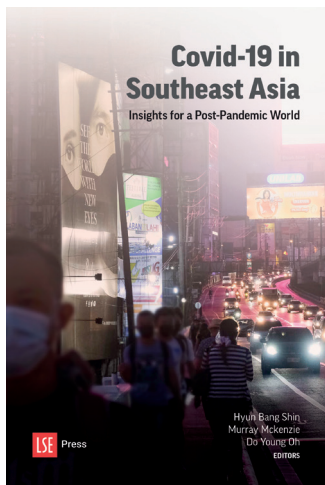


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1. Insights for a post-pandemic world

Murray Mckenzie, Do Young Oh, and Hyun Bang Shin

a different ambition: to move the future which is just beginning to *take shape* into view against the *still* predominant past.

Ulrich Beck

There may never be a ‘post-COVID world’, in the literal, posterior sense. However, if it is to serve as a novel scholarly appellation for the near future – the LSE’s trans-institutional ‘Shaping the Post-COVID World’ initiative being one indication this is so – then our initial questioning of it might begin with Ulrich Beck’s (1992, p.9) observations concerning the prefix ‘post-’, made nearly 30 years ago: as it gestures to a ‘beyond’ that cannot yet be known or named, the reality of that which is ‘post-’ can only be confronted through the familiar past and present that it purports to negate.

During the months in which this text was written, our world in many respects appeared to be in a moment of suspended transformation. Our intellectual lives, and the structures of daily life that sustain them, bore increasingly familiar features that mixed the improvisational with the decisive. The question of what will differentiate the arrangements that endure raises both a critical, scholarly imperative and an exigent impetus to act, or to shape the ‘post-pandemic world’ to the full extent that one can. Thus, the initial premise of this volume follows the widely read adjuration of Indian writer and activist Arundhati Roy (2020) to see the pandemic as ‘a portal, [or] a gateway between one world and the next’. In her words, COVID-19 was an opportunity to rethink the world as it is and to ready ourselves to step into a new one, without, as she has put it, ‘dragging the carcasses of our prejudice and hatred, our avarice, our data banks and dead ideas, our dead rivers and smoky skies behind us’. Roy’s stirring rhetoric comes entwined with her critical rigour and perspicacity, and it is our wish for this volume to likewise evince both aspects – the hopeful and the incisive – in its treatment of

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the circumstances that COVID-19 brought differently or more clearly into view.

Nevertheless, so too do we yet harbour misgivings as to whether such questions of a ‘portal’ are the right ones to ask. Gautam Bhan, Teresa Caldeira, Kelly Gillespie, and AbdouMaliq Simone (2020) have opined that such monumental claims about COVID-19 – ‘totality, catastrophe, portal’ – evince an ‘overreach, ... romance, [and] rush to diagnose that inflames, encamps, and routes our imaginations’. They have argued that these tendencies reveal a northern paradigmatic imagination that slights the experiences of urban majorities in the global South, where emerging infectious diseases are but one risk among the many that constitute an enduring crisis to be contended with through the collaboratively improvisational practices of everyday life (see also Simone 2004). For many urban residents of the global South, there has been no lockdown, no social distancing, and no substantial change to provisions for sanitation or public health (Oldekop et al. 2020; Wasdani and Prasad 2020; Wilkinson 2020) – facts that often fall to critical social scientists to make known. Amid the circumstances of the pandemic, however, critical reflection and theorisation might compete with more urgent priorities to act, to contend with the exigencies of one’s embeddedness, or to attend to solidarities rather than critique (Barbosa 2020).

This volume, then, collects the insights of an ensemble of social scientists – area studies, development studies, and legal scholars; anthropologists, architects, economists, geographers, planners, sociologists, and urbanists; representing academic institutions, activist and charitable organisations, policy and research institutes, and areas of professional practice – who recognise the necessity of critical commentary and engaged scholarship while at the same time making no claims that the pandemic’s legacy or lessons can at this point be definitively known. Amid social sciences scholarship on COVID-19 at large, one readily finds evidence of disciplinary disjuncture and incoherence, as the deeper analysis and reflection through which concepts and theories will coalesce have remained in an incipient phase. What we do wish to convey, however, is our conviction that the sweeping consequences of COVID-19 will leave scarcely any focus of social research untouched, such that even social scientists who claim no expertise in infectious disease – most of us, of course – are likely to consider the relevance and possibilities of their research to have shifted in significant ways.

As we discuss in this introductory chapter, with reference to Beck’s *Risk Society*, as cited above, there have been two fundamental

perspectives that these social scientists' responses have been likely to take and with which we can argue for the value of these preliminary contributions. One is that which speaks from a situated position in relevant debates to challenge knowledge about the pandemic that has assigned selective and inequitable visibility to issues, people, or places, or which through its inferential or interpretive capacity has worked to set social expectations or assign validity to certain interventions with a bearing on the pandemic's course and the future it has foretold. The other perspective is that which has used the events and consequences of the pandemic to advance or renew understandings of social challenges, risks, or inequities that were already in place and which, without further or better action, are to be features of our 'post-pandemic world' as well.

By grounding this volume in Southeast Asia, we endeavour to help secure a place within these debates for a region that was among the first outside East Asia to be forced to contend with COVID-19 in a substantial way and which has evinced a marked and instructive diversity and dynamism in its fortunes. The relative success of Malaysia, Singapore, or Thailand in dealing with the pandemic can be counterposed with the greater difficulties of Indonesia or the Philippines; the worsening of authoritarian leanings, the manipulation of information, the exploitation of migrant workers, stirrings of unrest, and outbreaks of political instability and conflict can be counterposed with demonstrations of technological innovation and heartening instances of grass-roots mobilisation. As we explain in this chapter, our editorial commitments in this regard owe much to our disciplinary grounding in urban geography, where postcolonial critiques of knowledge and difference have become transformational reference points in the intellectual and theoretical landscape (see, e.g., Robinson 2011; Robinson 2016; Roy 2009; Sheppard, Leitner, and Maringanti 2013). These critiques, alongside human geography's foundational neo-Marxian analysis of relational capitalist urbanisation (see, e.g., Doucette and Park 2019; Song and Hae 2019), have together compromised the viability of an archetypal 'Southeast Asian city' as an object of research (see Rimmer and Dick 2009) and a 'metrocentric' approach that foregrounds only select metropolitan regions (Bunnell and Maringanti 2010; Goh and Bunnell 2013). As we describe below, and acknowledging the methodological nationalism evidenced in other domains of Southeast Asian area studies, our preference is to think in terms of a multitude of situated outcomes and experiences that in their relational connectivity are in fact constitutive of

regional mappings bearing greater methodological utility than a priori framings can afford (Bunnell 2013; Ong 2011; Shin 2021).

The unfolding pandemic in Southeast Asia

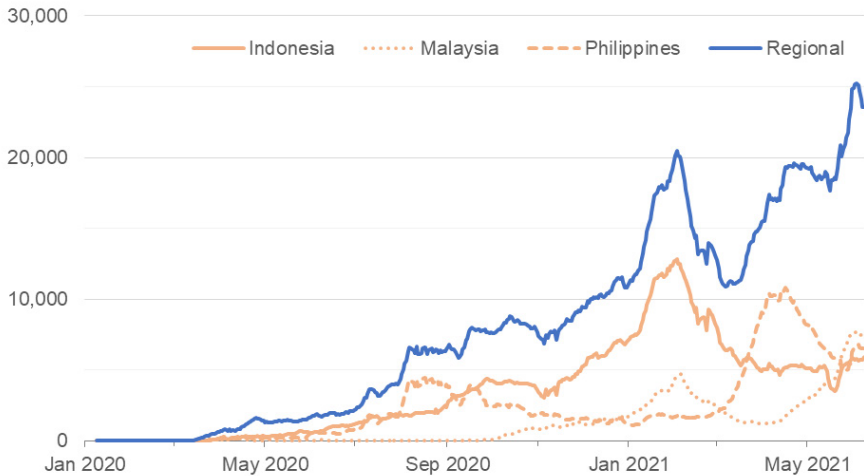
Southeast Asia was among the first regions outside East Asia to be significantly affected by COVID-19. While Thailand was the first country to report a case of COVID-19 outside China, on 13 January 2020, the Philippines reported the first death from the disease outside China on 2 February. Singapore, the region's global business hub, was also seen as an early transmitter of the virus to other parts of the world. It is well known that an international sales conference held in mid-January 2020 in Singapore was a key early node from which the virus circulated to other parts of the world, including the UK, France, South Korea, and Spain (Mandhana, Solomon, and Jeong 2020). By April, the country's initially measured approach and preservation of relative normality had given way to an advisory against non-essential travel abroad, the closure of the border to non-residents, the suspension of religious services, and a 'circuit-breaker' lockdown that was especially impactful on migrant worker dormitories (*The Economist* 2020a; *The Economist* 2021b).

Despite the early emergence of cases, many parts of Southeast Asia were known to have been less severely affected by the COVID-19 pandemic in terms of the number of COVID-19 cases and the resulting death rates. There are two principal caveats to this observation, however. First, the tremendous economic impact of COVID-19 in the region – more severe than that of the Asian financial crisis in 1997–1998 – was expected to have a lasting detrimental impact on inclusive growth, which fostered a widespread but mostly frustrated desire for political change that likely will have consequences for regional stability as well (*The Economist* 2020b). The GDP of the Philippines was expected to shrink 9.0% in 2020 (OECD 2021); the economies of Malaysia and Thailand have been severely affected too. The global economic downturn and travel restrictions had pervasive impacts on everyday life, as reported in scholarship on garment workers (Lawreniuk 2020), microfinance borrowers (Brickell et al. 2020), and tourism operators (Do et al. 2021; Foo et al. 2020), for example. Second, as we conclude the writing of this chapter in June 2021, the identification of new clusters and the spread of more transmissible variants of the virus – partly attributable to recent festivals and the entry of infected foreigners – has been

straining healthcare resources and causing worry in scantily vaccinated areas of continental Southeast Asia that had hitherto been able to avoid being host to major outbreaks (*The Economist* 2021a) (see Figures 1.1 and 1.2).

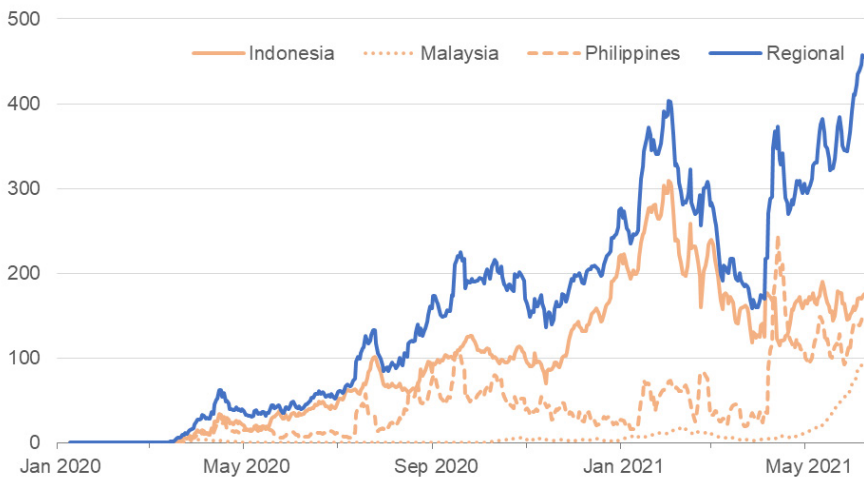
According to the COVID Performance Index maintained by the Lowy Institute (2021), an Australian think tank that assessed the performance

Figure 1.1. New COVID-19 cases, seven-day moving average



Source: World Health Organization.

Figure 1.2. New COVID-19 deaths, seven-day moving average



Source: World Health Organization.

of 116 countries in managing the pandemic, several Southeast Asian countries ranked highly as of 13 March 2021, including Thailand (4th), Singapore (14th), Malaysia (17th), and Myanmar (24th). While some observers have doubted the reliability of such data, it is notable that even the worst-hit parts of Southeast Asia performed relatively better than many advanced Western countries. For example, as of 8 June 2021, the UK had recorded 1,915 COVID-19 deaths per million people. While similar rates were reported in other European countries – such as France, Italy, and Spain – Indonesia and the Philippines, as the two countries in Southeast Asia with the highest number of cases, had respectively recorded only 194 and 205 COVID-19 deaths per million (see Table 1.1). Reasons for this success might include ASEAN-led regional health governance (Caballero-Anthony 2021; see also Davies 2019), a widespread mask-wearing culture (Ratcliffe 2020), early domestic and international travel restrictions (Elegant 2020), or a mixture of all of these factors (Meagher 2020).

Furthermore, although the region's share of global COVID-19-related deaths was low, differences between Southeast Asian countries

Table 1.1. Cumulative COVID-19 cases and deaths per million people across Southeast Asian countries, up to 8 June 2021

Country	Population in millions (2019)	Cumulative cases per million	Cumulative deaths per million
Philippines	107.29	11,893	204.8
Indonesia	266.91	6,980	194.1
SE Asia region	651.88	6,449	125.99
Malaysia	32.58	19,093	106.2
Myanmar	54.34	2,658	59.4
Thailand	66.37	2,750	19.5
Cambodia	15.29	2,278	17.4
Timor-Leste	1.28	6,138	14.1
Singapore	4.03	15,451	8.2
Brunei Darussalam	0.46	531	6.5
Vietnam	96.21	94	0.6
Laos	7.12	276.	0.4

Sources: World Health Organization (cumulative cases and deaths); United Nations Statistical Division (populations).

cannot be overlooked, as they reflect diverse socio-economic and political conditions within the region. As mentioned above, several Southeast Asian countries like Singapore and Thailand were able to control their COVID-19 outbreaks with sound public health systems, massive test-and-trace regimes, swift government responses, and society-wide engagement. In hard-hit nations such as the Philippines and Indonesia, the situations were more concerning. We saw the rise of authoritarian governance including clamping down on free speech and declaring martial law (Russell 2020). Philippine president Rodrigo Duterte infamously threatened lockdown violators that he would ‘shoot them dead’ and ‘bury’ them, while informal residents already living in vulnerable conditions were pushed into more difficult economic situations (Gutierrez 2020; *Reuters* 2020). In Indonesia, President Joko Widodo introduced a Sukarno-like martial law that included repressive measures towards the media to tighten domestic control and surveillance (Kuddus 2020). At the same time, in the country, drinking traditional *jamu* was promoted by the president to build immunity against COVID-19 (Kuddus 2020). In fact, these poor pandemic responses could be said to have resulted from the states being too weak to effectively mobilise society to tackle the spread of the virus, and not because they downplayed the risk (Pepinsky 2021). In this regard, as Greer et al. (2020) have argued, politics and policies are highly related to the effectiveness of COVID-19 responses.

A pandemic may also operate as an ‘X-ray’ image that reveals long-lasting societal fractures (McCann 2020). For example, the COVID-19 outbreak among migrant workers in large dormitories in Singapore exposed the inherent problems of its selective migration regime (Lin and Yeoh 2020). While more than one million low-skilled migrant workers served as the ‘hidden’ backbone of the Singaporean economy by providing cheap labour to four million Singaporeans (Li 2020), their well-being was largely overlooked by the Singaporean government. In Thailand, more than one million undocumented migrant workers from Cambodia and Myanmar were excluded from state legal protection while struggling to return to their home countries due to mobility restrictions (*Radio Free Asia* 2020). Refugees in the region were also excluded from social protection provided by the state, having been mistreated or stigmatised (Human Rights Watch 2021a; Thiri Shwesin Aung, Fischer, and Wang 2021).

It is also important to note that COVID-19 will be remembered as a moment of not only public health crisis but also political crisis.

As mentioned earlier, Myanmar was considered a country that had successfully tackled the outbreak, but a coup in February 2021 raised major political as well as health concerns in the region. In Myanmar, health-care workers and civil servants led a civil disobedience campaign to fight against the return to military dictatorship. Frontline health workers' decision to risk their lives and boycott work reflected the political urgency amid a worsening pandemic situation (BMJ Opinion 2021). Thailand and Cambodia also experienced human rights crises in 2020: students, media, opposition parties, and human rights defenders were attacked and suppressed by states that aimed to silence critical voices (Human Rights Watch 2021a; Human Rights Watch 2021b). Global action to respond to emerging threats to democracy in the region remained largely insignificant. ASEAN's efforts to restore democracy in Myanmar were meagre despite convening several meetings (*Al Jazeera* 2021). Such circumstances raised concerns about the peaceful and equitable future of the region.

No one is safe until everyone is safe. This adage succinctly captures the challenges faced by Southeast Asia and the world. The extent of direct and indirect impacts of the pandemic on the region has varied, but the ever-changing pandemic situation suggested that globally coordinated responses to COVID-19 were necessary to overcome its multi-faceted challenges. In June 2021, Malaysia struggled to stop a sharp rise in COVID-19 cases and again imposed a two-week lockdown to stop the virus. There were also new surges of COVID-19 cases in Vietnam and Singapore. Vaccination was considered a key solution to tackle the virus, but the progress of vaccination campaigns varied across the region. As of 14 June 2021, Singapore was leading (80.19 doses per 100 people), followed by Cambodia (33.12), while in Vietnam less than two doses (1.60) had been administered per 100 people (Our World in Data 2021). Along with supply issues, distrust in military governments is one of the key reasons for low vaccination rates in the region (Thompson 2021).

While the mainstream media and government announcements focused on official programmes to address the pandemic, it would be erroneous to disregard bottom-up initiatives that built upon the strengths of local communities and civil societies. Community-based responses to the pandemic produced the possibility for more progressive changes in the region. For example, both Padawangi (Chapter 18) and Perkasa (Chapter 20) in this volume highlight community efforts to slow down the spread of the virus. On the other hand, in Vietnam, it was expected

that the country's high public trust, building upon the transparency of COVID-19 information, could increase expectations and demands for further positive political changes (Truong 2020). In this regard, COVID-19 allowed us to imagine an alternative system driven by empowered people and communities. In the following section, we will look into what we can learn from the pandemic, laying out the key perspectives that guided our project.

Learning from the pandemic: our perspectives

As indicated above, this volume commences from Arundhati Roy's (2020) proposition that COVID-19 opened a 'portal' through which circumstances are brought more clearly into view and through which we might collectively venture in the imagination of future possibilities. Like the pandemic itself, this approach is not without precedent. In geography and urban studies, for instance, Ali and Keil (2006) surveyed the 2002–2004 SARS outbreak and concluded that, while the greater, faster, and more spatially complex connectivity of the global city network should be recognised as posing new risks for the transmission of emerging infectious diseases and new challenges for their containment, an inverse perspective was also worthy of better recognition, namely that the study of infectious disease might serve as a fruitful 'new entry point for the already lively debate on connectedness in the global city universe' (Ali and Keil 2006, p.493). There are two general and equally valid interpretations of what this 'entry point' – or 'portal' for Roy (2020) – represents. The first is in accordance with the principles of political ecology as a mode of geographical critique. As Ali and Keil have extended to COVID-19 in collaboration with one of this volume's contributors (Connolly, Keil, and Ali 2020), it is the literal sense in which infectious disease wedges open a view onto the ecological pressures that are attendant on socio-spatial change and its entanglement with natural and social processes and systems. The second is a broader interpretation, which commences from the position that *all* modes and domains of critique have had some, and often many, of their points of reference changed, with implications as well as possibilities for intellectual work that are impossible to ignore. Taking inspiration from Chen's *Asia as Method* (2010), it could be proposed that the coronavirus pandemic, as an imagined anchoring point for scholars in a host of contexts, locations, and disciplines, like the ambiguous 'Asia' Chen has in mind, can be strategically mobilised to generate 'alternative horizons

and perspectives' (Chen 2010, p.212) that gain in political and integrative potential precisely by virtue of their emotional force.

Using this latter interpretation, which features implicitly in every contribution to this volume, we catalogued hundreds of English-language publications in the fields of development, human geography, planning, and urban studies for which to date (March 2021) COVID-19 had served as a 'portal', 'entry point', or 'method'. Nearly all of them had been written by scholars who claimed no expertise in infectious disease. Instead, many of them adopted the pandemic and its consequences, including the suspension of most primary research activities, as an appropriate juncture for the critical re-evaluation of each scholar's research area or sub-field. Such re-evaluation has been especially energetic in the geography of tourism, for example. In the three most highly cited papers, according to Google Scholar, of any of the publications we have catalogued thus far, Gössling, Scott, and Hall (2020), Hall, Scott, and Gössling (2020), and Higgins-Desbiolles (2020) have argued that COVID-19 exposed the critical flaws in global tourism's fundamental growth model, including its exposure to risk and its lack of resilience as well as its implication in the climate crisis. They have further highlighted associated problems such as deforestation, industrialised food production, and neo-liberal injustices such as labour exploitation and tax avoidance.

Ulrich Beck's *Risk Society* (1992, p.9), and his ambition to 'move the future which is just beginning to take shape into view against the still predominant past', affords a useful initial basis for summing up what it is that holds this outburst of scholarship together and what original critical undertaking it might collectively advance. Beck's compelling and well-known thesis, originally written in German in 1986, is that the late-capitalist logic of the production and distribution of *risks* has now become dominant over – and therefore in some sense a determinant of – the high-capitalist logic of the production and distribution of *wealth*. Those risks encompass the multitude of hazardous externalities that occur because of the expansion of techno-economic production, of which the accelerated transmission of emerging infectious diseases is a good example (Connolly, Keil, and Ali 2020), and that must consequently be identified and avoided, contained, or distributed.

Overall, the potential application of this lens to COVID-19 scholarship involves two essential perspectives. First, given their invisibility and uncertainty, risks acquire their social existence only through the knowledge that is available about them and thus are dependent on social

construction: northern political and economic concerns related to emerging infectious diseases are a ready example (see King 2002). This is one of the essential premises of geographers' recent critical interventions into global health and 'the differentiated manner in which particular problems, populations, and spaces are rendered visible and amenable to intervention' therein (Brown, Craddock, and Ingram 2012, p.1183). Scholarship in this vein served a vital purpose in the year before this volume's publication by challenging the rationalities and causal interpretations, as well as their implicit social expectations and value judgements, through which the pandemic was understood and addressed in various contexts. In the responses of some governments to COVID-19, for example, an immoderate dependence on sophisticated analytics variously caused the neglect of other forms of public health knowledge, such as field experience; the neglect of the societal implications of containment measures, including worsening domestic violence and mental health (Dodds et al. 2020); and the neglect of the nuances of spatially uneven and unjust outcomes that are not easily conveyed in summary statistics or graphical forms (Everts 2020). In other instances, scholars have focused their criticism on the intensification of a medicalised surveillance capitalism, in which the modelling and monitoring of COVID-19 have been guided principally by profit motives rather than practical feasibility or a regard for data privacy and security. The trade-off between public health and civil liberties that was constructed in debates about digital pandemic containment technologies was an especially contentious aspect of this issue (Kitchin 2020) that is echoed in several of the contributions to this volume (see Chapters 4 and 5 in particular).

Second, risks are unevenly distributed in ways that might amplify existing inequalities or complicate them, as evident at all scales from the interpersonal to the global. In often-predictable ways, many of the risks and consequences of industrial *over*-production are displaced, by a combination of design and circumstance, onto the same disadvantaged groups for whom material scarcity remains a real predicament, such as the residents of Jakarta's informal settlements, who are among the people in the region most vulnerable to the risks of environmental pollution, flooding, and land subsidence (Firman et al. 2011). These groups, furthermore, are more likely to lack the information and resources needed to recognise and avoid the risks to which they are exposed. As Harvey (2020) argued early in the pandemic, the familiar refrain that 'we are all in this together' was no more than a rhetorical

cloak over outcomes that were highly differentiated by class, gender, race, ethnicity, and other intersecting factors of oppression, largely originating in the dual burdens of exposure to the virus and to job losses that were disproportionately borne by the ‘new working class’ of the tertiary sector. This was as true of the millions of ‘impoverished, hungry, thirsty’ migrant workers that Roy (2020) observed trekking out of India’s megacities in late March 2020 as it was for the most vulnerable communities of Chicago and New York (Maroko, Nash, and Pavilonis 2020).

Thus, there is also a two-part answer to the question of the pandemic’s political meaning – the question of ‘a portal to what?’ There is, first, the part that seizes the opportunity to construct an objective community of global risk, potentially in the utopian terms of an imminent collectivity, facilitated by a ‘great awakening’ (Gills 2020) to new intersectional equivalences based on the degree and urgency of endangerment. Among the possibilities that social scientists have raised is that COVID-19 might serve as catalyst for a new global development paradigm (Oldekop et al. 2020), a sustainability transition (Cohen 2020; Goffman 2020; Wells et al. 2020), or more caring and inclusive approaches in urban planning and design (Forester 2020; Jon 2020; Pineda and Corburn 2020). The second part of the answer steps back from the commonality of positive social change – for, indeed, commonality might be precisely the grounds upon which responsibility is deferred – to ask whence risk’s most charged political subjects are to come. This part of the answer, referring again to Beck, is that it might be the anxious solidarities of *negative* social change that prove more animating in the current era: negative in the sense that their foremost concern is not with need or want but with the demand to be *spared* from exposure to the manifold potential dangers we have collectively produced. In other words, it may be enough to say – as the ambiguous phrase ‘post-pandemic’ implicitly does – that what we are searching for in the present is a portal simply to ‘something other than this’.

Learning from Southeast Asia

The way we have situated this study in Southeast Asia reveals the influence of our disciplinary grounding in urban geography, where, among the scholarly fields represented in this volume, there has been an especially sustained and impactful application of postcolonial critiques of knowledge and difference to theoretical debates. Among the most

influential texts is Robinson's *Ordinary Cities* (2006), which makes a forceful argument against widely evinced practices in canonical urban studies through which only certain cities have become launching sites for novel theoretical propositions, and categorical divisions and hierarchies imposed on cities and world regions have amounted to incommensurability for the purposes of learning and understanding them. Robinson enjoined urban geographers to think in terms of 'a world of ordinary cities' (Robinson 2006, p.1) or a world in which conceptual innovations or insights can arise from any urban situation or process (see also Robinson 2016). Her intervention has helped to motivate geography and its adjacent disciplines to engage more systematically with the intellectual legacy of subaltern studies, with its methodological tools for resisting constrictive and hegemonic conceptions of political action, and especially with the injunction of Chakrabarty (2000) to 'provincialize' European thought by instating difference as an analytic through which academic knowledge is consciously produced. Accordingly, a recent bibliometric assessment of the cities that are now 'on and off the map' of urban globalisation research recommends cautious optimism about an evident but incomplete decentring of Euro-American cities, with select East Asian cities especially gaining representation, including Tokyo, Shanghai, and Beijing (Kanai, Grant, and Jianu 2018; see also Shin 2021 and Song and Hae 2019).

This volume, accordingly, is intended to make a modest effort to expand and enrich the representation of Southeast Asian experiences in English-language scholarship, a task we have set out to undertake by consciously mobilising regional contributors from the perspective of decolonisation and decentring knowledge production (see Chapter 26 in this volume). Our quick assessment of the first 834 English-language publications responding to COVID-19 in development, human geography, planning, and urban studies that we had collected as of March 2021 found that only 3.4% of them thoroughly described or analysed experiences of the pandemic in Southeast Asia – a figure that suggests the region has been afforded only two-fifths of the representation it is due based on its share of the world's population. What we cannot yet offer, however, is a rigorous analysis of the extent to which that 3.4% of publications resists the prevalent tendency to elide or assimilate southern social phenomena into dominant narratives originating in, or more attentive to, cities and regions of the global North. The urban theorist Ananya Roy (2009; 2011b) has been especially observant of the problem that it is insufficient to redouble efforts to compile empirical

research on the subaltern urbanisms of the global South or to refashion them as desirably ‘vibrant and entrepreneurial’ (Roy 2011b, p.226). Rather, theoretical propositions about cities in the global South must be ‘appropriated, borrowed, and remapped’ (Roy 2009, p.820), or made to travel in all manner of ways to stimulate new insights and provocations beyond their places of origin if theory generated in the global North is to yield up its exclusive authoritative force. Consequently, urban geographers have developed an influential and highly innovative body of work focused on epistemologies and methodologies of comparative research, often encompassing cities occupying markedly different positions in relation to global economic and social flows (see Lees, Shin, and López-Morales 2016; McFarlane 2010; Robinson 2011).

Among Roy’s enduring contributions to this literature is her argument for the strategic grounding of knowledge production in world regions and a reformulated ‘area studies’, albeit attentive to ‘the spatiality of flow, juxtaposition, porosity, and relational connectivity’ through which cities and regions are made (Amin 2004, p.34; see also Roy 2009). In taking ‘Asia’ as her consciously ambiguous focus, Roy’s aim is not to adopt it as a territorial container for a multitude of urban meanings but rather to demonstrate how its circulating models, its inter-referenced plans and policies, and its aspirations to globality or futurity are in fact constitutive of the same geographical space for which they stand (see also Ong 2011); they affect a ‘making and unmaking of the referent’ that is ‘Asia’ (Roy 2011a, p.309). In so doing, these experiments and claims practise a form of self-recognition that is not a conferral of visibility onto a subaltern Other in and through which colonial difference is reinscribed, but instead achieve a centring, or ‘worlding’, of themselves that resists being subtended by implicitly Euro-American categories, concepts, or habits of thought (see Chakrabarty 2000). Chua (2011) and Pow (2014), for example, have interrogated Singapore’s self-scripting of its own success and the attendant partial borrowings of its lessons, or a Singapore ‘model’, in a wide range of urban contexts – an essential precursor, perhaps, for the influence of Singapore’s technology-focused pandemic response in places as distant as the Czech Republic (Kouřil and Ferenčuhová 2020). Park, Shin, and Kang (2020) have evinced a similar process of self-referencing in the case of South Korea’s promulgation of its developmental model.

As Bunnell (2013) has observed, the beneficial implications of this perspective for Southeast Asian area studies and for a lessened reliance on methodological nationalism therein have been acknowledged

far less among area studies scholars than have the corresponding implications for urban research. Rather, regional analyses of Southeast Asia depend predominantly on the a priori framings of either global economic macro-regions, in the view of which Southeast Asia typically occupies a supplementary position in relation to the Asia-Pacific, or of sub-regional economic areas, such as the Indonesia–Malaysia–Singapore growth triangle. While greater attention to Southeast Asia’s intraregional, transnational urbanisms is broadly warranted by this situation, in Bunnell’s view, the approach to intra-Asian urban aspirations developed in Roy and Ong’s 2011 edited volume *Worlding Cities*, as well as in Bunnell’s own editorial work (Bunnell et al. 2012), is distinctly capable of allowing mappings of regions-in-information to cohere through existing linkages and relations as they are observed, whether movements of financial capital or the everyday dreams of disadvantaged urban residents. The point is not that a relational urban geography should necessarily displace differently scaled geographical analyses but that the methodological innovations of postcolonial urban studies – including sensitivities to forms in emergence, to the mutability of geographical constructions, and to the possibility of alternative topological mappings – have much to offer beyond the study of cities for which they were devised. Concurrently, we are also mindful of the danger of postcolonial perspectives ‘falling into the epistemological pitfall of liberal pluralistic thinking’ and of how such approaches may ‘potentially neutralise or bypass historical violence and structural hierarchies’ (Hae and Song 2019, p.11; see also Shin 2021, pp.65–67). To this extent, we are reminded of Roy’s (2016, p.207) avowal that refers to how postcolonial approaches would help her ‘undertake a political economy attentive to historical difference as a fundamental and constitutive force in the making of global urbanization’. Thus, while each of the chapters in this volume takes a starting point that falls within Southeast Asia as conventionally understood, more important in our view is that each conveys a regional formation-in-the-making that claims a positioning within this world in its own way.

That does not mean that this volume attempts to reach any conclusions as to what the enduring rearrangements instigated by COVID-19 in Southeast Asia are likely to be. Certainly, over the course of the pandemic, the imaginative force of a perpetually emergent and technologically sophisticated ‘New Asia’ (Chang 2005), comprising a selection of East and Southeast Asian megacities, has held force in commentaries on the successful management of outbreaks in China, Singapore, and

South Korea. Exemplary is the economist Yasheng Huang's analysis in the *Harvard Business Review* of the synergistic blend of collectivist mindsets, advanced digital infrastructures, and compliant adoption of contact-tracing technologies to which he ascribes those countries' shared success (Huang, Sun, and Sui 2020). As Ong (2008; 2016) has documented, Singapore's well-nurtured bioscientific capabilities have been among the principal beneficiaries of its competitive ambitions, as well as of its post-SARS sensitivity to epidemiological risk, and these capabilities have in turn been an overlooked impetus to Asia's incessant remaking, now 'as a genomic, epidemiological, and environmental continuity' (2016, p.xiv). Ong also observes, however, how less well-resourced states such as Indonesia have cautiously negotiated to preserve a measure of 'bio-sovereignty' amid capitalistic and cross-regional initiatives for global health.

Taken as a whole, it is through a lens that takes Southeast Asia's cities as 'milieus of intervention', or as launching points for 'a plethora of situated experiments', as posited by Ong (2011, p.2), that this volume best stands to bring a post-pandemic world into view. The workings of this analytic depend, in ethos and orientation if not in an explicitly conceptual sense (see Anderson and McFarlane 2011), on the foregrounding of various situated articulations of knowledges and practices, or 'global assemblages' (Collier and Ong 2005), through which the broader shifts instigated or illuminated by the pandemic can be productively grasped. Consequently, Ong (2011) has argued, canonical theories of the political economy of globalisation or of subaltern postcoloniality are liable to be made untenable in their hegemonic forms, for what is demonstrated is that neither singular causalities nor privileged social categories alone suffice to explain the multitude of situated outcomes and experiences that are engendered by such overarching phenomena as COVID-19. Our contributors' conclusions must perforce be open-ended; the concepts and methods they use and the challenges and initiatives they describe neither hold consistent from one chapter to the next nor collectively exhaust the most salient themes for social research arising from COVID-19 in this part of the world. Each chapter, however, initiates an intellectual engagement with a world amid crisis, and, while theoretical intervention is constrained by each chapter's brevity as well as the risk of being premature, the circumstances under which this book was produced have the benefit of bringing many of its contributors' personal and political entanglements to the fore, while giving voice to authors from the region, many of

whom are early career researchers under-represented in mainstream English publications.

Learning from COVID-19 in the region

COVID-19 presented huge challenges to governments, businesses, civil societies, and people from all levels of society, but its impact was highly variegated, affecting society in multiple negative ways, with uneven geographical and socio-economic patterns. The collaborative scholarly initiative in which this volume originated began with our recognition that, despite the profound implications COVID-19 posed for Southeast Asia, critical perspectives on and from the region were under-represented in many academic forums, apart from a small number of regionally specific initiatives. With this in mind, we solicited contributions from a diverse selection of social scientists that contemplate the lessons COVID-19 might hold for a ‘post-pandemic world’ in and beyond Southeast Asia. Within these contributions, we have identified three major themes, which serve as the titles for the three parts of this book: (1) Urbanisation, digital infrastructures, economies, and the environment; (2) Migrants, (im)mobilities, and borders; and (3) Collective action, communities, and mutual action.

Urbanisation, infrastructure, economies, and the environment

Arundhati Roy’s (2020) notion of the pandemic as a ‘portal’ is among the most arresting of a considerable number of arguments for viewing COVID-19 as a catalytic crisis that has modified or accelerated processes of social change that were already considered urgent matters in the social sciences. For instance, Cohen (2020) has observed that the pandemic’s destabilisation of global financial markets, disruption of international supply chains and tourism, and prompt to reconsider patterns of work forced our thinking about prosperity and sustainability to advance abruptly in a direction broadly like the one in which governments, multilateral organisations, and research institutions had moving with respect to sustainable consumption for 30 years. Oldekop et al. (2020) have argued that the pandemic substantiates the case for a more global, rather than international, development paradigm that equally implicates countries of the global North and South in the shared challenges of the climate crisis and patterns of deprivation and inequality. Harvey (2020) has argued that the pandemic underscores the problems

of the existing global model of capital accumulation, which was already troubled by protest movements and other challenges to its legitimacy as well as mounting signs of poor economic health, such as the excessive creation of debt.

It is now the task of the social sciences to ground these and other interlinked arguments for the pandemic's significance in the empirical specificities of an array of contexts, not least because in many cases one finds that the strained political systems of severely affected countries may have constrained both the durability and progressiveness of adaptive responses. In Part I of this volume, contributors do this with respect to several salient dimensions of social change, namely urbanisation, digital infrastructures, economies, and the environment. First, from a regional perspective, Connolly (Chapter 2) discusses how our urban economies became prone to infectious disease, as the rise of globalisation not only made cities interconnected but also facilitated the emergence of peri-urban and regional connections that created greater challenges in terms of containing epidemic outbreaks. Rapid urbanisation seen in regions such as Southeast Asia has not been accompanied by an adequate provision of infrastructure such as clean water supplies and housing appropriate for tackling the proliferation of infectious disease. To address these problems, Connolly calls for the incorporation of socio-ecological justice for our urban economies to achieve more socially inclusive and environmentally sustainable future development.

Chapters 3, 4, and 5 address digital technology and the economy. By taking Malaysia and Cambodia as their main case studies, the authors attend to the impacts of the pandemic on digital infrastructure. The use of digital technology for tackling the pandemic (e.g. app-based contact tracing) was a major area of innovation for pandemic-affected countries across the world. While the pandemic contributed to the deepening of digitalisation of social services including health and education, Gong, Shaharudin, and Tumin (Chapter 3) shed light on the ways in which such digitalisation may not create equitable opportunities for people, even though governments and businesses would encourage digital technologies to enhance the resilience of their labour force to the pandemic. For Yatid and Said (Chapter 4), the rapid adoption of digital technologies to control the spread of infectious disease raised concerns for data governance, especially with regard to ensuring data privacy and security. Young (Chapter 5) raises an important aspect of digital platforms as a double-edged sword based on his study of digital platforms and online communities in Cambodia. Digital platforms have

been a key arena for communities to connect with each other; however, it is also important to be aware that digital platforms can be an invisible means of state surveillance.

Chapters 6, 7, and 8 examine the impact of the pandemic on select industries, namely real estate, business process outsourcing, and garment manufacturing. Here, we glimpse how the global pandemic affected the global production network and value production. Ng (Chapter 6) examines how cross-border investment practices in real estate markets responded to the COVID-19 pandemic. Focusing on Malaysia's 'My Second Home Programme', which encouraged off-shore property investment, the chapter exposes the fragile conditions of domestic property markets that depended heavily on the mobility of international investors when such mobility was constrained by movement restrictions. He thus calls for state action to curb the industrial practices of building housing for profit, which exacerbates affordability problems for local populations.

In Chapter 7, on the business process outsourcing (BPO) industry in the Philippines, Thompson reveals the exploitative relationship between the global North and the global South, which drove BPO workers to face greater risks during the pandemic to support the lives of consumers in the global North. In Chapter 8, Brickell, Chhom, Lawreniuk, and So critically reflect upon the economic impact of the COVID-19 pandemic on garment workers who were trapped in what the authors conceptualise as 'global precarity chains'. In line with the arguments made by Thompson, Brickell et al. also shed light on the ways in which garment workers in Cambodia faced harsher life conditions, which were initially generated by the precarious position of the country's garment industry in global value chains but were further exacerbated by the pandemic pushing workers into greater indebtedness.

Chapter 9 turns to labour relations, taking the example of labour activism and campaigning in Vietnam. Here, Buckley examines the structure of labour relations in Vietnam's socialist market economy and discusses how the national campaign by the state-led labour organisation co-existed with self-organised labour activism at the grass-roots level. For Buckley, this dual structure was effective in advancing demands for safer workplaces as well as broader reformist changes to promote fair wages and welfare benefits amid pandemic-generated economic hardship. While exposing limitations, this dual structure was deemed effective in terms of preventing acute impacts of pandemic on many Vietnamese workers.

Finally, Chapter 10 steps back to reflect on the relationship between Southeast Asian economies and socio-environmental conditions and how this relationship was reshaped by the pandemic. Here, taking the example of haze in Indonesia and Malaysia, Smith and Varkkey draw attention to the possibility of how haze-generated air pollution and the spread of infectious disease might have reinforced each other during the pandemic.

Migrants, (im)mobilities, and borders

The widespread imposition of restrictions on movement during COVID-19, including border closures, lockdowns, social distancing measures, and travel restrictions, signalled a profound resurgence of geographical closure, political disintegration, and territoriality that augured a very different post-pandemic world (Dodds et al. 2020; Radi, Pinos, and Ptak 2021; Ren 2020). Observers anxiously raised the prospect of various government responses and political debates reinforcing aspects of exclusionary nationalism and its linkages with authoritarianism, prejudice, and the politics of fear; however, it has also remained possible that the pandemic will prove to be an impetus for greater cooperation and cross-national solidarity (Bieber 2020). As a critical node in the control of transnational mobility, Singapore has already been centred within these debates and used to demonstrate that pandemic containment measures have tended to sustain existing regimes and the pathologisation of select mobilities, especially that of migrant workers (Lin and Yeoh 2020). These areas of inquiry are worked through and addressed from several places within Southeast Asia in the second part of this volume.

The salience of pre-existing structures of inequality impacting on migrant workers is well-demonstrated by Chapters 11 and 12, both of which take Singapore as their scene of analysis. In Chapter 11, Jamieson presents a critical and theoretically informed consideration of the preconditions for the uncontained outbreaks that afflicted migrant worker dormitories. His argument is that this exposure was enabled by the construction of the migrant worker as a pathological subject in the context of the ‘logistical violence’ of the global supply chains (Cowen 2014) within which the city-state had positioned itself as a global node. The model of ‘logistical citizenship’ that this entailed, for Singapore, in effect sequestered migrant labour from state or societal responsibility by way of formal and informal policy mechanisms, the

nested hierarchies of agents and contracts, and the spatial logic of the dormitory – with enduring and exploitative consequences that must not be allowed to slip behind the premise of quarantine as a temporary measure. In Chapter 12, Antona reports on the experiences of live-in domestic workers, whose mobility was acutely circumscribed, especially during Singapore’s ‘circuit-breaker’ containment measures. Describing domestic workers’ confinement in the homes of their employers, where they were subjected to increased surveillance and control and tasked with greater responsibilities, and their reluctance to travel outside the city-state when their right to return became much less certain, Antona’s most rousing finding is how few of her interlocutors regarded this as a meaningful change from ordinary circumstances, or as less of a ‘new normal’ and more of the ‘same old’.

A similar critique of pre-existing inequalities is evident in Chapters 13 and 14, both of which address the plight of overseas Filipino workers (OFWs), ordinarily characterised as the Philippines’ ‘modern-day heroes’ for the hardships they endure, and for the substantial benefits remittances provide to OFWs’ households as well as the national economy. In Chapter 13, Fernandez, Muyot, Pangilinan, and Quijano focus on the experiences of the over 600,000 OFWs whom the pandemic had forced to repatriate as of April 2021. The difficulties they faced upon return – including, *inter alia*, lengthy and inconvenient journeys from Metro Manila to their home provinces, limited access to financial assistance or protection against exposure to COVID-19, and the necessity of compensatory adjustments to household expenses, including the withdrawal of children from education – illuminated their underlying disadvantages, precarity, and stigmatisation. So too did these difficulties illuminate shortcomings of governance, including underinvestment in community infrastructure and human capital, deferrals of responsibility to impoverished provincial and local governments, dilatory adaptation or policy responses, and insensitivity or misguidance in policy choices.

In Chapter 14, Humi presents a complementary analysis of the difficulties faced by OFWs who remained employed in frontline health-care roles in the UK, where they constituted the nationality dying from COVID-19 in the greatest numbers among National Health Service (NHS) staff. She observes that the ‘heroes’ narrative is echoed in the affinity that Britons hold for NHS workers, the insufficiency of which was demonstrated by gestures such as weekly performances of ‘clapping for carers’ while pay increases, adequate personal protective equipment, and secure immigration statuses were not forthcoming. Humi uses

these circumstances to forcefully situate the control and exploitation of Filipino and other migrant labour with respect to colonial legacies, the disruptive interventions of international organisations, and the deleterious fragmentation of such imagined communities as the ‘Filipino global nation’.

In Chapter 15, Tan and Romadan take a more policy-oriented approach to examining the societal consequences of the redoubled vulnerability of Malaysia’s migrant workers during the pandemic. While poor living standards amplified migrants’ viral exposure and rates of transmission, the inadequacy of governmental support for their employers worsened migrants’ precarity of employment and attendant residential status. Tan and Romadan’s point is that the argument for more effective government intervention in these circumstances is not only moral; there is also a compelling economic argument that encompasses (1) externalities such as the healthcare burden of the virus’s poorly mitigated circulation; (2) the qualities of migrant workers that make them difficult to replace (i.e. their willingness to take lower-skilled and unappealing jobs); and (3) the dangerous assumptions (a) that the costly modernisation of production technologies can be achieved simply by impeding industries from utilising low-cost, labour-intensive strategies, and (b) that it is lower-skilled roles, typically filled by migrants, that technology is most likely to displace.

In Chapter 16, Koh discusses the significance of borders and bordering practices as technologies of selective inclusion and exclusion, which were strengthened by the pandemic as well as augmented by such tactics as travel bubbles and ‘green’ or ‘fast’ lanes. Her argument is that what we witnessed is not only the illumination of the enduring logics of injustice that inform existing borders and bordering tactics but also their greater entwinement with health security in ways that will reshape the unequal privileges of mobility and which therefore bear considerable and potentially lasting ethical and political significance. Of critical importance here, as in many contributions to this volume, are the underlying inequalities that impact individuals’ health status and exposure to the virus, which are easily occluded by the legitimacy of public health considerations and the objectivity of testing for the virus or antibodies.

Koh’s observations are complemented by Chapter 17, in which Wardani and Maw Thoe Myar share an anthropological perspective on the Myanmar–China border area from Muse, a small town in Myanmar’s northern Shan State. Visiting the border crossing in July

2020, the authors detail the diverse mix of actors contending with unexpected macro-level changes in policy and trade and the uncertainty of the pandemic's course through various improvised means. Truck drivers camped within their stranded vehicles, found support in nearby communities, and haggled to offload perishable agricultural goods to local traders. Hawkers, smugglers, and peddlers worked flexibly between formal and informal economic arrangements.

Collective action, communities, and mutual aid

Given the profound uncertainty brought by disrupted or accelerated processes of social change and the challenges of closure, disintegration, and enforced immobility, the third part of this volume sharpens our collective focus on the pandemic's diverse impacts on everyday life. There we find cause for hope. For, as Springer (2020, p.112) has suggested, one can find evidence of a 'resurgence of reciprocity' in every part of the world, as everyday acts of care and compassion hold communities together despite lockdowns and social distancing. In Part III, on collective action, communities, and mutual aid, eight chapters investigate various bottom-up initiatives in the region to support communities and slow the spread of COVID-19. It is of considerable importance that these analyses of everyday strategies of collective care and resistance adopt an intersectional sensitivity to how the uneven impacts of the outbreak, as well as unequal opportunities to access mutual support, have been conditioned by existing structures of oppression. These chapters allow us to imagine an alternative system driven by empowered communities. In this regard, Chapter 18 by Padawangi provides an overview of various potentials that collective actions can bring against the capitalist mode of production amid the COVID-19 pandemic. To do so, this chapter sees COVID-19 as an opportunity to challenge 'normalcy' by looking into different collective movements in Indonesia from food-sharing in neighbourhoods to online protests and political participation.

Chapters 19 and 20 demonstrate challenges and possibilities for communities to respond to the multiple crises resulting from COVID-19. In Chapter 19, Sangsuradej investigates Myanmar's complex situation resulting from the pandemic and a series of political crises, including the 2021 coup. While the pandemic revealed the deep-rooted political, economic, and ethnic divides of the country, Sangsuradej finds that urban community groups played a key role in preventing the spread of the virus in disadvantaged areas. Similarly, in Chapter 20, Perkasa shows

how community groups mobilised themselves to manage and control the spread of the virus by introducing health protocols in response to government mismanagement in Surabaya, Indonesia. For Perkasa, the idea of community-based mutual help, known in Indonesia as *gotong royong*, was a key element to prevent further adverse effects from COVID-19.

In Chapter 21, Lim demonstrates how COVID-19 was utilised by the Singaporean state to legitimate the state's interventions regarding food security issues. He also points out that, despite the rhetoric of food security, the state insufficiently addressed lived food insecurity issues as more households faced difficulties in accessing sufficient, safe, and nutritious food. In such circumstances, community-led food-sharing initiatives were the pivotal point to support vulnerable groups in many parts of Southeast Asia. Chatinakrob, in Chapter 22, analyses the 'happiness-sharing pantries' campaign in Thailand, a platform allowing community members to donate food for whoever needed it. This is an example of how a local, bottom-up initiative can be a national-level campaign supporting vulnerable groups in society. In the Philippines, a similar initiative also played a key role in aiding vulnerable groups. In Chapter 23, Guazon provides a vivid account of community support for female informal residents despite a draconian lockdown imposed by the state. Guazon also reminds us that researchers need to learn from vulnerable people, who are often only seen as the subject of research.

The remaining chapters also show the role of communities in dealing with various social problems beyond the reach of the state resulting from COVID-19. Chapter 24 by Tengku Nur Qistina examines how civil society and NGOs responded to domestic violence issues in Malaysia that the government did not adequately address. In Chapter 25, Hanung argues that already-marginalised groups in Southeast Asia, namely LGBTIQ people, were more severely affected by COVID-19, but community-led initiatives were crucial to empower the groups and build resilience in terms of economy, well-being, and advocacy. The various community-led initiatives introduced in Part III to tackle COVID-19 pandemic indicate the possibility that community-led initiatives can bring more positive and enduring changes to the region.

References

Al Jazeera. (2021). 'Criticism over Myanmar ASEAN deal with military coup leader', 25 April. <https://perma.cc/459G-6SFN> [Last accessed 19 June 2021].

- Ali, S. Harris; and Keil, Roger. (2006). 'Global cities and the spread of infectious disease: The case of Severe Acute Respiratory Syndrome (SARS) in Toronto, Canada'. *Urban Studies*, vol. 43, issue 3, pp. 491–509. <https://doi.org/10.1080/00420980500452458>
- Amin, Ash. (2004). 'Regions unbound: Towards a new politics of place'. *Geografiska Annaler: Series B, Human Geography*, vol. 86, no. 1, pp. 33–44. <https://doi.org/10.1111/j.0435-3684.2004.00152.x>
- Anderson, Ben; and McFarlane, Colin. (2011). 'Assemblage and geography'. *Area*, vol. 43, no. 2, pp. 124–127. <https://doi.org/10.1111/j.1475-4762.2011.01004.x>
- Barbosa, Eliana Rosa de Queiroz. (2020). 'Academic southernness as affective boldness: A quarantined testimonial'. *Space and Culture*, vol. 23, no. 3, pp. 279–285. <https://doi.org/10.1177/1206331220938630>
- Beck, Ulrich. (1992). *Risk Society: Towards a New Modernity*. UK: SAGE.
- Bhan, Gautam; Caldeira, Teresa; Gillespie, Kelly; and Simone, AbdouMalik. (2020). 'The pandemic, southern urbanisms and collective life'. *Society and Space*, 3 August. <https://perma.cc/8NEV-XEC9> [Last accessed 17 June 2021].
- Bieber, Florian. (2020). 'Global nationalism in times of the COVID-19 pandemic'. *Nationalities Papers*, pp 1–13. <https://doi.org/10.1017/nps.2020.35>
- BMJ Opinion. (2021). 'Myanmar's doctors are risking their lives in the civil disobedience movement', 21 April. <https://perma.cc/R2CY-Q5NJ> [Last accessed 19 June 2021].
- Brickell, Katherine; Picchioni, Fiorella; Natarajan, Nithya; Guermond, Vincent; Parsons, Laurie; Zanello, Giacomo; and Bateman, Milford. (2020). 'Compounding crises of social reproduction: Microfinance, over-indebtedness and the COVID-19 pandemic'. *World Development*, vol. 136, p. 105087. <https://doi.org/10.1016/j.worlddev.2020.105087>
- Brown, Tim; Craddock, Susan; and Ingram, Alan. (2012). 'Critical interventions in global health: Governmentality, risk, and assemblage'. *Annals of the Association of American Geographers*, vol. 102, no. 5, pp. 1182–1189. <https://doi.org/10.1080/00045608.2012.659960>
- Bunnell, Tim. (2013). 'City networks as alternative geographies of Southeast Asia'. *TRaNS: Trans-Regional and -National Studies of Southeast Asia*, vol. 1, no. 1, pp. 27–43. <https://doi.org/10.1017/trn.2012.2>
- Bunnell, Tim; Goh, Daniel P.S.; Lai, Chee-Kien; and Pow, Choon Piew. (2012). 'Introduction: Global urban frontiers? Asian cities in theory, practice and imagination'. *Urban Studies*, vol. 49, no. 13, pp. 2785–2793. <https://doi.org/10.1177/0042098012452454>

- Bunnell, Tim; and Maringanti, Anant. (2010). 'Practising urban and regional research beyond metrocentricity'. *International Journal of Urban and Regional Research*, vol. 34, no. 2, pp. 415–420. <https://doi.org/10.1111/j.1468-2427.2010.00988.x>
- Caballero-Anthony, Mely. (2021). 'COVID-19 in Southeast Asia: Regional pandemic preparedness matters'. *Brookings Institution*, 14 January. <https://perma.cc/C4NK-37UK> [Last accessed 18 June 2021].
- Chakrabarty, Dipesh. (2000). *Provincializing Europe: Postcolonial Thought and Historical Difference*. USA: Princeton University Press.
- Chang, T.C. (2005). 'Place, memory and identity: Imagining "New Asia"'. *Asia Pacific Viewpoint*, vol. 46, no. 3, pp. 247–253. <https://doi.org/10.1111/j.1467-8373.2005.00286.x>
- Chen, Kuan-Hsing. (2010). *Asia as Method: Toward Deimperialization*. USA: Duke University Press.
- Chua, Beng Huat. (2011). 'Singapore as model: planning innovations, knowledge experts', in Ananya Roy and Aihwa Ong (eds) *Worlding Cities: Asian Experiments and the Art of Being Global*. UK: Blackwell, pp. 29–54.
- Cohen, Maurie J. (2020). 'Does the COVID-19 outbreak mark the onset of a sustainable consumption transition?' *Sustainability: Science, Practice and Policy*, vol. 16, no. 1, pp. 1–3. <https://doi.org/10.1080/15487733.2020.1740472>
- Collier, Stephen J.; and Ong, Aihwa. (2005). 'Global assemblages, anthropological problems', in Aihwa Ong and Stephen J. Collier (eds) *Global Assemblages: Technology, Politics, and Ethics as Anthropological Problems*. UK: Blackwell, pp. 3–21.
- Connolly, Creighton; Keil, Roger; and Ali, S. Harris. (2020). 'Extended urbanisation and the spatialities of infectious disease: Demographic change, infrastructure and governance'. *Urban Studies*, vol. 58, no. 2, pp. 245–263. <https://doi.org/10.1177/0042098020910873>
- Cowen, Deborah. (2014). *The Deadly Life of Logistics: Mapping Violence in Global Trade*. USA: University of Minnesota Press.
- Davies, Sara E. (2019). *Containing Contagion: The Politics of Disease Outbreaks in Southeast Asia*. USA: John Hopkins University Press.
- Do, Binh; Nguyen, Ninh; D'Souza, Clare; Bui, Huu Duc; and Nguyen, Thi Nguyen Hong. (2021). 'Strategic responses to COVID-19: The case of tour operators in Vietnam'. *Tourism and Hospitality Research*. <https://doi.org/10.1177/1467358421993902>
- Dodds, Klaus; Broto, Vanesa Castan; Detterbeck, Klaus; Jones, Martin; Mamadouh, Virginie; Ramutsindela, Maano; Varsanyi, Monica; Wachsmuth,

- David; and Woon, Chih Yuan. (2020). 'The COVID-19 pandemic: territorial, political and governance dimensions of the crisis'. *Territory, Politics, Governance*, vol. 8, no. 3, pp. 289–298. <https://doi.org/10.1080/21622671.2020.1771022>
- Doucette, Jamie; and Park, Bae-Gyoon (eds) (2019). *Developmentalist Cities? Interrogating Urban Developmentalism in East Asia*. Netherlands: Brill.
- The Economist*. (2020a). 'Not even Singapore has been able to avoid a lockdown', 11 April. <https://perma.cc/U2DR-G4DQ> [Last accessed 20 June 2021]
- The Economist*. (2020b). 'The pandemic has exposed South-East Asia's poor governance', 24 October. <https://perma.cc/3EHE-BBT2> [Last accessed 20 June 2021]
- The Economist*. (2021a). 'A worrying new wave of COVID-19 is hitting South-East Asia', 15 May. <https://perma.cc/RGF6-6LTQ> [Last accessed 20 June 2021]
- The Economist*. (2021b). 'Singapore's migrant workers have endured interminable lockdowns', 19 June. <https://perma.cc/6YGF-GY3Y> [Last accessed 20 June 2021]
- Elegant, Naomi Xu. (2020). 'These Asian countries have masterfully limited COVID outbreaks. Here's how they did it'. *Fortune*. 28 December. <https://perma.cc/KGM8-RGEN> [Last accessed 18 June 2021].
- Everts, Jonathan. (2020). 'The dashboard pandemic'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 260–264. <https://doi.org/10.1177/2043820620935355>
- Firman, Tommy; Surbakti, Indra M.; Idroes, Ichzar C.; and Simarmata, Hendricus A. (2011). 'Potential climate-change related vulnerabilities in Jakarta: Challenges and current status'. *Habitat International*, vol. 35, no. 2, pp. 372–378. <https://doi.org/10.1016/j.habitatint.2010.11.011>
- Foo, Lee-Peng; Chin, Mui-Yin; Tan, Kim-Leng; and Phuah, Kit-Teng. (2020). 'The impact of COVID-19 on tourism industry in Malaysia'. *Current Issues in Tourism*. <https://doi.org/10.1080/13683500.2020.1777951>
- Forester, John. (2020). 'Kindness, planners' response to vulnerability, and an ethics of care in the time of Covid-19'. *Planning Theory and Practice*, vol. 21, no. 2, pp. 185–188. <https://doi.org/10.1080/14649357.2020.1757886>
- Gills, Barry. (2020). 'Deep restoration: From the Great Implosion to the Great Awakening'. *Globalizations*, vol. 17, no. 4, pp. 577–579. <https://doi.org/10.1080/14747731.2020.1748364>
- Goffman, Ethan. (2020). 'In the wake of COVID-19, is glocalization our sustainability future?' *Sustainability: Science, Practice and Policy*, vol. 16, no. 1, pp. 48–52. <https://doi.org/10.1080/15487733.2020.1765678>

- Goh, Daniel P.S.; and Bunnell, Tim. (2013). 'Recentring Southeast Asian cities'. *International Journal of Urban and Regional Research*, vol. 37, no. 3, pp. 825–833. <https://doi.org/10.1111/j.1468-2427.2013.01208.x>
- Gössling, Stefan; Scott, Daniel; and Hall, C. Michael. (2020). 'Pandemics, tourism and global change: a rapid assessment of COVID-19'. *Journal of Sustainable Tourism*, vol. 29, no. 1, pp. 1–20. <https://doi.org/10.1080/09669582.2020.1758708>
- Greer, Scott L.; King, Elizabeth J.; Massard da Fonseca, Elize; and Peralta-Santos, Andre. (2020). 'The comparative politics of COVID-19: The need to understand government responses'. *Global Public Health*, vol. 15, no. 9, pp. 1413–1416. <https://doi.org/10.1080/17441692.2020.1783340>
- Gutierrez, Jason. (2020). "Will we die hungry?" A teeming Manila slum chafes under lockdown'. *New York Times*, 15 April. <https://perma.cc/GJH4-8BWC> [Last accessed 17 June 2021].
- Hae, Laam; and Song, Jesook. (2019). 'Introduction: Core location, Asia as method, and a relational understanding of places', in Jesook Song and Laam Hae (eds) *On the Margins of Urban South Korea: Core Location as Method and Praxis*. Canada: University of Toronto Press, pp. 3–20.
- Hall, C. Michael; Scott, Daniel; and Gössling, Stefan. (2020). 'Pandemics, transformations and tourism: Be careful what you wish or'. *Tourism Geographies*, vol. 22, no. 3, pp. 577–598. <https://doi.org/10.1080/14616688.2020.1759131>
- Harvey, David. (2020). 'Anti-capitalist politics in the time of COVID-19'. *Jacobin*, 20 March. <https://perma.cc/L5EG-4G4W> [Last accessed 17 June 2021].
- Higgins-Desbiolles, Freya. (2020). 'Socialising tourism for social and ecological justice after COVID-19'. *Tourism Geographies*, vol. 22, no. 3, pp. 610–623. <https://doi.org/10.1080/14616688.2020.1757748>
- Huang, Yasheng; Sun, Meicen; and Sui, Yuze. (2020). 'How digital contact tracing slowed Covid-19 in East Asia'. *Harvard Business Review*, 15 April. <https://perma.cc/XS8S-VHAM> [Last accessed 17 June 2021].
- Human Rights Watch. (2021a). *Thailand: Events of 2020*. <https://perma.cc/4RAB-24T7> [Last accessed 19 June 2021].
- Human Rights Watch. (2021b). *Cambodia: Events of 2020*. <https://perma.cc/D3VY-MJS7> [Last accessed 19 June 2021].
- Jon, Ihnji. (2020). 'A manifesto for planning after the coronavirus: Towards planning of care'. *Planning Theory*, vol. 19, no. 3, pp. 329–345. <https://doi.org/10.1177/1473095220931272>

- Kanai, J. Miguel; Grant, Richard; and Jianu, Radu. (2018). 'Cities on and off the map: A bibliometric assessment of urban globalisation research'. *Urban Studies*, vol. 55, no. 12, pp. 2569–2585. <https://doi.org/10.1177/0042098017720385>
- King, Nicholas B. (2002). 'Security, disease, commerce: Ideologies of postcolonial global health'. *Social Studies of Science*, vol. 32, no. 5–6, pp. 763–789. <https://doi.org/10.1177/030631270203200507>
- Kitchin, Rob. (2020). 'Civil liberties or public health, or civil liberties and public health? Using surveillance technologies to tackle the spread of COVID-19'. *Space and Polity*, vol. 24, no. 3, pp. 362–381. <https://doi.org/10.1080/13562576.2020.1770587>
- Kouřil, Peter; and Ferenčuhová, Slavomíra. (2020). "'Smart" quarantine and "blanket" quarantine: the Czech response to the COVID-19 pandemic'. *Eurasian Geography and Economics*, vol. 61, no. 4–5, pp. 587–597. <https://doi.org/10.1080/15387216.2020.1783338>
- Kuddus, Rohana. (2020). 'Lemongrass and prayer'. *New Left Review*, vol. 122, pp. 35–41. <https://perma.cc/XXA3-RXB2> [Last accessed 23 June 2021].
- Lawreniuk, Sabina. (2020). 'Necrocapitalist networks: COVID-19 and the 'dark side' of economic geography'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 199–202. <https://doi.org/10.1177/2043820620934927>
- Lees, Loretta; Shin, Hyun Bang; and López-Morales, Ernesto. (2016). *Planetary Gentrification*. UK: Polity.
- Li, Audrey Jiajia. (2020). 'Singapore's divisions are deepening'. *Financial Times*, 28 July. <https://perma.cc/N8DF-F3JV> [Last accessed 23 June 2021].
- Lin, Weiqiang and Yeoh, Brenda S.A. (2020). Pathological (im)mobilities: Managing risk in a time of pandemics'. *Mobilities*, vol. 16, no. 1, pp. 96–112. <https://doi.org/10.1080/17450101.2020.1862454>
- Lowy Institute. (2021). *Covid Performance Index: Country Rankings*. <https://perma.cc/3XU9-DV3A> [Last accessed 25 June 2021].
- Mandhana, Niharika; Solomon, Feliz; and Jeong, Eun-Young. (2020). 'How one Singapore sales conference spread coronavirus around the world'. *Wall Street Journal*, 21 February. <https://perma.cc/8DTG-86VX> [Last accessed 18 June 2021].
- Maroko, Andrew R.; Nash, Denis; and Pavilonis, Brian T. (2020). 'COVID-19 and Inequity: a Comparative Spatial Analysis of New York City and Chicago Hot Spots'. *Journal of Urban Health*, vol. 97, no. 4, pp. 461–470.

- McCann, Eugene. (2020). 'Spaces of publicness and the world after the Coronavirus'. *Society and Space*, 1 June. <https://perma.cc/GE7C-8BCS> [Last accessed 18 June 2021].
- McFarlane, Colin. (2010). 'The comparative city: Knowledge, learning, urbanism'. *International Journal of Urban and Regional Research*, vol. 34, no. 4, pp. 725–742. <https://doi.org/10.1111/j.1468-2427.2010.00917.x>
- Meagher, Dominic. (2020). 'What's the secret to Southeast Asia's Covid success stories?' *The Interpreter*, 28 July. <https://perma.cc/LC4K-M4GA> [Last accessed 18 June 2021].
- OECD. (2021). *Economic Outlook for Southeast Asia, China and India 2021: Reallocating Resources for Digitalisation*. OECD Development Centre. <https://doi.org/10.1787/711629f8-en>
- Oldekop, Johan A.; Horner, Rory; Hulme, David; Adhikari, Roshan; Agarwal, Bina; Alford, Matthew; Bakewell, Oliver; Banks, Nicola; et al. (2020). 'COVID-19 and the case for global development'. *World Development*, vol. 134, pp. 1–4. <https://doi.org/10.1016/j.worlddev.2020.105044>
- Ong, Aihwa. (2008). 'Scales of exception: Experiments with knowledge and sheer life in tropical Southeast Asia'. *Singapore Journal of Tropical Geography*, vol. 29, no. 2, pp. 117–129. <https://doi.org/10.1111/j.1467-9493.2008.00323.x>
- Ong, Aihwa. (2011). 'Worlding cities, or the art of being global', in Ananya Roy and Aihwa Ong (eds) *Worlding Cities: Asian Experiments and the Art of Being Global*. UK: Blackwell, pp. 1–26.
- Ong, Aihwa. (2016). *Fungible Life: Experiment in the Asian City of Life*. USA: Duke University Press.
- Our World in Data. (2021). *COVID-19 Vaccine Doses Administered per 100 People*. <https://perma.cc/X7JA-KVDJ> [Last accessed 27 June 2021].
- Park, Sehoon; Shin, Hyun Bang; and Kang, Hyun Soo (eds). (2020). *Exporting Urban Korea? Reconsidering the Korean Urban Development Experience*. UK: Routledge.
- Pepinsky, Thomas. (2021). 'What state-party relations mean for COVID-19 management in Southeast Asia'. *Brookings Institution*, 7 January. <https://perma.cc/TGR5-J55U> [Last accessed 27 June 2021].
- Pineda, Victor Santiago; and Corburn, Jason. (2020). 'Disability, urban health equity, and the coronavirus pandemic: Promoting cities for all'. *Journal of Urban Health*, vol. 97, no. 3, pp. 336–341. <https://doi.org/10.1007/s11524-020-00437-7>
- Pow, Choon Piew. (2014). 'License to travel: Policy assemblage and the "Singapore model"'. *City*, vol. 18, no. 3, pp. 287–306. <https://doi.org/10.1080/13604813.2014.908515>

- Radil, Steven M.; Pinos, Jaume Castan; and Ptak, Thomas. (2021). 'Borders resurgent: Towards a post-Covid-19 global border regime?' *Space and Polity*, vol. 25, no. 1, pp. 132–140. <https://doi.org/10.1080/13562576.2020.1773254>
- Radio Free Asia. (2020). 'Unemployed Southeast Asian migrants in Thailand struggle as COVID-19 shuts down economy', 3 March. <https://perma.cc/9BF4-FHHU> [Last accessed 18 June 2021].
- Ratcliffe, Rebecca. (2020). 'How have Thailand and Cambodia kept Covid cases so low?' *The Guardian*, 16 December. <https://perma.cc/44LB-67YR> [Last accessed 18 June 2021].
- Ren, Xuefei. (2020). 'Pandemic and lockdown: A territorial approach to COVID-19 in China, Italy and the United States'. *Eurasian Geography and Economics*, vol. 62, no. 4–5, pp. 423–434. <https://doi.org/10.1080/15387216.2020.1762103>
- Reuters. (2020). "Shoot them dead" – Philippine leader says won't tolerate lockdown violators', 2 April. <https://perma.cc/9DUJ-B7PP> [Last accessed 18 June 2021].
- Rimmer, Peter J.; and Dick, Howard. (2009). *The City in Southeast Asia: Patterns, Processes and Policy*. Singapore: NUS Press.
- Robinson, Jennifer. (2006). *Ordinary Cities: Between Modernity and Development*. UK: Routledge.
- Robinson, Jennifer. (2011). 'Cities in a world of cities: The comparative gesture'. *International Journal of Urban and Regional Research*, vol. 35, no. 1, pp. 1–23. <https://doi.org/10.1111/j.1468-2427.2010.00982.x>
- Robinson, Jennifer. (2016). 'Thinking cities through elsewhere: Comparative tactics for a more global urban studies'. *Progress in Human Geography*, vol. 40, no. 1, pp. 3–29. <https://doi.org/10.1177/0309132515598025>
- Roy, Ananya. (2009). 'The 21st-century metropolis: New geographies of theory'. *Regional Studies*, vol. 43, no. 6, pp. 819–830. <https://doi.org/10.1080/00343400701809665>
- Roy, Ananya. (2011a). 'Postcolonial urbanism: Speed, hysteria, mass dreams', in Ananya Roy and Aihwa Ong (eds) *Worlding Cities: Asian Experiments and the Art of Being Global*. UK: Blackwell, pp. 307–335.
- Roy, Ananya. (2011b). 'Slumdog cities: Rethinking subaltern urbanism'. *International Journal of Urban and Regional Research*, vol. 35, no. 2, pp. 223–238. <https://doi.org/10.1111/j.1468-2427.2011.01051.x>
- Roy, Ananya. (2016). 'Who's afraid of postcolonial theory?' *International Journal of Urban and Regional Research*, vol. 40, no. 1, pp. 200–209. <https://doi.org/10.1111/1468-2427.12274>

- Roy, Ananya; and Ong, Aihwa (eds). (2011). *Worlding Cities: Asian Experiments and the Art of Being Global*. UK: Blackwell.
- Roy, Arundhati. (2020). 'The pandemic is a portal'. *Financial Times*, 3 April. <https://perma.cc/FSD4-SGKU> [Last accessed 17 June 2021].
- Russell, Martin. (2020). *Coronavirus in South-East Asia: Health, Political and Economic Impact*. European Parliamentary Research Service, June 2020. <https://perma.cc/ZA9L-KB3U> [Last accessed 25 June 2021].
- Sheppard, Eric; Leitner, Helga; and Maringanti, Anant. (2013). 'Provincializing global urbanism: A manifesto'. *Urban Geography*, vol. 34, no. 7, pp. 893–900. <https://doi.org/10.1080/02723638.2013.807977>
- Shin, Hyun Bang. (2021). 'Theorising from where? Reflections on de-centring global (Southern) urbanism', in Colin McFarlane and Michele Lancione (eds) *Global Urbanism: Knowledge, Power and the City*. UK: Routledge, pp. 62–70.
- Simone, AbdouMalik. (2004). *For the City Yet to Come: Changing African Life in Four Cities*. USA: Duke University Press.
- Song, Jesook; and Hae, Laam (eds). (2019). *On the Margins of Urban South Korea: Core Location as Method and Praxis*. Canada: University of Toronto Press.
- Springer, Simon. (2020). 'Caring geographies: The COVID-19 interregnum and a return to mutual id'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 112–115. <https://doi.org/10.1177/2043820620931277>
- Thiri Shwesin Aung; Fischer, Thomas B.; and Wang, Yihan. (2021). 'Conceptualization of health and social vulnerability of marginalized populations during Covid-19 using quantitative scoring approach'. *Journal of Immigrant and Refugee Studies*. <https://doi.org/10.1080/15562948.2021.1882023>
- Thompson, Nathan. (2021). 'Southeast Asia had COVID-19 under control. What went wrong?' *Foreign Policy*, 26 May. <https://perma.cc/XJT5-BCZ3> [Last accessed 19 June 2021].
- Truong, Mai. (2020). 'Vietnam's COVID-19 success is a double-edged sword for the Communist Party'. *The Diplomat*, 6 August. <https://perma.cc/V6NB-5XDT> [Last accessed 19 June 2021].
- Wasdani, Kishinchand Poornima; and Prasad, Ajnesh. (2020). 'The impossibility of social distancing among the urban poor: The case of an Indian slum in the times of COVID-19'. *Local Environment*, vol. 25, no. 5, pp. 414–418. <https://doi.org/10.1080/13549839.2020.1754375>

- Wells, Peter; Abouarghoub, Wessam; Pettit, Stephen; and Beresford, Anthony. (2020). 'A socio-technical transitions perspective for assessing future sustainability following the COVID-19 pandemic'. *Sustainability: Science, Practice and Policy*, vol. 16, no. 1, pp. 29–36. <https://doi.org/10.1080/15487733.2020.1763002>
- Wilkinson, Annie. (2020). 'Local response in health emergencies: Key considerations for addressing the COVID-19 pandemic in informal urban settlements'. *Environment and Urbanization*, vol. 32, no. 2, pp. 503–522. <https://doi.org/10.1177/0956247820922843>

PART I:
URBANISATION, INFRASTRUCTURE,
ECONOMIES, AND THE ENVIRONMENT

2. The urbanisation of spatial inequalities and a new model of urban development

Creighton Connolly

Changing patterns of urbanisation strongly influenced the initial outbreak and severity of the COVID-19 pandemic and form the focus of my first section here. The second section outlines how the pandemic highlighted deep existing inequalities and shortfalls in governance that have been associated with the current model of global urban development. As Nixon, Surie, and McQuay (2020) have argued, the COVID-19 pandemic ‘brought urban governance to a critical juncture in Asia’. Subsequently, I evaluate how East and Southeast Asian cities are being redesigned in the wake of the pandemic and the role of participatory urban governance in creating healthier and more socio-ecologically just cities.

Urbanisation and infectious disease

Previous research has shown that dramatic changes in demographic and social conditions, including an exponential increase in global transport, have been responsible for much of the global emerging infectious disease problem (Ali and Keil 2006). Diseases like SARS were associated with the rise of globalisation, as interconnected global cities like Toronto and Hong Kong were severely affected (Ali and Keil 2008). This is because decreasing travel times allowed for the quicker spread of microbes and viruses before governance and healthcare systems could identify and control them.

The COVID-19 pandemic, however, was a story of peri-urban and rural–urban connections, as seen in large industrial centres like Wuhan, northern Italy, and parts of Germany, which are connected through global and regional supply chains. We saw more peri-urban and regional connections between a larger network of cities, which make it much

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more difficult to contain disease outbreaks (Connolly, Ali, and Keil 2020). In general, cities are inherently connected with their peripheries through daily flows of people and goods. People commute into and out of the city each day for work; food and other essentials are often produced in peri-urban or rural areas and transported into the city. There are thus plenty of opportunities for the spread of microbes, bacteria, and different forms of nature through these activities and networks.

Urban density has been widely accused in popular media for the severity of the pandemic in places like New York City. Research has shown, however, that density alone cannot be a predictor of the spread of infectious diseases and depends on other factors such as the state of development, adherence to social distancing measures, and the extent of access to public health infrastructure (Florida 2020). It is also important here to distinguish between ‘density’ and ‘overcrowding’, where the former refers to high concentrations of people within an area and the latter to the lack of separation or space between people (often caused by inequality). For instance, Asian cities like Hong Kong, Seoul, and Taipei are far denser than New York City but have had far fewer cases of COVID-19 per capita.

Recent trends have suggested that the emergence of pathogenetic zoonoses in rapidly developing and urbanising regions has become a paradigmatic component of urbanisation and globalisation processes in the 21st century (Decaro and Lorusso 2020). This has been happening in tandem with the expansion of urban areas into previously uninhabited or non-urbanised peripheries, where there is more contact/interaction between humans and other animal and plant species. As I have argued previously, rapidly expanding infrastructure networks and urban landscapes can themselves play a role in the emergence of potential outbreaks (Connolly, Keil, and Ali 2021). Examples include deforestation on the edges of cities and new agro-industrial transformations of hinterlands, producing new pathways of emergent infectious disease transmission (Yong 2018).

Adler, Florida, and Hartt (2020) have thus proposed using the concept of the mega-region to understand the geography of SARS-CoV-2’s spread and its economic toll. As we saw in the early stages of the COVID-19 outbreak, many initial outbreaks were in wider metropolitan regions such as Milan/Lombardy and New York/New Jersey. These regions tend to be connected through travel corridors that extend well beyond the typical daily commuting range, resulting in the potential for diseases to spread much more widely through the urban fabric. In many

cities of Asia, transit-oriented development has been an integral part of urban planning strategies that seek to develop polycentric urban regions, including high-density suburbs. This increasing connection within and between urban regions has resulted in SARS-CoV-2's trajectory of filtering down the urban hierarchy over time from mega-regions to large metropolitan regions and then to smaller towns.

As a result of increasing interconnectivity between cities and their hinterlands, travel bans have proved ineffective in containing disease because there will inevitably be some spread of the disease before they are enforced (Bajardi et al. 2011). At best, they can delay the spread of disease; at worst, they can counterintuitively increase the odds that outbreaks will spread by forcing travellers to seek alternative and even illegal transport routes. Yong (2018) has pointed out that they can also 'discourage health workers from helping to contain foreign outbreaks, for fear that they'll be denied reentry into their home country'.

The emergence of SARS-CoV-2 in Wuhan – a city of 11 million people – immediately before the Lunar New Year holiday played a large factor in the rapid spread of the virus. This was due to Wuhan's role as a major travel hub or 'thoroughfare' in central China (Ren 2020). As Ren (2020) has noted, however, the severity of the outbreak in Wuhan was magnified by the delay of officials in China in notifying the public about the novel virus and taking action to control it. As I discuss below, effective governance is crucial in responding to disease outbreaks and requires close cooperation between citizens and the state.

In contrast, cities that worked the quickest and most diligently to control local transmission through contact tracing, identifying sources of infections, quarantining affected individuals, and so on were most effective. While early lockdowns and social distancing measures helped to flatten the infection curve in some places, they were ultimately ineffective if implemented too late. Essential workers for example, were still needed to keep supermarkets, supply chains, and infrastructure running. Moreover, as Ren (2020) has noted in the case of Wuhan, lockdowns also tended to be unequal, affecting less affluent communities in the urban periphery more than those in the core. The plight of lockdowns on precarious and transient migrant workers has also been well documented, with many of these individuals out of work and with few options to travel home (Nixon, Surie, and McQuay 2020).

The lack of infrastructure in rapidly urbanising regions, including Southeast Asia, can also have severe consequences for the rise of epidemics, as rapid growth in cities and urban populations is not accompanied

by the appropriate development of transportation and other essential infrastructure (Recio, Chatterjee, and Lata 2020). This includes access to clean water supplies, which are essential for combating the spread of infectious disease but are often lacking in rapidly growing informal settlements (Wilkinson 2020). Housing is also a crucial issue. In Manila, for example, millions of the city's essential but low-paid workers live in crowded, informal (and often illegal) settlements on the periphery, where they are vulnerable to disease outbreaks.

Even in wealthy cities like Singapore, the poorest sectors of the population are often unable to self-isolate owing to dense living conditions and are thus at higher risk of contracting and spreading diseases. Singapore was initially praised for its handling of COVID-19 and even managed to avoid imposing lockdown conditions until mid-April, when a sharp increase in cases among Singapore's migrant worker population emerged (Jamieson 2020). Nine dormitories housing more than 50,000 men, mostly from Bangladesh, India, and China, were declared 'isolation areas' and effectively on lockdown, meaning that about 300,000 workers had restrictions on their movements within their complexes (Han 2020). Most of these worker dormitories were deliberately located on the peripheries of Singapore and could have 12 to 20 workers sharing a room. They were also essentially 'out of sight' (both literally and metaphorically) as a potential source of vulnerability until the issue exploded (Luger 2020). This illustrates the spatial dimension of urban infectious disease outbreaks, as both the edges of the city and those who are most marginalised in society tend to be the most vulnerable (see Connolly, Ali, and Keil 2020; Iswara 2020).

Post-COVID-19 futures of an urbanising world

There has also been significant discussion about how cities and the world are going to change after the COVID-19 pandemic, much of which also relates to density and urban mobilities. Some urban designers have been arguing for a so-called 'Goldilocks density', which refers to an urban population density that is high enough to reap the benefits of sustainability and convenience provided by cities but not so high that people must live in 30-storey apartment blocks that rely on extensive use of public spaces like elevators (Alter 2020). Singapore has been planning to continue with high-density development while using 'smart solutions' to manage crowds (Board 2020). There has also been a widely recognised need to plan cities better to support bike and

pedestrian infrastructure, which will make cities not only more carbon neutral but also less vulnerable to future disease outbreaks (Nixon, Surie, and McQuay 2020). This infrastructure, however, needs to be constructed evenly, rather than just serving wealthy or middle-class communities, which has been the case in many cities in recent decades (Madden 2020).

Indeed, as David Madden (2020) has pointed out, the global urban development model over the past few decades ‘has catered to the needs of elite individuals ... while allowing the deterioration of social services and public institutions and the intensification of inequality’. This is a point that has been recognised by urban designers across Southeast Asia. For example, Thai urban designer Kotchakorn Voraakhorn has asserted that: ‘Bangkok should focus more on the public space and green infrastructure that make the city more liveable rather than the temporary infrastructure in the city for tourists’ (quoted in Board 2020). Similarly, Malaysia’s green building movement has largely focused on middle- to high-income developments targeted at foreigners and wealthy Malaysians. It has been suggested that the wake of the COVID-19 pandemic could be an ideal time to extend this type of development to the affordable market segment, which, in contrast to the glut of luxury properties nationwide, has seen very little supply (Board 2020).

Urban governance proved to be a critical element of how successful cities were in responding to the COVID-19 pandemic, particularly with regard to the role of civil society and community support. Seoul, for example, focused on an approach emphasising transparency, accountability, and solidarity instead of strict movement restrictions (Jagannathan 2020). Hong Kong is another interesting case in this regard, as the organisational capacity and the civic infrastructure established by 2019’s protest movements played a central role in the city’s response – and ultimate success – in containing the virus’s spread (Tufekci 2020). One group set up a website to track cases of COVID-19, monitor hotspots, warn people of places selling fake PPE, and report hospital wait times and other relevant information. Such reliable information is crucial in managing epidemics within a community (Ren 2020; Yong 2018). Civilians also spontaneously adopted the wearing of masks in public, defying the government’s ban on masks (in place due to the mass protests). Large groups of volunteers also distributed masks to the poor and elderly and installed hand sanitiser dispensers in crowded (low-income) tenement buildings. When the government at first refused to close the

border with mainland China, more than 7,000 medical workers went on strike, demanding border closures and PPE for hospital workers (Ip 2020). These collective actions illustrate how civil society can organise to make up for the governance failures of urban and regional governments in responding to pandemics in real time.

Conclusion

The massive expansion of the global urban fabric over the past few decades has increased exposure to infectious diseases and posed new challenges to the control of outbreaks. As Nixon, Surie, and McQuay (2020) have argued, the pandemic ‘revealed the fragile interconnectedness of metropolitan, peri-urban, and rural spaces and the inequalities upon which cities are built and maintained’. Indeed, while the central business districts of Southeast Asia’s largest cities are modern, highly connected spaces, the pandemic highlighted the social inequalities and underinvestment in infrastructure services that are visible in more peripheral urban areas. This has made cities and their inhabitants more vulnerable not only to SARS-CoV-2 but also to other forms of social and economic hardship. The unsustainable urban development model that had been pursued in Asia and around the world therefore not only played a role in the outbreak of the COVID-19 pandemic but also had negative consequences for quality of life and socio-ecological justice.

While urban planning and design is already being reformulated to cope better with the next pandemic, urban governance will also be crucial. Urban governments will need to collaborate more effectively, not only with regional and national levels of government but also with residents and civil society groups to make infrastructure, housing, and livelihood opportunities more equitable. Politics in municipalities, between cities and other jurisdictions, and between municipalities, civil society actors, and local communities will be crucial to understanding the role urban health governance plays in an increasingly urbanised and globalised society (Acuto 2020). To this end, the COVID-19 pandemic offered valuable lessons about the need for building socio-ecological justice by strengthening institutions to promote more socially inclusive and environmentally sustainable forms of development. Without this effort, the inequalities that the pandemic exposed will only grow worse in the years and decades to come.

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References

- Acuto, Michele. (2020). ‘COVID-19: Lessons for an urban(izing) world’. *One Earth*, vol. 2, no. 4, pp. 317–319. <https://doi.org/10.1016/j.oneear.2020.04.004>
- Adler, Patrick; Florida, Richard; and Hartt, Maxwell. (2020). ‘Mega regions and pandemics’. *Tijdschrift voor economische en sociale geografie*, vol. 111, no. 3, pp. 465–481. DOI: <https://doi.org/10.1111/tesg.12449>
- Ali, S. Harris; and Keil, Roger. (2006). ‘Global cities and the spread of infectious disease: The case of Severe Acute Respiratory Syndrome (SARS) in Toronto, Canada’. *Urban Studies*, vol. 43, no. 3, pp. 491–509. <https://doi.org/10.1080/00420980500452458>
- Ali, S. Harris; and Keil, Roger. (2008). *Networked Disease: Emerging Infections in the Global City*. UK: Wiley-Blackwell.
- Alter, Lloyd. (2020). ‘Urban density is not the enemy, it is your friend’. *Treehugger*, 25 March. <https://perma.cc/62HK-QG39> [Last accessed 22 April 2020].
- Bajardi, Paolo; Poletto, Chiara; Ramasco, Jose J.; Tizzoni, Michele; Colizza, Vittoria; and Vespignani, Alessandro. (2011). ‘Human mobility networks, travel restrictions, and the global spread of 2009 H1N1 pandemic’. *PLOS One*, vol. 6, no. 1, p. e16591. <https://doi.org/10.1371/journal.pone.0016591>
- Board, Jack. (2020). ‘COVID-19: Why saving our forests can help stop the next pandemic’. *CNA*, 9 May. <https://perma.cc/M3T9-CRG4> [Last accessed 14 January 2021].
- Connolly, Creighton; Ali, S. Harris; and Keil, Roger. (2020). ‘On the relationships between COVID-19 and extended urbanization’. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 213–216. <https://doi.org/10.1177/12043820620934209>
- Connolly, Creighton; Keil, Roger; and Ali, S. Harris. (2021). ‘Extended urbanisation and the spatialities of infectious disease: Demographic change,

- infrastructure and governance'. *Urban Studies*, vol. 58, no. 2, pp. 245–263. <https://doi.org/10.1177/0042098020910873>
- Decaro, Nicola; and Lorusso, Alessio. (2020). 'Novel human coronavirus (SARS-CoV-2): A lesson from animal coronaviruses'. *Veterinary Microbiology*, vol. 244, p. 108693. <https://doi.org/10.1016/j.vetmic.2020.108693>
- Florida, Richard. (2020). 'The geography of coronavirus'. *Bloomberg CityLab*, 3 April. <https://perma.cc/N7C6-4YCA> [Last accessed 9 June 2020].
- Han, Kirsten. (2020). 'Singapore's new Covid-19 cases reveal the country's two very different realities'. *Washington Post*, 16 April. <https://perma.cc/8RF7-DVK6> [Last accessed 8 June 2020].
- Ip, Regina. (2020). 'The bitter pill medical workers on strike might have to swallow'. *South China Morning Post*, 9 February. <https://perma.cc/FP8Z-FRK8> [Last accessed 14 January 2021].
- Iswara, M. Anthony. (2020). 'Southeast Asia needs progress as pandemic exacerbates inequality: UN'. *Jakarta Post*, 3 August. <https://perma.cc/2CBS-AQMH> [Last accessed 14 January 2021].
- Jagannathan, Vijay. (2020). 'Learning from Seoul to control COVID-19: Transparency, accountability, solidarity'. *TheCityFix*, 18 May. <https://perma.cc/B8VH-WZYS> [Last accessed 14 January 2021].
- Jamieson, William. (2020). 'Logistical violence and virulence: Migrant exposure and the underside of Singapore's model pandemic response'. *LSE Southeast Asia Blog*, 14 October. <https://perma.cc/5LJ6-6762> [Last accessed 14 January 2021].
- Luger, Jason. (2020). 'Seeing Covid-19 through workers, students, and dormitories: Singapore in comparative framing'. *LSE Southeast Asia Blog*, 16 November. <https://perma.cc/3JRA-QZAJ> [Last accessed 13 January 2021].
- Madden, David. (2020). 'Our cities only serve the wealthy. Coronavirus could change that'. *The Guardian*, 2 June. <https://perma.cc/5KLC-YEGJ> [Last accessed 4 June 2020].
- Nixon, Nicola; Surie, Mandakini; and McQuay, Kim. (2020). 'Covid lays bare the flaws in Asia's booming megacities'. *InAsia*, 19 August. <https://perma.cc/9C4G-MP6B> [Last accessed 28 September 2020].
- Recio, Redento; Chatterjee, Ishita; and Lata, Lutfun Nahar. (2020). 'COVID-19 reveals unequal urban citizenship in Manila, Dhaka and Delhi'. *LSE COVID-19 Blog*, 5 June. <https://perma.cc/Z9LA-6X6E> [Last accessed 14 January 2021].
- Ren, Xuefei. (2020). 'The quarantine of a megacity: China's struggle over the coronavirus epidemic'. *International Journal of Urban and Regional*

- Research*, 4 February. <https://perma.cc/DLW5-WKM5> [Last accessed 13 April 2020].
- Tufekci, Zeynep. (2020). 'How Hong Kong did it'. *The Atlantic*, 12 May. <https://perma.cc/D799-64C8> [Last accessed 17 May 2021].
- Wilkinson, Annie. (2020). 'The impact of Covid-19 in informal settlements – are we paying enough attention?' *Institute of Development Studies*, 10 March. <https://perma.cc/2FAJ-ACS6> [Last accessed 14 January 2021].
- Yong, Ed. (2018). 'The next plague is coming. Is America ready?' *The Atlantic*, July/August. <https://perma.cc/8BU5-BZNL> [Last accessed 17 May 2021].

3. Digital transformation, education, and adult learning in Malaysia

Rachel Gong, Ashraf Shaharudin, and Siti Aiysyah Tumin

Malaysia's government has long recognised the value and promise of technology and innovation, having begun in the 1990s to develop a multimedia super corridor (MSC) to be competitive in a globally digitalised economy (Banerjee 1999). While digitalisation refers to the process of restructuring society around digital and communication infrastructures (Brennen and Kreiss 2016), digital transformation involves socio-technological changes that have broader and more profound implications on society and culture, such as the evolution of information dissemination from edited, curated print articles to unregulated, algorithmically recommended TikTok videos.

Despite its incomplete digital transformation, Malaysia emerged as a relatively well-connected country in Southeast Asia. As of 2019, Malaysia was a mobile-first nation, with a 123% mobile broadband penetration rate and a 9% fixed broadband penetration rate. In populated areas, 4G coverage was reportedly at 82% (MCMC 2020), albeit of questionable quality. Basic data plans are generally affordable, and the most popular online activities among internet users are social communications such as texting and social media (Gong 2020).

Efforts to further digitalise Malaysia had begun before the COVID-19 pandemic. A national broadband infrastructure plan had been launched; programmes had been established to incorporate advanced digital technologies into economic sectors such as manufacturing; and various structural institutions, such as the civil service, institutes of higher learning, and legal courts, had begun incorporating digital services, cloud computing, and big data analysis into their workflows. However, the pandemic revealed in Malaysia, as elsewhere, the stark structural

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inequalities present in its digital infrastructure and adoption, a problem that had existed since the days of the MSC (Bunnell 2002). While digital technologies enabled elite segments of society to adapt fairly easily and quickly to life under lockdown, many under-served groups were not as fortunate.

In this chapter we assess the ways in which digital technologies, instead of levelling the playing field, may actually increase socio-economic inequalities, especially with regard to education and adult learning. We consider the segments of society who may be further marginalised in the future, given the changing conditions of learning and work accelerated by COVID-19, and suggest how future research and policy can tackle these challenges.

Previously, the digital divide described a fundamental gap in terms of access to computers and the internet (DiMaggio et al. 2001). As computing power costs decreased and internet infrastructure became widespread, digital inequalities became not just about access but also about meaningful connectivity and use (A4AI 2020; Gong 2020; Hargittai, Piper, and Morris 2018). The question is no longer simply whether everyone can connect to the internet, but also how we are connecting and how we are using our connectivity.

In the wake of the COVID-19 pandemic, Malaysia recognised internet connectivity as a public utility (MOF 2020), paving the way for significant improvements in the development of internet infrastructure. While this may address the access component of the digital divide, it does not guarantee inclusive meaningful connectivity or use. During Malaysia's movement control orders to curb the spread of COVID-19, schools and universities were closed. Despite their best efforts to pivot to online classes, teachers and students faced challenges in terms of both digital access and digital pedagogy. When offices closed, a divide emerged between workers who could work from home and workers who had to be physically present to do their (often essential) jobs. Income has been a good predictor of which side of this divide a worker might fall (Siti Aiysyah 2020).

Income has also been a good predictor of the likelihood of non-essential workers staying employed during the pandemic (Parker, Minkin, and Bennett 2020). The number of unemployed people in Malaysia rose 41% from 521,400 in September 2019 to 737,500 in September 2020 (DOSM 2019; DOSM 2020c). Online education opportunities increased as part of adult learning initiatives to reskill and upskill job

seekers. However, take-up of these programmes remained relatively low (*Malay Mail* 2020).

Widening gaps in education

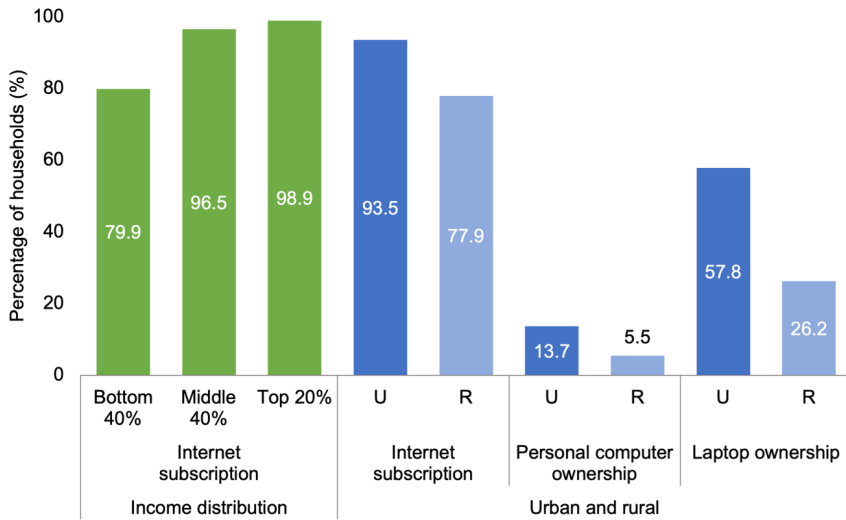
We turn now to a discussion of the role and impact of digital technologies and the digital divide on education and adult learning. Malaysian school students lost at least 17 out of 43 normal schooling weeks in 2020 due to school closures. Learning was disrupted for around 4.9 million pre-school, primary, and secondary school students (MOE 2020) and around 1.3 million higher education students (MOHE 2020). Different and compounding forms of existing inequalities became apparent with distance learning.

The clearest gap was the lack of digital resources for some students, rendering digital learning almost impossible. Even before the pandemic made distance learning the default mode, students lacking the resources necessary to learn remotely were found to trail their peers in cognitive abilities and be more likely to drop out in the long run (Murat and Bonacini 2020). In 2019, only 6–9% of Malaysian school students owned a personal computer and/or a tablet (Hawati and Jarud 2020). Unequal access to digital devices and the internet tended to follow the rural–urban and household income gaps (Figure 3.1), aggravating prevailing inequalities.

Approximately 77% of school students were unable to effectively learn digitally from home owing to limited digital access (Ashraf 2020). This likely lower-bound estimate was based on both fixed and mobile broadband access, though fixed broadband access has been much rarer and arguably more effective for learning. In 2019, Malaysia's average mobile download speed of 11.0 Mbps was far slower than developed countries such as Canada (59.6 Mbps) and South Korea (59.0 Mbps) (Fenwick and Khatri 2020). States with lower median household incomes had lower fixed broadband subscription rates (Gong 2020), which implied a higher percentage of disadvantaged students in poorer states.

Distance learning requires self-discipline and self-initiative. A time use survey found that German students reduced their daily learning time by about half during school closures (Grewenig et al. 2020). The reduction was larger among low-achieving students as their learning time was replaced with less useful activities such as gaming or consuming social media, potentially further deteriorating their educational

Figure 3.1. Internet subscription and personal computer and laptop ownership by household segment, 2019



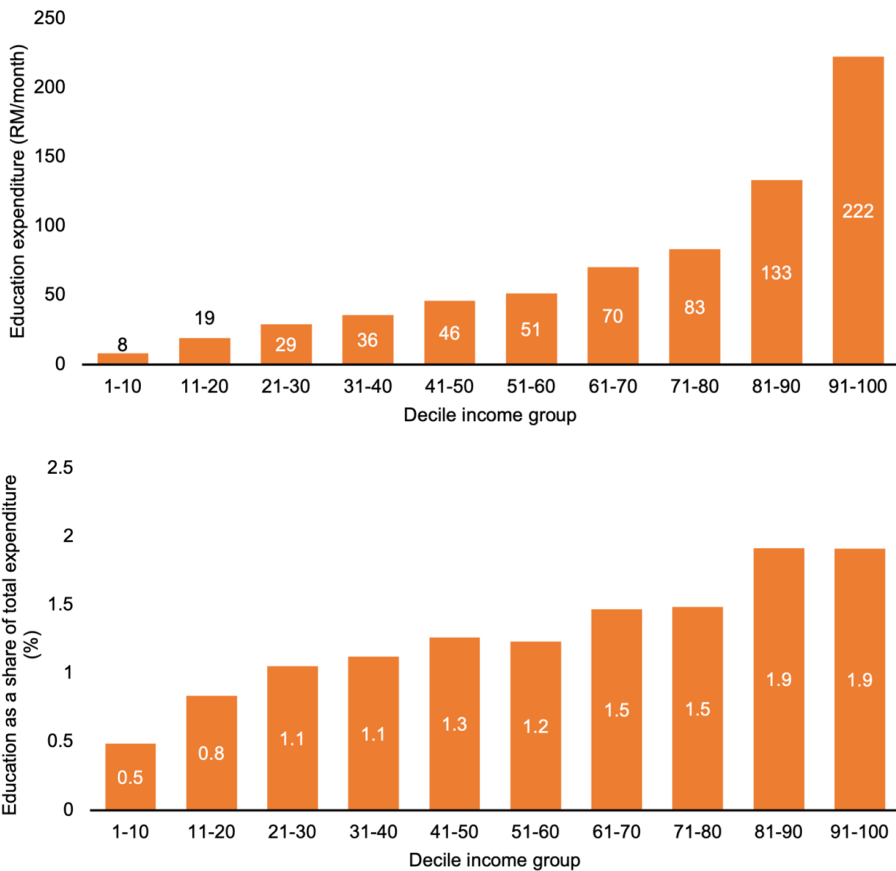
Source: DOSM (2020a).

achievement. This also highlights the discretionary nature of internet use, resulting in different outcomes for users. In 2019, across Malaysia, while 86% of internet users engaged in social networking, only 60% and 56% used the internet to study and read online publications, respectively (Gong 2020).

Researchers discovered that, by April 2020, Google search intensity for online learning resources in the United States had doubled relative to pre-pandemic levels (Bacher-Hicks, Goodman, and Mulhern 2021). However, the demand for online resources was substantially lower in areas with lower income, lower internet access, and more rural schools. Malaysia likely experienced similar inequalities; based on crude observations, during the first lockdown, keyword searches for learning resources were higher in affluent states such as Selangor and Kuala Lumpur.

There was also a gender dimension to distance learning, which raises questions for further research and policy deliberation. In Malaysia, while the proportion of women in the population remained steady from 2012 to 2018, the proportion of internet users who were women declined (Gong 2020). Concurrently, the teaching profession was dominated by women, who disproportionately bore the burden of care work (KRI 2019), which increased during lockdowns.

Figure 3.2. Expenditure on education by decile income group, 2019



Source: DOSM (2020a).

Meanwhile, boys’ disengagement from education was expected to worsen with distance learning (UNESCO 2020). The reduction in learning time due to school closure was larger for boys than for girls (Grewenig et al. 2020). This may have exacerbated the ‘lost boys’ problem in Malaysia, where boys made up only 30% of higher education enrolment. These ‘lost boys’ either left school early or did not further their education (KRI 2018).

Without discrediting the benefits of education technology (edutech) for students and teachers alike, for-profit edutech has long-term consequences for how education as a public good is perceived and practised (Williamson, Eynon, and Potter 2020). In 2019, poorer households in Malaysia spent considerably less on education than richer households did, both in absolute terms and as a proportion

of their total expenditures (Figure 3.2) (DOSM 2020a). Further research is needed to understand how the increasing ‘platformisation’ of education impacts the education of poor and digitally disadvantaged households. While the pandemic hastened the adoption of digital technology in education, it is doubtful whether this was an inclusive digital transformation.

Adult learning and digital exclusion

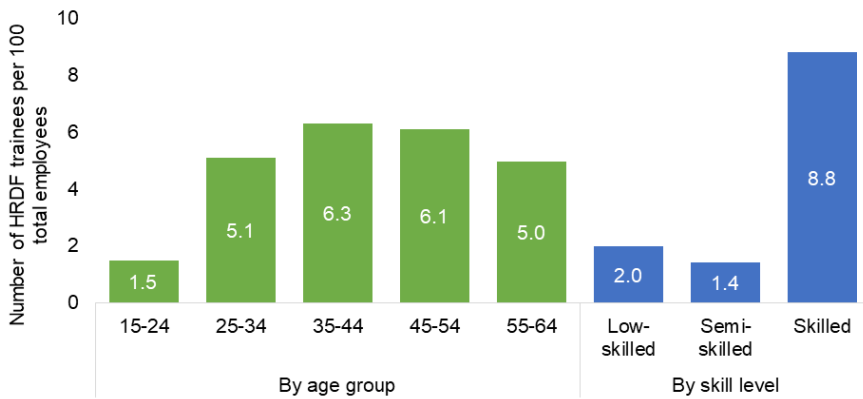
The lack of digital inclusivity went beyond education. It also affected adult learning, which was essential given the changing nature of work due to technological advancements and globalisation (World Bank 2019). COVID-19 might have accelerated the effects of labour market megatrends such as automation and increased the incentive to substitute capital for labour (Bloom and Prettnner 2020). This increased the importance of adult learning to ensure people remained competitive in the labour market.

Malaysian policymakers had been actively encouraging reskilling and upskilling prior to the pandemic. However, pre-pandemic participation in adult learning was generally underwhelming. The training participation rate among registered employers topped out at 25%, compared to 49% in Singapore and 77% in Australia (HRDF 2019a). Only 33% of surveyed manufacturing firms offered formal training, far lower than peer countries (Nur Thuraya and Siti Aiysyah 2020). Lack of awareness, inadequate resources, overlapping programmes, and recognition issues have been cited as the main challenges of adult learning (HRDF 2019c).

Participation in adult learning was unequal, with young and very old trainees under-represented. Adult learning at work was also skewed towards the skilled workforce, compared to the semi-skilled and low-skilled workforce (Figure 3.3). Unfortunately, COVID-19 exacerbated the vulnerabilities of groups not actively participating in adult learning. Youth workers were found to be disproportionately adversely affected by the pandemic (Gonzalez, Gardiner, and Bausch 2020), while lower-skilled workers were most likely to be replaced if firms decided to automate their business operations during the pandemic (KRI 2020).

The digital divide further increased these inequalities. First, not all training programmes could be conducted online. In fact, the adoption rate of e-learning and mobile learning was less than 1% for Human

Figure 3.3. HRDF trainees as a share of total employees, disaggregated by age and skill level, 2018



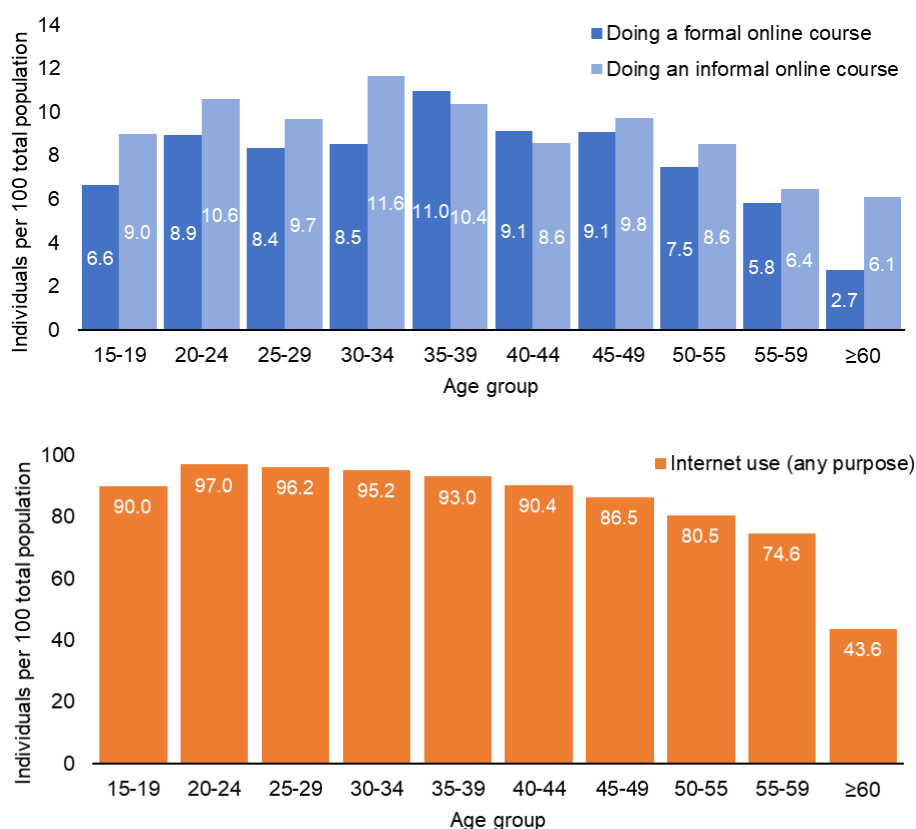
Sources: HRDF (2019c); HRDF (2020); DOSM (2020b).

Resource Development Fund (HRDF) training programmes in 2018 (HRDF 2019b). Training for non-digital technical skills such as machine handling and safe food preparation could not be conducted online because they required practical learning activities.

Second, not all employers were supportive of employee training, as evident in the low training participation rates among employers. In economic downturns, employers face financial constraints in supporting workers' skills development. Additionally, the HRDF only covered selected sectors, and a substantial segment of the workforce not covered by the HRDF (micro-enterprises, workers in the informal sector, and the self-employed) could not afford to invest in adult learning.

Moreover, the lack of digital literacy among the older population has been a significant barrier in accessing online adult learning courses. More mature individuals were not only less likely to use the internet; they were also less likely to use it for learning purposes (Figure 3.4). Online adult learning was likely challenging for lower-income households too, as they faced higher trade-offs between spending on essential goods and investing in adult learning (Rao 2009). Poorer households also faced significant barriers to digital access that limited their adult learning opportunities (Siti Aisyah 2020).

Reskilling and upskilling were important to help workers navigate the changing nature of work and employment challenges brought on by the pandemic. However, focusing solely on digital skills when many training providers, employers, and workers do not have the capacity

Figure 3.4. Share of internet use by type of activity and age group, 2019 (percentage)

Source: DOSM (2020b).

to do so could further exacerbate existing structural issues in adult learning. Failure to address the digital gap among workers might also perpetuate inequality in the labour market.

Conclusion

The COVID-19 pandemic accelerated digitalisation in many ways, but digital adoption has not been equitable. More research is needed to assess the long-term impacts of the digital divides described in this chapter. While distance schooling is unlikely to fully replace physical schooling for children, online learning is likely to be incorporated into teaching methods. Inclusive education requires an understanding of how digital and analogue inequalities affect educational attainment

and subsequent socio-economic opportunities. Improving internet coverage and quality, increasing access to digital devices, and providing digital pedagogy training for teachers must be part of the national socio-economic agenda.

Businesses and governments were proactively encouraging online adult learning during the pandemic to enhance worker resilience. However, many adult learning programmes were costly and had limited participation and impact. These programmes did not consider different adult learning styles, competing family, care, and work demands, and socio-economic constraints (World Bank 2019). Effective adult learning, offline or online, must address these challenges to bring returns to post-schooling human capital investment.

Broadly applying digital solutions to every available situation does not lead to an inclusive digital transformation. Rushed and improperly considered digital adoption is rife with unintended consequences. Diversity of input and research is needed, especially among groups typically under- or ill-served by digital technologies, in order to ensure that digital transformation is beneficial and sustainable for society in the long run.

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References

- A4AI. (2020). *Meaningful Connectivity: Raising the Bar for Internet Access*. USA: World Wide Web Foundation. <https://perma.cc/4MQ9-PK87> [Last accessed 22 April 2021].
- Ashraf, Shaharudin. (2020). *Reopening Schools: Giving Access to Education Equitably and Safely*. Malaysia: Khazanah Research Institute. <https://perma.cc/VUE4-93X8> [Last accessed 22 April 2021].
- Bacher-Hicks, Andrew; Goodman, Joshua; and Mulhern, Christine. (2021). 'Inequality in household adaptation to schooling shocks: Covid-induced online learning engagement in real time'. *Journal of Public Economics*, vol. 193, p. 104345. <https://doi.org/10.1016/j.jpubeco.2020.104345>
- Banerjee, Indrajit. (1999). 'Malaysia's multimedia super corridor: One-stop super shop or highway to progress and prosperity for all?' *Convergence*, vol. 5, no. 3, pp. 106–115. <https://doi.org/10.1177%2F135485659900500308>

- Bloom, David; and Prettnner, Klaus. (2020). 'The macroeconomic effects of automation and the role of COVID-19 in reinforcing their dynamics'. *VoxEU*, 25 June. <https://perma.cc/PXD8-P557> [Last accessed 22 April 2021].
- Brennen, J. Scott; and Kreiss, Daniel. (2016). 'Digitalization', in K.B. Jensen and R.T. Craig (eds) *The International Encyclopedia of Communication Theory and Philosophy*. UK: Wiley-Blackwell, pp. 556–566.
- Bunnell, Tim. (2002). 'Multimedia utopia? A geographical critique of high-tech development in Malaysia's multimedia super corridor'. *Antipode*, vol. 34, no. 2, pp. 265–295. <https://doi.org/10.1111/1467-8330.00238>
- DiMaggio, Paul; Hargittai, Eszter; Celeste, Coral; and Shafer, Steven. (2001). *From Unequal Access to Differentiated Use: A Literature Review and Agenda for Research on Digital Inequality*. USA: Russell Sage Foundation. <https://perma.cc/G7U8-4477> [Last accessed 22 April 2021].
- DOSM (Department of Statistics Malaysia). (2019). *Key Statistics of Labour Force in Malaysia September 2019*. Malaysia: Department of Statistics Malaysia. <https://perma.cc/43UL-NY22> [Last accessed 11 January 2021].
- DOSM. (2020a). *Households Expenditure Survey Report 2019*. Malaysia: Department of Statistics Malaysia. <https://perma.cc/LTT4-FAHA> [Last accessed 11 January 2021].
- DOSM. (2020b). *ICT Use and Access by Individuals and Households Survey Report 2019*. Malaysia: Department of Statistics Malaysia. <https://perma.cc/AK8U-N7LQ> [Last accessed 11 January 2021].
- DOSM. (2020c). *Key Statistics of Labour Force in Malaysia September 2020*. Malaysia: Department of Statistics Malaysia. <https://perma.cc/8A6L-SXXK> [Last accessed 11 January 2021].
- Fenwick, Sam; and Khatri, Hardik. (2020). *The State of Mobile Network Experience 2020: One Year Into the 5G Era*. UK: Opensignal. <https://perma.cc/2U7D-JPPT> [Last accessed 22 April 2021].
- Gong, Rachel. (2020). *Digital Inclusion: Assessing Meaningful Internet Connectivity in Malaysia*. Malaysia: Khazanah Research Institute. <https://perma.cc/4NUB-4JLG> [Last accessed 22 April 2021].
- Gonzalez, Susana Puerto; Gardiner, Drew; and Bausch, Jo. (2020). *Youth and COVID-19: Impacts on Jobs, Education, Rights and Mental Well-Being: Survey Report 2020*. Switzerland: International Labour Organization. <https://perma.cc/SAL9-HYB4> [Last accessed 22 April 2021].
- Grewenig, Elisabeth; Lergetporer, Philipp; Werner, Katharina; Woessmann, Ludger; and Zierow, Larissa. (2020). *COVID-19 and Educational Inequality: How School Closures Affect Low- and High-Achieving Students*.

- Germany: IZA Institute of Labor Economics. <https://perma.cc/595R-Z874> [Last accessed 22 April 2021].
- Hargittai, Eszter; Piper, Anne Marie; and Morris, Meredith Ringel. (2018). 'From internet access to internet skills: Digital inequality among older adults'. *Universal Access in the Information Society*, vol. 18, pp. 881–890. <https://doi.org/10.1007/s10209-018-0617-5>
- Hawati, Abdul Hamid; and Jarud, Romadan Khalidi. (2020). *Covid-19 and Unequal Learning*. Malaysia: Khazanah Research Institute. <https://perma.cc/5YHQ-7NSC> [Last accessed 22 April 2021].
- HRDF (Human Resource Development Fund). (2019a). *HRDF Industry Training Participation Report 2019*. Malaysia: Human Resource Development Fund. <https://perma.cc/WB29-TFXW> [Last accessed 22 April 2021].
- HRDF. (2019b). *Human Capital Report Issue 06: Adoption of E-learning*. Malaysia: Human Resource Development Fund. <https://perma.cc/K9AL-CX6U> [Last accessed 22 April 2021].
- HRDF. (2019c). *Human Capital Report Issue 09: Adult Lifelong Learning*. Malaysia: Human Resource Development Fund. <https://perma.cc/AMP7-NKG3> [Last accessed 22 April 2021].
- HRDF. (2020). *Industry Training Intelligence Report Issue 03: Training Inequality According to Job Levels*. Malaysia: Human Resource Development Fund. <https://perma.cc/NPN6-LP2T> [Last accessed 22 April 2021].
- KRI (Khazanah Research Institute). (2018). *The School-to-Work Transition of Young Malaysians*. Malaysia: Khazanah Research Institute. <https://perma.cc/C69W-XB84> [Last accessed 22 April 2021].
- KRI. (2019). *Time to Care: Gender Inequality, Unpaid Care Work and Time Use Survey*. Malaysia: Khazanah Research Institute. <https://perma.cc/H456-Z3XW> [Last accessed 22 April 2021].
- KRI. (2020). *Work in an Evolving Malaysia*. Malaysia: Khazanah Research Institute. <https://perma.cc/GBE2-7KBY> [Last accessed 22 April 2021].
- Malay Mail*. (2020). '16,000 participants signed up for MDEC's free online courses, says CEO', 26 June. <https://perma.cc/U7JK-UJR9> [Last accessed 22 April 2021].
- MCMC (Malaysian Communications and Multimedia Commission). (2020). *Industry Performance Report 2019*. Malaysia: Malaysian Communications and Multimedia Commission. <https://perma.cc/64SC-F55X> [Last accessed 22 April 2021].
- MOE (Ministry of Education). (2020). *Statistik Bilangan Sekolah, Murid and Guru [MS]*. Malaysia: Ministry of Education Malaysia. <https://perma.cc/L5NT-P2SM> [Last accessed 6 January 2021].

- MOF (Ministry of Finance). (2020). *Budget 2021 Speech*. Malaysia: Ministry of Finance. <https://perma.cc/58NG-KRT4> [Last accessed 22 April 2021].
- MOHE (Ministry of Higher Education). (2020). *Statistik Pendidikan Tinggi 2019 [MS]*. Malaysia: Ministry of Higher Education Malaysia. <https://www.mohe.gov.my/en/download/awam/statistik/2019-1> [Last accessed 22 April 2021].
- Murat, Marina; and Bonacini, Luca. (2020). *Coronavirus Pandemic, Remote Learning and Education Inequalities*. Global Labor Organization (GLO). <https://perma.cc/RF4R-WRU9> [Last accessed 22 April 2021].
- Nur Thuraya, Sazali; and Siti Aiysyah, Tumin. (2020). *Leaving No Worker Behind: Deficit in Decent Work*. Malaysia: Khazanah Research Institute. <https://perma.cc/E3D3-K4NH> [Last accessed 22 April 2021].
- Parker, Kim; Minkin, Rachel; and Bennett, Jesse. (2020). *Economic Fallout from COVID-19 Continues to Hit Lower-Income Americans the Hardest*. USA: Pew Research Center. <https://perma.cc/CAV4-MYRH> [Last accessed 22 April 2021].
- Rao, Ramesh. (2009). 'Digital divide: Issues facing adult learners'. *Computer and Information Science*, vol. 2, no. 1, pp. 132–136. <https://doi.org/10.5539/cis.v2n1p132>
- Siti Aiysyah, Tumin. (2020). *Covid-19 and Work in Malaysia: How Common Is Working from Home?* LSE Southeast Asia Blog, 23 November. <https://perma.cc/H3PY-UK4G> [Last accessed 22 Apr 2021].
- UNESCO. (2020). *Addressing the Gender Dimensions of COVID-Related School Closures*. France: UNESCO. <https://perma.cc/8VYK-PJWL?> [Last accessed 22 April 2021].
- Williamson, Ben; Eynon, Rebecca; and Potter, John. (2020). 'Pandemic politics, pedagogies and practices: Digital technologies and distance education during the coronavirus emergency'. *Learning, Media and Technology*, vol. 45, no. 2, pp. 107–114. <https://doi.org/10.1080/17439884.2020.1761641>
- World Bank. (2019). *World Development Report 2019: The Changing Nature of Work*. USA: World Bank. <https://perma.cc/9C2X-5ZV6> [Last accessed 22 April 2021].

4. Data privacy, security, and the future of data governance in Malaysia

Moonyati Yatid and Farlina Said

Throughout the course of the spread of COVID-19 in Malaysia, technology was deployed to control, investigate, and mitigate societal well-being beyond public health. Unmanned aerial vehicles like drones were used to monitor society's compliance with lockdown measures (Bernama 2020), e-commerce initiatives were rolled out under the government's economic recovery plan (MDEC 2020), and artificial intelligence-enabled thermal cameras were deployed (*New Straits Times* 2020). However, none of these was more contentious than the technologies used in contact tracing.

From the start of the pandemic, Malaysia introduced several contact-tracing applications driven by both federal and state initiatives. At the federal level, the three main applications were MySejahtera, MyTrace, and Gerak Malaysia. At the state level, there were SELangkah in Selangor and digital surveillance solutions in Sarawak. From August 2020, MySejahtera was mandatory for all business premises, with exemptions only for premises in rural areas or small towns without stable internet connectivity (*The Star* 2020).

In a landscape of evolving digital legislation, the swift implementation of such technologies could outpace efforts for data governance. Thus, the rapid adoption of these technologies could create vulnerabilities in the protection of privacy. As such, this chapter aims to cover the different technologies used in the mitigation of COVID-19 in 2020 with a focus on the contact-tracing applications that were developed. Subsequently, the chapter delves into data privacy and security concerns and concludes with reflections on Malaysia's technological future in data governance.

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Tech-less contact tracing and the efficacy of application-based contact tracing

Surveillance and public health in Malaysia were not initially so dependent on technology. The country's first case of COVID-19 was discovered on 25 January 2020 thanks to the Ministry of Health's Crisis Preparedness and Response Centre (CPRC) (Ahmad et al. 2020). Common procedures dictated that, from the diagnosis of a COVID-19 case, rapid assessment and rapid response teams would be deployed to collect the patient's socio-demographic information and travel and movement history over the previous 14 days. This established the patient's contact list for tracing (Ahmad et al. 2020). This tech-less contact tracing was the primary method used by the Ministry of Health (MOH) at that time, particularly for district health offices (Boo 2020).

To control rising infections, Malaysia's movement control order (MCO) was initiated on 18 March 2020. Malaysia's MCO had several iterations, corresponding with different standard operating procedures. The 18 March MCO was lifted and replaced by a recovery movement control order (RMCO) on 9 June 2020 in light of a decrease in the number of cases. Technology then began to be used, particularly to assess users' health and risk, to trace possible infections from a specific location, and as a means of delivering updated information and highlighting hotspots. As technology itself is transformative, throughout the MCO and the RMCO, contact-tracing applications in Malaysia learned from competing applications and modified their own processes.

Developers introduced several applications in the months between the MCO and RMCO. The applications differed in terms of ownership, methodology, privacy thresholds, and, where declared, data retention limits. To streamline efforts, an announcement on 3 August 2020 mandated that businesses owners and operators download and register with MySejahtera. With this announcement, and with MySejahtera being the only application tied to short-term economic plan (PENJANA) benefits, certain states such as Penang announced that they would phase out their own applications in favour of MySejahtera, thus consolidating contact-tracing applications into a centralised data collection system. The table below illustrates the different applications rolled out during the MCO; afterwards, PgCare and Gerak Malaysia ceased operation.

These applications had different practices for data retention and data protection. MyTrace, the development of which was led by the Ministry of Science, Technology and Innovation, used Bluetooth and anonymised

Table 4.1. Contact-tracing applications used in various Malaysian states

Application	Developer	Function
MySejahtera	Federal government agencies (National Security Council [NSC], Ministry of Health [MOH], Malaysian Administrative Modernisation and Management Planning Unit [MAMPU], Malaysian Communications and Multimedia Commission [MCMC])	Multi-purpose application intended for individuals to assess health levels, discover hotspots, seek health facilities, and receive latest updates and other materials from the MOH using web-based and QR-scanning functions
MyTrace	Federal government agencies (led by the Ministry of Science, Technology and Innovation [MOSTI])	Bluetooth-enabled contact tracing, with data remaining anonymous and information about potential exposures stored only on one's device
SELangkah	Selangor state government	Location-based and QR code-enabled contact tracing
SabahTrace	Sabah state government	Location-based and QR code-enabled contact tracing
COVIDTRACE	Sarawak state government	Location-based and Bluetooth-enabled contact tracing
Gerak Malaysia (no longer in use as of 2021)	Federal government (MCMC and the Royal Malaysia Police [RMP])	GPS-enabled contact tracing and QR codes to inform authorities of permissions granted to travel
PgCare (no longer in use as of 2021)	Penang state government	Location-based and QR code-enabled contact tracing

data while retaining records of encounters on one's device. Sarawak's COVIDTrace also stated that user data would be anonymised, and geolocation data would not be collected. The information gathered by

COVIDTrace, Selangor's SELangkah, and Sabah's SabahTrace included the individual's name and phone number as well as the date and time of visits to relevant premises. SabahTrace also collected information on the user's body temperature.

MySejahtera is among the examples of centralised data collection tools for which data in transit was said to be encrypted. The data security and governance of MySejahtera were managed by the National Cyber Security Agency (NACSA), an arm of the National Security Council (NSC). Data retention limits for the applications ranged from 21 days to six months, though not all applications declared limits; MyTrace stated the duration of data retention in devices was 21 days (Bedi 2020), while MySejahtera's check-in feature retained data for 90 days (Krishnan 2020). The now-defunct Gerak Malaysia also stated that information on travel would be retained for six months after the MCO ceased. Meanwhile, COVIDTrace stated that, should users revoke consent, their data would be deleted from the system, thus protecting users from future data breaches.

While technology was crucial in mitigating infection rates, the efficacy of contact-tracing applications alone was questionable. For instance, only 4% of all reported reports of COVID-19 cases in Malaysia were detected by MySejahtera (CodeBlue 2020). Researchers have highlighted, however, that contact tracing could work if it was part of a wider public health strategy and response that encompassed mass testing and strict physical distancing measures at the same time (Browne 2020). The self-assessment tool in MySejahtera detected positive cases with a success rate between 3.1% and 6.5% (Krishnan 2020). In addition, data gathered from the check-in function at a densely populated location could swiftly trace close contacts. A cluster at a large shopping complex resulted in the identification of 221 positive cases from 17,260 screened users, demonstrating an efficacy rate between 15.1% and 37.8% (Krishnan 2020). Such achievements justified the use of contact-tracing applications, as the MOH Director General, Dr Noor Hisham, attested in October 2020 (Palansamy 2020).

Data privacy and security concerns

Privacy has diverse cultural interpretations. Joseph Savirimuthu (2016) has conceptualised privacy through the lenses of jurisdiction, space, and identifiable data. Such concepts were only nascent in Malaysia during the pandemic. Ipsos, a marketing research and consulting firm, surveyed Malaysians in 2019 and revealed a high degree of acceptance

of sharing data with the private sector or the government if there was a reward of better services or other benefits (Ipsos 2019). As ‘data is the new oil’, however, it could be tempting for companies and countries to abuse this receptivity for economic and political gains.

The multitude of applications available to Malaysians and low awareness about the management of data and privacy rights could lead to problems of mining digital platforms for information. In addition, increased surveillance and a culture of exchanging data for benefits could bear social and security-related consequences. Malaysia’s data protection and privacy systems have had a poor reputation – in a 2019 study by Comparitech, Malaysia ranked fifth lowest out of 47 countries assessed (Tang 2020). Furthermore, Malaysia had previously suffered from serious data leaks, including the patient records of nearly 20,000 Malaysians (Habibu 2019) as well as 46.2 million mobile subscribers of Malaysian telecommunications companies and mobile virtual network operators (MVNO) (Vijandren 2017). With the Personal Data Protection Act (PDPA) of 2010 falling short of enforcing the mandatory reporting of data breaches, neither the severity of data breaches nor high cyber hygiene levels could be clearly assessed. Malaysia’s data governance, however, could be judged by the capability of the government to protect users from data breaches and government efforts to construct standards upholding privacy.

First, heightened responsibility and accountability require appropriate legislation and enforcement. The PDPA possessed loopholes that weakened its protection of personal data beyond commercial purposes. This meant that the regulations did not include the government sector in its scope. While section 203A of the Penal Code provides penalties for any person who leaks information in the performance of their duties, the absence of mandatory data breach reporting rules for the private and public sectors reduced enforcement and transparency.

Additionally, the Act did not specifically address online privacy protections or users’ privacy protections. Malaysia’s challenges related to protecting privacy would require the reconciliation of cultural interpretations of privacy with technical possibilities. The notion of identity being separate from personal data was not a widespread practice, which could underlie the fundamental delay in the establishment of policy directions in data governance, as concepts and gaps in data classification needed time to become incorporated into policy and law. While international standards such as the EU General Data Protection Regulation (GDPR) had upheld user privacy by adding layers of protection such as

anonymisation, pseudonymisation, or encryption, Malaysia's laws and various personal data protection standards did not implement principles of data protection by design. This should be explored further as Malaysia's legislation on the matter develops.

Second, developing industry standards depends on the ability of the industry to uphold principles through various practices. An example of the different practices in security-by-design is the choice between centralised and decentralised data storage, each of which has different cybersecurity implications. The diversity of Malaysia's contact-tracing landscape indicated a variety of practices in data management. Contact-tracing applications in Malaysia utilised both centralised (MySejahtera and SELangkah) and decentralised (MyTrace and partial functions of COVIDTrace) models. MyTrace, for instance, utilised Bluetooth signals and proximity between devices to store information for contact tracing. Bluetooth signals are useful for data collection not directly associated with individuals, as the technology uses unique numbers in place of personally identifiable information. Additionally, MyTrace data was stored on users' devices for up to 21 days, which could assure users that their information was not shared or retained unnecessarily (Bedi 2020). Comparatively, MySejahtera collected data on a secured server with various details about users stored centrally. While MySejahtera's centralised database might have efficiently facilitated contact tracing for the MOH (Yusof 2020), the substantial amounts of information it collected could have unsettled users.

Through the lens of cybersecurity, both models have their weaknesses. For decentralised systems such as MyTrace, the security of the Bluetooth data collection depended on the application operator and the cyber hygiene of the user. In contrast, MySejahtera's centralised system meant that responsibility for data management was in the hands of a single body. Thus, while centralised databases can be more efficient, their weaker anonymity controls and data retention limitations can increase vulnerabilities when sharing information with the application.

As the PDPA and its lacking enforcement measures did not mainstream security-by-design conversations among developers, safeguards should be in place to protect users. Two ideas that can be considered are to collect the minimum data needed and to roll out deletion measures – either for the application or for the data itself. The right to forget should be discussed further in Malaysian social and legislative contexts such that information retained by any data collector can and should be deleted.

Learning from this experience, the government should also provide more transparency for its data processing – and other mechanisms of these applications – in order to gain more trust from citizens. There could also be platforms for citizens to provide open feedback to improve the applications. It is necessary for data to be retained for only a limited timeframe to serve only the specific purpose for which it was collected. In a nutshell, fully transparent and accountable privacy-preserving solutions should be embedded by design to balance the benefits and risks associated with personal data collection, processing, and sharing. Components of an awareness campaign should include channels to contact relative cybersecurity agencies for cybersecurity issues. Thus, the strategy should map out the responsibilities of respective cybersecurity agencies and provide avenues to possible assistance. Another campaign could make cyber hygiene a norm of cyber practices. As washing hands has become the norm to mitigate the risk of COVID-19, similar consistent reminders could relate to standard cyber hygiene practices such as updating applications frequently, reading terms and conditions before agreeing to anything online, being wary of personal information shared, and visiting sites that are secured with necessary certifications.

Concluding reflections and anticipations for the future

The concerns surrounding the privacy and security aspects of technology, which was abruptly and extensively used to combat COVID-19, became more real as possibilities slowly began to look like reality. One example is the case of Singapore, which retracted its promise to safeguard the privacy of its official COVID-19 application users. In March 2020, when Singapore first introduced the TraceTogether application, the government repeatedly and explicitly vowed that the data collected would be used purely for contact-tracing purposes. Ten months later, however, after the application's use became mandatory, it was revealed that the data could also be accessed by police to conduct criminal investigations (Sato 2021). This aligns with warnings made by analysts about the dangers of technological tools being exploited and privacy and security being violated in efforts to heighten surveillance and control.

As with other countries, Malaysia also experienced an increase in technology use during COVID-19, which brought both positive and negative impacts to society. It is safe to say that technology will grow increasingly important in our daily lives, even beyond the pandemic. It is important to remember, however, that the issues of privacy and security should be prioritised: as the internet is borderless, no person,

organisation, or country is safe from the attacks of hackers with malicious intentions. While privacy and security concerns related to COVID-19 have largely been discussed in the context of contact-tracing applications, in the near future, other technologies such as vaccine passports could also pose a danger to privacy, particularly as sensitive data travels across borders. The damage of security and privacy violations would be unimaginable; hence Malaysia needs to take steps to protect its citizens at all costs. Transparency in the use of technology, especially in the processing of mass data, and creating platforms for open feedback from citizens, as well as other mechanisms that could instil trust from society, are among the first steps that should be considered. Further, although the political scene in Malaysia has been deemed unstable in recent times – with unpredictable and constantly changing leadership – joint efforts and unity in safeguarding citizens' privacy and security should be made a priority, regardless of who is in power.

References

- Ahmad, Noor Ani; Lin, Chong Zhuo; Rahman, Sunita Abd; bin Ghazali, Muhammad Haikal; Nadzari, Ezy Eriyani; Zakiman, Zazarida; Redzuan, Suziana; Taib, Salina Md; et al. (2020). 'First local transmission cluster of COVID-19 in Malaysia: Public health response'. *International Journal of Travel Medicine and Global Health*, vol. 8, no. 3, pp. 124–130. <https://doi.org/10.34172/ijtmgh.2020.21>
- Bedi, Rashvinjeet S. (2020). 'Data from Covid-19 app MyTrace kept on phone, not govt servers, says Khairy'. *The Star*, 8 May. <https://perma.cc/9QXN-MFB4>
- Bernama. (2020). 'COVID-19: MAF to use drones at 12 hotspots during MCO'. *Bernama*, 24 March. <https://perma.cc/EPT7-A4ZX>
- Boo, Su-Lyn. (2020). 'How MySejahtera protects your data and does more than contact tracing'. *CodeBlue*, 12 August. <https://perma.cc/P9L9-HG3T>
- Browne, Ryan. (2020). 'Why coronavirus contact-tracing apps aren't yet the "game changer" authorities hoped they'd be'. *CNBC*, 3 July. <https://perma.cc/EG6J-QL5K>
- CodeBlue. (2020). 'MySejahtera directly tracked just 4% of Covid-19 cases'. *CodeBlue*, 18 November. <https://perma.cc/SBK9-ZMY4> [Last accessed 20 May 2021].
- Habibu, Sira. (2019). 'Health Ministry investigating leak of patient records'. *The Star*, 19 September. <https://perma.cc/4AXM-AFQM> [Last accessed 20 May 2021].

- Ipsos. (2019). *Global Citizens and Data Privacy: A Malaysian Perspective*. <https://perma.cc/5EXR-SH5B> [Last accessed 20 May 2021].
- Krishnan, Dhesegaan B. (2020). 'MySejahtera app helped Health Ministry detect 9,167 Covid-19 cases nationwide'. *New Straits Times*, 19 November. <https://perma.cc/YV8E-3TSZ> [Last accessed 20 May 2021].
- Malaysia Digital Economy Corporation. (2020). *MDEC Rolls Out Micro and SMES E-commerce Campaign under PENJANA Recovery Plan*, 30 June. <https://perma.cc/AP2J-X6VS> [Last accessed 20 May 2021].
- New Straits Times*. (2020). 'TM unveils solution for Covid-19 early detection', 3 April. <https://perma.cc/544H-XYHT> [Last accessed 20 May 2021].
- Palansamy, Yiswaree. (2020). 'Dr Noor Hisham: 1 Utama mall cluster in Selangor at sixth-generation infection'. *Malay Mail*, 20 October. <https://perma.cc/4GG5-QBUA> [Last accessed 20 May 2021].
- Savirimuthu, Joseph. (2016). *Security and Privacy*, vol 3. UK: Routledge.
- Sato, Mia. (2021). 'Singapore's police now have access to contact tracing data'. *MIT Technology Review*, 5 January. <https://perma.cc/DK5H-NDUZ> [Last accessed 20 May 2021].
- Tang, Ashley. (2019). 'Study: Malaysia the fifth-worst country for personal data protection'. *The Star*, 16 October. <https://perma.cc/49AW-5P9D> [Last accessed 20 May 2021].
- The Star*. (2020). 'My Sejahtera App "a must for all businesses"', 4 August. <https://perma.cc/A22G-3U2M> [Last accessed 20 May 2021].
- Vijandren. (2017). '46.2 million Malaysian mobile phone numbers leaked from 2014 data breach'. Lowyat.net, 30 October. <https://perma.cc/UAS5-FE8R> [Last accessed 20 May 2021].
- Yusof, Teh Athira. (2020). 'MySejahtera app now mandatory for all business'. *New Straits Times*, 3 August. <https://perma.cc/WZ82-23SM> [Last accessed 20 May 2021].

5. Economic crisis and the panopticon of the digital virus in Cambodia

Sokphea Young

Within Southeast Asia, Cambodia is the most impoverished nation, notwithstanding an economy reliant on garment and manufacturing industries, tourism, and agriculture. The country's garment and manufacturing sector, especially the garment and footwear industry, emerged in the early 1990s after the first general elections organised by the United Nations Transitional Authority in Cambodia. The United States and the European Union supported Cambodia's export-driven economy through their Generalised Systems of Preferences and other trade schemes. The EU, for example, allowed Cambodia to export duty-free and quota-free to its market from 2001 under the Everything but Arms (EBA) scheme. These policies boosted Cambodia's garment sector such that, as of 2019, it employed about 600,000 Cambodians, most of whom were women from rural areas. With the support of the garment industry and other industries, Cambodia managed to significantly reduce poverty and transform its economy to become a lower-middle-income country in 2016. From 2017 to 2019, Cambodia exported on average €4 billion (European Commission 2020) and US\$4 billion (United States Census Bureau 2021) of apparel products per year to the EU and US markets, respectively. As such, the manufacturing industry accounted for about 10% of Cambodia's GDP (World Bank 2020).

While these forms of support were significant to the country and its people, the Cambodian government's respect for human rights, particularly freedom of association and freedom of speech, and democracy in general has been dismal, as the country has leaned towards authoritarianism, as evidenced by the dissolution of the most prominent opposition party, the Cambodia National Rescue Party (CNRP), in 2017 as

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well as the ongoing intimidation and spurious arrests of human rights and environmental defenders, all of which restricted the space of civil society organisations. These restrictions led the EU to partially withdraw its EBA scheme with Cambodia in February 2020, harming workers in related sectors. Many factories were forced to shut down without proper indemnities for the employees.

Coinciding with the imposition of import tariffs by the EU, Cambodia's economy, especially its garment and manufacturing, was doubly punished by the emergence of coronavirus (SARS-CoV-2), which spread across the world. Not only did the pandemic severely disrupt the global supply chain and markets of garment and manufacturing industries, leaving many jobless, but it also affected the entire country's socio-economic conditions. The government's lack of proper remedial measures for the impacts of the pandemic sparked dissatisfaction, which in turn led to activism. Amid the country's shift towards authoritarianism, as seen in the 2018 election, and the restrictions imposed by the government to contain the virus, many were forced to stay at home and were thus compelled to subscribe to digital platforms for study, work, communication, and activism. This pushed those who were affected by the EU's sanctions and the pandemic to carry out online activities to advocate for better solutions rather than stage offline (on-street) protests.

In this chapter, I seek to understand online activities and activism during the pandemic and examine the adverse consequences of avoiding offline activities over the same period. This chapter argues that the endeavour, either by the state or individuals, to avoid offline activities to contain the virus adversely induced a new virus – digital surveillance – that infiltrated everyone's digital devices. More than the panopticon of COVID-19, the symptoms of which are easily observable, this new form of digital virus embodies itself in every smartphone device without showing any symptoms. While social media was a COVID-19-free platform for ordinary citizens and activists to connect and express their concerns during the pandemic, it became an invisible hand of surveillance of the authoritarian ruling system.

This chapter is written based on my ongoing observation of Cambodia's sociopolitical and technological developments, employing digital ethnography and collecting data from relevant social media pages and profiles. The quantitative data presented in this chapter was acquired from Google, focusing on the 'news' media outlets it has captured.

The remainder of this chapter begins with a discussion about conceptualising digital media in the context of surveillance as a new form of digital virus, an expression of the pandemic that has been less familiar to us. It then illustrates how COVID-19 induced Cambodians to subscribe to social media and digital devices before providing evidence on how the latter could strengthen an authoritarian surveillance system.

The virus and digital technology panopticon

The digital community has been recognised as a modern tool of human development and evolution. Many have been impressed by this evolution, as digital devices can process data and circulate images and voices from one community to another. Kittler (2010, p.11) has argued that ‘machines take tasks – drawing, writing, seeing, hearing, word-processing, memory and even knowing – that once were thought unique to humans and often perform them better’. Given this capability, digital devices like smartphones and cloud devices have become modern panoptic tools incubated by our everyday lives. These devices and the internet have been replacing our basic needs. Drawing on Foucault’s (2012) conception of the panoptic prison cell, I argue that these devices gradually ingrain themselves in our bodies and minds without warning; health applications are exemplary in this sense. It is a virus that affects us without giving us symptoms. With our unintentional consent, this digital virus has extracted our personal data for buyers’ commercial and political purposes. Zuboff (2019) has rightly illustrated that access to the digital community exposes oneself to significant risks. At risk is the loss or co-optation of privacy rights, rendering personal data (our private space, in essence) to corporate giants. Having submitted to machine learning, it has been increasingly difficult to hold the state and politicians accountable, particularly through activism. More often than not, for the sake of profit, the corporate capitalist media have allowed surveillance and authoritarian states to use their data to gain legitimate power, as in the US presidential and UK parliamentary elections, and to censor opponents.

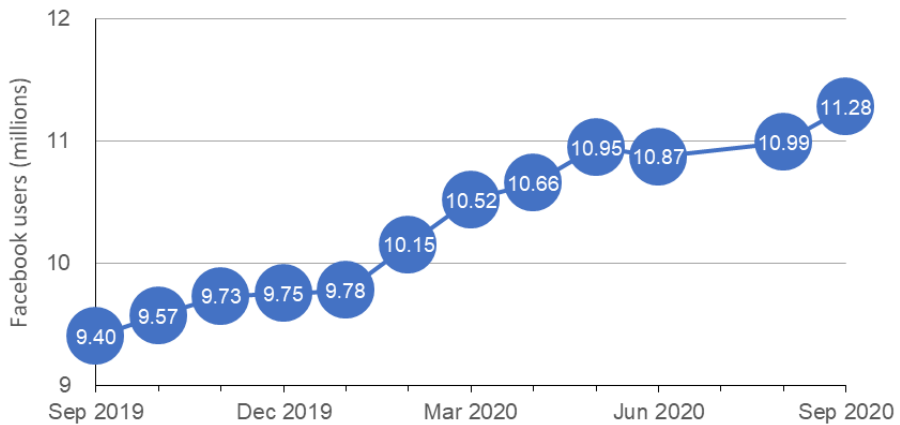
Drawing on how activists and the state interact in China, MacKinnon (2010) has introduced the concept of ‘networked authoritarianism’, which is a political tactic that creates selective social openings for transparency but at the same time monitors and stifles dissent (He and Warren 2011). This networked authoritarianism in the digital era is framed by the notion of a networked society whose key social structures

and activities are organised and linked electronically (Castells 2010). The networked authoritarian Chinese government, for instance, allows people to use the internet to submit grievances or unjust activities, but the government also monitors who reports or submits the grievances. In China, only specific applications or types of social media platforms are allowed to be used, and this makes it easier for the ruling regime to scrutinise and surveil users in order to curb outrageous dissent. The use of these digital communication technologies, therefore, has undesirable side effects, one of which is exposure to the surveillance system (Howard and Hussain 2013), a critical concern for digital activism in non-democratic political systems that appear to have adopted the Chinese authoritarian style of panoptic surveillance, of which Cambodia is an example.

Cambodia's online community and activism amid the pandemic

The foregoing theorisation of how digital communication and technologies carry risks has been eminent in the experiences of Cambodia and other countries during the pandemic. Following the government's instructions not to mobilise or make physical contact, especially in education and offices, the pandemic forced millions of Cambodians to subscribe to digital devices and communication platforms. By September 2020, about 67% of Cambodians (11.28 million of about 16 million) had subscribed to Facebook (NapoleonCat 2020), making this social media site a popular means of communication among Cambodian people, particularly the youth. This figure had climbed from about 9.73 million subscribers before the pandemic, in December 2019, only gradually increasing to 9.78 million users by January 2020, by which time COVID-19 had not spread widely in the country. With the pandemic starting to affect the country in early February 2020, the number of subscribers surged rapidly, to 10.52 million in March and 10.95 million in May the same year (see Figure 5.1). Young adults and children were among the new subscribers, with an age distribution of 7.8% ages 13–17, 31.4% ages 18–24, and 47.5% 25–34 as of March 2020 (NapoleonCat 2021). Likewise, the number of smartphone subscribers also increased, as these devices were required to access social media sites such as Facebook, Telegram, and YouTube. ITU (2021) reported that the number of mobile cellular phone subscribers in Cambodia increased from 19.42 million in 2018 to 21.42 million in 2019. Compared

Figure 5.1. Facebook users in Cambodia before and during the COVID-19 pandemic (millions)

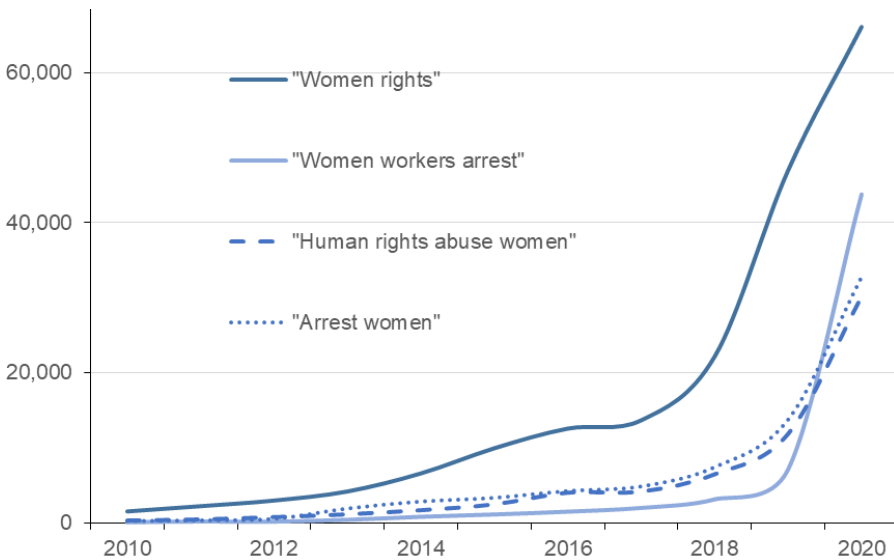


Source: Author's compilation from NapoleonCat (2020).

with a total population of 16 million, this data suggests that many Cambodians could afford at least two phones (Young 2021a). Given the low quality of education, the higher percentage of young subscribers raised critical concerns for data and privacy issues as well as the users' rights. These young adults and children subscribed to the internet and social media for online education, watching livestreamed lectures or pre-recorded video instructions. Based on my field observations, albeit under the supervision of their parents or guardians, many of these users were known to be addicted to YouTube, Facebook, TikTok, and online games and exposed to inappropriate content instead of accessing teaching materials.

Not only did the pandemic compel ordinary Cambodians to go online; it also negatively affected Cambodia's economy (coinciding with the partial withdrawal of the EBA programme). Coupled with the decline of purchase orders in the apparel and footwear industries, Cambodia's GDP growth in 2020 was predicted to be between -1% and -2.9%, with about 1.76 million jobs at risk (World Bank, 2020, p.3). The World Bank (2020) emphasised that the poverty rate in the country was to increase by 20% in 2020. Some factories closed down, as they were affected by either the impact of COVID-19 on global supply chains or the withdrawal of the EU's EBA scheme. This raised concerns for affected populations, especially garment and manufacturing workers, who then sought government intervention and assistance. Given the government's restrictions on physical movement, the ability

Figure 5.2. Online news reports on Cambodia related to selected search terms before and during the COVID-19 pandemic[†]



Source: Author's collection of data from Google Search.

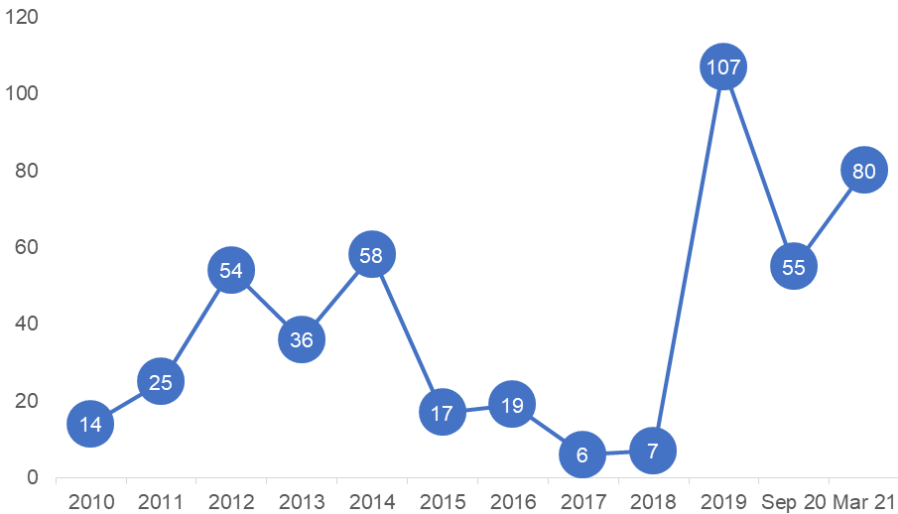
to lobby the government and concerned stakeholders was limited to on-line activities. Workers and other advocates began to use social media platforms including Facebook to express grievances, such as a lack of indemnities (as factories were shut down) and dissatisfaction with the government's failure to remedy job losses and cuts due to COVID-19. Coming from either individuals or media outlets, news on job losses and cuts and people's dissatisfaction with government measures were widely observed in Google searches.

As I traced the development of news on women workers on Google (see Figure 5.2), I found that results for 'women rights Cambodia' were often reported by local and international media outlets: the number of mentions increased from 47,000 in 2019 to 66,100 in 2020. While digital and social media have become platforms for disgruntled women to frame and amplify their concerns to the public, it has not been an ideal solution. Querying the term 'women workers arrest' in Cambodia, I found that the frequency of the term exploded from 7,170 times in 2019 to 43,800 times in 2020. This signified that many women workers or activists were arrested, detained, or harassed by authorities. For instance, one female worker, who was a member of a union, was arrested because of a post on Facebook that criticised her employer for

dismissing 88 workers without following government guidelines and instructions not to cut jobs but rather reduce workers' wages (Kelly and Grant 2020). Following her post, the employer who saw the post decided to re-employ the workers, and she immediately deleted her post from Facebook, but the employer still filed a complaint against her, accusing her of creating fake news to defame the company and buyers. The ability to notice who was posting what or putting news on Facebook from their smartphone has indicated the effectiveness of both private companies and government surveillance systems. Both companies and the government may have worked together to censor online activities. The government's Anti-Cybercrime Office has been playing an important role in this effort. In one instance, the prime minister of Cambodia, who had been in power for more than three decades (Young 2021b), claimed that smartphones allowed the government to track and trace anyone effectively (Young 2021c). He claimed, 'If I want to take action against you, we will get [you] within seven hours at the most' (Doyle 2016). For anyone who dares to speak out against the supreme leaders or the government, the consequence is predictable based on that statement.

While many Cambodians moved their activities online to contain and prevent the spread of the virus, political activists, environmental and human rights defenders, workers, and protesters also resorted to online activities. As they went online, they submitted to a new form of authority that I call a 'surveillance virus', which infects users at all times. As in Figure 5.3, it appears that the pandemic caused a surge in spurious arrests of political activists, environmental and human rights defenders, workers, and protesters. The accumulation of the arrest in 2019 and 2020 was induced by two important reasons. First, authorities arrested those activists with whom they were still disgruntled even two years after the 2017 dissolution of the opposition party (CNRP) prior to the 2018 elections. The election allowed the ruling party to take control of all national assembly seats and Prime Minister Hun Sen to remain in power (Young 2021b). Second, the arrests were made in response to those who supported the attempt of CNRP leader Sam Rainsy, who had lived in exile since 2016, to return to Cambodia in 2019. As of September 2020, the number of people arrested by authorities had increased to 55, alarming the international community's concerns over the country's tendency to practise authoritarianism during the pandemic. In tandem with the preceding reasons, the arrests in 2020 were linked to criticisms made by activists and citizens on how the government handled and contained the pandemic. By March 2021, as

Figure 5.3. Activists arrested in Cambodia before and during the COVID-19 pandemic



Source: modified from Young and Heng (2021).

many as 80 activists and ordinary citizens had already been arrested or detained for criticising and expressing their opinions about the efficacy of the Chinese-made COVID-19 vaccines (Sinopharm and Sinovac) that were preferred and being rolled out by the government. The government claimed that they were arrested because their opinions and statements (through text and video) on Facebook and TikTok ‘gravely affect[ed] social security’ (Finney 2021). Some of the arrests were publicly reported by the Facebook page of the government’s Anti-Cyber Crime Office (ACCO). The ACCO was the surveillance unit actively censoring and screening online news and posts, including ‘fake’ news, on social media. The arrests were enabled by the ‘networked authoritarianism’ highlighted by MacKinnon (2010) in China: the government allowed online grievance submissions but tackled critical ones, as they undermined the ruling regime’s authority and legitimacy. Cambodian activists’ and citizens’ critiques of how the government handled the pandemic, socio-economic issues, and other social issues during the crisis have been subject to scrutiny and surveillance. Social media-mediated devices have become invisible tools of the ruling system.

Conclusion

In this chapter, I have demonstrated how COVID-19 not only affected Cambodia’s economy but also pushed many Cambodians to go online,

subscribing to digital platforms. Digital media platforms have been believed to help contain the spread of COVID-19, but such endeavours apparently allowed users to become infected by a new form of virus, digital surveillance, whose symptoms cannot be diagnosed or known by users, only by the government. This digital virus has surrounded users, placing them in the panoptic prison cell of the surveillance system. The users only realise that they are in the cell when the observers or guards (the government, in this instance) take action against them, as illustrated by the women workers and activists in the present study and beyond. This new type of virus tightened the authoritarian surveillance system to effectively monitor the antagonistic behaviour of citizens and activists that could undermine the ruling system's legitimacy.

Note

1. I used key terms to search on Google and classified the results of the search by year. To ensure that all search results were about Cambodia, 'Cambodia' was always added to individual terms when searched on Google: 'Women workers arrest Cambodia', for example. These search results were limited to 'news' rather than 'all' results in the Google search engine. I then grouped these results by year of publication.

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References

- Castells, Manuel. (2010). *The Information Age: Economy, Society, and Culture*, vol 1: *The Rise of the Network Society*, 2nd edn. UK: Wiley-Blackwell.
- Doyle, Kevin. (2016). 'Cambodian leaders' love-hate relationship with Facebook'. BBC, 7 January. <https://perma.cc/5LL4-ANEQ> [Last accessed 20 January 2021].
- European Commission. (2020). *Countries and Regions*, 18 June. <https://perma.cc/D4YG-9M4N> [Last accessed 26 July 2020].
- Finney, Richard. (2021). 'Cambodian activist arrested for criticizing Chinese COVID-19 vaccine'. *Radio Free Asia*, 15 March. <https://perma.cc/G4FU-R3EW> [Last accessed 25 April 2021].

- He, Baohang; and Warren, Mark E. (2011). 'Authoritarian deliberation: The deliberative turn in Chinese political development'. *Perspectives on Politics*, vol. 9, no. 2, pp. 269–289. <https://doi.org/10.1017/S1537592711000892>
- Howard, Philip N.; and Hussain, Muzammil M. (2013). *Democracy's Fourth Wave? Digital Media and the Arab Spring*. UK: Oxford University Press.
- ITU (International Telecommunication Union). (2021). *Mobile-Cellular Subscription 2020*, 18 January. <https://perma.cc/MDT9-SSVY> [Last accessed 25 February 2021].
- Kelly, Annie; and Grant, Harriet. (2020). 'Jailed for a Facebook post: Garment workers' rights at risk during Covid-19'. *The Guardian*, 16 June. <https://perma.cc/GX5G-VEM7> [Last accessed 20 January 2021].
- Kittler, Friedrich. (2010). *Optical Media*. UK: Polity.
- MacKinnon, Rebecca. (2010). *Networked Authoritarianism in China and Beyond: Implications for Global Internet Freedom*. USA: Stanford University Press.
- NapoleonCat. (2020). *Facebook Users in Cambodia*: September 2020. <https://perma.cc/CE6S-JV3R> [Last accessed 26 July 2020].
- NapoleonCat. (2021). *Facebook Users in Cambodia*: March 2020. <https://perma.cc/CF7M-4N4R> [Last accessed 1 February 2021].
- United States Census Bureau. (2021). *Trade in Goods with Cambodia*. <https://perma.cc/6VQM-4KU4> [Last accessed 15 January 2021].
- World Bank. (2020). *Cambodia Economic Update: Cambodia in the time of COVID-19*. USA: World Bank.
- Young, Sokphea; and Heng, Kimkong. (2021). *Digital and Social Media: How Cambodian Women's Rights Workers Cope with the Adverse Political and Economic Environment amid COVID-19*. Sweden: Raoul Wallenberg Institute.
- Young, Sokphea. (2021a). 'Citizens of photography: Visual activism, social media and rhetoric of collective action in Cambodia'. *South East Asia Research*, vol. 29, no. 1, pp. 53–71. <https://doi.org/10.1080/0967828X.2021.1885305>
- Young, Sokphea. (2021b). *Strategies of Authoritarian Survival and Dissensus in Southeast Asia: Weak Men versus Strongmen*. Singapore: Palgrave Macmillan.
- Young, Sokphea. (2021c). 'Internet, Facebook, competing political narratives, and political control in Cambodia'. *Media Asia*, vol. 48, no. 1, pp. 67–76. <https://doi.org/10.1080/01296612.2021.1881285>
- Zuboff, Shoshana. (2019). *The Age of Surveillance Capitalism: The Fight for the Future at the New Frontier of Power*. USA: Profile Books.

6. Property development, capital growth, and housing affordability in Malaysia

Keng-Khoon Ng

Many governments and state agencies in the global South have shifted towards the operation of ‘property states’ (Haila 2015), ‘cities for profits’ (Shatkin 2017), or ‘neoliberal policies’ (Chen and Shin 2019). In Malaysia, retirement and second-home properties have been promoted by the government to lure foreigners to buy relatively cheap freehold properties in cities such as Kuala Lumpur, Penang, Melaka, and Johor Bahru. This development tendency, however, has added pressure to the provision of affordable housing because developers have been more keen to develop international property projects than less profitable products of local housing.

From 18 March 2020, Malaysia imposed a series of entry and movement restrictions in response to the COVID-19 pandemic. These restrictions brought uncertainty and new challenges to the (future) operation of international property market. Adopting an urban political economy perspective, this chapter discusses the property-related policy responses taken by Malaysian governments while reflecting on prevailing concerns over housing affordability. Though long-standing impacts on the landscape of housing in Malaysia are hard to predict, the COVID-19 crisis revealed the inevitable risks of fuelling capital growth through the proliferation of speculative, high-priced international real estate projects with little relevance to society.

Constitutionally, housing development in Malaysia is governed by a series of legal Acts and policies authorised by the Ministry of Housing and Local Government. The federal government’s role in housing planning and supply, however, is complemented by the various responsibilities that rest upon state governments and local authorities. While housing is a matter governed by both federal and state governments,

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the latter definitely enjoys more executive power where actual housing development projects are concerned. In short, housing- and land-related development has remained under the state's authority in Malaysia.

Housing development in Malaysia occurs through a dynamic relationship between state and market. Since the 1980s, housing had become a private enterprise predominantly undertaken by private developers. For example, the Ninth Malaysia Plan (2006–2010) clearly stated that the 'private sector [acts] as the engine of growth while [the] public sector takes up the roles of facilitator and regulator and civil society and others as partners in development' (Economic Planning Unit 2006). Notwithstanding a small number of houses produced directly by the state, housing has remained a private sector-led activity in Malaysia.

How does the government make sure there is a sufficient housing supply for low-income (defined as below the 40th percentile of the income distribution) and middle-income (defined as the 40th to 80th percentiles) households? In practical terms, two basic rules enforced since 1982 are worth mentioning: (1) private developers must dedicate at least 30% of a project's units to low-cost housing, and (2) they must allocate at least 30% of the units for Bumiputera (i.e. Malay and other indigenous groups of Malaysia) buyers with discounted prices under the Bumiputera Lot Quota Regulation (a pro-Bumiputera affirmative action policy). However, the provision of affordable housing for middle-income households, especially those in urban areas, was not adequately addressed by existing housing policy. In addition, one of the root causes of this housing mismatch issue was the proliferation of international property development.

The proliferation of international property development

Land has moved to the centre of urban politics in contemporary Malaysia. While land has remained largely a national asset, land-based developments have been pursued aggressively by both federal and state governments as a key fiscal policy to accelerate economic growth. Despite the contributions of international property investment to Malaysia's fairly rapid economic development, it has neither provided improvements towards the democratisation of urban transformation processes nor increased the provision of affordable housing. Undertaking international property development, with speculative, high-growth investment as an inherent feature, has indeed been an exploitation of land.

The proliferation of international residential property development was bound up with the Malaysia My Second Home programme (MM2H), which provides a special long-term visa (renewable every 10 years) for foreigners to reside in Malaysia. This investment migration programme was introduced by the Ministry of Tourism, Arts, and Culture in 2002, with 42,000 participants having been approved as of 2021. To encourage property-buying, for example, MM2H participants are allowed to partially withdraw from the required fixed deposit from the second year onwards (50,000 Malaysian ringgit for those aged 50 and above or 150,000 Malaysian ringgit for those under 50) for expenses related to purchasing property. It is important to note that, in 2020, the federal government lowered the minimum price threshold to avail of this benefit from RM1 million to RM600,000 (in the condominium/apartment segment) in an attempt to solve property overhang. A total of 31,661 unsold residential units were recorded by the end of the first half of 2020 for all of Malaysia; the states of Johor (with 6,166 unsold units) and Selangor (with 4,865 unsold units) had the most severe property oversupply (NAPIC 2020). To what extent has MM2H accelerated capital growth in residential property? Could it have actually worsened the problems of property oversupply and housing unaffordability?

Despite the fact that there is no government or market data enabling us to answer these questions, the whole idea of MM2H is to capitalise on offshore investments, privileged lifestyles, and the ability to hold long-term visas for small-scale investors. In line with Aihwa Ong's (1999) concept of 'flexible citizenship', MM2H elucidated such intentions by maximising capital accumulation through strategies of migration and border-crossing flexibility. It is interesting to note that, in the first decade of MM2H (2002 to 2012), most of the second-home participants were retirees seeking a high-quality lifestyle with a relatively low cost of living compared to their homelands (see Ono 2015; Toyota and Xiang 2012; Wong and Musa 2014). In the last decade, however, both local and foreign developers have taken advantage of this policy to scale up lucrative international property projects. As MM2H has not been recognised as a discrete housing category, there has not been a distinct type of housing provider or developer for this kind of real estate development. Also, there has not yet been a specific housing policy guide or control the development of MM2H projects.

For example, Iskandar Malaysia regularised the formation of an international zone in Iskandar Puteri (formerly known as Nusajaya) to allow more than 25,000 residential units to be built for a speculative

market of seamless border-crossing living between Singapore and Southern Johor (see Ng and Lim 2017; Ng 2020). The formation and legislation of such an international zone enabled local authorities to charge higher property taxes for foreign homebuyers. Most crucially, all the housing projects located in the international zone were permitted to have 100% foreign ownership. In other words, there was no requirement to provide the 30% quota for Bumiputera lots or the 30% quota for low-income housing in the international zone. It is important to note that the establishment of the international zone thus suspended these two policy requirements that had laid a foundation for housing equality in Malaysia since 1982.

In Iskandar Puteri, a series of exclusive facilities such as international boarding schools, a world-class theme park, a private yacht marina, healthcare centres, and hotels were developed to create a lifestyle matching international standards. Forest City by Country Garden Pacificview is another housing mega-project where a well-capitalised Chinese developer ventured into the emerging market of international property in Johor (see Koh, Zhao, and Shin 2021). This project took its cue from Beijing's promulgation of the Belt and Road Initiative to lure homebuyers from China and the neighbouring regions. These high-priced housing projects, however, did not make any direct contribution to the provision of affordable housing for Malaysians.

To this end, the MM2H programme highlights the dynamics of migration policy and economic development under a strong authoritarian state that shaped private housing markets to channel opportunities for land-based developments. In other words, MM2H can be best understood as a result of contingent overlaps of the capitalist interests of the state and real estate developers.

The COVID-19 outbreak in Malaysia caused an unprecedented disruption to the international property market and the operation of the MM2H programme. As a result, new applications for MM2H were suspended with no clear indication as to when the programme could resume. This sudden decision disrupted international property sales. Furthermore, movement restrictions triggered by the pandemic reshuffled the MM2H holders' privileges of border-crossing and visiting their Malaysian homes. For example, the Johor–Singapore border closures had a far-reaching impact on everyday border-crossing practices, not to mention the existing business of international property. Although MM2H visa holders could apply for entry permission to return to Malaysia, the government enforced entry restrictions on foreigners who were travelling from countries that had recorded over 150,000 COVID-19

cases. In addition, all passengers travelling into Malaysia were required to serve a two-week quarantine at dedicated quarantine centres.

Several MM2H pass holders and consultants reported to local news media their dissatisfaction over a lack of clear directions and considerations given by the Malaysian authorities (see Davison 2020; James 2020; *The Star* 2020; Thomas 2020). In brief, they wished for MM2H visa holders to be treated equally as citizens because they had been contributing a large amount of direct investment to the country's economy. From the perspective of developers, the president of the Real Estate and Housing Developers Association Malaysia opined:

With the Malaysia My Second Home (MM2H) programme put on hold and MCO reinstated, the developers have no other choice but to price the new projects at a very competitive price to survive the pandemic. (Chew and Lim 2021)

To an extent, the statement reflects that property prices could still be adjusted to match the income level of local buyers instead of merely focusing on residential products with higher profit margins.

Taken together, all these perspectives reveal not only the instability of the MM2H programme but also the vulnerability of excessive international property projects in the country. For the government, perhaps the time is ripe to think more rigorously about this investment migration program in terms of risk management, investor relations, and inclusiveness. For the real estate developers, the COVID-19 pandemic exposed underlying concerns over the 'sustainability' of the business model and growth strategies of international property development. What still makes these high-priced residential projects attractive when the selling point of cross-border mobility can no longer be taken for granted? Given that the COVID-19 pandemic might realistically take several years to bring under control globally, the market response towards international property in the post-coronavirus era remains uncertain. For property investors, the up-and-down market sentiments over high-priced residences should ultimately be seen as a high-risk investment because luxury property supply has simply exceeded market demand in Malaysia.

How helpful has the 2021 national budget been for Malaysians to buy homes?

Housing affordability is a salient issue in Malaysia, especially for urban dwellers. Between 2002 and 2016, the country's overall housing

affordability worsened significantly, with Kuala Lumpur, Selangor, and Johor ranked in the 'seriously unaffordable' category (KRI 2019). Although there were more than 31,000 unsold units available on the market in 2020, these units were simply unaffordable for the majority of Malaysians.

How did the government help Malaysians attain homeownership amid the COVID-19 pandemic? Reintroduced under the Short-Term Economic Recovery Plan by the federal government in June 2020, the Home Ownership Campaign provided a stamp duty exemption on instruments of transfer (for properties below RM1 million) and an exemption on instruments for securing loans (for properties between RM300,000 and RM2.5 million), as well as a 10% price reduction limited to those developers who registered for the scheme. On 6 November 2020, a series of initiatives targeted at increasing homeownership were announced as part of the 2021 national budget. An extension of the full stamp duty exemption on instruments of transfer and loan agreements was granted for first-time homebuyers buying new-launch or sub-sale properties priced up to RM500,000.

How helpful were these stamp duty exemption schemes? Put simply, they only benefited home buyers who managed to secure housing loans from banks. Banks were likely to tighten lending standards because people's debt-servicing capacity was deemed deteriorated due to potential retrenchment and recession, thus making it relatively difficult for people to participate in the schemes and own their first home.

In the 2021 budget, the Ministry of Finance allocated RM500 million to build 14,000 housing units for those in the bottom 40% of the income distribution and RM315 million for the construction of 3,000 housing units by Syarikat Perumahan Negara Berhad, the state-owned, national housing developer, as part of the Rumah Mesra Rakyat programme. The government also offered a rent-to-own scheme for 5,000 PR1MA units limited to first-time home buyers. While Malaysians recognised these positive attempts to build more affordable housing, there was still a lack of immediate action taken by the government to solve pressing housing concerns. For example, governments should expand the rent-to-own scheme by inviting more private developers to join the initiative. In return, the developers could receive special incentives in the form of tax rebates or social responsibility credits. Also, there was the possibility to convert underutilised public buildings or abandoned shopping malls into short-term solutions for the urban poor or the homeless.

Moreover, there was a worrying tendency for private and government-linked developers alike to focus on the luxury housing market (Lim and Ng 2020). Particularly for the case of Medini Iskandar Malaysia, developers were exempted from building low-cost housing as part of corporate social responsibility requirements. In other cases, developers preferred to pay penalties to local governments instead of meeting their responsibilities. In this regard, local governments should tighten the requirements for private developers to build affordable housing. In short, while Malaysia has actively promoted the MM2H programme and the international property market, the government must also put effort into determining the right balance between capital growth and housing affordability.

Conclusions

Housing development serves Malaysia in two ways. On the one hand, housing provision is premised on increasing home affordability, especially for low- and middle-income groups. On the other hand, the real estate market is an integral part of the government's fiscal policy – which is legislated through an influx of foreign investments and property taxes. In other words, housing production in Malaysia is operated under highly competitive – if not complex – negotiations between a home-owning democracy and a capitalist economy.

Housing has increasingly been regularised into a new geography of profit and politics in Asia (Chen and Shin 2019). To turn property development into a rent-seeking mechanism, the government began to intervene in housing policies and market-oriented practices. Two strategies – control and exploitation – have allowed the government to expand its authority over the public and private realms of property development. These two strategies, however, not only lead to conflicts of interest between the state and non-state actors but they also increasingly collide with social justice and political integrity.

In Malaysia, both COVID-19 and housing affordability remain huge challenges. On the one hand, the coronavirus crisis exposed new operational issues and policy concerns associated with the MM2H programme. On the other hand, the vulnerability of the international property market has been attributed to negative market sentiments arising from movement restrictions. During such challenging times, the government should pay more attention to the local housing supply/demand mismatch and the reordering of state–business relationships in property

development. International property development is a contested field of capital accumulation built upon market speculation. To avoid irresponsible market speculation, the government should introduce stronger measures to combat housing built for profit, not for living.

References

- Chen, Yi-Ling; and Shin, Hyun Bang (eds). (2019). *Neoliberal Urbanism, Contested Cities and Housing in Asia*. USA: Palgrave Macmillan.
- Chew, Rachel; and Lim, Chelsea J. (2021). 'Impact of MCO 2.0 on the property market'. *Edge Property*, 22 January. <https://perma.cc/DZ85-G4M3> [Last accessed 18 June 2021].
- Davison, Andy. (2020). 'Writing on the wall: Is the MM2H programme doomed?' *ExpatGo*, 29 September. <https://perma.cc/V5RV-TQBC> [Last accessed 10 November 2020].
- Economic Planning Unit. (2006). *The Ninth Malaysia Plan, 2006–2010*. Malaysia: Economic Planning Unit. <https://perma.cc/XQL2-7GYU> [Last accessed 26 May 2021].
- Haila, Anne. (2015). *Urban Land Rent: Singapore as a Property State*. UK: Wiley-Blackwell.
- James. (2020). 'MM2H visa holder stranded abroad and confused'. *Free Malaysia Today*, 22 May <https://perma.cc/8LTW-29NN> [Last accessed 26 October 2020].
- KRI (Khazanah Research Institute). (2019). *Rethinking Housing: Between State, Market and Society*. Malaysia: Khazanah Research Institute. <https://perma.cc/N8AD-ANR7> [Last accessed 14 November 2020].
- Koh, Sin Yee; Zhao, Yimin; and Shin, Hyun Bang. (2021). *The Micropolitics of Speculative Green Urbanism at Forest City, Iskandar Malaysia*. UK: London School of Economics Department of Geography and Environment Discussion Paper Series No. 21. <https://perma.cc/H95Y-PMXA> [Last accessed 26 May 2021].
- Lim, Guanle; and Ng, Keng-Khoon. (2020). 'Housing policy in Johor: Trends and prospects', in Francis E. Hutchinson and Serina Rahman (eds) *Johor: Abode of Development?* Singapore: ISEAS Yusof Ishak Institute, pp. 424–446.
- NAPIC (National Property Information Centre). (2020). *Residential Unsold Status H1 2020*. <https://perma.cc/A96R-NZKC> [Last accessed 10 November 2020].
- Ng, Keng-Khoon. (2020). 'Johor Bahru's urban transformation: Authority and agency revisited', in Francis E. Hutchinson and Serina Rahman (eds.)

- Johor: Abode of Development?* Singapore: ISEAS Yusof Ishak Institute, pp. 407–423.
- Ng, Keng-Khoo; and Lim, Guanle. (2017). 'Beneath the veneer: The political economy of housing in Iskandar Malaysia, Johor'. *Trends in Southeast Asia*, December, Singapore: ISEAS Yusof Ishak Institute.
- Ong, Aihwa. (1999). *Flexible Citizenship: The Cultural Logics of Transnationality*. USA: Duke University Press.
- Ono, Mayumi. (2015). 'Commodification of lifestyle migration: Japanese retirees in Malaysia'. *Mobilities*, vol. 10, no. 4, pp. 609–627. <https://doi.org/10.1080/17450101.2014.913868>
- Shatkin, Gavin. (2017). *Cities for Profit: The Real Estate Turn in Asia's Urban Politics*. USA: Cornell University Press.
- The Star*. (2020). 'MM2H visa holders hoping for clear directions', 9 June. <https://perma.cc/PKX8-JNZM> [Last accessed 26 October 2020].
- Thomas, Jason. (2020). 'Country's economy, image at stake in MM2H freeze, say consultants'. *Free Malaysia Today*, 7 July. <https://perma.cc/3P37-YGNT> [Last accessed 10 November 2020].
- Toyota, Mika; and Xiang, Biao. (2012). 'The emerging transnational "retirement industry" in Southeast Asia'. *International Journal of Sociology and Social Policy*, vol. 32, no. 11/12, pp. 708–719. <https://doi.org/10.1108/01443331211280737>
- Wong, Kee Mun; and Musa, Ghazali. (2014). 'Retirement motivation among "Malaysia My Second Home" participants'. *Tourism Management*, vol. 40, 141–154. <https://doi.org/10.1016/j.tourman.2013.06.002>

7. Business process outsourcing industry in the Philippines

Maddy Thompson

In 2019, the business process outsourcing (BPO) industry was the second largest contributor to the Philippines' economy, providing US\$26 billion to the Philippine economy in 2019 (Rosales 2020) and employing at least 1.3 million people in over 1,000 firms, mainly located in urban regions (Reed, Ruehl, and Parkin 2020). BPO workers provide services for overseas corporations including facilitating travel and insurance cover, customer support for technology, and telehealth services. During the COVID-19 pandemic, the Philippine government exempted the BPO industry from closure during quarantine periods owing to the industry's importance for economic and geopolitical relations. BPO workers were thus exposed to a heightened risk of infection so that overseas economic activities could continue. COVID-19 did not just disrupt the BPO industry and the overseas corporations it served; it also highlighted and reproduced endemic levels of global inequality and exploitation.

This chapter discusses the growth of the BPO industry in the Philippines with a specific focus on the healthcare information management sector pre-COVID-19 before examining the various responses that COVID-19 precipitated. The final section reflects on possibilities for the future of the BPO industry and its workers. Throughout, it is argued that BPO work in the Philippines is a recent example of the ways in which colonial lines of exploitation are redrawn in a digital world.

BPO in the Philippines

The Philippines' BPO industry began in earnest in the 1990s, its growth facilitated by 'overly optimistic' government support (Soriano and Cabañes 2020, p.1). The industry was oriented to the country's former

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colonial power, the USA, and also served Europe, Japan, New Zealand, and Australia (BIEN 2019). Its contribution to the Philippine economy was second only to remittances brought in via migration, and, as of 2020, the Philippines had the world's largest concentration of call centre workers, although India had the bigger BPO market share (Reed, Ruehl, and Parkin 2020). Where India successfully marketed key cities as hubs of innovation to attract highly skilled BPO activities, the Philippines largely took on back-end processing work ripe for automation. Only around 15% of Filipino BPO workers were employed in highly skilled roles before the COVID-19 pandemic, and Manila's overall ranking of second on the Tholons list of top super cities for digital innovation (see Table 7.1) reflected the size of the BPO industry rather than a culture of digital innovation (Tholons 2019).

BPO expansion has been connected to the mass emigration of overseas Filipino workers (OFWs) and the Philippines' legacy of colonialism (Soriano and Cabañes 2020; Thompson 2019). As a nation dependent on migration, higher education has tended to reflect Western practices, with most courses instructed in English (Ortiga 2017). Keeping in touch with migrant family members has also made many Filipinos skilled

Table 7.1. Top super cities for digital innovation according to Tholons (2019)

Rank	City	Country
1	Bangalore	India
2	Manila	Philippines
3	Sao Paulo	Brazil
4	Mumbai	India
5	Dublin	Ireland
6	Toronto	Canada
7	Delhi	India
8	Hyderabad	India
9	Singapore	Singapore
10	Buenos Aires	Argentina
11	Krakow	Poland
12	Cebu City	Philippines
...
95	Davao City	Philippines

in digital and distanced communication (McKay 2016). In some BPO sectors, the connections between OFWs and BPO workers were more apparent. The healthcare information management sector, for example, emerged in response to heightened demand for healthcare-related insurance processing activities generated by the USA's 2010 Affordable Care Act (also known as Obamacare) and relied on vast numbers of under- and unemployed nurses whose dreams of migration had 'turned sour' (Ortiga and Macabasag 2021). Global North markets had long encouraged the Philippines to train nurses beyond demand to provide migrant workers (Ortiga and Macabasag 2021), but during the 2010s, faced with increasing pressures on healthcare systems, rising anti-migration sentiment, and technological advances, outsourcing healthcare via digital platforms became increasingly attractive (Thompson 2019). Incorporating this ready-made, low-cost, highly skilled workforce into the digital health economy allowed profit margins in the global North to increase while restricting the material benefits migration could entail for individuals and their families.

The Philippines' BPO industry has been relatively inclusive. Women have long dominated call centre activities, comprising 53.2% of the workforce in 2019 (BIEN 2019), while BPO has been one of the few industries where Filipino LGBTQ+ workers have found safe employment.¹ Transgender women in particular entered the industry in the thousands through the early 2000s, mainly in call centre roles (David 2015). Nonetheless, workers have had variable employment experiences. For permanent employees, BPO roles offer relatively high pay, working benefits (e.g. health insurance), and safe, air-conditioned working environments (Thompson 2019). As the industry grew, however, pay and conditions declined, with an estimated two-fifths of the workforce employed on 'floating'/'no-work-no-pay' status by 2020 (Rabino 2020). Floating workers had their working benefits removed (BIEN 2017). Such status has been particularly problematic for marginalised groups and those with caring responsibilities, groups that made up the majority of BPO workers in 2020. Additionally, in 2019, an estimated 1.5 million Filipinos were digital freelancers, using digital platforms to sell their services. Wood et al. (2019) have found that these online freelancers had few legal labour rights, as rating systems and global competition created a highly competitive and uncertain industry. Despite the lowering of labour standards, the comparatively high pay compared to non-digital employment meant that Filipinos viewed BPO and freelance work as 'good' (Soriano and Cabañes 2020).

Responding to COVID-19

The Philippines imposed a nationwide ‘enhanced community quarantine’ from 16 March 2020 (Ocampo and Yamagishi 2020). Although the nationwide lockdown was later relaxed, urban areas, home to BPO offices, were most affected and experienced stricter and more prolonged periods of quarantine. BPO was one of the few industries exempted from closure, demonstrating its importance to the country’s economic and geopolitical interests. However, quarantine restrictions, including the closure of public transport combined with insufficient working-from-home conditions for many employees, meant BPO businesses were unable to maintain normal staffing levels, particularly at the onset of the pandemic. Concurrently, global travel restrictions and national lockdowns elsewhere increased short-term demand for travel and insurance services, while other businesses pulled out (Macaraeg 2020; Oxford Business Group 2020). COVID-19 thus caused significant disruptions to the industry.

Responses from the foreign businesses impacted varied. Some sought to facilitate homeworking, shipping IT equipment to workers’ homes (Sharwood 2020). As the average Manila household had four to five people and a ‘poor yet expensive internet connection’ (Ocampo and Yamagishi 2020, p.8), homeworking was unsuitable for many. Others provided on-site accommodation to allow workers with quarantining family members or those without caring duties to continue to work (dela Peña 2020). Workers reported that ‘accommodation’ included sleeping at workstations or sharing hotel rooms without the separation of infected workers from healthy ones (Macaraeg 2020). Though permanent employees were entitled to sick pay, many had their contracts changed to floating status during the pandemic, removing their access to working benefits (Salgado 2020). Workers who were absent to self-isolate or care for family members or who were otherwise physically unable to work thus went unpaid (Macaraeg 2020). As BPO workers were often the primary breadwinners in their household, periods of no pay had the potential to plunge families into poverty.

COVID-19 both intensified and made more visible the exploitation of BPO workers in the Philippines (see Lawreniuk 2020 for a similar argument in relation to Cambodian garment workers). Those unable to work were made disposable and left without financial security. Those who could work were placed in dangerous settings without proper precautions. The make-up of BPO workers in the Philippines

placed vulnerable groups – women and LGBT+ groups – at heightened risk of exposure to exploitative conditions. Furthermore, as many BPO workers were infected and BPO offices were identified as hubs of community transmission nationwide (BIEN 2020), public harassment and discrimination towards BPO workers and returning OFWs occurred (Guadalquiver 2020). BPO workers and migrants, previously perceived as national heroes for their ‘service’ to the country (Soriano and Cabañes 2020), were transformed into vectors of disease.

The pandemic also made visible the global interconnections that shape BPO. In March 2020, Australian consumers were informed that ‘[d]ue to increased containment measures announced by the Philippines Government overnight, Telstra’s contact centre workforce has been reduced. ... [T]here will be longer wait times for customers’ (Sharwood 2020). By both blaming the Philippine government and omitting concern for the workers, companies like Telstra absolved themselves of responsibility for their overseas employees (see also Brydges and Hanlon 2020).

The future of BPO in the Philippines

Global responses to COVID-19 included economic protectionism and the tightening of borders. Some foreign companies quickly began re-shoring BPO activities, taking advantage of newly unemployed workforces in places with a wider penetration of broadband and home office equipment and where impacts of future lockdowns were more predictable (Reed, Ruehl, and Parkin 2020). The early rapid termination of contracts revealed the exploitation that globalisation had produced, exposing vulnerable workers and their families to increasing precarity. Other businesses were investing further into automation and artificial intelligence, reducing reliance on human-based workforces for low-skilled work (Chen, Marvin, and While 2020). The simultaneous ‘throttling’ of labour migration caused by COVID-19 (Abel and Gietel-Basten 2020) meant that remittances from migrants were disrupted, and many migrants were forced to return to the Philippines (Abrigo et al. 2020). Increased competition from returning migrants likely further exacerbated the erosion of labour standards within the BPO industry.

Longer term, business analysts have predicted that shifts in the acceptability of homeworking and the need for companies to cut costs due to economic downturns could create gains in the outsourcing industry (CBI 2020). These gains are likely to be most prevalent for

freelance work (Dagooc 2020) and could see the further reduction of tax revenues and workers' rights (Wood et al. 2019). Sectors that might survive would be those where automation was less of a threat. The healthcare information management (HIM) sector, for example, could see longer-term gains owing to the more skilled nature of the work (Rosales 2020). The HIM sector expanded rapidly over the 2010s, and before COVID-19 this growth was expected to continue, as shown in Table 7.2. Revised figures in November 2020 indicated that, while the growth might be less than expected, the industry was still set to grow (IBPAP 2020).

With a world-leading reputation, the Philippines was well-placed to capitalise on the growth in digital health provision that COVID-19 had precipitated. Indeed, within the first six months of the pandemic, digital health industry insiders estimated there had been the equivalent of five to 10 years' expansion in digital health (British Chamber of Commerce 2020), with telehealth operations in particular growing worldwide to maintain both COVID-19-related and non-COVID-19-related care activities (Baynham and Hudson 2020). While there have been no guarantees that the transformation to digital health will be permanent, the cost-saving benefits will make it an attractive option for healthcare providers. Furthermore, industry insiders believed that COVID-19

Table 7.2. Forecasted growth rate of BPO market sectors, 2019–2022

Sector	Forecasted percentage change (prediction intervals)	
	Employees	Revenue
Contact centre and business processing	2.8–6.7	3.3–7.4
IT	2.7–6.2	3.2–6.7
Global in-house centres	2.7–4.7	3.2–5.2
Healthcare	6.8–10.2	7.3–10.8
Animation and game development	6.8–11.7	7.3–12.3
Total IT BPO market	3.0–7.0	3.5–7.5
Total IT BPO market (revised 2020 prediction in light of COVID-19)	2.7–5.0	3.2–5.5

Sources: IBPAP (2019; 2020).

had precipitated a cultural shift, transforming patient and healthcare providers' perceptions as to the acceptability of digital health technologies (British Chamber of Commerce 2020). While this might allow further growth of the HIM sector in the Philippines, there will be an urgent need to question the ethical dimensions of shifting healthcare provision online and overseas.

Tracking the accelerated move to digitally facilitated healthcare, early attention focused on the ability of big data to map COVID-19 (Brice 2020; Desjardins, Hohl, and Delmelle 2020; Rosenkrantz et al. 2021), concerns about security and surveillance (Datta 2020), misinformation (Stephens 2020), and the impact of COVID-19-specific technologies on urban spaces (Chen, Marvin, and While 2020; James et al. 2020; Zeng, Chen, and Lew 2020). Questions of global justice, however, have largely been absent. There is a pressing need to examine how shifts towards digital health in the global North impact the global South. Increases in outsourcing benefit the Philippines but simultaneously exacerbate its vulnerability and dependency on foreign markets. Workers may have access to more stable work, but, with highly uneven healthcare provision in the Philippines, having trained healthcare professionals serving the needs of places with better standards of health raises critical ethical concerns.

Conclusion

BPO workers in the Philippines were put at risk to avoid 'longer wait times' for consumers in the global North. Looking ahead, it seems likely labour standards in the Philippines' BPO industry will continue to decline, while insufficient infrastructure to facilitate large-scale home-working could prompt mass withdrawal of FDI, putting the future of the BPO industry and the livelihoods of its workers at risk. While early responses to COVID-19 described a global 'resurgence of reciprocity' (Springer 2020, p.112), BPO work shows how COVID-19 intensified and made visible enduring forms of global exploitation. Left unchecked, corporate responses to COVID-19 would further heighten inequalities in an already unequal world.

Note

1. Unfortunately, no quantitative data exists regarding the numbers of LGBT+ BPO workers, although qualitative research by Emmanuel David (2015) suggests that, in some offices, over half of staff are transgender.

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References

- Abel, Guy J.; and Gietel-Basten, Stuart. (2020). 'International remittance flows and the economic and social consequences of COVID-19'. *Environment and Planning A: Economy and Space*, vol. 52, no. 8, pp. 1480–1482. <https://doi.org/10.1177/0308518X20931111>
- Abrigo, Michael R.M.; Uy, Jhanna; Haw, Nel Jason; Ulep, Valerie Gilbert T.; and Francisco-Abrigo, Kris. (2020). *Projected Disease Transmission, Health System Requirements, and Macro-economic Impacts of the Coronavirus Disease 2019 (COVID-19) in the Philippines*. Philippines: Philippine Institute for Development Studies Discussion Paper Series No. 2020-15. <https://perma.cc/75E6-NJHE> [Last accessed 19 May 2021].
- Baynham, David; and Hudson, Mary. (2020). 'Rollout of video consultation across general practice'. *Technology in the NHS*, 26 March. <https://perma.cc/X5UZ-UMLC> [Last accessed 8 July 2020].
- BIEN (BPO Industry Employees Network). (2017). *BPO Workers Protest against Floating Status, Attacks on Job Security in SITEL*, 4 July. <https://perma.cc/SC5S-7SHL> [Last accessed 10 August 2020].
- BIEN. (2019). *Work Flexibilisation and Its Impact on BPO Women Workers in Metro Manila*. <https://perma.cc/3RFS-NCEU> [Last accessed 27 August 2020].
- BIEN. (2020). *BIEN Sounds Alarm over COVID19 Outbreaks in Many BPOs*, 13 August. <https://perma.cc/2X4R-NPK8> [Last accessed 20 January 2021].
- Brice, Jeremy. (2020). 'Charting COVID-19 futures: Mapping, anticipation, and navigation'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 271–275. <https://doi.org/10.1177/2043820620934331>
- British Chamber of Commerce. (2020). *The Changing Economic Outlook: Healthcare Industry in South East Asia*. <https://perma.cc/MP6A-PHVV> [Last accessed 11 August 2020].
- Brydges, Taylor; and Hanlon, Mary. (2020). 'Garment worker rights and the fashion industry's response to COVID-19'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 195–198. <https://doi.org/10.1177/2043820620933851>

- CBI. (2020). *Outsourcing Greatly Affected but More Relevant after COVID-19*, 22 April. <https://perma.cc/75Q9-8TDS> [Last accessed 7 August 2020].
- Chen, Bei; Marvin, Simon; and While, Aidan. (2020). 'Containing COVID-19 in China: AI and the robotic restructuring of future cities'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 238–241. <https://doi.org/10.1177/2043820620934267>
- Dagooc, Ehda M. (2020). "'Gig economy" to rise after ECQ'. *The Freeman*, 14 April. <https://perma.cc/X7LF-4WQJ> [Last accessed 12 August 2020].
- Datta, Ayona. (2020). 'Self(ie)-governance: Technologies of intimate surveillance in India under COVID-19'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 234–237. <https://doi.org/10.1177/2043820620929797>
- David, Emmanuel. (2015). 'Purple-collar labor: Transgender workers and queer value at global call centers in the Philippines'. *Gender and Society*, vol. 29, no. 2, pp. 169–194. <https://doi.org/10.1177/0891243214558868>
- Desjardins, Michael R.; Hohl, Alexander; and Delmelle, Eric M. (2020). 'Rapid surveillance of COVID-19 in the United States using a prospective space-time scan statistic: Detecting and evaluating emerging clusters'. *Applied Geography*, vol. 118, p. 102202. <https://doi.org/10.1016/j.apgeog.2020.102202>
- Guadalquiver, Nanette. (2020). 'Bacolod folks told not to discriminate vs. BPO workers'. *Philippine News Agency*, 11 August. <https://perma.cc/6GQU-PZMH> [Last accessed 27 August 2020].
- IBPAP (IT and Business Process Association of the Philippines). (2019). *The Philippine IT-BPM Industry Growth Forecast (2019–2022)*. <https://perma.cc/4B5U-PGVV> [Last accessed 28 April 2021].
- IBPAP. (2020). *Recalibration of the Philippine IT-BPM Industry Growth Forecasts for 2020–2022*. <https://perma.cc/4B5U-PGVV> [Last accessed 28 April 2021].
- James, Philip; Das, Ronnie; Jalosinska, Agata; and Smith, Luke. (2020). 'Smart cities and a data-driven response to COVID-19'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 255–259. <https://doi.org/10.1177/2043820620934211>
- Lawreniuk, Sabina. (2020). 'Necrocapitalist networks: COVID-19 and the "dark side" of economic geography'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 199–202. <https://doi.org/10.1177/2043820620934927>
- Macaraeg, Pauline. (2020). 'Double whammy: BPO employees get exposed to COVID-19, lose income'. *Rappler*, 19 May. <https://perma.cc/A9EA-CBE3> [Last accessed 7 August 2020].

- McKay, Deirdre. (2016). *An Archipelago of Care: Filipino Migrants and Global Networks*. USA: Indiana University Press.
- Ocampo, Lanndon; and Yamagishi, Kafferine. (2020). 'Modeling the lockdown relaxation protocols of the Philippine government in response to the COVID-19 pandemic: An intuitionistic fuzzy DEMATEL analysis'. *Socio-Economic Planning Sciences*, vol. 72, p. 100911. <https://doi.org/10.1016/j.seps.2020.100911>
- Ortiga, Yasmin Y. (2017). 'The flexible university: Higher education and the global production of migrant labor'. *British Journal of Sociology of Education*, vol. 38, no. 4, pp. 485–499. <https://doi.org/10.1080/01425692.2015.1113857>
- Ortiga, Yasmin Y.; and Macabasag, Romeo Luis A. (2021). 'Temporality and acquiescent immobility among aspiring nurse migrants in the Philippines'. *Journal of Ethnic and Migration Studies*, vol. 47, no. 9, pp. 1976–1993. <https://doi.org/10.1080/1369183X.2020.1788380>
- Oxford Business Group. (2020). *What Does the Covid-19 Outbreak Mean for the Philippines' BPO industry?* <https://perma.cc/3FH8-C8RX> [Last accessed 7 August 2020].
- dela Peña, Kurt. (2020). 'Groups urge gov't, companies to prioritize BPO workers' welfare amid pandemic'. *Rappler*, 24 March. <https://perma.cc/SJ9Q-WHHP> [Last accessed 11 August 2020].
- Rabino, Agatha Hazel. (2020). 'Four in 10 BPO workers are in floating, no work-no pay status during lockdown'. *Manila Today*, 6 June. <https://perma.cc/YL9D-PNSS> [Last accessed 10 August 2020].
- Reed, John; Ruehl, Mercedes; and Parkin, Benjamin. (2020). 'Coronavirus: Will call centre workers lose their "voice" to AI?' *Financial Times*, 23 April. <https://perma.cc/SB4C-5ZAU> [Last accessed 11 August 2020].
- Rosales, Elijah Felice. (2020). 'PHL seen bagging more BPO jobs'. *Business-Mirror*, 8 July. <https://perma.cc/LGK8-LY3Z> [Last accessed 12 August 2020].
- Rosenkrantz, Leah; Schuurman, Nadine; Bell, Nathaniel; and Amram, Ofer. (2021). 'The need for GIScience in mapping COVID-19'. *Health and Place*, vol. 67, p. 102389. <https://doi.org/10.1016/j.healthplace.2020.102389>
- Salgado, Ritchie. (2020). 'BPO workers lament company's lack of compassion amid COVID-19'. *Bulatlat*, 1 May. <https://perma.cc/6D4A-AEVK> [Last accessed 12 August 2020].
- Sharwood, Simon. (2020). 'Philippines sends all workers home, outsourced call centres for Acer and telcos suffer degraded service'. *The Register*, 18 March. <https://perma.cc/4M2G-XDFG> [Last accessed 11 August 2020].

- Soriano, Cheryll Ruth R.; and Cabañes, Jason Vincent A. (2020). 'Entrepreneurial solidarities: Social media collectives and Filipino digital platform workers'. *Social Media + Society*, April–June 2020, pp. 1–11. <https://doi.org/10.1177/2056305120926484>
- Springer, Simon. (2020). 'Caring geographies: The COVID-19 interregnum and a return to mutual aid'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 112–115. <https://doi.org/10.1177/2043820620931277>
- Stephens, Monica. (2020). 'A geospatial infodemic: Mapping Twitter conspiracy theories of COVID-19'. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 276–281. <https://doi.org/10.1177/2043820620935683>
- Tholons. (2019). *Innovation at Scale: Digital Nations and Super Cities*. <https://perma.cc/9UMS-LQNK> [Last accessed 12 August 2020].
- Thompson, Maddy. (2019). 'Everything changes to stay the same: Persistent global health inequalities amidst new therapeutic opportunities and mobilities for Filipino nurses'. *Mobilities*, vol. 14, no. 1, pp. 38–53. <https://doi.org/10.1080/17450101.2018.1518841>
- Wood, Alex J.; Graham, Mark; Lehdonvirta, Vili; and Hjorth, Isis. (2019). 'Networked but commodified: The (dis)embeddedness of digital labour in the gig economy'. *Sociology*, vol. 53, no. 5, pp. 931–950. <https://doi.org/10.1177/0038038519828906>
- Zeng, Zhanjing; Chen, Po-Ju; and Lew, Alan A. (2020). 'From high-touch to high-tech: COVID-19 drives robotics adoption'. *Tourism Geographies*, vol. 22, no. 3, pp. 724–734. <https://doi.org/10.1080/14616688.2020.1762118>

8. Global precarity chains and the economic impact on Cambodia's garment workers

Katherine Brickell, Theavy Chhom, Sabina Lawreniuk, and Hengvotey So

In the first year of the COVID-19 pandemic, Cambodia's emergency health response was widely heralded by the international community as a success (Heng 2020; Hyder and Ly 2020; Ratcliffe 2020). As of January 2021, the country had recorded only 460 COVID-19 cases and zero deaths. Yet its achievements in mitigating the worst health impacts of the pandemic during this period did not insulate its population of 16 million people from the economic fallout wrought by COVID-19. Far from it: Cambodia's deep integration into and reliance upon the faltering global market left at least 1.76 million jobs at risk (World Bank 2020) in Cambodia's three most important economic sectors: garments, tourism, and construction.

In this chapter, we focus attention on Cambodia's garment industry, which prior to the pandemic had a large and highly feminised labour force, nearing one million workers, 80% of whom were women (ILO 2018). We present an analysis of the economic impact of COVID-19 on workers from January 2020, when the pandemic first took hold in China, up until February 2021. Drawing on original research from our UKRI GCRF-funded ReFashion study (www.ReFashionStudy.org), we understand and contextualise the data on workers' experiences within the broader debate surrounding global value chains, and we advance the idea of global precarity chains.

Global value chains bring attention to links and relationships between different sectors along the chain of production, including 'all aspects of the process of production, distribution and retailing across global supply networks' (Barrientos 2001, p.83). Mainstream thinking in academic and policy circles has represented these chains as conducive to new development opportunities for firms and regions in the global South

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(Selwyn 2019). However, there exists considerable empirical evidence that these global value chains adversely ‘generate new forms of worker poverty’ (Selwyn 2019, p.71) for those undertaking the ‘nimble finger’ work of garment production (Elson and Pearson 1981). Bolstering export-oriented growth, women in the global South have been enrolled in labour-intensive patterns of low-skilled and low-paid garment work that is associated with casualisation, excessive hours, and weak social protection (Nadvi 2004). Under these conditions, women workers ‘effectively provide a subsidy to production under supply chains and pay the price of government strategies that rely on precarious jobs’ (Kidder and Raworth 2004, p.13).

Precarious jobs are generally understood as those which are insecure, dangerous, and/or characterised by poor working conditions and pay. Capitalism ‘works to divide and differentiate populations’ (Bhattacharyya 2018, p.147), leading certain individuals and groups to ‘suffer from failing social and economic networks of support and become differentially exposed to injury, violence, and death’ (Butler 2009, p.25). In this chapter we show the significance of what we call ‘global precarity chains’ for understanding lived experiences of workers in (pre-)COVID-19 times. It begins with a contextual reading of Cambodia’s development trajectory vis-à-vis the garment industry, before turning to two workers’ experiences of navigating this political economy during the first year of the COVID-19 pandemic. The chapter evidences, first, the precarious location of Cambodia’s garment industry in the value chain and its long-term exposure to shocks like the pandemic; second, the dependency on debt that evolved in response to precarious work in the industry prior to COVID-19 but escalated during the pandemic among poorly paid, suspended, and terminated garment workers; and, third, the precarious nature of development more widely in Cambodia, epitomised by the struggle to diversify economically and create alternative livelihoods outside the garment industry. These were significant issues that predated the pandemic and extended beyond its bounds, calling into further question the ability of Cambodia’s elected development pathway to create decent work for all through integration into volatile and exploitative global precarity chains.

Precarious development in Cambodia

It is by now almost a truism to attribute the ‘miracle’ (World Bank 2018) of Cambodia’s transition to the heady growth of its garment

manufacturing sector, catalysing a remarkable three-decade turnaround from post-conflict state to 'Asia's new tiger economy' (ADB 2016). It is easy to overlook that this take-off occurred as much by accident as design: a feat of industrial serendipity rather than strategy, as Cambodia's re-entry to the global marketplace in the mid-1990s coincided with regional volatility in the wider garment supply chain. Here, the 'business-friendly investment regime' (Bargawi 2005, p.5) pursued by the Cambodian government following the signing of the Paris Peace Accords in 1991 caught the eye of other Asian garment exporters, whose growth at the time was impeded by quotas restricting access to the US market. Preferential trade access bestowed on Cambodia, first by the US in 1997 and then by the EU in 2001, accelerated the reshoring of garment production from original East Asian outsourcing hubs to these new frontiers in a neat spatial fix for manufacturers. Where, in 1995, Cambodia had 20 factories, employing 18,000 workers and generating exports worth US\$27 million (Bargawi 2005, p.9), in 2018 there were more than 600, with a workforce nearing 1 million, generating a combined export value of US\$8 billion annually (ILO 2018).

For much of the intervening period, Cambodia's economy outpaced other post-conflict societies globally (Hill and Menon 2014), with 10 years of GDP growth averaging double-digit figures to 2008 and securing graduation to lower-middle-income status in 2015. Over a similar timeframe, the national poverty rate fell dramatically, from 47.8% in 2007 to 13.5% in 2014 (World Bank 2017, p.12). It has been hard to refute the unbridled optimism of initial accounts of the industry's success in pioneering Cambodia's development. Early analyses hailed the 'wonderful job opportunity' (Yamagata 2006, p.3) the sector afforded to women, their labour steering a 'blistering' (World Bank 2017, p.43) trajectory emulating historical precedent, where 'the textile and apparel industries have led industrialization at the early stage of development in many countries of the world' (Yamagata 2006, p.4).

Voices from the factory floor, however, offer a competing narrative that challenges the industry's developmental credentials. As further trade liberalisation fostered increasing international competition in an already densely crowded garments market, downwards pressure on unit prices has been exacted on industry profits. Where forecasters have long divined that such falls 'should be readily absorbable by Cambodian exporters' (Bargawi 2005), in practice it is workers who have borne cuts to balance the books. Between 2001 and 2011, as GDP growth and consumer inflation soared, real wages in the sector fell by 22%, locked

in at rates below reproduction requirements (Selwyn 2019). A spontaneous eruption of mass labour unrest at the end of 2013 evidenced the scale of mounting discontent. Dispelled with lethal violence by state security forces, the prospect of further collective action has since been thwarted by ‘authoritarian innovations’ (Ford, Gillan, and Ward 2020) in labour governance that stymie and criminalise the organisation of independent trade union activity. Flexibilisation and intensification of work patterns resulted, with employers resorting to the increasing use of three- and six-month fixed-duration contracts and escalating production targets to extract ever greater margins from an increasingly exploited workforce (Human Rights Watch 2015).

Yet, beyond GDP growth and job creation, it is not clear how the industry has contributed to wider national development objectives. Cambodian manufacturing remains stubbornly located at the ‘downstream, mass market’ (Bargawi 2005, p.5) section of the garment value chain, focused on so-called ‘cut–make–trim’ operations that turn ready-made fabrics and fibres into packaged products, shipped ready to hang on retail shelves. It is an activity where the share of value added to the final output is already relatively low, further reduced by reliance on imports for inputs like textiles, threads, and trimmings. The Cambodian government’s business-friendly policies including tax breaks for imports and tax holidays for new firms lured investment but permitted the industry to get away with injecting little cash into the coffers of the national budget in return. Unlike Cambodia’s competitors in the sector, such as Bangladesh, there is no protection for domestic firms. The resulting high proportion of foreign ownership, hovering around 90% since the 1990s, means that ‘a significant part of the profits are repatriated’ (Ear 2013, p.93).

As the garment sector has grown to dominate Cambodia’s share of employment and exports, its shallow integration and weak contribution to the national economy have prompted repeated calls to develop and diversify beyond cut–make–trim manufacturing, incorporating higher-value-added segments or sectors (World Bank 2017). Yet the continued growth of garments, rebounding even following the 2008 crash, provided little incentive to work at levelling up. As such, repeated warnings went unheeded. Heading into 2020, then, Cambodia’s post-conflict recovery resembled a paper tiger: GDP and jobs had yielded only a ‘mirage of development’ (Crossa and Ebner 2020, p.1218), shielding a precariously lopsided and trade-dependent economy and seeming particularly prone to external crisis.

Precarious work and precarious debt

COVID-19 provided this long-anticipated shock, and its impacts exposed the precarious foundations of development in Cambodia. The global garment industry was severely impacted by the pandemic. Cambodia's precarious location within the wider supply chain brought sustained damage from different waves of the outbreak (Lawreniuk 2020). First came upstream delays of raw material delivery due to manufacturing disruptions in China. Then, dramatic falls in demand from consumer lockdowns in Europe and the US led to the subsequent cancellation of orders by international retailers. The consequence of this was the temporary suspension or firing of garment workers in factories where production was interrupted or permanently ceased, with more than 100 factories closed. The ramifications of this situation were acute for women in Cambodia. Outside the agriculture sector, there was a pronounced segregation of occupations by sex, with women in a narrow range of traditional 'female' occupations, including trade, crafts, sewing, and the entertainment industry (UNIFEM et al. 2004, p.43). Women remained under-represented in managerial and technical roles in the country (ILO 2020), and there were high levels of inequality in higher education attainment (UNDP 2019). Cambodia's precarious development therefore left garment factory workers with few options to make a viable living outside the garment industry, whose legacies of precarious work rendered day-to-day existence a challenge even for those who were able to return to work.

This acute lack of alternatives to garment work and markedness of gender inequality in Cambodia are evident in garment worker Lida's experiences of the gendered burdens of managing household finances.¹ Lida had been married since 2008 and began factory work soon after. After three years, the couple had their first baby, and she moved to live with her mother-in-law because of childcare needs. At this time, her son had an allergy to powdered milk, and she stopped working to breastfeed him. Several years later, Lida started searching and applying for a job at a garment factory to make ends meet. She struggled juggling factory work and childcare. Furthermore, her husband failed to contribute any of his salary to support the family. COVID-19 led to Lida's suspension from her garment job for several months at the end of 2020. During the suspension, she received US\$40 per month from a government support fund and US\$30 per month from the factory. In 2021, the situation only worsened:

The factory announced that they had cancelled product orders; therefore, they don't have much work for all workers. They decided to change the shift patterns, meaning that I can only work between 10 to 14 days for the whole of January. At the same time, the factory opened up job announcements for new workers. I don't understand ... I always think of finding another job, but I don't have any ability or capacity. I think that I can sell vegetables in the village or at the market, but I don't have any support from my husband, so it is not easy to do. I can only dream, but I can't find a way to follow my dream.

The reduction in working hours put Lida in a precarious financial position, and the factory's decision to hire new workers made her feel discriminated against. Her teammates made complaints about her slow work rate on the normally fast-paced production line. Other workers began to resent her lack of ability, as it placed a further burden on them to work harder and compensate in order to reach production targets. At the same time, Lida felt compelled to accept these conditions given the lack of alternative options. The consequences of completely losing her garment job therefore weighed upon her heavily:

Nowadays, I feel like I am a single mother. I need to handle all my family burdens and support my two children. I am so depressed about this. I am afraid to lose my job because if I lost my job, I will have no money to support my family. I seem to have mental health problems ... I keep thinking all night about these worries.

Lida's experiences of anxiety and depression were shared more widely among garment workers and, for many women, were exacerbated by the burdens of debt they were carrying. This was the case for Chantou, who was orphaned at an early age. In 2018, 58-year-old Chantou had taken out a bank loan of US\$6,000 to pay for her disabled sister's healthcare costs in her rural homeland. Although garment workers pay into a contributory health insurance scheme, their dependents are not covered. The garment sector's limited contributions to the national budget, despite its contribution to record GDP growth, had stalled the development of wider healthcare provision and other social protections. Healthcare costs expended by family members could be financially ruinous for workers. Prior to her May 2020 suspension, Chantou had been paying US\$150 from her US\$230 salary as a factory security guard to repay the outstanding US\$4,000 loan. Once suspended, her source of repayment dried up:

I begged them not to suspend me. I begged them for work because I had no money to repay the loan. They did not agree ... I had no money to pay the

private loans ... I was screaming and crying loudly. I have endured hunger. I am having to endure eating salt and fermented fish until I have a full salary ... I borrowed more money from the money lenders for four months consecutively, and my monthly borrowing was US\$100, combined with cash support of US\$70 per month from the factory and the Ministry to repay the private loan.

Chantou's account illuminates the pandemic's toll on garment workers whose lives were trapped by a downward cycle of debt commitments, where they were forced to take out new loans with higher interest rates to repay existing debts. While Chantou returned to work after four months, she encountered partial and irregular payments of her wages, which again made loan repayments difficult. She held a deep-seated fear that she would soon lose the residential land she had secured as collateral for the loan.

COVID-19's economic impact, then, was not only limited to income loss; it also entrenched households' growing reliance on debt to finance everyday consumption and survival. The lack of affordable healthcare in Cambodia is a key structural reason for reliance on credit (Van Damme et al. 2004). Rather than improving people's developmental prospects through driving entrepreneurship, microfinance loans are typically used for daily expenditures on household costs (Bylander 2014; Bylander 2015). This reliance on debt to smooth immediate needs is, as Selwyn (2019) has expounded, a longer-term product of the industry's super-exploitation of workers, where wage rates fail to meet basic reproduction requirements. As Brickell et al. (2020, p.2) have explained, even:

prior to the pandemic, the microfinance sector's expansion in Cambodia temporarily papered over gaps in public service provision experienced strongly in rural areas, where liquidity was used to deal with household cash-flow uncertainties linked to education, health, and food.

As a result, the economic fallout of the COVID-19 pandemic was a major risk to borrowers, the majority of whom, like Chantou, were reliant on labour wages to repay loans (Green and Estes 2019). Media coverage in Cambodia suggests that the sacrifices that Chantou was making to repay the debts were not unusual. As journalist Gerald Flynn (2020) has written, 'debts to MFIs [microfinance institutions] are a more immediate threat than the virus', with workers facing a decision between eating or repaying loans.

Although microfinance loans assist workers like Chantou in the short term, the long-term burden of newly acquired loans from the COVID-19 shutdowns, on top of existing ones, would only aggravate

over-indebtedness and the severity of sacrifices needed to repay them. The World Health Organization (2021), for example, expressed concern that the economic impact of COVID-19 would worsen inequalities and fuel malnutrition for billions in Asia. These inequalities are intensely gendered; the pressures of COVID-19 in Cambodia manifested in precarities tied to women's predominant status in the garment industry and as household managers responsible for social reproduction.

Conclusion: from paper tiger to papering over the cracks

In this chapter, we have introduced the experiences of two Cambodian workers grappling with the economic consequences of the pandemic on a global garment industry in turmoil. The most severe hardships presented by COVID-19 fell on workers inhabiting the most vulnerable positions in the global value chain. To try to cope amid a global crisis, garment workers in Cambodia turned to credit borrowing to paper over the cracks and meet urgent survival needs. In doing so, their fates became intimately connected with the global financial institutions seeking a high return from the unfettered growth of Cambodia's micro-finance sector (Bateman 2017). Garment workers' lives are, more than ever, embedded within cross-cutting global precarity chains tied to the manufacturing and finance sectors. Their experiences underscore, first, the vulnerability of the Cambodian economy given its reliance on export earnings coming from the garment sector and, second, that, if decent work for all is to have any hope of being possible in practice, then the country needs to address its structural gender inequalities, which hinder women's educational and career progress outside the garment industry. The COVID-19 pandemic did not make value chains newly precarious but rather exposed and compounded long-standing vulnerabilities that women had already been confronting on a daily basis years before its devastating arrival.

Note

1. All names of garment workers in this chapter are pseudonyms. Their stories arise from 60 semi-structured interviews we conducted with workers between January and February 2021. Given this, the chapter reflects on the indirect economic impacts of the pandemic, as experienced through the first year of the crisis. All worker interviews were conducted in Khmer by Cambodian members of the research team and later transcribed into English. They were recruited to participate in the study with the assistance of independent labour unions and the Ministry of Labor in Cambodia.

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References

- Asian Development Bank. (2016). *Here Comes Cambodia: Asia's New Tiger Economy*. <https://perma.cc/KZT9-MEJE> [Last accessed 3 February 2021].
- Bargawi, Omar. (2005). *Cambodia's Garment Industry: Origins and Future Prospects*. UK: Overseas Development Institute. <https://perma.cc/C3MH-PBT6> [Last accessed 26 May 2021].
- Barrientos, Stephanie. (2001). 'Gender, flexibility and global value chains'. *IDS Bulletin*, vol. 32, no. 3, pp. 83–93. <https://doi.org/10.1111/j.1759-5436.2001.mp32003009.x>
- Bateman, Milford. (2017). *The Rise of Cambodia's Microcredit Sector: An Unfolding Calamity*. European Association of Development Research and Training Institutes General Conference, Bergen, 21–23 August 2017.
- Bhattacharyya, Gargi. (2018). *Rethinking Racial Capitalism: Questions of Reproduction and Survival*. UK: Rowman and Littlefield.
- Brickell, Katherine; Picchioni, Fiorella; Natarajan, Nithya; Guermond, Vincent; Parsons, Laurie; Zanello, Giacomo; and Bateman, Milford. (2020). 'Compounding crises of social reproduction: Microfinance, over-indebtedness and the COVID-19 pandemic'. *World Development*, vol. 136, pp. 1–4. <https://doi.org/10.1016/j.worlddev.2020.105087>
- Butler, Judith. (2009). *Frames of War: When is Life Grievable?* UK: Verso.
- Bylander, Maryann. (2014). 'Borrowing across borders: Migration and microcredit in rural Cambodia'. *Development and Change*, vol. 45, no. 2, pp. 284–307. <https://doi.org/10.1111/dech.12080>
- Bylander, Maryann. (2015). 'Depending on the sky: Environmental distress, migration, and coping in rural Cambodia'. *International Migration*, vol. 53, no. 5, pp. 135–147. <https://doi.org/10.1111/imig.12087>
- Crossa, Mateo; and Ebner, Nina. (2020). 'Automotive global value chains in Mexico: A mirage of development?' *Third World Quarterly*, vol. 41, no. 7, pp. 1218–1239. <https://doi.org/10.1080/01436597.2020.1761252>
- Ear, Sophal. (2013). 'Cambodia's garment industry: A case study in governance'. *Journal of Southeast Asian Economies*, vol. 30, no. 1, pp. 91–105. <https://doi.org/10.1355/ae30-lf>

- Elson, Diane; and Pearson, Ruth. (1981). “Nimble fingers make cheap workers”: An analysis of women’s employment in Third World export manufacturing’. *Feminist Review*, vol. 7, no. 1, pp. 87–107. <https://doi.org/10.1057/fr.1981.6>
- Flynn, Gerald. (2020). ‘Garment workers cornered by job loss, virus fears and looming debt’. *VOD*, 16 April. <https://perma.cc/SLG3-47JC> [Last accessed 3 February 2021].
- Ford, Michele; Gillan, Micheel; and Ward, Kristy. (2020). ‘Authoritarian innovations in labor governance: The case of Cambodia’. *Governance* (pre-print). <https://doi.org/10.1111/gove.12559>
- Green, Nathan; and Estes, Jennifer. (2019). ‘Precarious debt: Microfinance subjects and intergenerational dependency in Cambodia’. *Antipode*, vol. 51, no. 1, pp. 129–147. <https://doi.org/10.1111/anti.12413>
- Heng, Kimkong. (2020). ‘What lies behind Cambodia’s surprise coronavirus success?’ *Nikkei Asia*, 2 June. <https://perma.cc/EZB5-W853> [Last accessed 3 February 2021].
- Hill, Hal; and Menon, Jayant. (2014). ‘Cambodia: Rapid growth in an open, post-conflict economy’. *The World Economy*, vol. 37, no. 12, pp. 1649–1668. <https://doi.org/10.1111/twec.12206>
- Human Rights Watch. (2015). ‘*Work Faster or Get Out: Labour Rights Abuses in Cambodia’s Garment Industry*’. USA: Human Rights Watch. <https://perma.cc/LG6S-2SJD> [Last accessed 26 May 2021].
- Hyder, Ziauddin; and Ly, Nareth. (2020). ‘What explains Cambodia’s effective emergency health response to Covid-19?’ *World Bank Blogs*, 19 November. <https://perma.cc/GMV3-XXMF> [Last accessed 3 February 2021].
- International Labour Organization. (2018). *Living Conditions of Garment and Footwear Sector Workers in Cambodia*. Switzerland: International Labour Organization Cambodia Garment and Footwear Sector Bulletin Issue 8. <https://perma.cc/J2DM-3ERZ> [Last accessed 3 February 2021].
- International Labour Organization and Organisation for Economic Co-operation and Development. (2020). *Social Dialogue, Skills and COVID-19*. Switzerland: International Labour Organization. <https://perma.cc/E35J-SC3X> [Last accessed 3 April 2021].
- Kidder, Thalia; and Raworth, Kate. (2004). “Good jobs” and hidden costs: Women workers documenting the price of precarious employment’. *Gender and Development*, vol. 12, no. 2, pp. 12–21. <https://doi.org/10.1080/13552070412331332150>
- Lawreniuk, Sabina. (2020). ‘Necrocapitalist networks: COVID-19 and the “dark side” of economic geography’. *Dialogues in Human Geography*, vol. 10, no. 2, pp. 199–202. <https://doi.org/10.1177/2043820620934927>

- Nadvi, Khalid. (2004). 'Globalisation and poverty: How can global value chain research inform the policy debate?' *IDS Bulletin*, 35, pp. 20–30. <https://doi.org/10.1111/j.1759-5436.2004.tb00105.x>
- Ratcliffe, Rebecca. (2020). 'How have Thailand and Cambodia kept Covid cases so low?' *The Guardian*, 16 December. <https://perma.cc/Q24E-DFND> [Last accessed 12 February 2021].
- Selwyn, Benjamin. (2019). 'Poverty chains and global capitalism'. *Competition and Change*, vol. 23, no. 1, pp. 71–97. <https://doi.org/10.1177/1024529418809067>
- United Nations Development Programme. (2019). *Human Development Report 2019*. USA: United Nations Development Programme. <https://perma.cc/673M-VJCZ> [Last accessed 12 February 2021].
- United Nations Development Fund for Women (UNIFEM); World Bank; Asian Development Bank; United Nations Development Programme; and Department for International Development of the United Kingdom. (2004). *A Fair Share for Women: Cambodia Gender Assessment*. Cambodia: United Nations Development Fund for Women. <https://perma.cc/8ZZ5-2CZB> [Last accessed 26 May 2021].
- Van Damme, Wim; Van Leemput, Luc; Por, Ir; Hardeman, Wim; and Meessen, Bruno. (2004). 'Out-of-pocket health expenditure and debt in poor households: Evidence from Cambodia'. *Tropical Medicine and International Health*, vol. 9, no. 2, pp. 273–280. <https://10.1046/j.1365-3156.2003.01194.x>
- World Bank. (2017). *Cambodia – Sustaining Strong Growth for the Benefit of All*. USA: World Bank. <https://perma.cc/WBM8-9PBQ> [Last accessed 12 February 2021].
- World Bank. (2018). *Riding the Wave: An East Asian Miracle for the 21st Century*. USA: World Bank. <https://perma.cc/V55Y-ZYE3> [Last accessed 16 May 2021].
- World Bank. (2020). *Cambodia Economic Update: Cambodia in the time of COVID-19*. USA: World Bank. <https://perma.cc/E3RM-VWX3> [Last accessed 12 February 2021].
- World Health Organization. (2021). *UN Agencies Warn Economic Impact of COVID-19 and Worsening Inequalities Will Fuel Malnutrition for Billions in Asia and the Pacific*. <https://perma.cc/F5RN-MDFD> [Last accessed 12 April 2021].
- Yamagata, Tatsufumi. (2006). 'The Garment Industry in Cambodia: Its Role in Poverty Reduction through Export-Oriented Development'. *Cambodian Economic Review*, vol. 2, pp. 81–136.

9. The dual structure of Vietnam's labour relations

Joe Buckley

Vietnam's public health response to the COVID-19 pandemic was feted as one of the best in the world. Thanks to rapid actions including closing schools and borders and extensive tracking, tracing, and quarantining, the death toll was kept to a minimum, and the country was the world's fastest growing economy in 2020 (World Bank 2020). Other social and political aspects of the pandemic in Vietnam, however, were less remarked upon. This chapter focuses on one of them: labour politics.

I use Daubler's (2018, p.155) conception of the 'dual structure' of Vietnam's labour relations to understand labour activism and campaigning in the country during COVID-19. Daubler has argued that the 'dual structure' is an effective system: the state-led Vietnam General of Confederation of Labour (VGCL) pushes for national-level changes, while self-organised wildcat worker activism holds employers accountable at the enterprise level. I argue that we saw this structure in action with regard to COVID-19. Wildcat strikes arose for the first time in years as workers demanded, first, safe workplaces and, second, fair wages, social security payments, and benefits in the face of the economic impact of the pandemic. Complementing these actions were the VGCL's activities at the national and regional levels: helping to distribute protective equipment and material aid, participating in discussions over the financial support package, and taking a strong stance during the annual minimum wage negotiations. The two parts of the structure combined to form an effective labour response to the pandemic.

I first explain the context of labour relations in Vietnam and Daubler's conceptualisation of the dual structure before applying the model to labour politics during COVID-19. Data for the chapter is drawn from

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reports in the Vietnamese labour press, especially the newspapers *Lao Động* (*Labour*) and *Người Lao Động* (*Labourer*).

The dual structure of Vietnam's labour relations

Vietnam is a one-party state with little freedom of association.¹ The state-led VGCL is the country's only legal trade union federation. It is subordinate to the ruling Communist Party at the national level, and enterprise-level unions are often dominated by employers, with human resource managers or similar acting as union branch presidents (Do and van den Broek 2013). Although the organisation does not often genuinely represent workers and is more or less entirely ineffective when it comes to organising campaigns for major social and political change, this does not mean it is totally useless. There have been interesting experiments with collective bargaining (Quan 2015), for example, and the VGCL does at times disagree with and take stronger pro-labour positions than the Ministry of Labour, Invalids, and Social Affairs (MOLISA) (Schweisshelm and Do 2018).

The country has also become famous for large numbers of wildcat strikes,² especially since 2006 (Siu and Chan 2015). The VGCL does not lead strikes; rather, they are organised by workers themselves. Strikes are overwhelmingly, although not exclusively, in industrial sectors. They are largely over immediate workplace issues, such as wages and working conditions, but have also had some important impacts on national politics, including forcing policy changes and reforms of labour relations institutions (Buckley 2021). They are often successful (Schweisshelm and Do 2018). Authorities have undertaken many attempts to stop strikes by building 'harmonious labour relations' (*quan hệ lao động hài hòa*). While still significant, strike numbers have been decreasing since 2011, as will be seen below.

A lot of the literature on labour relations in Vietnam – and here I am defining labour relations narrowly, excluding literature on the wider sociology and political economy of work – begins with the implicit normative assumption that what is needed is a tripartite system, in which unions representing workers, the state, and employers peacefully negotiate with each other to solve issues and improve workers' wages and conditions. The most well-known example of this approach is perhaps the influential report from Lee (2006), although there are several more recent examples (see, e.g., Quan 2015; Tran and Bales 2017). From this perspective, the problem to be solved is how and to what extent

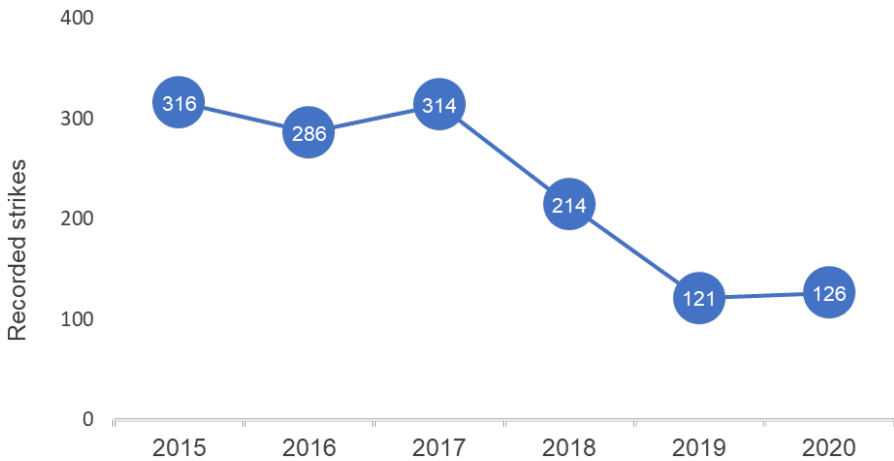
this system can be built in Vietnam and whether the VGCL can be reformed to become an organisation that is genuinely representative of workers.

Daubler (2018), however, has a different perspective. Instead of seeing Vietnam's existing labour relations as a deviation from the tripartite ideal, he has conceptualised them as having a 'dual structure' (Daubler 2018, p.155). By this he means that the VGCL undertakes 'the less conflict-ridden everyday issues and the distribution of benefits', while wildcat strikes apply 'pressure in the workplace', pursuing 'higher wages and improvements in working conditions'. Crucially, for Daubler (2018, p.158), the structure works: 'this is a fairly gratifying state of affairs ... although it has its shortcomings there is no real reason for fundamental changes'. I contend that we effectively saw this dual structure in action during the COVID-19 pandemic. The rest of the chapter will outline how this worked in the COVID period.

Wildcat strikes

The year 2011 was the high-water mark for wildcat strikes in Vietnam, with nearly 1,000 recorded; different sources put the number at somewhere between 857 (Siu and Chan 2015, p.71) and 993 (Schweisshelm and Do 2018, p.128). While still significant, strike numbers fell substantially after then, and in 2019 the VGCL recorded only 121 strikes. Owing to the COVID-19 outbreak, however, the trend reversed slightly in 2020, with 126 strikes recorded. This is shown in Figure 9.1.

An increase of five strikes, therefore, is very modest, and it is a rise from a low base, but it is a rise nonetheless. Towards the beginning of 2020, when the SARS-CoV-2 virus was first detected in Vietnam, many strikes were demanding health and safety in workplaces. For example, the Praegear Vietnam strike of February 2020 involved workers demanding that the Taiwanese-owned sporting goods factory in southern Long An province implement measures to protect them against coronavirus. In response, local union officials organised training and talks by medical experts, and the company introduced measures such as free masks, temperature checks, and spraying disinfectant. Other companies in the same region followed suit (Ky Quan 2020). The mid-February strike at Vast Apparel, a Taiwanese-owned garment factory in central Quang Nam province, occurred over concerns that a Chinese employee who was being quarantined was staying too close to the factory. Officials explained to workers the tests that had been performed and his move-

Figure 9.1. Recorded strikes according to VGCL data, 2015–2020

Sources: Internal VGCL data provided to author; Thu Hang (2018); Hoang Manh (2019); T.E.A. (2020); Hoang Manh (2021).

ments prior to returning to the factory before workers ended the strike (Ngoc Phuc 2020). The same week, workers at JY, a Korean-owned stuffed toy factory in northern Ha Nam province, protested against Chinese employees being allowed to return to work without being tested for coronavirus. Authorities said that they had actually been tested but asked the company to provide masks to workers (The Anh 2020).

Later in the year, when the economic impact of the pandemic began to be felt, striking workers shifted to demanding fair wages, social security payments, and benefits. At Tomiya Summit Garment Export, a Japanese-owned factory in southern Dong Nai province, 250 workers went on strike at the end of April 2020 to oppose the company sacking them without providing support for finding other jobs. The company said it needed to cut the labour force because of the impacts of COVID-19, but, in response to the strike, it announced that it would reduce working hours but not the number of workers (Ha 2020). The September 2020 strike at Luxshare-ICT, a Chinese-owned electronics factory in north-eastern Bac Giang province, came at an embarrassing time for the company, as Apple was considering contracting the factory to make some of its products. Workers had a number of demands, including related to salaries, bonuses, working hours, and leave allowances. The vast majority of the demands were met (Bao Han 2020a). Before a December 2020 strike and occupation at My Tu, a Korean-owned garment factory in southern Binh Duong province, the factory

had been laying off workers due to COVID-19. Workers discovered that the factory had been deducting social security contributions from salaries but not paying these into the social security fund, meaning workers would not have been able to claim unemployment benefits. There was also doubt about whether the remaining workers would be paid December salaries or bonuses. On 11 December, workers went on strike to demand these and occupied the factory overnight on 15 December. The company then promised to resolve all social security payments by the end of December (Tam An 2020).

Distributing material aid

Strikes were complemented by the VGCL's activities, the second part of the dual structure. At the most basic and immediate level, the VGCL provided material aid. This included donating financial gifts or food packages to workers in need and giving personal protective equipment to workers and their workplaces, as well as checking that these were being used properly. In addition, the VGCL organised information sessions for workers and employers about COVID-19 preventative measures. A campaigning effort organised and coordinated by the VGCL to get landlords to voluntarily freeze or decrease rents for workers who had suffered a loss of income also had some success (FES Vietnam 2020).

Vietnam's flagship economic policy during COVID-19 was a 62 trillion Vietnamese dong (US\$2.6 billion) support package, initially from April to June 2020 and then extended until the end of the year with another 18.6 trillion VND (US\$798 million). This provided tax breaks and low-interest loans to affected businesses and monthly financial support to those who needed it. Recipients had to be in one of seven groups, including the unemployed, informal workers whose income had significantly decreased, poor and near-poor families, and household businesses. Payments were modest, and the roll-out of the relief encountered substantial issues, as strict bureaucratic conditions that were difficult for many people to meet were attached. For example, many informal migrant workers in Hanoi, such as street vendors and motorbike taxi drivers, were told that, in order to receive the support, they needed a business licence and other documents verifying their residence, income, and nature of work, which they did not have (Lan Phuong and Tat Dinh 2020). Nevertheless, the payments were a lifeline for many. The package was not the VGCL's initiative, but they had a hand in its development. They also played an important role in highlighting the

issues that were stopping the money from getting to those who needed it and making suggestions for how that could be improved (Cuoc Song An Toan 2020).

Minimum wage negotiations

The VGCL also took a strong pro-labour stance during minimum wage negotiations in summer 2020. Vietnam's National Wage Council was established in 2013 as a mechanism to negotiate annual minimum wage rises. The council has a tripartite structure, with delegates from the Vietnam Chamber of Commerce and Industry (VCCI), the VGCL, and MOLISA. It meets every summer to decide on minimum wage increases for the following year; they are applied from 1 January.

In normal years, negotiations follow a familiar pattern. The VGCL says that workers are facing hardships from low wages and proposes a relatively large increase. The VCCI says that employers are facing difficulties and thus cannot afford a large increase in minimum wages. They propose a much smaller increase. The council meets and eventually agrees on an amount that falls somewhere between the two proposals. In summer 2019, when the council decided on minimum wage levels for 2020, the amount agreed was celebrated as the first time that minimum wages would cover 100% of workers' basic living costs (Anh Thu 2019).

Negotiations in summer 2020, however, were different. The VCCI said that, given all the hardships which businesses were facing due to the economic impact of the COVID-19 pandemic, there should be no increase in minimum wage levels in 2021; to do so would put too much financial pressure on employers. The VGCL opposed the VCCI, saying that workers had also faced severe hardship and loss of income and therefore needed higher minimum wages in 2021. MOLISA, supporting the VCCI, very quickly proposed that the council take a vote on the issue. The VGCL resisted, saying that no real discussions or negotiations had taken place. The vote went ahead anyway, but the VGCL delegates refused to take part, decrying it as illegitimate; they were aware that, with the MOLISA representatives voting with the VCCI, the vote would be lost even if they took part. The council therefore decided not to raise minimum wages in 2021 (Van Duan 2020). The VGCL did have one suggestion accepted into the official decision, however: the possibility that minimum wages could be raised on 1 July 2021, six months later than usual. The council said that this possibility should be considered at

a later date once the full economic impact of the COVID-19 pandemic was known (Bao Han 2020b). At the time of writing, in early 2021, the VGCL had returned to this suggestion, arguing that workers had suffered enough and that employers could afford a minimum wage increase in July 2021, as Vietnam saw economic growth of 2.9% in 2020 (Bao Han 2021).

Conclusion

This chapter has argued that Daubler's (2018, p.155) conception of the dual structure of Vietnam's labour relations is a useful way to understand the labour response to the COVID-19 pandemic in the country. Wildcat strikes demanded safe workplaces and fair wages and benefits at the enterprise level. Complementing these were the VGCL's activities at national and regional levels, including distributing material aid and successfully pushing for and improving government policies to support workers through the pandemic and its economic impacts. In addition to these, even though the VGCL failed to secure a minimum wage increase for 2021, their strong stance against MOLISA and the VCCI meant that the debate continued, opening the door to a potential wage increase later in the year. The two parts of the dual structure thus combined to form a fairly effective response.

The dual structure was by no means perfect. It could not stop workers experiencing significant hardships that were similarly felt around the world. And, despite its best efforts, the VGCL failed to achieve a minimum wage increase in January 2021, even though it succeeded in publicising the issue widely and raising the possibility of an increase in July 2021. As Daubler himself has noted, the dual structure has its shortcomings. Perhaps it would also be less useful in mounting campaigns for major changes. During the COVID-19 pandemic, however, the dual structure was able to provide an effective emergency response, blunting the worst impacts of the pandemic for many workers.

Notes

1. There was no formal freedom of association before January 2021, which saw some limited reforms (see Buckley, forthcoming). This chapter, however, focuses on 2020, before the reforms came into effect.

2. Here I use the term wildcat strike to mean a strike that is not led by a trade union.

References

- Anh Thu. (2019). 'Lương tối thiểu vùng năm 2020: "Chốt" tăng 5,5% so với năm 2019' ['2020 regional minimum wages: "Bolted" at a 5.5% increase compared to 2019']. *Lao Động*, 12 July. <https://perma.cc/ZMS5-2WGF> [Last accessed 13 January 2021].
- Bao Han. (2020a). 'Vì sao 5.000 công nhân Công ty TNHH Luxshare – ICT ngừng việc tập thể?' ['Why did 5,000 Luxshare – ICT workers strike?']. *Lao Động*, 14 September. <https://perma.cc/6LMZ-9799> [Last accessed 13 January 2021].
- Bao Han. (2020b). 'Lương tối thiểu 2021: Cần ghi nhận những đề xuất xác đáng của Tổng LĐLĐVN' ['2021 minimum wage: the VGCL's reasonable suggestions must be noted']. *Lao Động*, 25 August. <https://perma.cc/H36U-GXT7> [Last accessed 13 January 2021].
- Bao Han. (2021). 'Kiến nghị tăng lương tối thiểu từ 1.7: Giảm áp lực cho doanh nghiệp' ['Petitioning to raise minimum wages from 1 July: Reducing pressure on enterprises']. *Lao Động*, 6 January. <https://perma.cc/4EPZ-ZU8G> [Last accessed 13 January 2021].
- Buckley, Joe. (2021). 'Freedom of association in Vietnam: A heretical view'. *Global Labour Journal*, vol. 12, no. 2, pp. 79–94. <https://doi.org/10.15173/glj.v12i2.4442>
- Cuoc Song An Toan. (2020). 'Tiếp thu kiến nghị của Tổng Liên đoàn về tháo gỡ khó khăn, vướng mắc của gói 62.000 tỷ' ['Receiving the VGCL's ideas about how to solve difficulties and problems with the 62 trillion dong package']. *Cuộc Sống An Toàn*, 29 June. <https://perma.cc/5WBD-MADJ> [Last accessed 14 January 2021].
- Daubler, Wolfgang. (2018). 'Trade union pluralism in Vietnam – Coping with informal associations', in Rudolf Traub-Mertz and Tim Pringle (eds) *Trade Unions in Transition: From Command to Market Economies*. Germany: Friedrich-Ebert-Stiftung, pp. 149–162. <https://perma.cc/2A3W-FJTG> [Last accessed 13 January 2021].
- Do Quynh Chi; and van den Broek, Di. (2013). 'Wildcat strikes: A catalyst for union reform in Vietnam?' *Journal of Industrial Relations*, vol. 55, no. 5, pp. 783–799. <https://doi.org/10.1177/0022185613491685>
- FES Vietnam. (2020). 'Trade union in Vietnam in the context of the Covid-19 pandemic'. *Friedrich-Ebert-Stiftung Vietnam*, 25 May. <https://perma.cc/XDE7-TBVA> [Last accessed 13 January 2021].
- Ha Anh Chien. (2020). 'Cty cho nữ công nhân lớn tuổi nghỉ việc bằng tờ thông báo nhỏ như gang tay' ['Company fires older women workers with a small

- piece of paper’]. *Lao Động*, 28 April. <https://perma.cc/463S-NQ6X> [Last accessed 13 January 2021].
- Hoang Manh. (2019). ‘Các cuộc ngừng việc, đình công trong toàn quốc giảm 35%’ [‘Nationwide work stoppages and strikes reduced by 35%’]. *Dân Trí*, 14 March. <https://perma.cc/D8DJ-HRQA> [Last accessed 16 March 2019].
- Hoang Manh. (2021). ‘126 cuộc ngừng việc tập thể trong năm 2020’ [‘126 collective work stoppages in 2020’]. *Dân Trí*, 9 January. <https://perma.cc/T8NG-D4GL> [Last accessed 10 January 2021].
- Ky Quan. (2020). ‘Long An: Doanh nghiệp vào cuộc bảo vệ người lao động trước dịch bệnh Corona’ [‘Long An: Enterprise gets involved in protecting workers in the face of coronavirus’]. *Lao Động*, 6 February. <https://perma.cc/G98G-K5D4> [Last accessed 14 January 2021].
- Lan Phuong; and Tat Dinh. (2020). ‘Hanoi overlooks street vendors in Covid-19 incentive’. *VnExpress International*, 23 June. <https://perma.cc/P7GC-7D2K> [Last accessed 14 January 2021].
- Lee, Chang-Hee. (2006). *Industrial Relations and Dispute Settlement in Viet Nam*. Vietnam: International Labour Organization in Viet Nam. <https://perma.cc/A786-BREM> [Last accessed 13 January 2021].
- Ngoc Phuc. (2020). ‘Công nhân đã làm việc trở lại sau khi nghe giải thích về quy trình cách ly người Trung Quốc’ [‘Workers return to work after hearing an explanation the process of quarantining a Chinese national’]. *Sài Gòn Giải Phóng*, 19 February. <https://perma.cc/W4WL-D7KA> [Last accessed 14 January 2021].
- Quan, Katie. (2015). ‘One step forward: Collective bargaining experiments in Vietnam and China’, in Anita Chan (ed.) *Chinese Workers in Comparative Perspective*. USA: Cornell University Press, pp. 174–192.
- Schweissshelm, Erwin; and Do Quynh Chi. (2018). ‘From harmony to conflict – Vietnamese trade unions on the threshold of reform’, in Rudolf Traub-Mertz and Tim Pringle (eds) *Trade Unions in Transition: From Command to Market Economies*. Germany: Friedrich-Ebert-Stiftung, pp. 109–147. <https://perma.cc/FD8N-DECQ> [Last accessed 13 January 2021].
- Siu, Kaxton; and Chan, Anita. (2015). ‘Strike wave in Vietnam, 2006–2011’. *Journal of Contemporary Asia*, vol. 45, no. 1, pp. 71–91. <https://doi.org/10.1080/00472336.2014.903290>
- Tam An. (2020). ‘CÔNG TY TNHH MỸ TÚ: Hàng trăm công nhân lo mất trắng quyền lợi’ [‘MY TU: Hundreds of workers worry about losing their rights and interests’]. *Người Lao Động*, 20 December. <https://perma.cc/AF3D-VBC2> [Last accessed 13 January 2021].

- T.E.A. (2020) 'Số cuộc ngừng việc tập thể giảm gần 50%' ['Collective work stoppages reduce by nearly 50%']. *Lao Động*, 7 January. <https://perma.cc/CYT3-9KH3> [Last accessed 13 January 2021].
- The Anh. (2020). 'Vụ phản đối công nhân Trung Quốc vì sợ Covid-19: Lãnh đạo huyện giải thích' ['Opposing Chinese workers due to COVID-19 fears: District leaders explain']. *Dân Việt*, 17 February. <https://perma.cc/H743-H6A3> [Last accessed 14 January 2021].
- Thu Hang. (2018). 'Đã có 314 cuộc đình công và ngừng việc tập thể' ['There were 314 strikes and collective work stoppages']. *Thanh Niên*, 12 January. <https://perma.cc/XU3U-ZLYU> [Last accessed 2 June 2018].
- Tran Thi Kieu Trang; and Bales, Richard. (2017). 'On the precipice: Prospects for free labor unions in Vietnam'. *San Diego International Law Journal*, vol. 19, no. 1, pp. 71–94. <https://perma.cc/RB3W-VTAR> [Last accessed 14 January 2021].
- Van Duan. (2020). 'Không tăng lương tối thiểu vùng năm 2021' ['No 2021 regional minimum wage increase']. *Người Lao Động*, 6 August. <https://perma.cc/8Y2E-WZ3D> [Last accessed 13 January 2021].
- World Bank. (2020). *Taking Stock, December 2020. From COVID-19 to Climate Change: How Vietnam Can Become the Champion of Green Recovery*. USA: World Bank. <https://perma.cc/7UHH-NEMK> [Last accessed 13 January 2021].

10. Southeast Asian haze and socio-environmental–epidemiological feedback

Thomas E. L. Smith and Helena Varkkey

While the fire and haze season for Indonesia and Malaysia was mild in 2020 despite ‘moderate’ meteorological outlooks, there were a number of reasons to expect that the socio-economic impacts of COVID-19 would increase the prevalence of agricultural and land clearance fires and the resultant haze pollution. Furthermore, there was mounting evidence revealing that particulate matter in the haze produced by the fires may have increased transmission rates of COVID-19, exacerbated the symptoms of the disease and severity of infection, and increased overall mortality. We explore the reasons why COVID-19-related lockdowns and economic recessions might have led and will continue to lead to the increasing use of fire in Southeast Asia’s peatlands in the short and long terms. We then discuss the role that haze pollution (as well as historic population exposure to this pollution) might have played in exacerbating the COVID-19 crisis through interactions between air pollution and the virus. Finally, we speculate that a novel feedback loop may exist that has exacerbated both the severity of the pandemic and the risk of fire-related haze events.

Haze in 2020 and the situation in 2021

The Southeast Asian ‘haze season’ usually refers to a regional air pollution crisis generally occurring from late August through November, driven by deforestation and agricultural fires, predominantly in Indonesia (Varkkey 2015). Beyond its immediate effects in Indonesia, the haze often travels across borders to affect Singapore, Malaysia, and sometimes further afield. There have also been increasingly regular haze events in northern Southeast Asia caused by agricultural burning in the ‘golden

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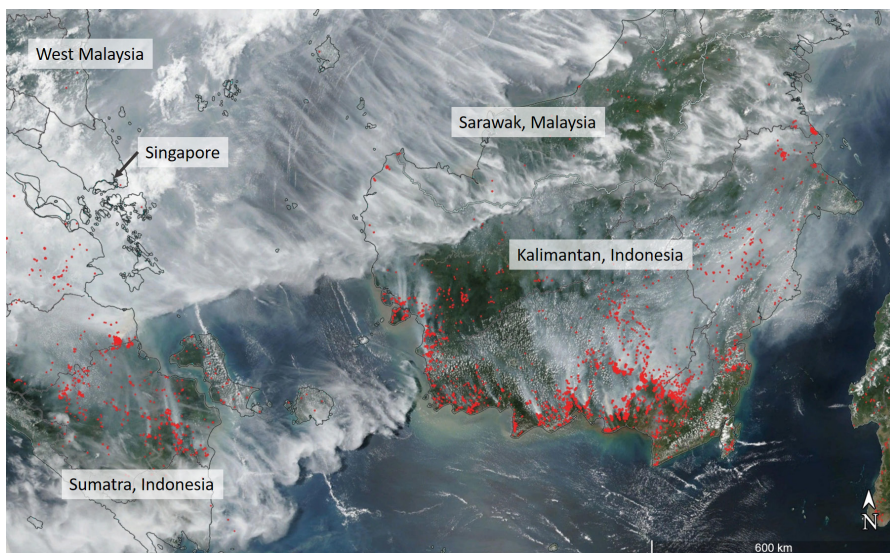
Smith, Thomas E. L.; and Varkkey, Helena. 2022. ‘Southeast Asian haze and socio-environmental–epidemiological feedback’. In: Shin, Hyun Bang; McKenzie, Murray; and Oh, Do Young (eds) *COVID-19 in Southeast Asia: Insights for a post-pandemic world*. London: LSE Press, pp. 118–127.
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triangle’ border region of Thailand, Laos, and Myanmar (Greenpeace Southeast Asia 2020).

Much of the haze originating from Indonesia is produced by fires on carbon-rich tropical peatlands. Under pristine forested and waterlogged conditions, peatlands rarely catch fire. Small-, medium-, and large-scale developers, however, often drain peatlands to prepare them for small-holdings and commercial plantations. This process dries out the surface peat layer such that it becomes highly combustible. Furthermore, fire is sometimes used intentionally as a cheap and efficient way to clear the land (Varkkey 2015). Once ignited, peatland fires are difficult to suppress and may smoulder for weeks or months (Hu et al. 2018).

Predicting the timing, extent, and severity of the haze season is complex given that the fires are a function of the weather and longer-term climate variabilities (e.g. El Niño) as well as land and water management. In March 2021, the NOAA’s El Niño–Southern Oscillation forecast suggested that El Niño (associated with hot and dry conditions in Southeast Asia) would be unlikely during 2021 (NOAA 2021), reducing the risk of widespread fires that had plagued previous El Niño-exacerbated dry seasons, such as those in 2015 and 2019 (Figure 10.1).

Figure 10.1. A true-colour satellite image with fire hotspot detections (red) over parts of Malaysia, Indonesia, Singapore, and Brunei during the height of the 2019 haze season, on 14 September 2019



Source: NASA Worldview (2019).

Note: Visible plumes of smoke shroud much of Kalimantan, while plumes from fires on Sumatra are driven by the wind northwards towards Singapore and the Malay Peninsula.

However, the Singapore Institute of International Affairs (SIIA), which releases annual ‘Haze Outlook’ reports, warned that the impacts of the COVID-19 pandemic could increase the risk of a severe transboundary haze incident, in spite of the low probability of El Niño (SIIA 2020).

COVID-19 and tropical peatland fires

By the end of March 2021, Indonesia had the highest number of COVID-19 cases and deaths in East and Southeast Asia, with 1,470,000 confirmed cases and 39,865 deaths as of 24 March 2021. With only 2.12% of the population vaccinated by the end of March 2021, the disease seemed likely to remain a public health crisis in the region throughout 2021, including the haze season later in the year. The potential influence of the pandemic on tropical peatland fires can be broken down into three critical COVID-19 impacts:

1. The reallocation of government budgets for environmental protection and fire prevention to the COVID-19 response and the deregulation of environmental laws to encourage economic recovery;
2. Lockdown and physical distancing measures inhibiting the deployment of government, NGO, and private sector personnel responsible for environmental protection, community engagement, and fire prevention; and
3. The economic impacts of the pandemic and associated lockdowns on certain plantation companies who might use fire and illegal encroachment to raise profitability.

First, in April 2020, the Indonesian Ministry of Environment declared a reallocation of 1 trillion rupiah (US\$111 million) from its budget to help forest communities and farmers affected by COVID-19 (PPID 2020). The consequences of the reallocation included a 50% budget cut for the ministry’s fire-fighting teams that were responsible for finding and fighting fires; this in turn led to a 34% reduction in the area of fire patrolling (Ungku and Christina 2020).

And, while the mandate of the Peatland Restoration Agency, a key agency in the fight against peatland fires, was extended for a further four years, several new laws and policies were passed in 2020 that accelerated environmental deregulation in the name of economic recovery and food security. For example, the Omnibus Law on Job Creation included the scrapping of a provision that required the maintenance of

a minimum 30% watershed and/or island area as forest area and the shortening of a requirement for plantation companies to develop 30% of their concession areas from three to two years. A new ‘food estate’ programme, in turn, allowed protected forest areas to be cleared in the process of establishing millions of hectares of new farmland. Such deregulations put fire-prone peatlands at risk of accelerated development (Jong 2021).

Second, lockdowns and social distancing rules compounded budget cuts, further inhibiting patrol efforts. It was not just government personnel who were stating that COVID-19 restrictions ‘hamper ... our access to the flames’ (Ungku and Christina 2020), but also stakeholders in the private sector who were finding it difficult to assess the situation on the ground, even on their own plantations (Jong 2020). NGOs, often responsible for encouraging more sustainable peatland livelihoods through outreach, fire-free programmes, and demonstration projects, shifted their focus to online activities at a crucial time of the year, and the effectiveness of online activities was highly dependent on reliable internet access, which was often lacking (Ungku and Christina 2020).

Finally, Indonesia’s economy contracted for the first time in 20 years in the second quarter of 2020, shortly after COVID-19 hit, and there were concerns of a prolonged recession (Ing 2021). Key sectors linked to fires and haze came into the COVID-19 pandemic on the heels of an already challenging financial year. In particular, palm oil saw especially low commodity prices in 2019 (Khoo 2019), influenced by issues like the European Union’s decision to phase out palm oil-based biofuels by 2030.

There were concerns that the associated unemployment and economic pressures will drive smallholders as well as some plantation companies to shift to cheaper and less sustainable practices. Smallholders surveyed in Indonesia reported an average 5% decline in selling prices of fresh fruit bunches (FFB), which affects turnover cost efficiency and fertiliser input expenses, with probable long-term knock-on effects for attainable FFB yield (Nurkhoiry and Oktarina 2020).

While larger, more publicly visible transnationals (e.g. Sime Darby, Wilmar, or Golden Agri Resources) made commitments to compliance with sustainable certification schemes such as the Roundtable for Sustainable Palm Oil (RSPO) to maintain sustainability practices at all times, this was not the case for less prominent small- and medium-sized companies that had not yet made such commitments. In the face of COVID-19-related economic pressures, such companies might have

been more inclined to infringe upon environmental regulations to offset immediate losses and increase short-term profitability, including the use of fire and illegal encroachment into tropical peat swamp forests (Suwiknyo 2020).

These economic pressures, combined with government cutbacks and movement restrictions, might have decreased the likelihood of effective policing, prosecutions, and convictions, raising the possibility of a more severe transboundary haze event should there be a strong El Niño dry season. The likelihood of a longer-term economic downturn suggested that the impacts of COVID-19 would reach far beyond 2020 and 2021.

How might haze exacerbate the pandemic?

While COVID-19 might have increased the risk of a significant haze incident, there was growing evidence suggesting that air pollution both decreased base-level immunity to the disease and increased mortality rate from it.

A growing body of literature has found statistically robust correlations between air pollution and COVID-19 cases, hospital admissions, and deaths (Cole, Ozgen, and Strobl 2020). In a US study, an increase in concentrations of fine particulate matter ($PM_{2.5}$) of just $1 \mu g m^{-3}$ was associated with a 15% increase in COVID-19 deaths (Wu et al. 2020), while a similar study from England found that an increase in the long-term average $PM_{2.5}$ concentrations of $1 \mu g m^{-3}$ could explain a 12% increase in COVID-19 cases (Travaglio et al. 2021). These results were especially concerning for the Southeast Asian haze season because concentrations of $PM_{2.5}$ can reach hundreds to thousands of $\mu g m^{-3}$ during haze events, many times higher than the concentrations investigated in the aforementioned studies.

Understanding the precise pathological mechanism for the correlation has remained a work in progress, although Acute Respiratory Distress Syndrome (ARDS), which has long been linked to polluted air, has been a major cause of COVID-19 related deaths. One notable finding from both the US and UK studies (Travaglio et al. 2021; Wu et al. 2020) was that high rates of COVID-19-related deaths correlated not only to contemporaneous air pollution conditions but also to prolonged exposure to polluted air over time. For example, those living in US counties that had experienced worsening air pollution over the previous 15 to 20 years had a substantially higher mortality rate. $PM_{2.5}$ particles, the particles in air pollution that are small enough to be inhaled into the lungs

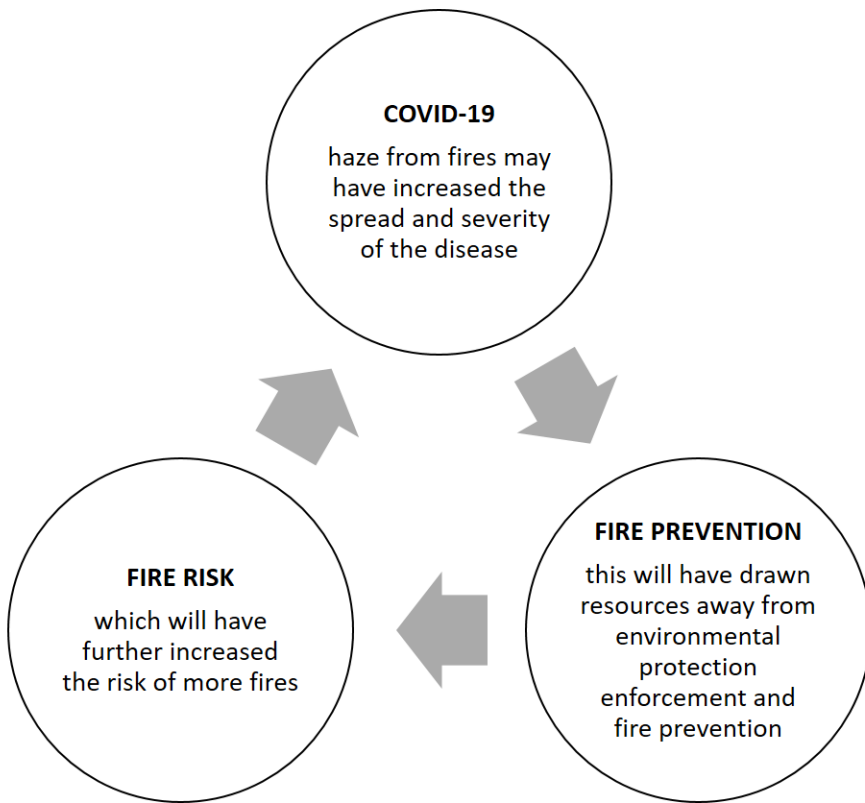
and even enter the bloodstream, have the long-term effect of weakening human respiratory, cardiovascular, and immune systems. In the context of COVID-19, someone with already weakened lungs and respiratory tracts has a higher risk of not only becoming infected but also suffering worse symptoms (Wu et al. 2020). Both acute and chronic exposure to haze, therefore, decrease the base-level immunity of the population to COVID-19 and increase the risk of death.

Perhaps most worryingly, there was also evidence to suggest that particulate matter may have also acted as a vector for the relatively tiny virus (Barakat, Muyllkens, and Su 2020; Setti et al. 2020), offering a surface to which the virus could cling. Frontera et al. (2020) have suggested that viruses travelling on the surfaces of air pollution particles were able to survive longer and travel further (> 2 m) through the air, potentially increasing the basic reproduction number (R), i.e. the spread, of the disease. The minute nature of the haze pollution particles as a host for the virus (as opposed to larger droplets of saliva) was also linked to deeper penetration into the human respiratory system, causing a more severe infection (Frontera et al. 2020). While COVID-19 lockdowns led to a notable decrease in aerosol optical depth (AOD, representing density of particulate matter) over Southeast Asia, it was found that, in areas with extensive forest fires and agricultural burning, AODs remained at very high levels, even during lockdown periods (Kanniah et al. 2020).

A novel socio-environmental–epidemiological feedback mechanism?

The impact of air pollution on the virus's spread and severity is likely to have been scaled with the concentration of particulate matter in the air and the density of people exposed to both the disease and air pollution (Cole, Ozgen, and Strobl 2020; Frontera et al. 2020). Major haze incidents in Southeast Asia are conducive to this effect, with hazardous levels of particle concentrations coinciding with densely populated urban centres.

From this, we may deduce that there is the potential for a novel socio-environmental–epidemiological reinforcing feedback loop (Figure 10.2), whereby environmental air pollution from fires might have led to an increase in the spread and severity of disease, which might in turn have drawn resources away from environmental protection enforcement and fire prevention, which might have further increased the risk of more fires. This vicious cycle might not have been unique to

Figure 10.2. The socio-environmental–epidemiological feedback loop

Southeast Asia and haze, possibly also playing a role in exacerbating COVID-19 and air pollution crises in other deforestation fire-affected regions, such as Russia and Brazil.

Beyond the COVID-19 pandemic, tropical peat swamp forests in Southeast Asia also present suitable conditions for the potential emergence of novel zoonotic infectious diseases in the future (Harrison et al. 2020; Morand and Lajaunie 2021). This is due to their high biodiversity, the presence of many potential vertebrate and invertebrate vectors, and high levels of habitat disruption and wildlife harvesting. Morand and Lajaunie (2021) found that increases in outbreaks of zoonotic and vector-borne diseases similar in nature to COVID-19 from 1990 to 2016 were heavily linked to deforestation in tropical countries. In particular, and of important relevance to haze crises, deforestation for oil palm plantations was singled out as a driver of outbreaks of vector-borne diseases (Morand and Lajaunie 2021). Combined with the high likelihood of fires in these areas (and the potential for these

fires to exacerbate a pandemic's health effects, as discussed above), any future outbreaks will likely have dire impacts on the public health and livelihoods of remote local communities around peatland areas, most of whom have limited medical facilities and high dependence on external trade (Harrison et al. 2020).

Hence, both in terms of the mitigation of the COVID-19 pandemic and reducing the potential for the emergence of future pandemics, it remains extremely important for governments to continue to prioritise environmental protection and fire prevention, especially in tropical peatlands, throughout and beyond this time of crisis.

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References

- Barakat, Tarek; Muylkens, Benoit; and Su, Bao-Lian. (2020). 'Is particulate matter of air pollution a vector of Covid-19 pandemic?' *Matter*, vol. 3, no. 4, pp. 977–980. <https://doi.org/10.1016/j.matt.2020.09.014>
- Cole, Matthew A.; Ozgen, Ceren; and Strobl, Eric. (2020). 'Air pollution exposure and Covid-19 in Dutch municipalities'. *Environmental and Resource Economics*, vol. 76, pp. 581–610. <https://doi.org/10.1007/s10640-020-00491-4>
- Frontera, Antonio; Martin, Claire; Vlachos, Konstantions; and Sgubin, Giovanni. (2020). 'Regional air pollution persistence links to COVID-19 infection zoning'. *The Journal of Infection*, vol. 81, no. 2, pp. 318–356. <https://doi.org/10.1016/j.jinf.2020.03.045>
- Greenpeace Southeast Asia. (2020). *Maize, Land Use Change, and Transboundary Haze Pollution*, 26 May. <https://perma.cc/5VKG-E4JV> [Last accessed 26 August 2020].
- Harrison, Mark E.; Wijedasa, L.S.; Cole, L.E.S.; Cheyne, S.M.; Choiruzzad, S.A.B.; Chua, L.; Dargie, G.C.; Ewango, C.E.N.; et al. (2020). 'Tropical peatlands and their conservation are important in the context of COVID-19 and potential future (zoonotic) disease pandemics'. *PeerJ*, vol. 8, p. e10283. <https://doi.org/10.7717/peerj.10283>
- Hu, Yuqi; Fernandez-Andez, Nieves; Smith, Thomas E.L.; and Rein, Guillermo. (2018). 'Review of emissions from smouldering peat fires and their

- contribution to regional haze episodes'. *International Journal of Wildland Fire*, vol. 27, pp. 293–312. <https://doi.org/10.1071/WF17084>
- Ing, Lili Yan. (2021). 'Economic outlook 2021: Beware of prolonged recession'. *Jakarta Post*, 5 January. <https://perma.cc/N7AX-WV8D> [Last accessed 30 January 2021].
- Jong, Hans N. (2020). 'COVID-19 may worsen burning and haze as Indonesia enters dry season'. *Mongabay*, 6 July. <https://perma.cc/D7G4-PA2W> [Last accessed 26 August 2020].
- Jong, Hans N. (2021). 'Indonesia renews peat restoration bid to include mangroves, but hurdles abound'. *Mongabay*, 5 January. <https://perma.cc/5MNF-TPW2> [Last accessed 30 January 2021].
- Kanniah, Kasturi Devi; Kamarul Zaman, Nurul Amalin Fatihah; Kaskaoutis, Dimitris G.; and Latif, Mohd Talib. (2020). 'COVID-19's impact on the atmospheric environment in the Southeast Asia region'. *Science of the Total Environment*, vol. 736, p. 139658. <https://doi.org/10.1016/j.scitotenv.2020.139658>
- Khoo, Daniel. (2019). 'Palm oil price at 6-month low'. *The Star*, 14 May. <https://perma.cc/2J7F-N7YU> [Last accessed 26 August 2020].
- Morand, Serge; and Lajaunie, Claire. (2021). 'Outbreaks of vector-borne and zoonotic diseases are associated with changes in forest cover and oil palm expansion at global scale'. *Frontiers in Veterinary Science*, vol. 8, p. 661063. <https://doi.org/10.3389/fvets.2021.661063>
- NOAA. (2021). ENSO: *Recent Evolution, Current Status and Predictions*, 26 April. <https://perma.cc/UDL4-6G5H> [Last accessed 24 March 2021].
- Nurkhoiry, Ratnawati; and Oktarina, Sachnaz Desta. (2020). 'How does COVID-19 impact oil palm management practises in Indonesia?' *International Journal of Oil Palm*, vol. 3, no. 2, pp. 56–67. <https://doi.org/10.35876/ijop.v3i2.49>
- PPID (Pejabat Pengelola Informasi dan Dokumentasi). (2020). *KLHK Alokasikan Rp 1,01 Triliun untuk Bantu Masyarakat dan Petani Hutan Terdampak Corona*, 16 April. <https://perma.cc/67WH-CEGJ> [Last accessed 26 August 2020].
- Setti, Leonardo; Passarini, F.; De Gennaro, G.; Barbieri, P.; Perrone, M.G.; Piazzalunga, A.; Borelli, M.; Palmisani, J.; Di Gilio, A.; Piscitelli, P.; and Miani, A. (2020). 'The potential role of particulate matter in the spreading of COVID-19 in northern Italy: First evidence-based research hypotheses. *medRxiv*. <https://doi.org/10.1101/2020.04.11.20061713>

- SIIA (Singapore Institute of International Affairs). (2020). *SIIA Haze Outlook 2020*. Singapore: Singapore Institute of International Affairs. <https://perma.cc/5YHJ-EWSU> [Last accessed 6 June 2021].
- Suwiknyo, Edi. (2020). *Ratusan Perusahaan Sawit Langgar Ketentua, Ekonomi*, 13 May. <https://perma.cc/ZCX4-9WRX> [Last accessed 26 August 2020].
- Travaglio, Marco; Yu, Yizhou; Popovic, Rebeka; Selley, Liza; Leal, Nuno Santos; and Martins, Luis Miguel. (2021). ‘Links between air pollution and COVID-19 in England’. *Environmental Pollution*, vol. 268, p. 115859. <https://doi.org/10.1016/j.envpol.2020.115859>
- Ungku, Fathin; and Christina, Bernadette. (2020). ‘Coronavirus cuts force Indonesia to scale back forest protection’. *Reuters*, 25 June. <https://perma.cc/CHE5-PB6S> [Last accessed 26 August 2020].
- Varkkey, Helena. (2015). *The Haze Problem in Southeast Asia: Palm Oil and Patronage*. UK: Routledge.
- Wu, Xiao; Nethery, Rachel C.; Sabath, Benjamin; Braun, Danielle; and Dominici, Francesca. (2020). ‘Exposure to air pollution and COVID-19 mortality in the United States: A nationwide cross-sectional study’. *Science Advances*, vol. 6, no. 45, p. eabd4049. <https://doi.org/10.1126/sciadv.abd4049>