

BOOK REVIEW  
Xiaoping Fang,  
*China and the Cholera Pandemic:  
Restructuring Society under Mao*  
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Xiaoping Fang's *China and the Cholera Pandemic: Restructuring Society Under Mao* is an important and timely addition to our understanding of Maoist China and its continuing impact on Chinese society. Professor Fang's book, which focuses on the origins and impact of the El Tor cholera pandemic as it played out in Southeastern coastal China from 1961 to 1965, demonstrates that the seventh global cholera pandemic was first and foremost a "significant social and political exercise" rather than simply a health crisis (7). Fang finds that the interventionist measures taken in response to the pandemic "contributed to the rise of an emergency disciplinary state" in China. While Fang could have defined the concept of "an emergency disciplinary state" earlier and more precisely, ultimately he argues convincingly that the top-down leadership, vertical bureaucratic system, and horizontal grassroots social organizations characteristic of the emergency disciplinary state developed during the 1961-65 pandemic have continued to shape the PRC government's distinctive method of responding to disaster, witnessed most recently and spectacularly during the ongoing Covid-19 pandemic.

*China and the Cholera Pandemic* is based on an impressive array of original sources, including archival documents from Zhejiang Province, Guangdong Province, and the World Health Organization (WHO) Western Pacific Regional Office in Manila, county gazetteers, local, national, and international newspapers, and interviews with former medical doctors and epidemic prevention staff, local cadres, and ordinary villagers who witnessed the cholera pandemic as it played out in the Wenzhou area of Zhejiang. Grassroots documents such as investigation reports, work reports, meeting minutes, and policy documents from each of the county archives in Wenzhou Prefecture, which had the highest incidence of cholera in southeastern coastal China in 1962, form the core materials for Fang's book.

The three parts of *China and the Cholera Pandemic* investigate different aspects of the pandemic. **Part I, "Global Pandemic and Mobility,"** examines the global and local origins of the seventh cholera pandemic. Chapter 1, "The Origins of the Epidemic: Migrants and Refugees in Cold War Asia," places the outbreak of the pandemic "in the contexts of transnational politics and nation-building in Cold War Asia" (p. 28). Fang first tells the story of how El Tor cholera – a hemolytic strain different from classical cholera – came to the Middle East

before 1900 with South Asian Muslims making the pilgrimage to Mecca, got its name from the El Tor quarantine station in Egypt, and was first brought to the Indonesian port of Makassar by Southeast Asian pilgrims returning from Mecca in 1925. Fang then provides a wonderfully trans-national analysis of the early spread of El Tor cholera in 1961 from Indonesia to China and beyond. There were roughly two million ethnic Chinese living in Indonesia by 1951, he notes, and during and after Indonesia's long struggle for independence, they were often targeted as aliens and collaborators with the Dutch, and later as Communist sympathizers. When the Indonesian government nationalized Chinese-owned enterprises in 1958, the Chinese government responded by welcoming Chinese Indonesians to repatriate to China. Early in 1960, explains Fang, the PRC began sending ocean liners to Jakarta to carry Indonesian Chinese to designated "host ports" in China, most of them in Guangdong Province. Approximately 94,000 Indonesian Chinese repatriated to China in 1960, and another 20,000 to 30,000 returned in 1961. A significant number of returning Indonesian Chinese settled in Guangdong Province's Yangjiang County, the place where the 1961-65 cholera pandemic first emerged in China. China's Ministry of Health subsequently determined that the pandemic came to Guangdong with returning Indonesian Chinese. Cholera soon spread from Yangjiang to the entire Pearl River delta area in Guangdong. Due to the large number of Chinese refugees who fled Guangdong in the early 1960s, Guangdong "became the hub of the pandemic for China and Southeast Asia." Cholera spread from Guangdong to Macau and Hong Kong by August 1961, notes Fang, and then from Hong Kong to the Philippines.

After tracing the international origins of the El Tor cholera pandemic, in chapter 2, "Mobile People, Mobile Disease," Fang examines the domestic context that allowed cholera to spread from Guangdong into Fujian, Zhejiang, Shanghai, and Jiangsu, or the whole of southeastern coastal China, in the summer of 1962. Fang first provides important context on changing population mobility in 1950s China, arguing that the rapid agricultural collectivization and urban industrialization campaigns of the Great Leap Forward of 1958-60 and the resulting Great Famine of 1959-61 produced both devastation and "disorderly population movement" (p. 77). During the important transitional period between the famine and the Cultural Revolution (1966-76), Fang explains, the Communist government "committed itself to social restructuring" in order to overcome the political crisis caused by the famine and to

“reconsolidate its rule” (p. 5). The restructuring effort, which included control of population mobility via the household registration system, work units, and people’s communes, created a striking separation between rural and urban society and contributed to “the rise of an immobile society” (p. 54). At the same time, elements of population mobility specific to China’s southeastern coastal societies played an important role in spreading cholera across the region in 1962. In particular, in response to the “Reclaim the Mainland” campaign launched by Chiang Kai-shek in Taiwan in 1961, the PRC government initiated a “Preparation for War” campaign, and designated Guangdong, Fujian, and Zhejiang as war zones. This brought large numbers of PLA troops to coastal areas such as Wenzhou in the summer of 1962, just as cholera began to spread. Fishermen from Guangdong, Fujian, and Zhejiang who moved up and down the Chinese coast to increase their catch were another mobile group who played an important role in carrying cholera from Guangdong to 1962, finds Fang. Finally, the Chinese government’s post-famine efforts to boost remittances, “a key source of foreign currency for national industrialization projects” (p. 62), by urging overseas Chinese to visit their hometowns in China, led to a fivefold increase in the number of overseas Chinese visitors/potential cholera carriers who came to Zhejiang Province in 1962. The Chinese government kept the movement of soldiers, fishermen, and overseas Chinese under tight control, concludes Fang, yet the degree of population mobility they brought to coastal societies, in concert with the human ecology of the southeastern coast and traditional festivals that caused people to gather in large groups, served to trigger the cholera outbreak.

**Part II, “Contagion, Social Divisions, and Borders,”** investigates how the restructuring of Chinese society after the famine shaped China’s interventionist responses to the cholera outbreak, and how in turn the control measures employed to deal with the epidemic consolidated restructured social divisions and borders. Chapter 4, “Social Divisions, Epidemiology, and Disease Distribution,” is a very rich chapter that examines how rural-urban, male-female, and military-civilian divides that had formed since 1949 but were strengthened in 1961-62 “changed the social epidemiological context and the distribution of cholera.” First, just as scholars of the Great Leap Famine have argued that the Chinese Communists “sacrificed millions of peasants’ lives on the altar of urban stability and industrialization” during the famine,<sup>1</sup> Fang finds that from the mid-1950s on, “urban residents were the primary beneficiaries” of the PRC government’s distribution of sanitary infrastructure and medical resources (p. 12). Using Wenzhou Prefecture as a case study, he finds that because the government prioritized improving the water quality of urban areas in the 1950s, when cholera broke out in 1962 urban residents in Wenzhou were significantly less likely to contract cholera, a waterborne illness, than their rural counterparts. During the cholera outbreak the government also prioritized the health and nutrition of the 50,000 PLA soldiers stationed in Wenzhou in 1962 as part of the “Preparation for War” campaign. For instance, in June 1962 Wenzhou Prefecture was instructed to supply the troops with grain “that accounted for 15 percent of all stored grain.” PLA troops were given cholera inoculations, and had access to high-quality and

free medical treatments at army hospitals. As a result, the “extremely low” cholera incidence rates among PLA troops in Wenzhou “contrasted sharply with incidence rates among civilians in the same areas” (pp. 105, 108).

In contrast to the widening gap Fang identifies between urban and rural residents and soldiers and civilians by 1962, he argues that when it came to gender, PRC policies narrowed rather than exacerbated what had been a pronounced male/female divide in cholera incidence before 1949. Comparing the gender distribution of cholera cases in Wenzhou Prefecture during the 1962 outbreak and a 1938 outbreak that occurred under Nationalist rule, he finds that while many more men than women contracted cholera during the 1938 epidemic, in 1962 “both male and female adult laborers [were] equally likely to contract waterborne infectious diseases” (p. 101). For example, he notes that “among those aged twenty to thirty-nine, the age group that was the main source of adult agricultural laborers,” in 1937 women accounted for only about 31 percent of the total number of patients in this age group while men made up 69 percent, but in 1962 “the gender distribution of cholera was almost even” (pp. 97, 101-102). Fang attributes this significant shift to “the blurring of traditional gender roles in agricultural work” (p. 101) that started in the 1950s when women began to take part in agricultural production on a large scale due to the Communist Party’s emphasis on women’s liberation, and became more pronounced during the Great Leap Forward, when women did intensive agricultural labor as men were sent to participate in irrigation work or industrial projects. Before 1949, he explains, the “traditional division of labor between men and women” meant that “women’s chances of coming into contact with infected soil and water were much lower than men’s” (p. 95). As women participated in intensive agricultural labor during the 1950s and especially the Great Leap Forward, however, they “began to suffer commensurate rates of cholera, as well as higher rates of female-specific disease, than they had suffered in the past” (p. 102).

This reader finds this line of argumentation interesting, but ultimately unconvincing. First, while CCP policies certainly led to a rapid increase in women’s participation in agricultural production after 1949, Fang could do more to acknowledge that before 1949 there were always a significant number of women who conducted farm labor and other kinds of work that would have brought them into contact with infected soil and water. As demonstrated in studies on women’s work in the Qing-era Lower Yangzi region, while Chinese women from all social classes were expected to engage in handicraft work in the home, women from poorer families often worked outside the home as well, doing tasks such as hoeing and plucking cotton, helping men haul mud from river bottoms to deposit on rice fields, driving water wheels, and engaging in other agricultural work.<sup>2</sup> A 1942 article on schistosomiasis that Fang cites in this section also makes this point, stating that some aspect of “housework,” such as washing rice, vegetables, and clothes, had to be done in rivers, thus exposing women to infection (p. 96). Fang could also read some of his sources in this section more critically. He supports the claim that women in Zhejiang rarely participated in agricultural production before 1949 with an interview with a local historian,<sup>3</sup> with a quote from a villager who told

Communist cadres in 1961 that before liberation, “women mainly made grass mats at home” and “prepared and delivered meals to those working in the fields,” and with the above-mentioned 1942 article that states, “In the Chinese countryside, men are usually in charge of agricultural production and laboring in the field. Women are responsible for housework. Women are prevented from exposing their bodies and skins by old feudal ethical codes. They therefore have much less chance to contracting infections than men” (pp. 95-96). Fang appears to accept these claims about women’s work before 1949 at face value, rather than pointing out that all of them are made by men, are broad and fairly dismissive in tone, and appear to be influenced by the powerful CCP discourse about the seclusion and powerlessness of women in China’s “old feudal society.” Including women’s voices about their experiences before 1949 could have complicated these claims. For instance, the interviews that Gail Hershatter conducted with rural women in North China’s Shaanxi Province emphasize “the regularity with which women went out to farm, sell, work, beg, flee, hide, or be sold, in order to avoid starvation” in the chaotic decades leading up to 1949. The “conventional narrative of women’s liberation by the CCP” excludes such examples, observes Hershatter, so they have largely faded from public memory.<sup>4</sup> Fang is of course writing about a very different region of China than Hershatter. Nevertheless, this section of his book would be strengthened by a more nuanced examination of women’s labor before 1949. Moreover, while Fang does a good job bringing to life the privation and diseases women experienced during and shortly after the Great Leap Forward and famine, a more balanced discussion might also include the sharp increase in life expectancy (from 36 years in 1950 to 57 years in 1957) experienced by Chinese women and men in the early and mid-1950s, which was brought about by in part by state attention to public health and hygiene.<sup>5</sup>

Second, while the chart (p. 97) Fang provides to show differences in the gender distribution of cholera cases in 1938 versus 1962 is striking, it raises as many questions as it answers. The 1938 numbers come from the First Epidemic Prevention Hospital in Wenzhou City, an urban setting, while the 1962 data comes from Rui’an County, a rural area. In his prior discussion of the growing disparity between rural and urban areas, Fang draws clear distinctions between Wenzhou City and rural Rui’an County during the 1962 outbreak. “The comparison of cholera incidence rates between rural and urban areas along the major canals of Wenzhou City and Rui’an and Pingyang Counties further indicates a rural/urban divide in the correlation between cholera and water supply and sanitation,” he writes. Incidence rates were lowest in Wenzhou City, and highest in the two counties (pp. 92-93). Given his own emphasis on the importance of the rural-urban divide, it is puzzling that Fang does not address the problems raised by comparing the gender distribution of cholera cases in an urban setting in 1938, versus a rural setting in 1962. Moreover, given that the cholera patients in the 1938 data were in an urban hospital, it seems problematic to assume that most of them were farmers who caught cholera due to their involvement in agricultural production. Might it be more likely that many of the male and female patients were instead urban residents exposed to the disease due to drinking contaminated water? As Fang explains

earlier in this chapter, when a hospital in Wenzhou City checked the water in 538 spots in the city after the 1938 cholera outbreak, the surveys “found that only a quarter of the water sampled was suitable as drinking water” (p. 85). Additional context on the 1938 outbreak would also be helpful in this section. The cholera epidemic that broke out in the summer of 1938 occurred only a year after the Japanese invasion of China, and less than a year after Japan’s brutal seizure of northern Zhejiang at the end of 1937 and the mass exodus of Chinese refugees who fled Japanese-occupied areas of the province.<sup>6</sup> Did some of those refugees flee to Wenzhou, which was not occupied until later in World War II, and if so, might more of those refugees be male than female? Moreover, was the hospital that treated the Wenzhou City cholera patients in 1938 the same hospital, mentioned in chapter 5, that was established by the Wentai Defense Command of the Third War Zone (p. 145) and if so, did it have close ties to the military? In short, might the wartime context of the 1938 outbreak suggest alternative reasons for the pronounced disparity between the number of male and female cholera cases in Wenzhou City in 1938? To conclude, Fang may be correct that increased female participation in agricultural work after 1949 made it more likely that women would be exposed to waterborne diseases like cholera. However, without additional context on both women’s labor in Wenzhou before 1949, and the urban setting and wartime backdrop of the 1938 data, it is difficult to know how to interpret the gender disparities noted. As presented, this section does not uphold Fang’s conclusion that the different gender distribution of cholera cases in Wenzhou in 1962 versus 1938 “marks a significant change in the gender structure of the social epidemiology of infectious diseases in Chinese history” (p. 109).

Chapter 4, “Quarantine and Isolation: The Rise of Multiple Borders,” examines how cholera control measures enacted during the 1962-65 cholera epidemic redrew multiple borders, resulting in a “reciprocal interaction between interventionist prevention measures and social restructuring” (p. 113). In addition to showing how new administrative borders and “invisible borders” created by required letters of introduction and grain coupons constrained people’s mobility and ultimately became more important than natural borders, this chapter charts the establishment, during the 1962-65 epidemic, of an elaborate system of quarantine stations and isolation hospitals in Zhejiang. For example, just two months after cholera arrived in Wenzhou, Wenzhou City had set up 4 quarantine stations, 18 quarantine teams, and 29 quarantine points. “The administrative, militia, and quarantine borders were quickly interlinked through collaboration and division of labor as authorities implemented the quarantine process,” writes Fang, and they served to strengthen the rural-urban divide and to restrain population movement (p. 120, 140). Quarantine procedures were not terribly effective at preventing the transmission of disease, however. Because cholera carriers and patients with mild cases did not necessarily show symptoms, explains Fang, it was difficult for quarantine stations to identify suspected patients. During a five-month quarantine period in 1963, one quarantine station checked 118,523 persons, but identified only 5 suspected cholera cases! Moreover, privileged groups such as party cadres and PLA personnel often used their

high status to ignore quarantine and isolation regulations, while the government, eager for the foreign currency brought by overseas visitors, facilitated the mobility of overseas Chinese visitor by exempting them from some quarantine examinations. In the end, finds Fang, “the practice of quarantine and isolation was more significant as a social and political exercise that contributed to the social restructuring process than as an effective disease control mechanism” (p. 140).

**Part III, “Pandemic Emergency, Data, and Social Structure,”** draws on social, production, and epidemiological data to analyze the reciprocal relationship between the anti-cholera campaign and social restructuring in the post-famine years. Chapter 5, “Comprehensive Inoculation, Rural Rhythms, and Compiling Registers,” examines the dynamics between rural restructuring and the mass cholera inoculation campaigns carried out in Zhejiang during the cholera epidemic of 1962-65. Concerned by the rising number of cholera cases, explains Fang, in August 1962 Zhejiang provincial authorities sent an emergency inoculation order that prompted a mass campaign to vaccinate a total of 2.94 million people in cholera-infected areas of Wenzhou within just 12 days (p. 147). The 1962 inoculation campaign “revealed serious deficiencies in coordination between the medical and administrative systems,” he finds (p. 160), which meant that in 1962 inoculation work in Wenzhou took three months rather than the targeted 12 days. This was especially problematic given that the immunity provided by the cholera vaccine in the 1960s lasted for only four months. Fang demonstrates that local governments in Wenzhou Prefecture learned from their mistakes, however. For the 1963 inoculation campaign, the national government increased nationwide cholera vaccine production, and Zhejiang’s Provincial and local governments reorganized inoculation teams to improve coordination, mobilized more local health-care workers by setting up a new incentive payment plan, adjusted the inoculation schedule so that it no longer conflicted with peak agricultural work periods, sent medical teams to the fields to inoculate people while they worked, and compiled reliable household inoculation registers and cross-checked the data against grain distribution books. Such improvements greatly increased the speed of inoculation campaigns. In Rui’an County, for instance, the number of days it took to complete the first round of inoculations, which vaccinated over 75 percent of the county’s population, plunged from 100 days in 1962, to 15 days in 1963, to only 7 days in 1964 (p. 161, 167). In addition to strengthening the ongoing social restructuring process by integrating household, accounting, and inoculation registers used in rural areas, notes Fang, the inoculation campaigns also generated a new social record, inoculation certificates, which “quickly became like passports for daily life” (p. 170).

A particularly fascinating aspect of Chapter 5 is Fang’s discovery that just as the Chinese state was making its herculean efforts to inoculate hundreds of thousands of people in affected communities along China’s southeastern coast, key epidemiologists in China and abroad were raising serious questions about the efficacy of the cholera vaccine. After the cholera pandemic began in 1961, in April 1962 the Western Pacific Regional Office of the World Health Organization (WHO) held a meeting in Manila to exchange information on

El Tor cholera (p. 260 FN 84; p. 281). At that meeting medical groups argued that “there was no evidence to suggest that there was a significant difference in the fatality rates between the inoculated and the unvaccinated population” (p. 171). China was not a member country of WHO from 1948 to 1972, observes Fang in Chapter 7. The Ministry of Health regularly collected and translated epidemic disease information issued by WHO headquarters, though, so presumably top Chinese epidemiologists would have been aware of the discussion in Manila. Chinese epidemiologists also expressed their own doubts about the cholera vaccine. In December 1963, explains Fang, the Ministry of Health convened a symposium in which cholera epidemiological experts examined a preliminary report about the efficacy of the cholera vaccine. Su Delong, a professor of epidemiology at Shanghai Medical University, argued that “the data we collected on the ground provided no evidence that preventive inoculation was effective in preventing cholera,” and that in many areas “there was no noticeable difference between the inoculation group and the control group.” In contrast, the author of the report argued that the vaccine was “definitely effective, but not strong” (p. 172-173). In spite of the questions raised about efficacy of the cholera vaccine, mass inoculation campaigns continued to be implemented in China until the late 1970s. While the cholera vaccine “ultimately proved not to be very effective,” judges Fang, the inoculation campaigns contributed to public health in China more broadly by institutionalizing the inoculation scheme for other diseases. “Functionalized as tactics to control and surveil the population,” he concludes, “all these inoculation campaigns strengthened the emergency disciplinary state” in a changing sociopolitical context (p. 173).

In Chapter 6, “Stool Sample, Archiving Patients, and Statistical Politics,” Fang’s analysis of “the rise of epidemic statistical politics” during the pandemic of 1962-65 is reminiscent of both Foucault’s pronouncement that “the formation of knowledge and the increase of power regularly reinforce each other in a circular process,” and James Scott’s emphasis, in *Seeing Like a State*, of the importance of legibility and measurement for the creation of state power.<sup>7</sup> By examining the epidemic reporting systems, outpatient departments for intestinal diseases, stool testing protocol, and medical licensing established during the early 1960s, Fang demonstrates that “the dynamics of disease surveillance, statistical politics, and social restructuring” during the pandemic fostered the institutionalization of China’s medical system, the “medicalization of the administrative system,” and the epidemiological categorization of the Chinese population (p. 176). Because the most effective way to distinguish cholera from other intestinal disease was to conduct stool sample tests, he explains, health departments in Zhejiang established strict procedures for collecting and testing stool samples. Epidemic departments then used these samples to categorize subjects into cholera patients, those with close contact with cholera patients, healthy populations, and so on. The epidemic reporting system developed in Wenzhou, states Fang, “penetrated into every corner of villages,” and put all residents under the surveillance of local medical and administrative authorities (p. 188). The government also assumed greater control over practitioners of Chinese and Western medicine via a medical licensing system started in



1962, finds Fang. In a welcome though brief section on treatments for cholera in both Chinese and Western medicine, he argues that the widespread use of saline solution and antibiotics to treat cholera after the 1940s “put Chinese medicine at a disadvantage during the pandemic” (p. 184). In 1960s Wenzhou, rehydrating patients with saline solutions via IV drips was the favored method for treating cholera, while “Chinese medicine was rarely used with urgent cholera patients” (p. 185). Chinese medicine practitioners found themselves at the bottom of the pyramid-shaped medical system,” and “increasingly faced challenges to their authority in local medical communities.” In sum, concludes Fang, “the epidemic statistical scheme quickly developed as a crucial part of an emergency disciplinary state” (p. 186, 200).

Chapter 7, “No. 2 Disease: A National Secret” is a fascinating but profoundly disturbing exploration of why and how the PRC state controlled information about the cholera epidemic of 1962-65 so tightly that the Chinese public and the international health community knew virtually nothing about it. Fang identifies three main reasons for the PRC state’s determination to control information about the epidemic. First, because traditional religious interpretations of and responses to epidemic disease appealed to local residents but “established a parallel structure of authority,” the government viewed them as threats to the social order. Second the government, “left fragile and sensitive” after the catastrophic Great Leap Forward and famine, feared that collective responses to news of a pandemic, including panic, flight, and religious pilgrimages, would foster the spread of cholera. The state also feared that media coverage of the cholera outbreak would impair “political legitimacy and China’s national image” (p. 204). Due to these factors, finds Fang, the government deemed the pandemic a “national secret,” and designated code “02” for referring to cholera in the reporting system (p. 202). Fang’s detailed survey of how information was controlled in Mao-era China will prove very useful to scholars who draw on archival documents from this period. In November 1960, he explains, the party committee of Zhejiang Province “instructed each locale to classify all information on hunger, diseases, and famine refugees as secret documents,” and designed a set of codes for major infectious diseases (p. 207). Documents were classified into top secret, confidential, and secret, and only senior party officials had access to the most classified information. As cholera spread in coastal areas in 1962, the Ministry of Health distributed to provincial health departments a publication on cholera prevention and treatment, complete with detailed instructions for how to keep data on the epidemic secret. The Zhejiang provincial government “kept the circulation and dissemination of official files concerning the cholera pandemic under close surveillance,” and disciplined cadres who made errors in processing classified documents (p. 210). The government also kept tight control over media reports concerning the outbreak, finds Fang. As cholera spread in mainland China from 1961 to 1965, China’s most authoritative newspaper, the *People’s Daily*, published a grand total of six reports about the cholera pandemic. Of the six, only one of them mentioned that cholera had appeared in mainland China (Guangdong). The other five news reports instead publicized the outbreak in Taiwan, Hong Kong, and the Philippines. Local newspapers followed suit.

“Strict control over coverage of the cholera pandemic in national and local media kept the people across the country ignorant of the pandemic,” states Fang (p. 213).

Fang also shows that the Chinese government worked hard to obtain up-to-date information about the spread of cholera abroad, while tightly controlling information about the outbreak in China. The PRC was not a member country of WHO from 1948 to 1972, notes Fang, and thus “remained isolated from the international epidemic reporting network” (p. 218). During the pandemic the Ministry of Health regularly collected and translated foreign publications on the spread of cholera abroad and on cholera prevention and treatment, but the Chinese government did not share epidemic information with the international community, and criticized as rumor Hong Kong media reports about cholera in Guangdong. “In this way,” writes Fang, “the Chinese government created information asymmetries on cholera between itself and the globalized health community in the specific geopolitics of the Cold War” (p. 221). This is a valid point, but it would have been helpful for Fang to remind his readers that the PRC was left out of the World Health Organization during the 1960s not by choice, but because after the CCP won the Chinese Civil War in 1949 and the Guomindang fled to Taiwan, the United States and its allies decided that the Republic of China would continue to represent China in the United Nations and WHO, denying mainland China a place in either body. Moreover, WHO was not a wholly neutral institution during the Cold War. As Elizabeth Fee notes in her article on the early years of WHO, “the United States, as the main fiscal underwriter of WHO, bought a considerable amount of influence with its financial support.” The degree of U.S. influence over WHO was a concern for many socialist countries, finds Fee. In 1949 the Soviets and several Soviet-allied countries, “believing, for good reason, that the Americans dominated the WHO and the UN,” formally withdrew from the WHO, and did not rejoin until 1956, only five years before the cholera pandemic.<sup>8</sup> Some acknowledgment of the geopolitical reasons for China’s isolation from WHO in the early 1960s would have added helpful balance to this section of an otherwise excellent chapter.

Professor Fang’s conclusion explains the concept of the “emergency disciplinary state” more fully, and traces its far-reaching impact on China’s public health response to twenty-first century disasters. Even after China’s post-Mao reforms led to internal and transnational mobility and integration into the globalized world economy, finds Fang, “the fundamental structures and features of the emergency disciplinary state continued to exist and operate, including top-down leadership, the vertical bureaucratic system, and the horizontal grassroots social organizations” (p. 233). During the SARS pandemic of 2002-03, he notes, the early cover-up of information followed a pattern similar to the concealment of the so-called “No. 2 disease” in the early 1960s. Moreover, while China in 2002 was a far more mobile society than China in 1962, the implementation of mass quarantine and isolation methods during the SARS epidemic showed the PRC government’s willingness to temporarily reverse the rise of the mobile society (p. 233). In recent years, argues Fang, China has seen yet more strengthening of the emergency disciplinary state. When

Covid-19 broke out in Wuhan in late 2019, he finds, after a brief but costly delay “the classical public health emergency response scheme was readily adopted and strictly implemented on an unprecedented, nationwide scale.” The Chinese government “abruptly reversed the shift to a mobile society and returned it to a more sedentary status while keeping the entire population under close surveillance,” using grassroots social organizations in tandem with a new disease control method, digitally assigned health codes (p. 235). Beginning in early 2020, he writes, residents in some areas have been required to apply for a digital health code on a smartphone, and their information is then processed with attention to the risk level of the area they live in, the length of time spent in an infected area, and the rate of their contact with Covid cases. “Each resident is given either a green, yellow, or red health code,” he explains, and must show their health code when entering or leaving a particular area, business, shopping mall, or subway. People with green codes can move freely, but red code holders must isolate themselves for fourteen days (pp. 234-236). Like the cholera inoculation certificates established during the cholera pandemic of 1962-65, concludes Fang, today’s digital health codes allow the Chinese government to control population activities and impose new, broad-reaching constraints on a mobile society. In sum, the structure and features of the emergency disciplinary state established in Mao’s China are alive and well in 2021.

Professor Fang’s book makes many contributions to existing literature on multiple aspects of Maoist China. Key contributions include the fascinating connections he draws between the early spread of the epidemic and the return to China of tens of thousands of Indonesian Chinese caught up in decolonization and the Cold War, his analysis of how state responses to the cholera pandemic strengthened the divide between urban and rural Chinese and between soldiers and civilians; his exploration of the tension between the perspective of epidemiological experts and the implementation of mass inoculation campaigns, his careful tracing of information flow (or lack thereof) in Maoist China, and his analysis of the long-term impact of the formation of China’s emergency disciplinary state. Given the wide array of topics Fang engages, *China and the Cholera Pandemic* will be of great interest not only to scholars of Mao-era public health, but also to those eager to understand the goals, priorities, and capabilities of the post-famine Maoist state.

#### QUESTIONS FOR THE AUTHOR:

1. Given the fact that the cholera outbreak occurred only in several coastal provinces and did not lead to a huge death toll, might you be giving the cholera epidemic of 1962-65 a bit too much weight in bringing about the rise of the emergency disciplinary state? For instance, I was struck by the fact that the death toll in a *single* commune in Wenzhou (3,481 starvation deaths in Wanquan Commune in 1960) was some five times higher than the cholera death toll for all of Wenzhou Prefecture in the worst year of the epidemic (606 cholera deaths in 1962), and of course the famine was national rather than regional in scope (p. 51, 76).
2. I was fascinated by your discussion of the Chinese government continuing its mass inoculation campaigns even as Chinese and foreign epidemiologists expressed increasingly serious doubts about the efficacy of the cholera vaccine in the 1960s. That made me want to know more about what epidemiologists in China and abroad knew about El Tor cholera and its treatment and prevention by the early 1960s. You briefly discuss treatment methods in Chapter 6, but that section was not wholly clear. You wrote that Western and Chinese medicine used similar remedies to cure cholera in the nineteenth century, but the Chinese medicine theories and treatment described on p. 185 sounded very specific to Chinese medicine. Could you tell us a bit more about how cholera was understood and treated in traditional Chinese medicine, and in Western medicine before the 1940s? Also, did epidemiologists have a general sense of the mortality rate for El Tor cholera in the 1960s, and do we know how China’s cholera mortality rates during the 1962-65 epidemic compare to those in surrounding Asian countries? It would also be helpful to know more about the cholera vaccine, such as what vaccine China used during its mass inoculation campaigns in the 1960s, how much prevention, if any, that vaccine provided, and whether the vaccine used in China led to the type of severe side effects mentioned by one of the Western epidemiologists you cited in Chapter 5. In sum, if such information is available, it would be interesting to learn more about what the international and Chinese medical communities knew by the early 1960s about El Tor cholera itself, and how to treat and prevent it.
3. Given that China’s Ministry of Health had determined, by late 1962 and more certainly by 1964, that the cholera pandemic in Guangdong was brought by cholera carriers from foreign countries, most likely

returning Indonesian Chinese (p. 42), what explains the central government's willingness to waive quarantine examinations and procedures for returned overseas Chinese visiting Zhejiang (pp. 138-139)? I understand the desire to obtain the foreign currency brought by overseas visitors, but given the government's hyper-attention to/fear of the spread of cholera, and extreme reluctance to let news of cholera cases in China reach the international community, it seems really surprising that returned overseas Chinese were permitted to avoid quarantine checks. What do you think best explains this seeming contradiction?

4. Your Chapter 7 discussion of the government's attempt to teach the masses how to prevent cholera without actually mentioning the cholera epidemic occurring in China at the time is really intriguing. Since you conducted interviews with witnesses of the pandemic, which added a lot of richness to your book, I would like to ask whether any of them addressed how much ordinary villagers in Wenzhou actually knew

about the disease that struck their communities in 1962? To what extent did the government's attempt to keep the outbreak a secret success? Did patients so dehydrated that they had to receive saline solution through both arms and legs think they had an ordinary intestinal disease, or did affected communities know they were fighting cholera even though they could not say so?

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<sup>1</sup> Felix Wemheuer, *Famine Politics in Maoist China and the Soviet Union* (New Haven: Yale University Press, 2014), 245, 247.

<sup>2</sup> Susan Mann, *Precious Records: Women in China's Long Eighteenth Century* (Stanford: Stanford University Press, 1997), 156, 159, 167-68.

<sup>3</sup> Fang cites this same local historian, Zhou Baoluo, a few pages later as well. This time Zhou, when explaining that people had lower resistance to disease due to the serious malnutrition of the famine years, states that, "relatively speaking, women's physiques are weaker" (p. 100). On the contrary, famine studies scholars have found that because females store a much higher proportion of body fat and a lower proportion of muscles than males, women survive famine better than men. See Cormac O Grada, *Famine: A Short History* (Princeton: Princeton University Press, 2009), 99-101).

<sup>4</sup> Gail Hershatter, *The Gender of Memory: Rural Women and China's Collective Past* (Berkeley: University of California Press, 2011), 62.

<sup>5</sup> Kimberly Singer Babiarz et al. "An Exploration of China's Mortality Decline under Mao: A Provincial Analysis, 1950-80." *Population studies* vol. 69,1 (2015): 39-56.

<sup>6</sup> R. Keith Schoppa, *In a Sea of Bitterness: Refugees during the Sino-Japanese War* (Cambridge: Harvard University Press, 2011), 10-12.

<sup>7</sup> Michel Foucault, *Discipline and Punish: The Birth of the Prison*, translated by Alan Sheridan (New York: Vintage Books, 1977), 224; James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998), chapter 1.

<sup>8</sup> Elizabeth Fee, "At the Roots of the World Health Organization's Challenges: Politics and Regionalization" *AJPH* 106.11 (November 2016), 1912, 1914.

## Response

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I am very grateful to Prof Kathryn Edgerton-Tarpley for investing a great deal of time in reading my book so carefully and giving me very encouraging and valuable comments. Many thanks for her thought-provoking questions, which help me craft my analysis and argument more convincingly. Before answering these questions, I would like to respond to Prof Edgerton-Tarpley's comments on the relationship between the gendered division of labour and the incidence rate of contagious disease, that is rural women's large-scale participation in agricultural production from the mid-1950s and its impact on the gendered proportion of cholera cases. Indeed, when I decided to include this section in the book, I anticipated that this argument (which was based on my interpretation of currently available written materials) would arouse heated criticism and discussion.

I was confident that archival documents and local materials that can be obtained in China under the new socio-political atmosphere, would support my argument. This would be augmented by oral interviews and be further endorsed by more declassified archival documents in the future.

Prof. Edgerton-Tarpley's questions focus on the following aspects: women's labor before 1949, the urban setting, and the wartime backdrop of the 1938 data concerning cholera patients. First, in terms of women's labor, I partially agree that before 1949 "there were always a significant number of women who conducted farm labor and other kinds of work that would have brought them into contact with infected soil and water." In fact, a significant number of women adult labors did not participate in agricultural production before 1949 due to the gendered division of labor, which was caused by established social custom, family economic conditions, geographical location, and even bound feet. In contrast, women adult labors aged between twenty and forty-nine, particularly between twenty and thirty-nine, were fully mobilized to participate in the Agricultural Collectivization campaign and the following People's Commune campaign from the mid-1950s due to the practical constraints caused by the work point scheme associated with family incomes and low school enrollment rates in rural areas, in addition to the grand political narrative of women's liberation.

In the discussion about women's participation in agricultural production in Wenzhou Prefecture, I cite the official investigative report concerning the serious famine in Wanquan Commune, Pingyang County in April 1961, where 4.92 percent of the total population died of starvation. I fully understand Prof. Edgerton-Tarpley's concern about whether these male narratives are "broad and fairly dismissive in tone, and appear to be influenced by the powerful CCP discourse about the seclusion and powerlessness of women in China's 'old feudal

society.'" But the main purpose of this report was to investigate the factors leading to the famine. Peasants who were interviewed mainly described the agricultural production mode before 1949 to show the impact of the new crop-planting scheme and local officials' irrational behavior. The male perspective of these interviewees' narratives should not be over-estimated. In the meantime, I also support Prof. Gail Hershatter's argument that women's voices "have largely faded from public memory" based on her intensive fieldwork in North China's Shaanxi Province. But regardless of the scale of women's participation in agricultural production and the hardship of their labor before 1949, it is undeniable that adult women laborers were fully mobilized to participate in agricultural production from the mid-1950s. This finding is based on my fieldwork concerning barefoot doctors and the cholera pandemic that I conducted in Zhejiang Province from 2003 to 2019.

I agree that women before 1949 did housework, "such as washing rice, vegetables, and clothes, [that] had to be done in rivers, thus exposing women to infection." Women continued to undertake onerous housework with the initiation of the Agricultural Collectivization campaign in the mid-1950s. For rural women before and after 1949, those factors exposing women to the cholera infection—the geographical environment, the ways of obtaining drinking water, and dietary habits—did not change much. The most noticeable change was the unprecedented, large-scale participation of women in agricultural production. The full mobilization of adult women labors in agricultural production exposed them, in the same way as men, to contaminated drinking water and food during the cholera pandemic in the summer of 1962. Correspondingly, this resulted in the consummate rate of cholera among male and female labor aged between 20 and 39.<sup>1</sup> As noted in my book, the statistical data in neighboring prefectures of Zhejiang Province, including Taizhou, Ningbo and Zhoushan endorse this finding.

Second, Prof. Edgerton-Tarpley astutely identified the urban setting and wartime backdrop of the 1938 data and the rural setting of 1962 data in my book. As indicated in this section, my purpose is to analyze the impact of women's participation in agricultural production in the pandemic of 1962 using a comparative perspective. I fully understand the urban setting and wartime backdrop of the 1938 data. As this epidemic broke out during the Anti-Japanese War, the relevant data is incomplete and fragmented, particularly epidemic information concerning rural areas and detailed information concerning gender and occupation of each cholera patient. Prof. Edgerton-Tarpley is also right in asserting that refugees arrived in Wenzhou after 1937. The First Epidemic Prevention Hospital in Wenzhou was affiliated with the Wentai Defense Command of the Third War Zone. But it was jointly operated by the



Defense Command, the local government, the county hospital, and local medical practitioners. Houseworkers, workers and peasants accounted for 75.1 percent of total cholera patients, while soldiers accounted for only 1.7 percent.<sup>2</sup>

The application of the 1938 data in Wenzhou City is based on the fact that incidences of cholera were determined by two crucial factors, that is geographic environment and social customs, which correspondingly affect access to drinking water and diet. In the Wenzhou City and neighboring counties, like Rui'an and Pingyang, there was no noticeable difference in these aspects, as discussed in the book, particularly those areas along canal rivers. Back in 1938, women in urban and rural areas did not participate in agricultural production on a large scale. The 1938 data in an urban setting could help us glimpse the incidence of women's cholera in rural areas to some extent. From the perspective of historical comparison between 1938 and 1962, the most noticeable change that affected access to drinking water and diet was "the quick harvesting and quick planting of rice crops" in the summer following women's participation in agricultural production with the implementation of the new cropping system.

Prof. Edgerton-Tarpley may further raise a very reasonable criticism that it is not possible to make a comparison between the two sets of data for males because some urban males did not participate in agricultural production in 1938. Indeed, the more detailed relevant data was not recoded. To correct the imbalance and supplement the data, I cited the example of schistosomiasis cases in Zhejiang Province in 1942, in which 95 percent of patients were peasants and 80 percent of them were male (p. 95). The incidences of similar parasitic diseases, before women's full participation in agricultural production, included filariasis and hookworm infections. For example, according to the Zhejiang Provincial Health Experimental Research Institute's studies in Liuxia and Wuchang Townships of Hang County in 1950 and 1951, there were two major findings. First, the infection rate of adult women laborers was much lower than that of adult men laborers within the same age groups. Second, women's infection rate steadily decreased as the age group increased. According to the report, "the reason lay in [the fact that] that women in the old society had fewer chances to contact soil after their marriage."

Table. The Relationship between Hookworm Infection Rate, Age and Gender in Liuxia and Wuchang Townships of Hang County, Zhejiang Province, February 1951

Age	Male			Female			Gender proportion Female (%)
	Examined	Infected	(%)	Examined	Infected	(%)	
0-9	92	22	23.91	52	8	15.09	26.6
10-19	131	68	51.91	102	54	52.94	44.2
20-29	83	64	77.11	73	33	45.21	34.0
30-49	119	93	78.15	93	27	29.03	22.5
50+	55	37	67.27	30	6	20.00	9.8
Total	481	284	51.56	351	128	36.47	31.0

Source: Zhejiangsheng weisheng shiyan yanjiuyuan [Zhejiang Provincial Health Experimental Research Institute], "Hangxian liuxiaqu gouchongbing

diaocha baogao" [The Investigative Report of Hookworm in Liuxia District, Hang County], *Zhejiangsheng weisheng shiyan yanjiuyuan diernian nianbao* [The Second Year Report of Zhejiang Provincial Health Experimental Research Institute], p. 75.

The statistical data of both schistosomiasis and hookworm not only indicate the correlation between women's participation in agricultural production and parasitic diseases, but also further help us understand the extent of women's participation in agricultural labor and the relationship between the gendered division of labor and the contagion of infectious diseases before the mid-1950s. When the cholera pandemic spread in Wenzhou Prefecture in July and August 1962, it happened to be the season of "the quick harvesting and quick planting of rice crops", which was the busiest agricultural production time of the year. Both adult men and women laborers all participated in agricultural production, in which they had the same chance of being exposed to contaminated drinking water and food.

## RESPONSES:

**Question 1:** In terms of death toll in the cholera pandemic of 1961–1965, it is not as serious as that of a single commune's famine, flood, droughts, earthquakes, or schistosomiasis in Mao's China. But it should be noted that the statistical data concerning the cholera pandemic is underreported due to the understandable fact that the epidemic reporting system was first established nationwide in the mid-1950s and was accordingly improved and strengthened. Regardless of the death toll, the government still made Herculean efforts to control and prevent the spread of the cholera pandemic given the specific domestic and international factors that prevailed after the Great Famine and in the Cold War. Compared with other disasters, the cholera pandemic in southeast coastal areas of China was invisible and unpredictable at a time when the government was very fragile and sensitive in the specific socio-political context of the early 1960s. In essence, any response to devastating disasters like the Yangzi River flood, the Great Leap Famine, the Tangshan Earthquake all reflected crucial features of the emergency disciplinary state. I single out the cholera pandemic of 1961–1965 because it was the most typical case in Maoist China.

Based on the currently available archival documents, it is hard to conclude that "it was the international attention the El Tor cholera epidemic attracted as it spread into multiple Asian countries that caused the Chinese government to focus so much attention on it."

**Question 2:**<sup>3</sup> The application of Chinese medicine in the prevention and treatment of epidemic diseases and its dynamic relationship with western medicine has been a heated topic in modern China. According to Wu Lien Teh and other scholars, "huoluan" (cholera) referred to "any acute stomach and intestinal disease that appeared suddenly and chaotically (*huoran erluan*)" in the history of diseases in traditional China. It has been claimed that cholera had appeared in China before 1821. This argument based on historic references to *huoluan* (cholera) nearly 4,500 years ago, and to so-called "melon-pulp epidemics (*kua jang wen*)". In the Tang Dynasty, cholera was

believed to be caused by polluted food and water. In the Yuan Dynasty, clinical treatments varied greatly and included fresh and aged ginseng and cardamom, white atractylodes rhizome, and Chinese cinnamon, depending on the severity of *huoluan* patients' symptoms. The main problem was that the Chinese *materia medica* for these prescriptions were often difficult to obtain and so prescriptions usually became extremely expensive during epidemics. However, there was no authentic cholera in the modern sense.

From the second half of the nineteenth century onwards, the history of pandemics in China became entangled with the contest between Chinese and Western medicine. The remedies each of these approaches used to cure acute infectious diseases, including cholera and plague, were fairly similar in the nineteenth century. During the cholera outbreak of 1862, British naval physicians at Tianjin treated the patients of "dry cholera" with saline purgatives to relubricate the intestine. Other proposed treatments included immersing sufferers in hot water, wrapping their abdomens with flannels soaked in turpentine or iodine, and even brandy and spirits. Chinese medicine doctors also combined hot and cold treatments while considering latent imbalances, such as *guasha* (rubbing or scraping of the skin) with saltwater or alcohol or scraping the skin with an earthenware blade dipped in sesame oil. Western medicinal practitioners admitted there was a similarity between the two styles of treatment. Because of the availability of pharmaceuticals, Chinese medicine gained popularity among many Chinese.

By the 1930s, Chinese medicine physicians in Shanghai classified cholera into dry and wet cholera: the former referred to patients who did not vomit, while the latter described those that did. Patients were told to drink large amounts of cold saline water, while taking *yiyuansan* powder for the stomach, using salt and Asiatic wormwood (*aicao*) to cauterize the umbilical region. To stop vein convulsion, it was suggested patients' feet and legs be bound with bandages. Physicians and pharmacists came up with their own remedies: one local physician proposed the following as a quick, efficient prescription for cholera: smash 8 *liang* (50 g) of flaccid knotweed herb, slice 4 *liang* of China papaya, buy 2 *jin* (500g) of Fuzhen wine (from the Jiangsu Province), use river water to boil them into a decoction, and then use it to wash the hands, feet, and numbed areas of the body. The actual effect of this home remedy was unclear. A Chinese pharmacist who worked from the late 1940s to the mid-1990s in Hangzhou Prefecture, first at his home pharmacy and later at the commune clinic and township hospital, reported that he did not know of any local prescriptions for cholera. But, according to Francis Lang Kwang Hsu's observations on cholera in Yunnan Province in 1930, local prescriptions were similar to the most up-to-date Western methods of treating cholera.

This phenomenon changed with the application of saline solution and antibiotics for preventing and curing cholera in the 1930s and 1940s. Intravenous saline injections became available in the early 1930s, but ordinary residents were too poor to afford them. When cholera broke out in Xiaoshan County, Zhejiang Province, in 1931, local newspapers

suggested that residents receive intravenous injections of normal saline to stop frequent and serious vomiting and diarrhea. However, most families could not afford this, as one bottle of normal saline cost the same as a 50-kilogram sack of rice. During the 1932 cholera pandemic, Guangzhou residents could not afford Western medicine and turned to cheaper Chinese patent medicine and then to charitable halls, which could not meet such huge demands. Some even turned to a mechanic who claimed to have a specific prescription for curing cholera, although it led to high mortality rates. Notwithstanding, the pandemics China experienced in the twentieth century sparked ongoing tensions between Chinese and Western medicine, with the latter usually criticizing the former for being unscientific. The use of saline solution and antibiotics to prevent and cure cholera after the 1940s put Chinese medicine at a clear disadvantage during the cholera pandemic.

Regarding China's cholera mortality rates, the government report claimed that it was much lower than Southeast Asian countries.

As to China's cholera vaccine, unfortunately I do not have more information than what I have discussed in my book. When I read these archival documents in 2016 and 2017, I was fortunately allowed to take notes. After I returned to the archives in late 2017, these documents had been reclassified and I was unable to consult them.

As for prevention and treatment in Chinese medical communities, there were a lot of clinical reports compiled by hospitals at different levels.

**Question 3:** It is not contradictory. Compared with the foreign currency brought by overseas visitors, the national image and political legitimacy demonstrated through the waiver of returned overseas Chinese's quarantine check was more significant given the specific socio-political context of the Cold War in the 1960s. More detailed information is available in Fujian and Guangdong Provincial Archives. Unfortunately, we are unable to read these documents now.

**Question 4:** In my fieldwork in Wenzhou, I interviewed mainly local doctors, former commune cadres, and former health bureau officials, who all know about this pandemic. A few of the villagers I interviewed also had vague memories of the pandemic. In terms of secrecy, ordinary residents in cholera-stricken Wenzhou area knew about the cholera pandemic, but detailed statistical data was kept secret from them. For people in areas that were not affected, the government was successful in keeping the pandemic information secret, even though the mass inoculation campaign was being held in these areas concurrently with affected areas. Regarding the epidemic prevention in areas not affected by cholera in Zhejiang, I have written an article that addresses this issue entitled, "The Global Cholera Pandemic Reaches Chinese Villages: Population Mobility, Political Control, and Economic Incentives in Epidemic Prevention, 1962–1964" *Modern Asian Studies*, 48.3 (2014): 754–90.

I do not think that patients who were so dehydrated that they had to receive saline solution through both arms and legs believed they had an ordinary intestinal disease. As discussed in my book, local governments were required to conduct publicity about hygiene associated with cholera treatment and prevention. They just did not know the detailed statistical data concerning the cholera pandemic, including its incidence and the resulting death toll.

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<sup>1</sup> In footnote 3 of the discussion on women's labor before 1949, Prof. Edgerton-Tarpley pointed out: "Famine studies scholars have found that because females store a much higher proportion of body fat and a lower proportion of muscles than males, women survive famine better than men." But I think that I should consult epidemiologist and medical scientists regarding the correlations between the body fat and incidence rates of cholera.

<sup>2</sup> Disan zhanqu Wenzhou jingbei silingbu [Wenzhou Garrison Command of the Third War Zone], "Fangyichu baogao" [The Report

of the Epidemic Prevention Department], 1938, Wenzhou Prefectural Archives, Vol. 204-1-17.

<sup>3</sup> For the detailed citation in this section, please refer to Xiaoping Fang, "Medical Marketplace, Commercialism, and Chinese Medicine in the Cholera Pandemic in Southeast Coast China, 1961–1965," in *Chinese Medicine and Transnational Transition during the Modern Era: Commodification, Hybridity, and Segregation*, edited by Nazrul Islam (Basingstoke, Hampshire, New York: Palgrave Macmillan, 2021), pp. 75–94.