Miller, M., Douglass, M., & Rigg, J. D. (2020). Introduction: Governing Resilient Cities for Planetary Flourishing in the Asia-Pacific. *Urban Studies*, 57(7), 1359-1371.
<https://doi.org/10.1177/0042098020903955>

Peer reviewed version

Link to published version (if available):
[10.1177/0042098020903955](https://doi.org/10.1177/0042098020903955)

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Governing Resilient Cities for Planetary Flourishing in the Asia-Pacific

Michelle Ann Miller, Mike Douglass and Jonathan Rigg

Abstract

For the first time in 2019, the Asia-Pacific became a majority urban region. The unprecedented pace and magnitude of urbanisation across Asia and the Pacific has exposed tens of millions of urban residents to heightened risks and vulnerabilities associated with the expanding ecological footprint of urban energy, food and water demands and the increasingly severe effects of global climate change. This special issue directs attention toward the challenges, innovations and examples of best practice in environmental governance for urban resilience in the Asia-Pacific region. Our understanding of urban resilience is tied to the concept of planetary flourishing that links the health and well-being of urban populations with sustainability behaviours that promote regeneration of the biosphere while redistributing environmental risks and benefits in more socially inclusive and equitable ways.

Keywords

Environmental governance, urban resilience, Asia, the Pacific, sustainability, the Anthropocene

Environmental Governance for Urban Resilience

The concept of urban resilience has been taken up by social scientists and policy-makers as an entry point for problematizing a set of governance approaches designed to buffer cities, urban populations and urban-based ecosystems against biophysical and socioeconomic shocks and stressors (Adger, 2000; Ernston et al., 2010; Ogden et al., 2017; Leitner et al., 2018; Monstadt and Schmidt, 2019). In its broadest sense, urban resilience refers to the capacity of urban systems and societies to withstand, absorb and recover from place-and-time specific disruptions while strengthening systems and processes to enhance future adaptive capacities (Lang, 2010; Leichenko, 2011; Elmqvist et al., 2019). Etymologically, resilience

(Latin: *resilio*, to bounce back) is sufficiently flexible to serve as an interface that brings together an extraordinary heterogeneity of urban actors and institutions in (re)generative activities, without requiring them to cohere around a unifying belief system. Genealogically, however, urban resilience scholarship has evolved separately in diverse disciplinary traditions, ranging from systems thinking about socio-ecological systems (SES) using quantitative modelling techniques through to social theories that qualitatively evaluate issues of intergenerational equity and environmental (in)justice. These different intellectual trajectories and forms of evidence have allowed the concept to be applied in a wide array of contexts and policy programs. Yet its malleability has also been politically exploited, commodified and simplified, prompting critical academic debate about vexing governance questions such as “resilience for whom”, “resilience to what” and “resilience for what purpose”? (Vale, 2014; Cretney, 2014; Meerow and Newell, 2019).

This special issue is concerned with political spaces for navigating, negotiating and contesting pathways to urban resilience in the rapidly urbanising and industrialising societies of the Asia-Pacific. With more than 2.3 billion people living in cities across Asia and the Pacific, the region became a majority urban population for the first time in 2019 (UNESCAP, 2019a). Alongside this urban transition, the Asia-Pacific has experienced increasingly frequent, costly and prevalent environmental disasters that threaten to reverse hard-won gains in liveability and quality of life. Between 1970 and 2018, around 142 million people in Asia and the Pacific were impacted by environmental disasters, compared with 38 million elsewhere in the world (UNESCAP, 2019b: 7). Urban centres, as the main drivers of demand for environmental resources, contribute substantially towards wider anthropogenic transformations of nature that incubate new geographies of risk and vulnerability in the form of disaster-induced rural to urban migration, air and groundwater pollution and the cumulative effects of global environmental change (Miller and Douglass, 2016a). These transboundary impacts reduce the resilience of urban societies, compromising their potential to respond to recurring environmental disasters and adapt to future environmental challenges in the longer term (Pelling and Manuel-Navarrete, 2011; Bahadur and Tanner, 2014).

More positively, however, cities in the Asia-Pacific are at the forefront of efforts to build “resilient governance capacity” (Coaffee and Lee 2016: 80) through

socially networked multi-stakeholder partnerships and urban and climate change planning. Urban governance regimes across the region are endeavouring to integrate burgeoning elderly populations and large informal economies into a multitude of hybrid (public-private, private-societal and co-governance) relationships aimed at empowering marginal actors as agents of urban resilience strategies (Miller et al., 2019). A regionally networked place-making movement in Asia has sought to build urban resilience through community-based activities centred on urban gardening, agriculture, recycling and environmental awareness programs in the creative arts (Archer, 2016). These strategies in Asia and the Pacific, like urban resilience efforts elsewhere in the world, have tended to use the term *urban resilience* interchangeably with *urban sustainability*, reflecting the high degree of ambiguity surrounding both concepts as well as their common goal of pursuing a broadly “good” Anthropocene trajectory (Elmqvist et al., 2019).

There is a good deal that is shared between urban resilience and notions of urban sustainability, which has a rather longer pedigree. In his bibliographic review of the literature on urban sustainability, Hamman (2017: 22) concludes that “there is ultimately no single meaning and model of urban sustainability that emerges in the literature”. What is clear from his survey (p.11), however, is that urban sustainability is often used in conjunction with resilience, and increasingly so. The weakness of both, made clear in the papers in this special issue, is the way in which such catch-all terms generalise more variegated realities. The trade-offs, tensions and contradictions that are embedded in the urban, and which create landscapes of winners and losers, are lost from sight as the issue of urban resilience becomes aggregated or even reduced to a simple index.

Urban Resilience for Planetary Flourishing

Most of the contributors to this special issue first came together at the *Workshop on Resilient Cities for Human Flourishing: Governing the Asia-Pacific Urban Transition in the Anthropocene*, held at the Asia Research Institute, National University of Singapore in March 2017. Other authors with allied research interests were subsequently invited to make intellectual contributions. Through these generative conversations, our theoretical lens expanded from an initial focus on human

flourishing as the desired outcome of resilient cities into our existing emphasis on the relationship between urban resilience and planetary flourishing. This distinction is critical because the concept of planetary flourishing aligns pathways to human flourishing with ecological flourishing (Grant, 2012). It does so through sustainability behaviours that promote regeneration of the biosphere while redistributing resources and risks in more socioeconomically inclusive and equitable ways (Edwards, 2010; Kosoy et al., 2012). Many of today's obstacles to urban resilience are bound up in the historical construction of the city as "a place excluding the conditions for environmental flourishing" in which human notions of well-being and the good life have come to be regarded as "something not only separate, but also antithetical to ecological integrity and flourishing" (Murdock, 2019: 303). As the urban enterprise has become conjoined with a process of collective amnesia, this forgetfulness of our shared ecological identity has created a legacy of entitlement and abuse of nature (Tidball and Stedman, 2012).

Redress for this condition of urban alienation from nature requires rethinking how cities and extended urban regions might provide political spaces within which to shape collective practices around the protection and sustainable commodification of common environmental goods. Humans, as an urban species (Dalby, 2007), cannot be divorced from our dependencies on non-human species and broader ecological systems. Conceptualising urban resilience as a function of planetary flourishing thus departs from assumptions of resilience embedded in standard economic measurements of liveability that overlook or downplay the role of human activities in generating regional or even global environmental impacts. There is now widespread recognition that liveability indicators alone are inadequate to evaluate deficits in urban resilience arising from socioecological change and inequalities that render significant sections of society more prone to environmental disasters, with clear implications for environmental (in)justice (Cutter et al., 2016).

Creating and sustaining the social foundations for urban resilience are deeply embedded in the pursuit of procedural and distributive justice. Procedural justice (fairness in processes of transparency and accountability in public decision-making) and distributive justice (broadly equitable decision-making outcomes about resource allocations and sharing environmental risks) are intertwined (Fainstein, 2010) in expanding urban resilience as a transformative social learning process (Friedmann,

2002). Both forms of justice come together in claims to “rights to the city” (Lefebvre, 1991) around the inclusive (re)production of more environmentally sustainable urban spaces. In Asia, the capacities of urban citizens to build resilience to environmental threats and crises have often been gained through the decentralisation of rights to decision-making about locally important resources (Miller and Bunnell 2013; Miller and Douglass, 2016b). Building resilience by prioritising just governance creates openings for what Castells (1997) calls a shift from “resistance identities” to “project identities”, or, as Reese and Rosenfeld (2008) describe, a crucial change in political culture away from a predominance of adversarial relations and toward productive engagements with government in identifying and resolving issues of socioecological justice in practice.

In treating the governance of urban resilience as a function of planetary flourishing, this special issue critically engages with two strands of scholarship on: (a) urban ecological resilience, and (b) urban hazards or disaster risk reduction. Both of these intersecting literatures treat biological processes as bound up in the power relations and economic value regimes of human-dominated urban ecosystems (Alberti and Marzluff, 2004; Ernston et al., 2010; Chelleri et al, 2015). In spatial and temporal terms, this means that cities and extended urban regions are constitutive of wider geographies of socioecological transformations. Béné et al. (2017) usefully distinguish between “resilience *of* cities” to denote the complex geographies of trade, migration and ecological flows that sustain cities and “resilience *in* cities” which functions at the level of ecosystem services within and between city boundaries. In the former category, anthropogenic transformations of remote and rural areas such as deforestation for plantation agriculture and large hydropower dams are driven by urban demands that have implications for regional food, energy and water security and even global climate change. The second type of “resilience *in* cities” magnifies redistributive inclusions and exclusions to show how urban ecological knowledge influences land-use practices and (re)development patterns (Ahern, 2013). In the Asia-Pacific, rapid rural-urban migration and industrialisation have exacerbated urban vulnerabilities while creating new forms of socioeconomic precarity through the establishment of informal urban settlements in unsafe areas at or below sea level in coastal areas or in river basins. Recurrent flooding episodes and heightened exposure to tropical storms in these unstable sites have eroded urban resilience by

forcing slum clearance evictions, fracturing neighbourhood support systems and disrupting livelihoods (Miller and Douglass, 2015). Cascading impacts such as landslides, subsidence, erosion and water pollution have left growing numbers of these urban residents with accumulating socioeconomic and health burdens, impairing their combined abilities to build resilience and adaptive capacities to future perturbations (Miller and Douglass, 2018).

Conceptualising urban resilience in terms of planetary flourishing thus involves attention to multiple scales and agents of environmental governance. In organisational terms, these scales of governance range from the level of individual households through to communities, cities, urban regions, nation-states and supranational or regional networks and agreements between blocs of countries. Agents of environmental governance span metropolitan organisations, community-based entities and private sector institutions. The individual papers in this special issue highlight how power and inequality at particular scales shape efforts to build urban resilience and produce unintended consequences at other scales of governance. For instance, power relations that privilege expert-driven urban ecological knowledge in city-level resilience strategies can produce policy disconnects that compromise the capacity of urban neighbourhoods to address existing and future socioecological challenges (Huck and Monstadt, 2019). Conversely, resilience strategies at the level of urban neighbourhoods might be achieved at the expense of resilience at the level of individual households (Leichenko, 2011).

Governance for urban resilience

Drawing from other work that distinguishes governance from management (Armitage et al., 2012; Miller, 2019), we use the term governance in this special issue to direct attention toward the structures and social relations of power that underscore environmental transformations, politicise knowledge about urban resilience, embed values into legislation and policies, and determine which spaces are available for collectivised action. Because cities are multi-faceted in their interactions with nature, we further argue that interdisciplinary and multi-sector approaches to governing urban resilience are required to encapsulate the sheer complexity of engineering,

social, ecological and economic approaches that involve specific sets of considerations and which overlap at different organisational scales (Jabareen, 2013; Chu et al., 2016). In taking this multi-dimensional approach, we build upon the contributions in an earlier *Urban Studies* special issue, *Governing for Urban Resilience* (Beilin and Wilkinson, 2015). Like this thematically allied collection, we are concerned with both the systems and asymmetrical power relations that animate around environmental resources to mediate risks and inform urban resilience strategies.

Our own approach to governance for urban resilience further developed from exploring key questions that emerged from on-the-ground research. What kinds of governance innovations are emerging in Asia and the Pacific to prepare urbanising societies for more environmentally resilient and socio-economically equitable futures? To what extent can civic cultures help to build resilience to environmental threats and promote sustainable ecological behaviours? What obstacles and bottlenecks are undermining the efficacy of urban populations to sustainably govern their resource dependencies? And, can collaborative relationships within and beyond the Asia-Pacific region improve city-environment interactions as part of a changing planetary ecology? Each paper in this special edition considers a sub-set of these questions, examining the different scales, institutional constraints and power dynamics that inform urban resilience strategies for planetary flourishing in the urban populations of ten countries: Australia, China, Hong Kong, India, Malaysia, Qatar, Singapore, South Korea, Vietnam and Taiwan.

An Overview of this Collection

Taken together, the contributors to this special issue highlight a set of historical and contemporary concerns in the search for more resilient forms of urban governance aimed at supporting planetary flourishing through greater attention to ecological sustainability. While we expect many readers to be interested in those case studies about which they have particular knowledge or expertise, the articles collectively aim to challenge the boundaries of thinking about urban environmental governance in addition to making important contributions in their own right. Beyond their applied policy relevance to specific peoples and places, they point to the ongoing need for

greater understanding of the reflexive causalities and far-reaching consequences of urban demands into ever more remote and rural landscapes, and the boomerang impacts of these ecological transformations on urbanising populations within and beyond the Asia-Pacific region.

Daniel Abramson's contribution to this collection explores these rural-urban interactions in human-nature relationships by conjoining the concepts of agropolitanism and resilience to interpret the historical challenges and opportunities of urban expansion in China. Drawing evidence from China's Chengdu Plain, which, for over 2000 years has sustained an agriculturally productive and biodiverse urban culture, Abramson describes how the past decade of urban growth has transformed that city-region from a grain exporter into a grain importer for the first time in its history. Despite having one of the world's most effective and enduring irrigation systems, the agro-ecological resilience of the Chengdu Plain has been further strained by laissez-faire rural development, the extension of monocropping and state-driven urban planning. Because these combined factors have eroded traditional forms of urban resilience centred on diverse and decentralised modes of production and flexible livelihoods, the challenge of rebuilding socio-ecological resilience thus suggests a need for meaningful feedback loops to integrate existing community-level urban planning and agricultural practices into higher scales of decision-making.

Recognition of the importance of community-level forms of ecological stewardship does not imply a rolling back of state responsibility for urban resilience. On the contrary, local actors can provide redress for higher scales of ecologically unsustainable behaviours in collaboration with state agencies at multiple levels, just as they can serve as important intermediaries in developing integrated and resilient socioecological systems. Jeffrey Hou takes urban gardening and agriculture as his entry point for exploring the contributions of grassroots urban resilience activities to wider scales of environmental governance. He demonstrates how the Garden City Initiative in Taipei has evolved into an influential social movement for fostering resilience in urban localities against the vulnerabilities produced by economic globalisation and global environmental change. Unlike urban regeneration initiatives in other parts of the world that have been systematically appropriated by neoliberal investment (Phelps et al., 2011), Taipei's urban gardens have benefited from substantial public sector funding. As a result, they have been able to flourish as an

example of best practice through their facilitation of civil society activities that are largely liberated from market constraints, which can be scaled up to connect with food security initiatives in other parts of Taiwan.

Huiying Ng explores this potential of civil society to craft more resilient environmental futures in her study of edible commons in the city-state of Singapore. She highlights the role of environmental education and co-produced narratives in forging ecological identities that can render urban spaces more resilient through sustainable spatial practices. By cultivating edible commons around urban gardening and agriculture, people with little or no experience of living outside cities can develop a relationship with nature and attain a sense of agrarian citizenship. Ecological identity is central to this construction of urban resilience because the way in which individuals see themselves in relation to their wider environments is consistently cited as a leading predictive variable of socioecological behaviour, alongside social norms and community influence (Snyder et al., 2014). In depicting edible commons as “active moments”, Ng highlights the immediate transformative potential of people to become agents for catalysing urban resilience once they locate themselves within broader sets of ecological processes.

At the city level of governance, Myung-Rae Cho demonstrates how politically progressive leadership can make urban populations more resilient by offsetting wider ecological transformations. Using the case of the “One Less Nuclear Power Plant” policy, Cho describes how the South Korean capital successfully reduced its energy consumption by cutting the energy equivalent of one nuclear power plant within a three-year period. Although Cho mainly attributes the success of Seoul’s energy policy to the progressive vision of its mayor, his theoretical lens extends to frame resilience as a function of planetary urbanism. As such, he argues that the future capacity of urban populations to become more resilient will hinge upon more than political leadership and rest on the combined efforts of urban populations to reduce their excessive reliance on extractive resources. With most of the world’s energy consumed by urban activities, the onus of building resilience against energy risks and uncertainty will thus rest on urban consumers and energy regimes in the longer term.

Mee Kam Ng, in her study of land scarcity in Hong Kong, problematizes what urban resilience means in the context of ongoing environmental degradation fuelled

by capital intensive development and urban density. With urban redevelopment concentrated around shopping malls and gentrified gated communities, poor city residents have been displaced in large numbers from their traditional livelihoods and place-making practices that are integral to building resilient and relationship-rich communities. To provide redress for this socioeconomic polarisation, Ng controversially proposes a form of transformative urbanism centred on re-planning and re-developing rural Hong Kong. She argues that urban resilience could be strengthened if the government departs from its existing planning framework to experiment with integrated urban planning strategies in rural areas currently owned mainly by indigenous oligarchies in the New Territories of Hong Kong.

Sara Fuller paints a very different picture of Hong Kong in her comparative study of climate responsibility vis-à-vis the city-state of Singapore. Unlike Singapore, where Fuller's interview respondents were less concerned about global warming because they believed their government was prepared, advocacy NGOs in Hong Kong actively engaged with the corporate sector to develop a city-wide climate response because they felt their role was vital in reconfiguring climate governance. These divergent sets of societal perceptions regarding the role of the state in climate responsibility informed not only how citizens in both countries saw themselves in relation to nature, but also the range of tools they perceived to be available to them in building climate resilience at and below the city scale. In critiquing the city as a homogenous or singular agent in climate action, Fuller therefore highlights the structural constraints and power dynamics that shape climate governance within cities as well as the networked geographies that circulate through them to inform localised perceptions and practices of urban resilience.

Urban resilience and its critics

Critics of urban resilience have articulated a wide variety of concerns with this hotly contested concept according to their interpretation, application and intellectual tradition (Sanchez et al., 2018). Despite the growing popularity of urban resilience in urban studies, political ecology and geography, social theorists have taken issue with the way in which ecological systems are evaluated in relation to institutions without paying due attention to issues of power, equality and the political structures that define and inform urban resilience strategies and programs (Meerow and Newell, 2016).

These important critiques go back to difficult questions of urban resilience for whom, what, where and why, and the spatial and temporal trade-offs that shape differential outcomes at particular organisational scales of environmental governance.

Creighton Connolly makes a compelling case in his contribution to move beyond notions of urban resilience that limit the possibilities for socio-ecological justice. In his study of the Malaysian island state of Penang, Connolly argues that the concept of multi-species flourishing better encompasses the causal linkages between human-urban health and ecological wellbeing. He does so by showing how the unrestrained clearing of hillside forests has placed mounting pressures on the natural environment to generate new human geographies of risk and vulnerability that Penang residents experience as severe erosion-induced landslides and flash flood events. For this reason, urban governance regimes need to bridge policy disconnects between urban development and ecological systems. In Penang, Connolly draws attention to one such citizens' initiative, the Penang Hills Watch, which seeks to strengthen multi-species flourishing through diverse grassroots activities ranging from monitoring incidences of illegal hillside forest clearing to raising environmental consciousness and defending workers' rights and heritage conservation.

Like Connolly, Giles Thomson and Peter Newman find the concept of urban resilience inadequate to encompass either the complex sustainability challenges faced by urbanising populations in the Asia-Pacific or the wider environmental risks and impacts generated by them. As an alternative, they contribute to recent scholarship on regenerative urbanism to argue that cities will only become more resilient if they first learn how to offset their consumption rates and contribute toward rejuvenation of those parts of the biosphere that have already exceeded their limits. Drawing from evidence in Perth, Western Australia, Thomson and Newman posit that policies based on regenerative design principles at the macro, meso and micro scales of governance could potentially produce lasting gains in supporting both human and planetary flourishing. Examples such as recycling water and waste, decarbonising energy, urban agriculture, transport planning and integrating biodiversity, if properly planned and implemented, could support future forms of regenerative urbanism while building resilience to major challenges of the Anthropocene.

Agatino Rizzo critiques the use of the term "green resilience" to convey messages of sustainability in his comparative study of two urban megaprojects in Johor-Singapore (Malaysia) and Doha (Qatar). He illustrates how urban planning

theory has uncritically embraced the colour green- including through non-living interpretations such as artificially planted areas, low energy certification schemes and innovative modes of transport- as a catch-all concept to offset the harmful impacts of urban development. This is especially true, Rizzo argues, in green megaprojects undertaken in weak regulatory regimes of the Global South, which often fail to account for their own substantial environmental footprints or distributive exclusions among surrounding urban and rural populations. In such contexts, green planning for urban resilience might mean a secure and healthier lifestyle for an affluent minority, but it can, and often does, entail heightened and extended environmental risks, impacts and dislocation or forced resettlement for many others.

(In)Justice in urban resilience

Questions of socioecological justice (for whom, when, and to what end?) are a recurring theme in this special issue. Justice, as a moral claim on governance, underpins urban resilience strategies that are usually formulated as responses to the underlying inequities that incubate geographies of risk and precarity (Douglass and Miller, 2018). In the large informal settlements found in developing countries across the Asia-Pacific, self-reliance is frequently the only recourse to urban resilience in the absence of formal programs and government funding. In such cases, justice claims are tied to a legacy of social exclusion from rights to the city in the form of public services and the denial of avenues through which to participate in formal channels of decision-making that shape official urban resilience policies and outcomes.

The injustice of postcolonial urban resilience regimes is central to Emily Potter's contribution to this collection. Focusing on the exclusionary practices of urban place-making in Australia, Potter carefully weaves together the hegemonic narratives that inform urban cultures and shape formal planning practices for urban resilience by asserting the unity of place and the sanctity of property rights and values. For indigenous Australians, whose historical experience of national unity has been one of colonial violence and dispossession, urban resilience planning for climate change represents yet another manifestation of their physical and psychological exclusion from urban spaces (Potter, 2019). Unless concerted efforts are made to actively include marginalised people in postcolonial cities, then urban planning for resilience will continue to perpetuate unjust and inequitable distributional outcomes.

We see how unjust water resilience strategies in the Indian city of Hyderabad have reinforced socially stratified economic geographies of exclusion from water security among the majority of residents who live outside middle-class gated communities. Diganta Das and Tracey Skelton highlight in their contribution to this collection how inclusion in, or exclusion from, the city's water resilience planning regime creates vastly different distributional outcomes in two neighbourhoods of Hyderabad. Whereas the air-conditioned, gardenised and water secure high-tech enclave of Cyberabad has been allowed to flourish, the rural migrant urban neighbourhood of Madhapur has become dry, dusty and a site of everyday water struggles. Das and Skelton show how this selective partitioning of water security has chronically reduced the overall resilience of Madhapur residents to deal with the cascading impacts of escalating food prices, urban heat island effects, declining health and a generalised sense of social anxiety linked to prolonged water scarcity.

In the Mekong Delta of Vietnam, Fiona Miller proposes the concept of "just resilience" as a lens through which to make sense of the processes and consequences of climate-related displacement and resettlement. She also signals how just resilience could be useful in exploring the additional pressures that climate-related resettlement places on Vietnam's urban centres by prioritising questions of procedural fairness, social inclusiveness and equitable distributive outcomes. In Vietnam, where rural-urban migration and land scarcity have created new urban geographies of risk and vulnerability, existing urban resilience and adaptation strategies have been pushed to their limits. By locating just resilience in this rapidly urbanising and risky climate context, Miller offers an alternative optic for exploring when, if and how climate-impacted communities should resettle and how humanitarian, livelihood and ecological challenges might be more comprehensively addressed in official resettlement programs.

The concluding perspective essay by Adger, de Campos, Siddiqui and Svaboova treats human well-being and planetary flourishing as sources as well as desired outcomes of resilience, which are furthered through urban governance regimes that expand social inclusion while reducing inequality. While substantial improvements in city-making during in Asia's accelerated 21st century urban transition have promised to enhance resilience, repeated failures in environmental governance are evidenced in under-provisioned infrastructures and services, including through the neglect or omission of much needed urban green spaces that underpin human

capacities and opportunities for sustaining environmental ecosystems. The authors therefore argue for new approaches to research and participatory methods to better illuminate the effects of marginalization and vulnerability that manifest as “asymmetrical power relations running through systems of urban life” and which are exacerbated by anthropogenic transformations of nature.

The papers in this special issue, as well as our experiences of working in cities across the Asia-Pacific, show that urban resilience is not something that can easily be built or created. Nor is it fixed or immutable. Rather, resilience is continually being negotiated, contested and redefined as ecologies are pushed outside their known historical ranges, rupturing and reconfiguring the human activities that depend upon them. As rural to urban resettlement becomes ever more commonplace across Asia and the Pacific, intergenerational understandings of resilience are being permanently lost as rural migrants navigate adaptive journeys amidst conditions of social disempowerment and economic insecurity (Miller, 2018). At the same time, however, new forms of urban resilience are continuing to emerge, including in unlikely places. Societal, business and political actors are cultivating a multitude of networked and situated spaces for sustaining more equitable and inclusive forms of food, water and energy production and consumption. This special issue, in directing attention toward these efforts in diverse urban contexts, makes a case for conjoining the future viability of urban societies with ecological well-being and planetary flourishing. It is only when urban resilience activities seek to restore human relations with nature that they will become more sustainable in the longer term.

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