Urban Resilience Has a History – And a Future

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As I compose the epilogue to this volume, in late January 2020, the world is steeling itself for a global epidemic of the Corona virus. What originated just a few weeks earlier in a food market in the city of Wuhan, China, has already spread across continents on the coattails of globalized travel. People in Wuhan, a megacity of 11 million inhabitants, are not permitted to leave, with all transport links suspended. They are effectively being held in collective quarantine in a drastic effort to stem the spread of the disease. Meanwhile, in other countries around the world, health officials and politicians are reassuring their citizens that contingency plans are in place to deal with a potential pandemic. All the same, they are calling on people to be vigilant and take the necessary precautionary measures to minimize the risk of contagion. The Corona virus hit the news headlines just a fortnight after these were dominated by scenes from some of the worst bushfires ever experienced by Australia. Extending over an area of some 10 million hectares, these fires have devastated forests, wildlife and homes, especially in the states of New South Wales and Victoria. The smoke from the fires made Canberra and Sydney temporarily the most air-polluted cities in the world. Reporting in the media focused on the heroism of the fire-fighters, the resilience of local communities and criticism of the prime minister's nonchalant response. The crisis confronting the emergency services in Australia was compounded subsequently by torrential rainfall and major flooding in many of the areas damaged by fire.

These two life-threatening events, happening so close together in time, can tell us a lot about the practices, policies and discourses of resilience that have come to characterize our responses to vulnerabilities today. Such crises, we are being told by experts, are likely to become more frequent, more intense, more widespread and more unpredictable in the future. Climate change will make extreme weather events – such as flooding, bushfires and drought – increasingly common, occurring in places rarely affected in the past. Pandemics will spread faster, following the highly mobile human race into any corner of the globe. Terrorist attacks are targeting not only major transport hubs, but also pubs, concert venues, places of worship and open streets. The message, in essence, is that no place on the planet is free from the risk of some kind of shock event. The consequence is that we all –

citizens, local communities, businesses and governments – need to accept this risk as the 'new normal', taking precautions to minimize the occurrence and damage of such an event whilst acknowledging that no level of preparation will ever be able to eradicate the possibility of one happening. What both the Chinese and Australian cases illustrate is that citizens cannot rely on the state to address these challenges, but are being expected to develop resilience responses of their own, whether individually or collectively.

In the public debate on crisis resilience, cities are treated as prominent entities. On the one hand, cities are seen as especially vulnerable to shocks and stresses. By virtue of their population density and high level of interpersonal contact, they face heightened risks from infectious diseases. Their built infrastructures, being extensive and costly, are particularly vulnerable to damage from extreme weather events. Places where many people come together to enjoy urban life are favored sites for terrorist attacks. On the other hand, cities are more likely to possess the human capacity, financial resources and local expertise required to avert or mitigate a crisis. They may well have units dedicated to crisis management, are likely to be a high priority in national contingency plans for critical infrastructures and generally have public health services better than the national average. For these reasons, cities are regarded as a pioneer locale of resilience thinking and action. The resilient cities programs of the Bloomberg and Rockefeller Foundations, the World Bank and other development organizations are testimony to the significance accorded to cities in the global response to crises.

Many urban planners, managers and architects are rising to the challenge and designing strategies, scenarios and buildings that are meant to render cities more resilient to disturbance or disaster. As several chapters in this book illustrate, resilience has a powerful appeal to practitioners and academics dedicated to organizing and structuring urban society. For urban planners, frustrated with their limited ability to shape a city in our globalized, market-driven world, planning for potential crises can lend a new purpose to the profession. Architects and civil engineers have, in resilience thinking, a novel rationale for reordering the city in its myriad material forms. Building flood-proof homes or providing back-ups for a power outage are examples of the 'can-do' attitude that pervades much of this technical-managerial expertise.

The confident manner in which resilience has been embraced by many urban managers has alarmed other commentators. The literature on urban resilience is rife with critiques of the concept and the practice, as many chapters in this volume testify. For some critics, resilience is an instrument of neo-liberalism, generating a permanent sense of crisis to justify measures designed to keep the existing system of market-based governance operative. The resilience debate, from this perspective, deflects attention away from deeper, systemic crises of the capitalist political economy. Others have pointed out how vulnerability to crises affects different people

in different ways, often exacerbating inequalities of geography, social class, race or gender. Vulnerabilities, they argue, rarely come alone. An environmental crisis, such as a drought event, will often compound the existing economic and social vulnerabilities of disadvantaged communities.

This critical literature has been hugely valuable in unpacking the normative meanings, market logics, techno-managerial solutionism and elitist thinking underpinning so many urban resilience programs. In deconstructing the concept and the practice, this body of scholarship has proven highly effective, at least within the academy. It has proven less effective, however, in offering ways forward in dealing with the very real challenges encountered by cities today. Beyond calls for a radical overhaul of neo-liberal urbanism, critics of resilience offer little in the way of orientation for urban citizens, communities and governments struggling to cope with their real and perceived vulnerability to multiple threats.

This volume makes the case for revaluing urban resilience. Whilst it acknowledges and, indeed, embraces many of the criticisms voiced above, the general tenor of the book is not to dismiss the concept of resilience, but to explore new ways of interpreting it that can provide both critical reflection and constructive orientation. The chapters in this book investigate the multiple histories, varied geographies and contested politics of urban resilience in order to reveal how far resilience does, or can, work as an urban practice as well as a development discourse.

Real-Life Urban Resilience in Past and Present

Looking across the chapters of this book, key messages emerge that contribute to this critical, yet constructive reappraisal of urban resilience. They all point to the value to be derived from taking a closer look at resilience practices, strategies and discourses at work in particular spatial-temporal contexts. Although strongly empirical in orientation, they all to some degree question the way resilience is conceptualized in the literature. In doing so, they make a powerful case for the value of inductive approaches to resilience research.

The most striking contribution of the book is, undoubtedly, to historicize urban resilience. Revealing how resilience has a history – as an urban strategy, as well as an everyday practice – is illuminating for a debate where it is widely regarded as a very contemporary phenomenon. The rich selection of historical cases in this volume challenge the narrow 'presentist' perspective of much resilience research. As Sönke Kunkel argues in his chapter, resilience may be a modern buzzword, but it is not a new way of thinking. He traces the historical roots of the resilience discourse well beyond awareness of global ecological crises to the logics of cold war risk management. These, he argues, were reproduced in strategies of urban disaster prevention that reflected the techno-scientific responses of the 1960s. Other aut-

hors look to the aftermath of wartime devastation as a source of resilience planning and practice. Koenraad Danneels, Bruno Notteboom and Greet De Block describe how the destruction of Belgian cities during the First World War inspired landscape architects to reimagine the city as an ecosystem in order to render it more resilient to crisis events. The use of socio-biological metaphors then and throughout the twentieth century points to interesting predecessors of the more familiar social-ecological framing of resilience today, as well as the influence of natural science perspectives on urban reconstruction. Ann Maudsley's chapter demonstrates how a different nature-based utopia inspired urban design in postwar Swedish towns within the Arctic Circle. Constructing buildings to withstand the shocks of extreme weather was an innovative plan that nevertheless failed, intriguingly owing to the involvement of Swedish oil companies. As Avi Sharma argues, resilience has a past not only as urban policy, but also as everyday practice. He uses the case of Berlin after the Second World War to describe personal strategies of survival and self-help in the face of food deprivation, housing shortage and inadequate clothing, interpreting these as forms of individual resilience in a crisis situation.

Besides histories of urban resilience, this book highlights the multiple geographies it can entail. On a straightforward level, the chapters cover a huge range of spatial contexts, with cases studies of cities in New Zealand, Germany, Colombia, Sweden and Belgium. Collectively, these pieces emphasize the huge importance of place in urban resilience. What counts as vulnerability in one locale may be treated very differently in another. Many of the chapters address unsung spaces of resilience. It is not the control rooms of urban operating systems or the hubs of critical infrastructures that feature in this book, but rather spaces where resilience emerges through close analysis. Some of the resilient practices documented – such as at community gardens in Christchurch after the earthquake or over car-washing in Medellín – are not even termed as such by those involved, but can nevertheless reveal a lot about coping under duress and uncertainty. What is also striking about the cases, from a spatial perspective, is the interaction of physical, political and social geographies. Each chapter addresses, explicitly or implicitly, socio-material associations that are distinctive of a particular urban setting. This is especially apparent in Marcela Lopez' piece on institutionalizing informal car-washing practices on the streets of Medellín, in which human and non-human elements are assembled to create resilience for the city's water supply, public water utility and car washers. Taking a spatially sensitive approach to resilience can also reveal overlapping crises in a single locale. This is evidenced in the chapters on post-war Berlin, where residents had to cope with physical, economic and political disruptions alike, and on Belgian cities, where wartime destruction combined to exacerbate existing challenges of urbanization and environmental degradation. As several of the chapters argue, it is the promise of resilience to tackle multiple vulnerabilities that contributes to its appeal today. At the same time, many of the

measures devised to enhance resilience reveal a degree of selectivity that belies this message of inclusivity. A case in point is the use of maps and urban plans to circumscribe the vulnerable, identifying – and thereby maligning – 'problem areas' of a city requiring remedial action.

The politics of urban resilience is a third dimension that emerges powerfully from many chapters of this book. Whose resilience is at stake is a question that always needs asking. This is a crucial point already familiar from critical research into urban resilience. We are now sensitive to the enrolment strategies underpinning many resilient cities programs and urban resilience strategies around the world, which claim commonality in policies and practices whilst privileging certain interests and approaches over others. What several chapters in this book suggest, though, is that dismissing urban resilience as a neoliberal ploy overlooks the empowerment that, in certain circumstances, can emerge through practices of resilience. Two examples stand out. The first is the Medellín case, in which the formalization of car-washing practices by the local water utility, in providing the car washers with contractual documentation, has helped strengthen their rights to employment and public services. The second is Andreas Wesener's piece on Christchurch, where community gardens became, after the earthquake, sites of post-trauma therapy offering mutual support for those affected. As this example illustrates, ancillary benefits of this kind often only become apparent in the longer term, once the immediate crisis has passed. At the same time, many authors of this book are keen to highlight the limits to resilience strategies. As the editors point out, some crises overwhelm the capacity of governments or communities to respond. We should never assume that resilience can be an effective response to every potential danger or uncertainty.

Futures for Urban Resilience Research

To conclude this epilogue, I make the case that resilience has not only a past worth exploring, but also a promising future in urban research. Reflecting on the contributions within this book and the wider debate on urban resilience, I draw out four pointers for a research agenda that takes contemporary debates forward – with the help of historical analysis.

Beyond 'presentism': The relative novelty of the term resilience implies that the phenomenon, too, is a feature of the contemporary world only. Much of the literature on resilience, whether supportive or critical, emphasizes the exceptionalism of modern crises. This 'presentist' focus discourages ventures into the history of resilience. There is no denying the specificity of temporal contexts or the particular severity of today's social-ecological crises. However, this is no reason to dismiss history as irrelevant to contemporary understandings of resilience. Looking to the

past can trace the roots and legacies of modern-day resilience. It can draw attention to the importance of spatial-temporal contexts in analyzing resilience. It can offer a corrective to simplistic trajectories of resilient thinking. It can reveal past forms of resilient thinking and action that, by virtue of their differences to the modern world, challenge our preconceptions. The first plea, therefore, is to do more to historicize resilience research.

Beyond 'eventism': Resilience research tends to focus on real or potential crisis events. It is the devastating flash-floods, large-scale fires, destructive terrorist attacks or sudden electricity grid failures that capture the attention of the media, governments and scientists alike. Resilience research, as a consequence, has a pronounced tendency towards 'eventism'. What is needed is more attention to the less visible, but no less impactful, vulnerabilities experienced as a result of structural or compounded disadvantages. These can be everyday existential challenges, such as securing a livelihood under duress, localized conflicts that fail to attract wide attention or alternatives to mainstream resilience strategies. Although often mundane and small in scale, these phenomena are widespread, making their overall impact profound. The second aspiration, therefore, is for more work on 'real-life' resilience happening below the radar of globally mediated crises.

Beyond 'essentialism': Resilience is not a given. Nor, for that matter, is vulnerability. Indeed, one person's resilience can be someone else's vulnerability. A dam built to redirect water to an urban water network – and thus render the city more resilient to drought events – could endanger the livelihood of farmers downstream dependent on that water for agricultural production. This example illustrates how measures introduced to improve the resilience of one aspect can reduce the resilience of another. This highlights the importance of treating resilience not only in a context-specific way, but also as a relational phenomenon. Resilience involves complex assemblages of human and non-human elements which are brought together – or fall apart – in particular spatial-temporal circumstances. Understanding how these diverse elements interact to create, destabilize or re-stabilize specific resilience configurations is key to getting beyond simplistic, normative notions of resilience as a desirable, benign status. The third strand of my proposed research agenda is, thus, about unpacking the relationality of urban resilience.

Beyond 'disciplining': This all calls for us to embrace multiple perspectives on resilience. Resilience can mean very different things in the hands (and minds) of different actors. We should not underestimate the degree to which resilience is socially constructed to conform to particular interests or assumptions. Resilience can also look very different depending on whether it is studied as a concept, as a policy or as a practice. The process of translating a resilience policy into urban practice can reveal major disjunctions, just as everyday forms of resilience can go unobserved by urban managers intent on making their city more resilient. As researchers, we need to be wary of interpretations of resilience – whether in the literature or in

the field – that claim to be universal. Wittingly or not, they represent an attempt to discipline us along a particular line of reasoning that, when analyzed closely, is often revealed to be selective. Consequently, we need to study who gets to determine meanings and measures of resilience in particular spatial-temporal settings. We need to explore ways in which those conventionally excluded or disregarded in debates on resilience can be included or considered, for they are often the most vulnerable groups in society. Finally, we need to unpack the disciplining work performed by academic disciplines. This means investigating how the natural sciences have framed the resilience discourse, how engineering sciences have given resilience material form and how the social sciences have focused on critique. Revealing some of these disciplinary divides and their legacies for research and policy could go a long way towards reinvigorating a concept and a practice that, given the state of the planet, are unlikely to go away in the foreseeable future.