COMMENTARY

Pandemic resilience and the heritage of Asian urban communities

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1 Introduction: community heritage in Tokyo

The neighbourhood in Tokyo where I lived while a student in the 1980s was a fire trap. Wood rowhouses clad with thin, untreated clapboards fronted directly on streets less than four meters across—many too narrow for a fire truck to enter. In winter, people used free-standing kerosene heaters. Houses were dilapidated, and a few displayed a worrying lean. Local authorities had plans for clearance and redevelopment but lacked the powers of eminent domain to remove long-time residents and property owners.

If it appeared hazardous, however, the neighbourhood was a paradise as a community. Everyone knew their neighbours by name (or nickname), people minded one another's children, and doors were left unlocked. The neighbourhood was safe because of what American urbanist Jane Jacobs called 'eyes on the street'. Not only eyes—old people who wanted company could simply drag a chair into the street in front of the house and be among neighbours. There were no sidewalks and relatively few playgrounds, but children played in the streets since they were too narrow for most car traffic. Few people owned cars, and everyone shopped locally. Mom-and-pop shops lined the wider front street. Many people ran businesses out of their homes, from hairdressers to tofu makers to printing shops.

In the 1980s, thanks to the work of a quarterly magazine of local history, three adjacent districts around

where I was living became popular under the colloquial name 'Yanesen', which combined the first syllables of their names: Yanaka, Nezu, and Sendagi. Both the housing and the social class of occupants in Yanesen varied widely. The area included commuters and students as well as shopkeepers and artisans. But Yanesen's walkability and the predominance of the physical and spatial features described above made the whole feel like one neighbourhood. The editors of *Yanesen* magazine enhanced residents' sense of the neighbourhood's identity by collecting oral histories from many of them and leading campaigns to preserve old houses (Sand 2013, 54−87).

The 'heritage' of neighbourhoods like Yanesen entwines buildings, communal spaces, and residents' shared knowledge and customs. Although the buildings themselves may lack the durability and quality to merit formal designation as historic architecture, many of these places bear urban traditions that deserve to be considered part of the true heritage of their cities. A heritage of traditionally-built low-rise housing, organic building materials, and narrow streets can also sustain dense but resilient neighbourhoods that are in many ways environmentally sound and may be well suited to surviving future disasters. These districts also house large numbers in limited areas, making them examples of high-density living without high-rise steel and concrete buildings.

2 Urban density: a North American debate

Urban economist Edward Glaeser's *Triumph of the City* became a bestseller in the United States after its publication in 2012 (Glaeser 2012). Glaeser's central claim was that concentrating functions in cities and concentrating people close together made good sense economically and was also good for the natural environment. In the

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United States, the planner's shorthand for what Glaeser championed is 'density'. With the growth of private car ownership in the 20th century, American cities sprawled horizontally. Since the 1960s, this has been recognised as a problem. Glaeser took the criticism of suburban sprawl one step further, arguing that everything that made cities good living environments derived from high population and building density. Sweeping across time and space from ancient Athens to present-day Bangalore, Glaeser offered a vivid portrait of densely-populated cities as centres of innovation and sites of human fulfilment. Yet, despite its global reach, Glaeser's was a very American book. Americans in the 20th century, Glaeser implied, had made a bad choice by building low-density cities; now, that could be corrected by choosing increased density. This assumed that readers would understand urban problems in terms of a choice between a New York model of high-rise apartments and public transport and cities like Houston and Los Angeles, where houses are low-rise and everyone commutes by car. Yet cities in much of the world conform to neither of these models, and the majority of urbanites, particularly in poorer countries, have little choice about where they live.

Glaeser's argument made little room for heritage. This, too, had a North American aspect. North American cities grew in the late 19th and early 20th centuries through the construction of two- and three-story wooden houses for the new middle classes. Many of these houses, both row houses and free-standing houses, were spacious and handsomely built. They often stood on large lots. These houses survive today in cities around the United States and Canada and, in many cases, remain highly desirable real estate. Old zoning laws and resistance from residents have limited the construction of new housing in the districts where they stand. In addition to the environmental argument against low-density housing, many American planners and policymakers point out that low-density zoning has perpetuated economic and racial inequality. Some have argued that historic preservation must share the blame for unaffordable housing by reducing densities—and in cities like New York and San Francisco, the argument is persuasive. San Francisco's 'painted ladies' are a vivid case: Victorian-era wooden rowhouses, protected for their architectural value, have become homes of the rich. At the same time, their protection constrains housing provision and keeps prices high in one of the country's most expensive real estate markets. Comparable cases can be found in Europe and Asia, but the North American case remains distinctive because of the high real-estate value of preserved single-family wooden houses. For this reason, advocating higher density in North America has become synonymous with relaxing preservation laws and other restrictions to allow taller buildings, with the anticipated positive effects of lower rents and less environmentally damaging sprawl.

Until the pandemic, the wind was in the sails of the density argument. Then came the pandemic, and the debate suddenly shifted. New York saw an explosion of infections in the spring and summer of 2020. Witnessing the frightening side of dense urban populations in a way that wealthy countries had not seen for almost a century, some writers on urban issues began to say that density itself was the problem. Moreover, they were capturing a widespread sentiment: the *Washington Post* in May 2020 profiled a dozen young creative industry workers who had come to New York because of the unique opportunities the city presented but were planning to leave.[1] And contrary to Glaeser's prediction that information technology would only lead to more demand for face-to-face contact, many people forced by the pandemic to telework from home or elsewhere found it surprisingly efficient. Even now, it is reasonable to wonder who among the affluent professionals who left the city will return to living and working cheek-by-jowl with others in dense city centres. In February 2022, when Covid-19-related restrictions had been lifted in North America and Europe, the *Economist* reported that 18% of London offices were still empty, along with roughly 16% in New York.[2] On the eve of the pandemic, every progressive-minded urbanist seemed pro-density, but today advocates must search for new arguments against commonsensical anxiety about dense living.

The pandemic has raised the stakes of the density question and increased the urgency of the discussion. Individual and collective choices being made today will have a significant impact on the long-term future of the city. What kind of living and working environments will people feel safe and comfortable in, and will whatever relative safety and comfort may be achieved in the short term survive the next pandemic or a different disaster? The stark divide between those who have the luxury to stay at home and telework and those were forced to expose themselves to risk in order to make a living compels planners and policymakers more than ever to find urban solutions that reduce inequality. High urban density will shape those solutions both positively and negatively.

3 Asian megacities and the density issue

Yet framing the issue in abstract terms of density versus dispersal fails to account for the real conditions of global urbanisation. In most of the world, we already know that

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[1] 'Frustrated and Struggling, New Yorkers Contemplate Abandoning the City They Love,' *Washington Post*, May 26, 2020.

[2] 'The True Cost of Empty Offices,' *Economist*, February 29, 2022.

Fig. 1 Nezu Area, Bunkyō Ward, Tokyo, ca.1968: 40,000 residents/km² (Source: Bunkyō-ku 1969)

people will continue to live in dense settlements because the overwhelming majority in cities have few other choices. So the right question is, instead, what kind of density to envision? Here is where my old neighbourhood in Tokyo offers insights. At its peak in the late 1960s, the population density was 40,000 people per square kilometre (Fig. 1). That is close to double the density of Manhattan today and a third higher than the density of Greenwich Village. Yet the houses remained a uniformly diminutive two stories tall. The great majority were single-family homes. The much-acclaimed Roppongi Hills, a high-rise mixed-use development built in the early 2000s in a tonier neighbourhood of Tokyo, with four residential towers, two of which are 43 stories tall, has a resident population density of only about 17,000 per square kilometre (Fig. 2).

Jane Jacobs recognised the virtues of low-rise, high-density urbanism over a half-century ago. Based on her observation of Greenwich Village, her argument on its behalf has become the heart of a widely shared vision of what makes good urban communities. But Greenwich Village, for its many virtues, is not the only model for vital, socially diverse, low-rise neighbourhoods. The Tokyo model is different. Since the houses are simple, it is cheaper and more flexible, and because the land is divided into tiny lots and the houses have little market value, it is less prone to gentrification. It takes many years for developers to persuade small owners to sell before they can assemble a large enough lot to get a return on investment.

Admittedly, in the 1980s, my old Tokyo neighbourhood was already a relic of an earlier urban lifestyle. It was an accidental survival rather than a product of good planning. Many similar Tokyo neighbourhoods have since gone high-rise, but many others have rebuilt while staying low and dense. One of the things that makes low-rise, high-density living in Tokyo feasible is a superb rail network. There is nothing prima facie superior about building skyward if you can move millions of people around in a way that is rapid, efficient, and environmentally sound,

Fig. 2 Roppongi Hills, Minato Ward, Tokyo, completed 2003: 17,000 residents/km². Two of the four residential towers stand to the left (Source: https://en.wikipedia.org/wiki/Roppongi_Hills)

as Tokyo does. Proximity to a train station is the biggest determinant of real estate values in Tokyo, and the network keeps expanding to improve connections, keeping disparities relatively low.

My old neighbourhood was indeed vulnerable. But in place of a strong, disaster-resistant physical infrastructure, what protected so many people living in flimsy structures in close quarters was social infrastructure—dense networks of interdependent people. Social infrastructure does not require government investment or enforcement; it requires only mutual interest. Preventing fires is one such interest. In tightly packed blocks of wooden houses, a one-house fire can easily sweep away the entire block. Despite the ever-present hazard, the neighbourhood did not see a major fire for decades. Residents were vigilant and ready to run to the aid of neighbours because it served their own interest too (for discussion of fire prevention in traditional Japanese urban neighborhoods, see essays in Nishimura 2006).

The model of dense, low-rise neighbourhoods, built cheaply but sustaining strong communities, can be found widely. Throughout Southeast Asia, there are urban neighbourhoods that started as villages and informal settlements, similarly built of short-lived organic materials (traditionally bamboo most often), and similarly high-density. Many lack adequate services and suffer from economic precarity, but their occupants resist eviction and stick together tenaciously. Some have been successfully integrated into the modern city. Indonesia's Kampung Improvement Programme, for example, has demonstrated that these neighbourhoods can be

reformed in situ, allowing people to stay while building attractive and environmentally sustainable settlements for low-income residents (Silas 1992).

Living standards in most of the marginalised neighbourhoods of Asian megacities are a far cry from what we should hope for, but these places also have virtues that deserve recognition. To begin with, people everywhere like single-family homes. There are many advantages to living close to the ground, particularly in a crisis like the pandemic. Wood and bamboo are renewable, and the rapidly developing technology of cross-laminated timber is making structures built of organic material as fire-resistant as steel, so the fire hazard need no longer pose the threat it has traditionally posed to wooden cities. The energy used in building and maintaining low-rise wooden buildings is often a fraction of the energy needed for heavier structures. Streets not dominated by cars foster neighbourliness. And the strong communities that tend to form in these places offer the resilience we need for the next crisis, whatever shape it may take.

4 Low-rise high-density settlements and the pandemic

How did the dense, socially resilient, but economically impoverished settlements of Asian megacities respond to the pandemic? Did mutual aid make a difference in countering an infectious disease? Did people in these settlements have the means to protect the most vulnerable among them? Does the epidemiological impact of living in close proximity overwhelm the positive effects of community solidarity? These are questions that urgently

need investigation. At the same time, we should be leery of quick answers since the questions involve all the complexities of assessing multiple urban risks in relation to urban form and to questions of quality of life as a whole.

I cannot offer hard data, but I will introduce observations from a few densely-inhabited, vulnerable communities that I hope will encourage further discussion. In 2018, I began a collaboration with colleagues living and working in several Asian cities to study marginal and informal settlements from the perspective of their residents. We called the project 'Asian Cities and Urban Settlers'.[3] Our focus was not on heritage in the sense of enduring architecture. Yet our starting premise was that a kind of heritage could be found even in the most fragile urban environments—a heritage of community practices and shared historical knowledge. Tokyo's Yanesen area provided the project model. Yanesen today is known for its historic streetscapes, but when the editors of *Yanesen* magazine began collecting oral histories in the 1980s, it was not. The steady work of documenting residents' experiences produced an awareness that the area had a unique heritage. The same process should be possible anywhere that residents show care for their neighbours and for the environment they share.

Although travel became impossible because of the pandemic, through the 'Asian Cities and Urban Settlers' project, I have remained in contact with colleagues closely involved in several of the settlements where we began in 2018. The stories of my colleagues in Mumbai (India), Manila (Philippines), Yogyakarta (Indonesia), and Yangon (Myanmar) indicate a range of local responses to the pandemic, each revealing distinct local forms of community resilience as well as distinct relationships with state and municipal authorities. Dharavi, the densely-populated district of Mumbai often called 'Asia's largest slum', experienced the most aggressive formal controls to combat the pandemic. The sprawling informal settlements of Hlaing Tharyar and Dagon Seikkan in the periphery of Yangon stood at the other end of the spectrum, where, amid a military coup, residents sought ways to survive with practically no assistance from the government. But everywhere on the spectrum, we can find distinct local practices of mutual aid, showing how the health crisis calls forth social resilience in dense low-rise urban neighbourhoods where people have few resources to protect themselves from disease.

Dharavi attracted wide attention during the first year of the pandemic. The 535-acre district, home to some 800,000 to one million people, had long been a target for municipal interventions and NGO projects, as well as the setting of several films, making it a 'celebrity' among Asian informal settlements. As one group of researchers described it, Dharavi was a 'petri dish' to examine the effects of pandemic policy because of its density and self-containment (Shervani et al. 2021). In the summer of 2020, it appeared that the area had weathered the first wave successfully, seeing a rapid reduction in cases after 1 month of exponential growth. The WHO soon declared Dharavi a 'model' for other communities. Public health experts attributed the success to stringent lockdown measures, a 'multisectoral approach' involving representatives of different government agencies, NGOs, and philanthropists, plus quarantining and contact tracing (Golechha 2020). In September 2021, Kiran Dighavkar, one of the administrators in charge of the pandemic response in Dharavi, published a book describing Dharavi's experience, portraying public health officials in heroic terms (Dighavkar 2021). Yet Dighavkar himself acknowledges that success depended not only on effective medical interventions but on an army of local volunteer 'Covid warriors', who delivered food supplies to families forced to stay home (Fig. 3). These volunteers did not emerge from nowhere: rather, they were what Dighavkar euphemistically calls the 'local lads'—mobilised by leaders of patron-client networks rooted in the community, some with backgrounds in organised crime, some connected to political parties.[4] Dharavi is a highly organised and politically active settlement. Its fame also makes it a target for policy experimentation. And although the aggressive intervention helped reduce infections, it came at a cost to residents: barricades and even drones were used to enforce the quarantine. Promoting Dharavi as a model thus carries the risk of normalising extreme forms of social control among the most vulnerable people (Menon 2021).

Meanwhile, the most critical concern for the majority of Dharavi residents during the pandemic was how to continue working. Many who commuted to factories and shops or peddled goods outside the district suffered during the lockdown. But Dharavi is home to a vast number of small manufacturers, many of whom rely on family labour and material from suppliers within the district (Sundar et al. 2020).[5] These businesses were able to continue production, showing the resilience of a neighbourhood that contains diverse forms of industry and retail in close proximity. Many residents maintain strong connections to villages far from the city, and large numbers

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[3] Six essays from the project have been published together as a special feature of *City and Society* (Vol. 32, No.2, 2020) titled 'Asian Cities and Urban Settlers'.

[4] Dighavkar, 104. On these groups in Dharavi, see Weinstein 2014, 49–52.

[5] This feature is shared with many older manufacturing neighbourhoods in Tokyo, which are also low-rise and high-density. (See Bansal 2020)

Fig. 3 Children receive food packets from an NGO in Dharavi. (Source: Arun Kunchikor, https://www.urbz.net/articles/what-another-lockdown-means-dharavi)

left for the countryside in 2020, so Dharavi is far from the isolated 'petri dish' some public health experts imagined. Still, the local society within the district is tightly knit in ways that were advantageous during the crisis. As researchers in the Dharavi-based community planning group Urbz have shown, the low-rise, high-density urban morphology enables this social infrastructure (Sundar et al. 2020).

Relations between informal urban settlers and the authorities have long been contentious in Manila. In the early months of the pandemic, police built fences around some informal settlements, making residents feel like convicts. Even without fences, others found themselves immobilised since all public transit stopped and businesses shuttered. Promised food deliveries did not arrive, prompting a violent confrontation between police and informal settlers in the San Roque district of Quezon City, part of Metro Manila. Some residents went into the streets to beg for food from passing motorists. Yet, despite these desperate and volatile conditions, Manila also revealed self-organising neighbourhoods' resilience.

In April 2021, Ana Patricia Non, manager of a small furniture business in Maginhawa Street, Quezon City, set up a bamboo shelf in the street and stocked it with vegetables and necessities. She hung a cardboard sign that read, 'give according to your ability, take according to your need' (Fig. 4). Maginhawa was a street of restaurants and food stalls, which had shut down because of the pandemic. Without work, Non and her employees suffered too. But distribution through the food pantry rapidly took off. News spread by word of mouth and

social media, sparking the launch of similar food pantries elsewhere in Quezon City and around the country within days (Suazo 2021). Imitators maintained the basic formula of the original, negotiating for food from farms near the city, setting up a shelf or some boxes and a table on the street and hanging a handwritten sign on cardboard, part of a homespun visual vocabulary familiar from street-vending and markets, as well as from political demonstrations (Cayabyab 2021). When news stories

Fig. 4 Ana Patricia Non's food pantry in Quezon City, Manila (Source: Ana Patricia Non, from CNN Philippines)

appeared and celebrities began donating, the community pantry became a fad. Within days, military and government officials accused Non and her imitators of being communists. The Quezon City mayor responded in support of the pantries, and national officials soon backed off. Mass media and some politicians, meanwhile, presented the spontaneous mutual aid effort as an indictment of the government's pandemic response.

The food pantry idea has the appearance simply of charity, and for most people who heard about it on social media and contributed food and necessities, that is what it was. The tradition of giving to the poor is deeply rooted and widespread in the Philippines. But in its origin, the Maginhawa food pantry was based on a particular form of urban community, which required mutual trust, restraint, and generosity. It also enacted a community in which these relationships occurred in a simple and direct form in the street rather than through institutions or placeless digital networks.

In Indonesia, the state promotes local self-government and mutual aid under the banner of '*gotong royong*', a national slogan meaning 'community work'. Authorities did not impose full lockdowns, instead implementing a program called 'large-scale social restrictions', urging the populace to stay home. Residents of the traditional neighbourhoods known as *kampungs* took this directive to mean they should cordon off their own blocks. Yogyakarta, a metropolitan area of roughly four million and the capital of Java's last sultanate, is a city dominated by low-rise, high-density settlements built and maintained by their residents. The fact that many *kampungs* have a single entrance marked with pillars or a simple gate lent a naturalness to the spatial solution of self-imposed isolation. These *kampungs* built temporary barriers and hung out hand-painted signs forbidding passage, accompanied by improvised slogans about defeating Covid (Fig. 5). Anxiety about crime also increased during the pandemic, creating a further incentive for communities to seal themselves in. At night, gates were closed. Some *kampungs* assigned members to stand guard overnight at entry points. The residents on guard duty set themselves up to spend the night in the middle of the street, bringing personal belongings, including television sets. These guard posts then became nighttime gathering places for neighbours. Thus, although the government intended to limit interaction among citizens in the name of *gotong royong*, protecting the *kampungs* created an opportunity for neighbours to socialise. The virus makes no distinction between neighbours and strangers, and it is hard to know whether community self-protection measures actually limited its spread. Clearly, however, the pandemic produced local responses that reinforced neighbourliness and mutual dependence.

Fig. 5 Makeshift bamboo barrier with a sign reading 'Lockdown. Visitors are required to report to the neighbourhood head. Resist, and you'll get a smackdown. Debt collectors too.' Gunungkidil Residency, near Yogyakarta, 2020 (Source: Uji Nugroho Winardi)

Among settlements in Asian cities, the coronavirus response in Yangon's Hlaing Tharyar and Dagon Seikkan townships occupies the opposite end of the spectrum from Dharavi in Mumbai. In contrast to the multiple forms of intervention in Dharavi, public health in these districts, where thousands of families live in self-built bamboo dwellings or the rented rooms of lodging houses, has been neglected. Following the coup of February 2021, the government has focused on the violent suppression of civilian opposition and devoted few resources to containing the pandemic. On March 14, 2021, the military killed dozens of anti-government demonstrators and bystanders in Hlaing Tharyar (Kyaw 2021). Informal settlers who didn't flee were evicted. Subsequently, however, some 70% of the population returned and found or built themselves lodging in the same area.

Residents of Hlaing Tharyar and other Yangon neighbourhoods adapted to the health crisis by hanging out yellow banners, or anything yellow, in front of the house when household members had fallen sick (Fig. 6). The improvised banners signified that the family needed aid. NGOs and local volunteers responded by bringing oxygen and other medical assistance. Some people used a

Fig. 6 House with banners requesting aid for infected household members, Dagon Seikkan, Yangon (Source: https://www.irraw addy.com/news/burma/myanmar-covid-19-victims-rely-of-neigh bors-for-help.html)

white banner to indicate they needed food. Ward officials allied with the military government took these improvised banners down since they were perceived as showing the authorities in a bad light. Despite the backlash, mutual aid bridged informal settlements with neighbours in formal housing. People also went on social media seeking help. But the use of banners showed the value of local interconnection at the street level, starting with trust and a sense of obligation among neighbours. Thus, mutual aid persisted in Yangon settlements even in dangerous and unstable conditions.

5 Concluding thoughts

These stories from low-rise high-density neighbourhoods, some ephemeral in construction and some more permanent, offer hints of a heritage of mutual aid and shared resilience. In addition to physical differences, the cases I have described spread across a spectrum regarding relations with authorities. Dharavi saw the heaviest state intervention, both because of the capacity of state and municipal health authorities in Mumbai and because the district itself had long received special attention. In Manila, spontaneous mutual aid stepped in where authorities were failing. Activists were called 'red' by officials who had an antagonistic relationship with informal settlers and their supporters. Yet, ultimately through social media and celebrities, who have enormous influence in Philippine society, a mutual

aid movement that started at the neighbourhood level became a national fashion. In Yogyakarta, as in other Indonesian cities, the state has idealised self-help and taken a relatively hands-off approach to local communities, where residents are accustomed to working together. *Gotong royong* even made the pandemic a time of increased sociability, as residents combined neighbourhood guard duty with the pleasure of spending time outdoors together. In Yangon, the authorities effectively abandoned the people to cope on their own. In each case, however, residents turned to the resources they had at hand, which meant primarily relying on existing informal institutions or creating them anew on their own.

The physical form of these neighbourhoods did not guarantee the success of mutual aid, and nothing that residents themselves did could stop transmission of the virus. Still, the crisis brought out traditional forms of response that would have been difficult in a city of permanent high-rise structures. These traditional responses at least ensured some help to those in need and increased the sense of solidarity among citizens. Without shared pedestrian streets and without an architecture that residents themselves had a role in building and maintaining, local-level networks of mutual aid would have been absent or difficult to mobilise.

If the pandemic becomes a turning point in how we plan and live in cities everywhere, then the lessons of Asia's low-rise, high-density settlements may prove relevant far beyond Asia. Focusing only on density without talking about what kind of density will leave us with a model in which the shape of cities is determined by real estate values. Tokyo's development points to a different process of densification accompanying urban modernisation, one that combines effective transport infrastructure with retro-fitting and infill construction while keeping housing low-rise and communities intact.

Declarations

Competing interests
The author declares that he has no competing interests.

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