerability informed both the aetiology of COVID-19 and government responses to it. For example, mandatory social distancing and stay-at-home orders focused on containing the virus rather than supporting residents, often deepening existing vulnerabilities and structural inequalities (Dodds et al., 2020; Basile, this issue; Shatkin et al., this issue). In much of the urban West, for instance, stay-at-home orders were easy to conform with for middle class, white families with private gardens and sufficient space to combine living and homeworking; those living alone, those in small homes, precarious 'gig' workers and those reliant on neighbourhood life for companionship and sustenance struggled (Buffel et al, Part One of the Special Issue; Hong and Chakrabati, this issue). This points to the continued, and in some cases growing, influence of neoliberalism and authoritarianism in the biopolitical and spatialised management of public health emergencies (Atuk and Craddock, this issue).

Part One of the Special Issue on Public Health Emergencies detailed these social and spatial inequalities, and the way that urban divides became pronounced during the

COVID-19 pandemic. Part Two of the Special Issue moves from this analysis of inequalities to highlight the broader commitments of urban planning and governance towards improving population health, health equity, and the well-being of citizens. Here, the pandemic has been more than a simple wake-up call, with COVID-19 requiring efforts to extend the field of urban epidemiology to encompass new spaces, processes, and co-evolutionary dynamics (Gandy, 2023). As such, the pandemic has re-emphasised the importance of traditions of public health planning in cities, but also revealed how recent and ongoing infrastructure planning and urban governance practices may have exacerbated post-pandemic inequalities and vulnerabilities. In Part Two of this Special Issue, contributions hence explore how cities can be better prepared for future public health emergencies by implementing planning and governing practices addressing embedded inequity and vulnerability in the city, drawing on debates on urban resilience and preparedness to propose new forms of cooperation between government and civil society.

2. Urban forms and everyday infrastructures

Much analysis of COVID-19 has explored connection between the occurrence of disease and patterns of urban compactness and population density (Hamidi et al, 2020). But not all cities are affected the same with the significant of population density per se dependent on local context and the extent to which pathologies

connected 'inside' and 'outside' (see Boterman, Part One of this Special Issue). Certain key infrastructure facilities such as airports and hospitals were hence the focus of much initial attention given their interior conditions were seen to promote air-borne transmission amongst a diverse set of occupiers, but it became apparent that care and nursing homes, prisons, stadia and public venues, as well as streets and parks in general, were associated with a 'density pathology' that aided proliferation of the virus. This dual consideration of density and connection took on new inflection given the recognition that questions of public health need to extend to the non-human, with the socio-ecology of public health requiring acknowledgment of zoonotic transfer zones as significant sites in the aetiology of disease (Gandy, 2023). This raises the question of what the cumulative impacts of dense urban infrastructure might be for the spread and control of infectious diseases and how these can be better managed in the future.

A near-universal response to COVID-19 was the imposition of lockdown or quarantine control. Despite evidence that transmission was highest in indoor space, the logic of lockdowns figured compressed urban spaces as sites with an increased risk of infection, creating a set of anxieties about density which conflated population density (the numbers living in a neighbourhood or district) with risk of infection, ignoring evidence concerning the interplay of physical distancing, connection and transmission. In this sense, the evidence presented by Psyllidis et al (this issue) is of

note, suggesting that generalised fears of transmission in urban public spaces were unfounded, and that local differences in infrastructure such as pavement widths were important in exacerbating risks of exposure to the virus. Their study suggests that, in Amsterdam, neighbourhoods with high exposure risk were mainly characterised by streets with high street integration (i.e. considerable connection to the surrounding street network) and high estimated pedestrian flows. Conversely, streets characterised by low street integration, combined with a limited amount of estimated pedestrian flows and attractive businesses, produced a lower exposure risk score. This implies that targeted measures in specific street spaces, including physical distancing measures, could help reduce airborne transmission rates in densely-populated urban neighbourhoods rather better than blanket strategies enveloping all public spaces. This study illustrates the usefulness of combined infrastructure and human activity data in assessing potential exposure to airborne viruses and ensuring safe physical distancing at the street level. In turn, it underscores the need for a less rigid understanding of where is risky and where is not, and the need for localised solutions to manage micro-level interactions (Andres et al, 2022).

In light of the reignited debate on density and disease, Hong and Chakrabarti (this issue) likewise examine the effects of multiple density measures on COVID-19 case and death rates in all urbanized counties in the contiguous US. They found that

density worsened county-level pandemic outcomes in a nuanced and complex way: *job density* was found to be more relevant than population density in explaining the spread of COVID-19. Further, weighted job density, which is a more accurate measure of density as perceived by the average person, has a stronger effect on COVID-19 outcomes than unweighted job density. They also found that early lockdowns and more stringent government responses were associated with fewer COVID-19 infections and lower mortality rates in their study period (January to June 2020). As acknowledged in Hong and Chakrabarti (this issue), these findings point to an important insight: the conflicting and incongruent findings on density and COVID-19 spread in the literature may stem from the use of different density measures and the inclusion or exclusion of other important explanatory variables.

Hong and Chakrabati's reflection is in line with McFarlane's (this issue) critical perspective that urban transformations in response to the COVID-19 crisis must go beyond narrow conceptions of density, towards a deeper probing and a more nuanced understanding of the urban dimensions such as connectedness, uneven development, domestic overcrowding, and the poverty that attaches particular value to density. McFarlane suggests that COVID-19 demands a 'wide-ranging conversation about different kinds of city densities and their futures', with the pandemic the moment that might 'provoke an 'urgent rethinking of how we plan, design, build and come to know cities' (*page numbers, this issue*). Herein, McFarlane

convincingly argues for the revaluing of density, and careful analysis of the intersections of governance, knowledge and form, in particular the ways that we come to *know* density.

Manzano Gómez (this issue) validates McFarlane's critical perspective by suggesting that territorial disadvantage and uneven development - such as concentrated vulnerability in inner suburbs in Madrid, Spain – help explain the spatial distribution of COVID-19 consequences. Manzano Gómez's analysis makes several novel contributions. Firstly, it draws on a historical sociology perspective to examine the influence of previous pandemics and associated historical urban planning and governance practices on the present-day unequal geographical impacts of COVID-19. Secondly, it reveals the continuity and confluence between historical epidemic planning practices and present-day social distancing measures. Historical epidemic planning practices were 'largely conceived to distance populations considered prone to disease and manage the risk of contagion through segregation' (Manzano Gómez, this issue) whereas present-day social distancing measures redistributed negative effects to less visible and already marginalized communities (Caduff, 2020). As Manzano Gómez argues, these invidious inequitable effects may be less visible than the form of spatial segregations characteristic of previous pathologized spatialities, but their impacts are equally long-lasting and systematic. In this sense, Manzano Gómez's analysis of Madrid's inner suburbs effectively

demonstrates that geographic patterns of urban vulnerability might provide alternative measures of urban form that are more effective than measures of density *per se* in explaining COVID-19 outcomes.

Besides urban form, it appears that the patterning of urban infrastructure systems could also explain uneven geographies of COVID-19 and other public health emergencies. Infrastructure facilities such as parks, hospitals, grocery stores, sidewalks, and transit stations are critical to people's everyday life needs including healthcare, mobility, food and nutrition, and leisure and recreation. The past few decades have seen a shift from managerialism to entrepreneurialism in urban infrastructure development as municipal governments spend public funds on major infrastructure projects (e.g., vast stadiums and sports complex) and forego corporate tax revenues to maximise the attractiveness of their cities for private investment and capitalist development (Harvey, 1989). The financialisation of infrastructures at the city-regional scale has also witnessed state actors adopting innovative contractual relations with the private sector (O'Brien et al, 2019), creating new arrangements for urban infrastructure governance (Valverde, 2022). Such shifts in urban infrastructure development are characterized by reduced and uneven municipal budgets to support the neighbourhood-level urban infrastructure and services that are essential for people's everyday life needs.

Kawlra and Sakamoto (this issue) found that geographic disparities in availability and access to key everyday infrastructures are important factors explaining the uneven outcomes of the COVID-19 pandemic at the neighbourhood level in New York. Infrastructure variables significantly improved the explanatory power of the models estimating neighbourhood-level COVID-19 case rates. Their infrastructure variables included both density and distance measures, which offered a more nuanced understanding of the distinct effects of infrastructure availability and access. Their study demonstrated that COVID-19 spread was influenced by the quantity and density of infrastructure facilities available to residents as well as the distance and access to such resources, factors strongly shaped by investments in public transport.

Preece et al. (this issue) shift from outdoor densities to the risks of domestic space and the private space of the home. Deploying the concept of urban rhythms (Lefebvre, 2013), Preece et al examined people's lived experience in small homes before and after COVID-19 lockdowns. Their analyses of urban rhythms and daily life uncovered how COVID-19 unsettled the spatiotemporal boundaries between work, leisure, and care, and unmasked the inequities associated with the unequal distribution of housing infrastructure in our societies. The analysis demonstrates how housing inequities affect both quality of life and subjective well-being (see also Kearns, 2022). Preece et al argue that 'participants in small homes reporting a sense

of life merging into one, boredom and in some cases anxiety and stress, exacerbated by the inability to vary their use of space' (*page numbers, this issue*). These findings are confirmed in other studies concerned with trying to balance home and work life in very small homes (Hubbard et al, 2021; Özer and Jones, 2022), suggesting that government-sanctioned strategies encouraging the production of small homes on the grounds of ecological and energy efficiency need to be balanced with an assessment of the availability of spaces outside the home that could provide safe social infrastructures at times of social stress. Here, new thinking is needed to produce multimodal residential spaces supporting effective work / life balance, with access to green infrastructures key to this (Andreas, 2021).

3. Urban governance and civil society

The way that COVID-19 fundamentally inverted usual urban densities and disrupted rhythms of the city posed important questions about healthy urbanism and its relation to urban density. In turn, this raised questions about scales of management and regulation, with quarantine and social distancing rules often found wanting in specific neighbourhood contexts. The relationships between urban governance and the control of infectious disease are not of course new but COVID-19 exposed both the shortcomings and potential opportunities of governance at different levels: often the national and local state failed to deliver the services

required by the vulnerable and needy, meaning civil society had to mobilise to fill in the spaces vacated by the ‘rollback’ of welfare provision (Beck and Gwilym, 2022).

Although a pandemic may be global, local responses will differ and may be driven by factors that are related to future economic outcomes, as well as differences in the quality of local institutions, such as healthcare, and the extent that local governments work, or do not work, with local community groups and third sector organisations. In recent years, many local governments and regional/state authorities - the front line of defence in public health emergencies – have been starved of funding due to austerity policies (Davidson, 2020). Public authorities and health care systems were, almost everywhere, caught short-handed by COVID-19, necessitating local responses organised organically and spontaneously through civil society. Emergency disaster measures introduced by the state to control transmission were oftentimes focused on surveillance and preventing the spread of the virus through broad strategies of spatial isolation rather than more nuanced attempts at helping the vulnerable manage risks. So what lessons need to be learnt to ensure a better response to future pandemics and what are the barriers to achieving these responses? And in what ways will the pandemic result in the reshaping of the boundaries of the state and civil society?

Building upon the extensive research on pandemics and social inequalities, Atuk and Craddock (this issue) propose an innovative “pathogenicity” framework to rethink

how cities can be better prepared for future public health emergencies. The “pathogenicity” framework, originally proposed by Hinchliffe et al. (2016) in the context of global biosecurity, reconceptualizes disease as a situated matter: that is to say, disease is not a fixed object but a *process* of various conditions being formed which allow for disease emergence and transmission. By translating Hinchliffe et al.’s (2016) “pathogenicity” framework to urban settings, Atuk and Craddock (this issue) make a compelling argument that making communities healthier at all times would have greater effectiveness in managing pandemics than episodic public health preparedness in times of crises. As Atuk and Craddock write, ‘COVID-19...has shown that the neoliberal tendency to address harm only when there are crises and disasters, and to divest from programmes that might eradicate some of the root causes of unequal burdens of disease such as reduction of public investment, privatisation of healthcare and impoverishment of public health infrastructures...becomes quite literally murderous to millions’ (*page numbers, this issue*).

Another distinctive contribution of Atuk and Craddock’s work is its comparative case studies of COVID-19 response measures in Turkey and the US. In both countries, government-initiated COVID-19 interventions privileged biotechnical solutions and lockdown measures for preventing viral infections. Though there are key differences in national responses, both case studies show that these top-down

interventions often ignore the social, economic and political antecedents of pandemics, causing extensive and multifaceted harm in the most vulnerable urban communities (e.g. people of colour in the US, Kurdish minorities in Turkey). In contexts of extreme national and global inequality, they argue it is important to focus on everyday public health preparedness, expand community-led initiatives, and manage pandemics without making the lives of the most vulnerable more dangerous as a result. This includes addressing racisms and other phobias, introducing universal health care, expanding food sovereignty across the globe as well as tackling the root causes of inequities by rejecting global obsession with capitalist growth and extractive consumerism.

Basile (this issue) provides further evidence that is in line with Atuk and Craddock's observation that governmental response in the face of public health emergencies is often insufficient for protecting the most vulnerable population groups. By analysing Facebook, website, and media article posts by favela resident-led organizations and coalitions during the first six months of the COVID-19 pandemic in Brazil, Basile (this issue) finds that community organizations took collective actions to support and protect their informal settlement communities. It was found that these communities' collective actions were motivated by three main factors: socio-spatial vulnerabilities exacerbated by COVID-19, the long history of state neglect and absence faced by these communities, and the sense of collectivity and

care within these communities. These findings illustrate the need for structural change in the governance of urban public health emergencies to support bottom-up, community-led planning and policy efforts. As Basile writes, ‘Favela organisations have profound and unique knowledge about the realities of their communities, the difficulties they face and how to begin to address them’, continuing to argue that ‘learning from this wealth of knowledge and allowing residents to have agency over such a process is a critical step in bridging the gap between government and favela organisations and, possibly, beginning to remedy the historical vulnerability and inequalities’ (*page numbers, this issue*).

Shatkin et al. (*this issue*) offers a review of the historical relationship between pandemics and urban planning responses as well as a review of the emerging literature on COVID-19 and urban informality. They identify three modalities of planning approaches to mitigating pandemic threats and managing informality. The first approach is “revanchist”, which seeks to stigmatize informal settlements and is often enacted through eviction, expulsions, and restrictions imposed on the urban underclass. The second approach is “incrementalist”, which seeks to protect low-income informal communities on the premise that they contribute to the urban economy and is often enacted through selective regulations and modest extensions of social and infrastructure services. The third approach is “reformist”, which seeks to address the state’s role in producing informality and structural socio-spatial

inequalities and is often enacted through community-based strategies that call for broader social reform and real partnership between government and the civil society.

Shatkin et al. (this issue) further argue that cities may resort to any of these three modalities of pandemic response dependent on how the politics of pandemic risks takes shape at urban and national scales. At the urban scale, cities may develop new urban agendas to either restrict informal communities' access to urban space or to address structural inequalities that have exacerbated the risks facing informal communities. At the national scale, the state may develop measures that either restrict immigration and migration for continued oppression of informal communities or promote systematic changes for dismantling the longstanding history of state violence and oppression against informal communities. By reviewing the three modalities of planning and how urban and national politics may interact to shape the planning responses, Shatkin et al deepen our understanding of the inter-scalar and inter-system nature of pandemic threats. Their work reveals that the prevailing entrepreneurial model in contemporary urban planning is counterproductive when it comes to managing informality. Under urban entrepreneurialism, the state prioritizes corporate capital accumulation over community welfare improvement, exacerbating disease spread within informal communities. Their work makes a compelling argument that planners need to seek

an alternative urban governance model that is ‘aligned to the practices of ‘urban collective life’, which refers to the broad arrangements that the marginalised organise to manage their daily existence’ (Shatkin et al, this issue).

Liu et al. (this issue) offers a timely case study of neighbourhood co-governance in urban China in the early stage of the COVID-19 pandemic. Neighbourhood co-governance refers to a hybrid model of urban governance in which the government and the residential community join forces to ensure efficient service delivery and fair representation of local interests. In spring 2022, Liu et al. (this issue) collected quantitative survey and qualitative interview data from frontline residential community workers in multiple cities in China. Their data illustrate a collaborative rather than confrontational dynamic between state and non-state actors for mitigating the pandemic crisis. Central to neighbourhood co-governance were “resident committees”—state-sponsored neighbourhood organizations that functioned as a critical node bridging state and non-state actors. Here, their conclusions about the role of the state need to be placed in the context of the peculiarities of the Chinese state, which retains strategic intervention capacity beyond that evident in much of the urban West (Wu and Zhang, 2022)

Neighbourhood co-governance is also discussed in He and Zhang (this issue) and Li et al. (this issue). He and Zhang apply event system theory to examine the governance events related to the COVID-19 outbreak, spread, and control in

Wuhan, China between December 2019 and June 2020. Their analysis suggests four categories of response mechanism—including the tiered response system, interactions between multilevel governance entities, quarantine regulations, and governance of public sentiment—all of which were found to have positive effects on mitigating the pandemic threats. When discussing quarantine regulations deployed in Wuhan, China, He and Zhang highlight the important role of the neighbourhood-level, community-based governance system (involving street committees, property management companies, volunteers and other social forces) in maintaining order in the community and channelling food and medical supplies to those who needed it. Li et al also discuss how residents' committees and other grassroots social organizations played an important role in disease prevention and control in Zhengzhou, China. Yet as Wu and Zhang (2022) note, the literature on neighbourhood governance in China demonstrates different mechanisms being present in different neighbourhoods, with migrant-concentrated neighbourhoods having weaker or non-existent neighbourhood associations. This suggests that inferences about the effectiveness of local community governance in these neighbourhoods need to be nuanced via consideration of local social composition (a similar argument to that concerning the geographies of variable 'social capital' that informed responses to the pandemic elsewhere (Pitas & Ehmer, 2020)), albeit the organisation of neighbourhood committees in China provide a basis for hierarchical state action.

It is important to note that all three studies on urban China presented in this Special Issue used data collected in the first six months of the COVID-19 pandemic, so prior to the outbreak of the Delta and Omicron variants in urban China (Li et al, this issue; Liu et al, this issue; He and Zhang, this issue). Their positive findings about China's neighbourhood co-governance model and strict quarantine policies may not extend into the later phases of the COVID-19 pandemic in 2021 and 2022 when China continued to implement its Dynamic Zero-COVID policy that centered on contact tracing, containment, and isolation. This did not end until December 2022 after protests in multiple cities challenging the policy. There is an emerging body of literature on the negative consequences of citywide lockdowns in China in the later days of the COVID-19 pandemic (Bai et al, 2022; Nam et al., 2022; Nam & English, 2022; Wang et al., 2022) in terms of impact on mental health and subjective well-being. Nonetheless, the three urban China studies in this Special Issue make an important contribution to the international literature on urban governance. As Liu et al. (this issue) argue, 'nuanced interpretation of the state–society dynamics in urban governance in China' provides a 'comparative lens for understanding the emerging forms and dynamics of neighbourhood co-governance in diverse institutional and political contexts' (*page numbers, this issue*).

Here, an emergent theme in the COVID-19 pandemic was the potential roles smart city applications and big data had in helping to control the spread of the disease

through the identification of infected people and near-live systems of monitoring and contact tracing. South Korea has been used as an example of best practice and it has been suggested that emerging digital infrastructure may become the sanitation of our time. Li et al. (this issue) offers a brief case study of the implementation of “health codes”—a mobile application for monitoring a population’s movement and health status with big data—for pandemic control in Hangzhou, China. While the Hangzhou case study shows positive effects of health codes on enforcement of social distancing and quarantine rules, questions remain regarding the governance, ethical and privacy issues that need to be addressed and how these digital applications change urban life. As Hucko suggests (in Part One of the Special Issue), urban surveillance and governance carried out in the name of public health can interfere with the right to the city and requires a renewed discussion of ‘urban privacy’ in which each one of us could choose autonomously what to make public and what not to during public health emergencies (see also Garg et al, 2020, on participatory health surveillance).

4. Conclusions: urban policy in pandemic times.

Part Two of this Special Issue presents a renewed search for urban planning and governance practices that could maximize the preparedness for, and minimize the impact of, public health emergencies. Here, it is evident that the battle against the

microbial demands governance and planning at different scales simultaneously, and that new models of urban pathogenesis are needed to produce more timely and nuanced public health interventions that allow for effective disease prevention without imposing privations and limits on the freedoms that have come to be associated with urban life. Such a search is not new and will continue to evolve given the inherent connections between urbanization and health. Researchers in this issue demonstrate that, regardless of historical or contemporary circumstances, urban responses to health emergencies have often neglected the needs of low-income and minority communities, concentrating and even magnifying the impact of public health crises on these communities. In the worst cases, public health has been weaponised, becoming a mechanism used to marginalise and stigmatise racialised communities who become figured as a vector of transmission (Lunstrum et al, 2021). Here, the inequitable effects of lockdown and social distancing measures during COVID-19 are remarkably similar to those of the sanitation, segregation, and slum-clearance measures used during pandemics and other public health crises throughout history (Craddock, 2000).

Beyond offering critical reflections on historical and contemporary failures, the search for better urban planning and governance practices highlighted in Part Two of this Special Issue leads to the development and validation of new planning and governance paradigms such as the “urban pathogenicity” theory proposed by Atuk

and Craddock (this issue) and the neighbourhood co-governance practice proposed by Liu *et al* (this issue). The “urban pathogenicity” theory calls for upstream interventions that fully address communities’ social pathologies, healthcare austerity and the racisms that have made certain populations more vulnerable than others. In contrast, the neighbourhood co-governance model elevates the power and capacity of residential communities, recognising the capacity of these communities to create spaces of urban care through a transversal politics that puts more emphasis on social than physical infrastructures. As Power and Mee (2020: 489) explain, such community-making practices “organize the possibilities of care-giving and receiving at a household and social scale” becoming key elements within a complex relationality of care that dynamically unfolds and transforms according to public health needs.

Whether or not the COVID-19 pandemic changes how cities are governed in the long-term remains unclear. Although complete return to pre-pandemic conditions is unlikely, many seem to assume that it would be a mark of success for cities to re-achieve pre-pandemic levels of urban mobility, activity, and experiences (Atik *et al.*, 2023). Some of the concerns widely articulated in the midst of the pandemic, about sustainability, the value of the local and the tyranny of the motor car, appear to have been forgotten as other concerns like austerity, geopolitical conflict, and fuel poverty take precedence. But while COVID-19 will probably be seen as an

interruption rather than a great reset, it has certainly encouraged new thinking about the need for healthier cities. As evidence across both parts of the Special Issue makes clear, COVID-19 was an emergency largely because of its iniquitous health impacts: promoting urban inclusion through policy and planning accordingly appears to be a vital first step in ensuring more resilient cities in the future.

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