COVID-19: Lessons for an Urban(izing) World

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The COVID-19 crisis has changed the face of many of our cities and questioned how we should manage urban life in the wake of a pandemic. This Commentary points to the need to learn urban governance lessons and to the potential value of urban experimentation in crisis.

Pandemic of a Century or a Century of Pandemics?

Coronavirus disease (known as COVID-19, caused by the virus SARS-CoV-2), first identified in December 2019 in China, is now sweeping across countries and cities, driving global mobility and supply chains to a standstill with ripple effects that few would have predicted just 4 months ago. Over 90 countries have put in place travel restrictions and quarantines at the time of writing. In many countries, COVID-19 has, at least temporarily, changed the face of cities and fundamentally affected the discussion of how we should manage urban life in the wake of a pandemic. The current crisis has ushered in talk of states of exception, unique measures, and unprecedented moves in cities and countries the world over. Questions such as "Will there be a lasting impact?" and "What will urban resilience and sustainability look like in a post-coronavirus world?" are emerging.

The uncomfortable truth is that this is neither the first nor probably the last public-health emergency of this kind that our modern cities and society will face. COVID-19 is perhaps not quite, as authoritative voices such as Bill Gates called it in the *New England Journal of Medicine*, a "once-in-a-century pandemic."[1] Yes, the impact of coronavirus will uniquely drive a change in the way we think about cities and health. But it is not a completely unique occurrence. In 2003, severe acute respiratory syndrome (SARS) followed a very similar path to global contagion and fell just short of the current impact of COVID-19. Near misses and concerning cases of infectious-disease outbreaks are a near-daily occurrence for the World Health Organization (WHO), which detects about 7,000 signals of potential outbreaks every month.[2] A series of epidemic scares of international proportions such

as COVID-19 have taken place as recently as the last decade. The 2009 H1N1 influenza (or "swine flu"), the 2014 West African Ebola crisis, and more recently, the 2016 Zika outbreak in the Americas are all fresh in mind.

The majority of such crises lead to our learning key lessons in both global and urban governance. SARS taught us to better understand how our international system is centered on global cities and how, through their planetary connections, epidemics can go global.[3] H1N1, echoing medical history lessons, stressed how epidemics are superimposed onto contexts of urban marginalization and affect the already disadvantaged. The global impact of COVID-19, although perhaps not the deadliest nor the most formidable of all these diseases, has captured global attention and triggered a response like no other in recent history. What will the lesson be this time—and will it be heeded? The current crisis still has, at least at the time of writing amid country-wide lockdowns, the potential to follow the same path as that of the 1918 "Spanish flu," which affected 27% of the world's population. Anyone from that generation would have known an infected acquaintance or, worse, had to witness the brutal effects of that flu on a loved one. The coronavirus portends a key challenge in global health governance but also a key trial for the way in which we manage, plan, and live in possibly contagious cities.

A Step Change in Contemporary Urbanism?

Urban centers are expanding the world over. We face projections of urban population booms in the next two decades; for example, major urban centers such as Wuhan and Paris are shooting upward of 11 million dwellers. By 2050 there are pro-

jected to be 43 such megacities, and more than two-thirds of the global population could be living in urban areas. Managing epidemics in an urban(izing) world is therefore incredibly important, but it is also complicated by the traits of contemporary urbanism, as lethally demonstrated by the COVID-19 crisis.

Upward high-rise density is a primary characteristic of urban centers across the globe. Yet, whereas the aggregation of more people in less space can indeed reduce the size of society's environmental footprint, a situation where people are increasingly pressed against each other in complex multi-story built environments linked via global flows of travelers, goods, and ideas (and panic) clearly complicates the need to control infection—as is currently evident across the globe. The worrying aspect is that this is and was well known prior to the current crisis. We have had clear knowledge of the interplay between disease and density and the associated nuances and complexities since the 1920s.

When cities are not growing upward, they are expanding outward, sprawling into the brown and green belts that ring urban centers. Ever since the early 2000s, Roger Keil and colleagues have commented on the relative unmanageability of the suburban sprawl and how coronavirus contagions can start and spread inward from, and between, the edges.[4] Much of the German contagion story is that of a link—via an automotive production factory—between the outskirts of Wuhan and peri-urban Bavaria. These are the edges that the "global city" imaginary of the late 20th and early 21st centuries has again largely overlooked.[4]

And then there are the informal settlements devoid of governance, design, services, and legal status; in these, upward of a billion people are estimated to

presently live. The management of infection, treatment, social distancing, and service provision in such settings is a formidable problem. But once more, although this has only recently surfaced in the media, this is no novelty. The Sierra Leone Urban Research Centre noted at the time of the 2014 Ebola scare how the poor attempts to quarantine and sanitize informal settlements ended in poor results and violence.[5] Of greater concern still is that, although most stark in informal settlements, inequalities are not restricted to the Global South. Globally, nearly two billion people have poor or no access to adequate sanitation, and more than 150 million are considered homeless.[6] Inequalities permeate urban society and introduce a further layer of complexity to managing pandemics—this is already evident in the current crisis in that concerns regarding housing evictions in major cities were flagged at the beginning of March 2020.

The challenge is clearly formidable, but with a better understanding of urban governance, having more people in less space does not necessarily equate risk. The difference in how high-rise-dense cities, such as the currently quarantined New York and the on-the-mend Hong Kong, have been managed is a telling example, as are the app-based trackers, temporary social-distancing-based crowd management, and testing facilities rolled out in South Korea and Singapore.

Can COVID-19 provide a unique window for a step change in the way we think about cities? Can it be a turning point for urban development worldwide?

Learning from a Forced Experiment

If we are to fully learn from the humbling lessons taught by COVID-19 and drive lasting positive change in a way that addresses rather than enhances our deepest urban challenges, we should think more explicitly about the benefits of "forced experimentation"—testing long-term solutions within a crisis or even via emergency measures planned as long-term reforms.[7] Emergency measures could be considered, more explicitly, from a long-term transformative point of view. The crisis has, for instance, seen the proliferation of regularly updated crisis-information repositories at international and national levels, as with the well-known Johns Hopkins University Center for Systems Science and Engineering dashboard or the quick release of territory information by the Italian Protezione Civile. Emergency notification, advice, and health-check apps, as well as WhatsApp-based information bots, have also become a regular feature. These could be leveraged to drive a more risk-literate urban citizenry in the longer term, just like health and prevention measures could provide the foundation for better sanitation practices across cities.

Of primary concern, however, is the potential for such advancements to augment urban inequality by splintering the "haves" and "have nots" further along key access and affordability fault lines. Whether we will leverage COVID-19 as an opportunity for greater community building and more explicit considerations of urban equality remains to be seen. Appreciating how tacit networks of mutual care,[8] and the informal governance of our cities, work is a critical step at this juncture in time. Mutual aid groups, such as the COVID-19 Mutual Aid UK initiative now sprawling in the hundreds across Britain, have proliferated in the wake of the crisis. Recognition of the most at-risk groups by local authorities is also key. Greater Manchester Mayor Andy Burnham launched a £5 million fund to be used with immediate effect to house 1,000 rough sleepers across the city in a time of extreme vulnerability. Philadelphia and New York have made COVID text alerts available for residents of all nationalities irrespectively of visa status. Sydney has been providing multilingual public-health information via the city's community centers. Many cities, such as San Francisco, have declared a moratorium on residential evictions. Ljubljana has organized a home-food-delivery system for children in at-risk families and elderly citizens.

City governments are now on the frontlines. Mayors the world over are faced with the suffocating pressures discussed above while wielding stifled powers, often limited data (in capacity, geospatial coverage, and level of accuracy), and global connectivity challenges amid closing borders and nationalist separation. In this context, it is fundamental for local and national governments to understand the extent of the urban experimentation afoot at present in urban areas worldwide, and temporary measures can teach us a great deal about the possibilities for reform. Mobility limitations have, for instance, blatantly put in check transport-related emissions to the tune of 25% reduction in China and Italy alike, which speaks volumes for the radical efforts to curb our greenhouse gas impact on the atmosphere.[9] The digital response to what has already been tagged by the WHO as the most "information-intensive" public-health crisis of modern times has been a treasure trove of digital change promoting teleworking, web-based community building, virtually delivered services, and 3D printing of essentials ranging from test swabs in the US to ventilators in Italy. A similar discussion could apply to the vast labor implications of the crisis, where not only massive challenges such as misinformation and job precarity are under the spotlight, but also sizeable tests to virtual alternatives and working patterns are taking place across developed and developing nations. At present, these are reported with curiosity, but better mechanisms of learning not only *from* the crisis but also *while in* the crisis[10] and of understanding possible alternative pathways for city life could be put in place while we respond to the current disruptions. Transport, public venues ranging from stadiums to cinemas and sites of prayer, and even streets might have to be retrofitted with the goal of avoiding overcrowding and service redundancy rather than continuous strain.

COVID-19 has magnified the deficiencies of how we manage our cities but has also given us a unique chance to rethink, replan, and redesign. However, the question remains: will we heed these lessons? When the alternative is empty streets, quarantined urban dwellers, locked-down cities, a stalled economy, and most devastatingly of all, the loss of life, I argue we can no longer afford not to.

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