INTRODUCTION

ON JUNE 28, 1962, SIXTY-THREE-YEAR-OLD CHEN AZHU WENT OUT SHOPPING, having said good-bye to her daughter-in-law, who was visiting the family from Shanghai Municipality. Chen and her husband lived a simple, lonely life at Xihetou Lane in Rui'an, a coastal county town in Wenzhou Prefecture, Zhejiang Province, China. Their days followed a predictable pattern: purchasing food from the nearby farmers' market in the morning and staying at home in the afternoon, sometimes chatting with neighbors in the lane. Beyond their doors, however, Rui'an County, along with other parts of southeastern coastal China, was undergoing significant changes that month. The effects of the Great Famine still lingered, but the majority of internally displaced people had returned to their hometowns. With the end of the rainy season and the coming of high summer, the busiest agricultural season was about to begin—*shuangqiang*, or the quick harvesting and quick planting of rice crops. Grain production was especially important that year, as this fragile society had suffered hunger, disease, population flight, and death over the previous few years. Furthermore, Rui'an's location on the southeast coast placed the county at the front lines of a new military threat. The Communist government had released an urgent circular calling on people to be prepared for war, to enhance their vigilance, and to step up the fight against the attempts by Chiang Kai-shek's Nationalist government in

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Taiwan to, "Reclaim the Mainland," per the title of a patriotic tune. In response, the People's Liberation Army (PLA) was marching to the southeastern coastal front in unprecedented numbers.

Although she lived in this fragile, frightened society, Chen Azhu was just an ordinary woman who never imagined that she would trigger a major social panic. However, on July 4, six days after her daughter-in-law left, Chen suffered serious abdominal pains and more than ten bouts of vomiting and diarrhea. She was admitted to the hospital on the second day of her illness with a preliminary and hotly contested diagnosis of suspected cholera. With the assistance of epidemiologists who had been urgently summoned from the Provincial Sanitation and Epidemic Prevention Station on July 16, it was finally confirmed that Chen was suffering from El Tor cholera (*Vibrio cholerae* El Tor), the first identified case in the area. In the days between her first symptoms and diagnosis, cholera had spread rapidly through Rui'an and its neighboring counties and cities within Wenzhou Prefecture.

Her case was part of a global cholera pandemic. The disease broke out in 1961 in Makassar on Sulawesi Island (or Celebes), Indonesia. It quickly spread to Indonesia's other islands, then to Sarawak and Sabah on the island of Borneo, and to other Southeast and East Asian countries. The outbreak had reached India and the Middle East by 1966 and then continued on to Europe, Africa, and the Americas, becoming the seventh global cholera pandemic in recorded history. It continues in many parts of the world today and is the same catastrophic disease that Nepalese United Nations peacekeepers brought to Haiti in 2010.[1]

In China, the disease first struck in Yangjiang County, Guangdong Province, in June 1961. Indonesian Chinese had returned to China during the archipelago's pandemic to escape political, economic, and racial tensions between Indonesians and Chinese and were immediately suspected cholera carriers. Eight months later, in February 1962, cholera reemerged in Guangdong and from July 1962 onward affected southeastern coastal China, spreading rapidly through Zhejiang, Fujian, Shanghai, and Jiangsu. Following a large-scale but clandestine medical campaign, the pandemic had been contained by 1965.

As a public health emergency, the 1961–1965 pandemic emerged and spread through southeastern coastal China in a very specific sociopolitical context. Before the pandemic hit, the Great Leap Forward of 1958–1960 had moved millions of peasants into communes in a misguided attempt to rapidly collectivize agriculture. It caused the catastrophic Great Famine of 1959–1961. The devastation of the Great Famine persisted into the early 1960s, while China's

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paramount leader, Mao Zedong, appeared to have retreated somewhat from his "bullying and erratic leadership" that had directly produced the Great Leap debacle.[2] In local politics, the Communist government committed itself to social restructuring in order to overcome the political crisis and reconsolidate its rule.[3] Accordingly, the government undertook a number of crucial initiatives. It reformed and strengthened its control of population mobility through the household registration system (*hukou*) and the identification of all citizens with either a work unit (*danwei*) or a people's commune. It reinvigorated social surveillance mechanisms, conducted more political indoctrination programs, and further implemented economic strategies and policies that it had initiated in the early 1950s. In so doing, it consolidated a strict division between rural and urban areas, which I refer to in this book as the "rural/urban duality."

This social restructuring in the early 1960s brought about a transition from the chaotic population movement that was characteristic of the Great Leap Forward years to orderly mobility in the more sedentary postfamine society. Rural people, who made up the vast majority of China's total population, found their communities comprehensively and significantly restructured when the government formally downsized the People's Commune system—a change that was further enhanced by new mechanisms for social control, payment, and welfare, such as letters of introduction, work points, and grain coupon schemes. The government also launched a series of rolling campaigns to target political, social, and ideological enemies while indoctrinating the people. Similar restructuring based on the work unit scheme also extended to nationalized factories, government-controlled bureaus, hospitals, and schools in urban society.[4] In 1966, a year after the pandemic was brought under control, China's most radical political campaign was launched: the Cultural Revolution. The state's dominance in work, life, production, and consumption was brought about by social restructuring in the postfamine period under scrutiny in this book. It continued largely intact until the Reform and Opening Up era that commenced in December 1978.

This sociopolitical change was complicated by the geopolitical position of the People's Republic of China (PRC) within the international community at the peak of the Cold War. In the early 1960s, China's contact with the outside was mainly confined to the socialist bloc and a few developing countries. China was isolated from the West and from major international institutions such as the World Health Organization (WHO). In this international context, China reshuffled its geopolitical and ideological interests and faced clashes and serious conflicts with its neighbors in Southeast and East Asia. These included the

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Indonesian Chinese nationality issue and Chiang Kai-shek's military preparation for his "Reclaiming the Mainland" campaign.

This external environment both challenged and reinforced the post–Great Leap social restructuring process. On the one hand, the absence of international coordination for health emergencies was problematic, and external affairs prompted the rise of a mobile society in coastal areas, including the arrival of PLA soldiers, interprovincial flows of fishermen, and visits from overseas Chinese. On the other hand, international responses also triggered further restructuring initiatives, such as political indoctrination, military mobilization, and propaganda campaigns justifying the ideology and legitimacy of Communist China. Under these circumstances, the global cholera pandemic and the restructuring process interacted reciprocally in the early 1960s.

China and the Cholera Pandemic: Restructuring Society under Mao investigates the dynamics between disease and social restructuring in the significant transitional years of Mao's China. It adopts an analytical framework that focuses on three major issues—disease and mobility (the movement of both people and pathogens), social divisions and borders (created by social reorganization and interventionist cholera prevention measures), and data and social structure (drawing on household registration, agricultural production figures, and epidemiological information)—and seeks to examine the following questions:

Disease and mobility: How did transnational politics and domestic social restructuring lead to specific forms of population mobility and contribute to the outbreak and transmission features of the cholera pandemic?

Social division and borders: How did the social divisions and borders created by the restructuring of society and politics that began in the 1950s and strengthened from 1961 onward shape epidemiology and facilitate quarantine and isolation? Conversely, how did control measures strengthen social restructuring during the pandemic? How did the consolidation of social divisions and the rise of multiple borders during the pandemic reflect the features and problems of social restructuring?

Data and social structure: How did the integration of epidemiological information with household and production data (i.e., household registration and accounting books) contribute to the rise of the new comprehensive social order via a specific form of statistical politics in Mao's China? What characteristics of the social restructuring process are revealed by the large-scale but clandestine anticholera campaign,

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which focused on comprehensive inoculation, disease surveillance, and pandemic information?

This study argues that the global cholera pandemic was more than just a health incident in China—it was also, more importantly, a significant social and political exercise. Disease and its control were not only affected by the social restructuring that began in the 1950s and strengthened from 1961; they were integral components of it. And, to some extent, the disease and its control even prompted experimentation with possible alternative social structures. These sociopolitical changes facilitated the emergence of a sedentary rural society and, simultaneously, the rise of a mobile coastal society that would shape the features of cholera transmission and social epidemiology during the pandemic—namely, the emergence of rural/urban, male/female, and military/civilian divides.

The interventionist prevention scheme to control the pandemic not only harnessed opportunities provided by the broader social restructuring initiatives but also directly contributed to them. The role of social, production, and epidemiological data in this reciprocal process further enhanced social control and political discipline and facilitated the formation and top-down imposition of a new, wide-reaching social structure via a specific form of statistical politics. This impacted government systems, local cadres, medical professionals, and the ordinary masses. The global cholera pandemic significantly contributed to the rise of an emergency disciplinary state in China through the integration of health governance and political governance. However, the efforts to contain and control the pandemic were plagued by problems resulting from the rural/urban divide and other gaps and hierarchies created by the broader social restructuring programs.

Within the analytical framework of reciprocal interactions between disease and politics, this study of the cholera pandemic, with a specific focus on the Wenzhou area, advances both empirical and theoretical knowledge concerning disease and social restructuring in China studies and in the history of medicine. The book presents a nuanced and detailed sociopolitical, global, and medical history of a previously unexplored aspect of socialist China between the two most radical political events of the Maoist era: the Great Leap Forward and associated famine (1958–1961) and the Great Proletarian Cultural Revolution (1966–1976). Shifting from high politics to local politics, this research not only shows the sociopolitical history of grassroots society in the transitional and transformative years from 1961 to 1965 but also demonstrates the multifaceted and sophisticated

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relationship between Cold War politics, the transnational population movement, diasporic groups, and the global pandemic. It also sheds new light on Chinese Communist Party governance and social control/organization, which contributes to current scholarship in the fields of the sociopolitical history of China and Mao's China in particular.

From a medical history perspective, this study of the global cholera pandemic outbreak sheds light on the rise of health emergencies, the formation of health governance, and the development of pandemic surveillance under socialism in the context of public health, state medicine, and nation-building in China since the early twentieth century.[5] This book also contributes to a growing body of medical history literature about the role of infectious diseases in the development of social and political structures in other locales, exemplified by studies of cholera in Europe and North America (mainly before 1900), colonial medicine in Asia from the nineteenth century to the early twentieth century, and cholera in Africa and South America since the 1970s.[6] The study also presents a new understanding of epidemic history that is located at the intersections of sociopolitical, environmental, and economic histories.[7]

DISEASE AND MOBILITY

Throughout the world, including China, population mobility and displacement resulting from wars, rebellions, and social and political chaos have often led to the outbreak of pandemics.[8] The intensification of human interaction commenced in the early nineteenth century due to expanding global trade, warfare, pilgrimage, and migration, all facilitated by more rapid transportation methods, and together these increased the spread of diseases.[9] The cholera pandemics in China from 1817 to the early 1900s occurred in a global context in which large parts of the world faced the full chaotic impact of Western imperial and colonial aggression. In 1817, the first global cholera pandemic emerged in the Gangetic Plain in India and spread throughout the world along the routes established via Western imperialist expansion.[10] According to Wu Lien Teh and Kerrie MacPherson, the first cholera pandemic reached China both by land—from India and the borders of Tibet and southwestern China—and by sea—carried to Burma by the British military in the British Burmese War in 1820. It then spread to Guangzhou via Bangkok and from there to the Yangtze delta areas by sea. By 1821, cholera had arrived in the capital, Beijing, which became the new center of cholera in northeastern Asia.[11]

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At the start of the twentieth century, further radical global disruptions caused large-scale population movement and resulted in the outbreak and spread of cholera. By 1932, there had been forty-six documented outbreaks of cholera of varying intensities, and there was no single year in which cholera was absent in China.[12] Plague transmission is another representative case: after 1908, large numbers of rural coolies and migrant workers from Shandong migrated into Manchuria—which was contested by Japan, Russia, and the late Qing dynasty—to hunt the Tarbagan marmot for its fur. The migrants, who were "accused of neglecting anti-plague precautions taken by native hunters in harvesting marmot fur," were believed to have triggered the outbreak of the great Manchurian pneumonic plague epidemic of 1910–1911.[13] From the late 1930s onward, the movement of troops and armies caused by World War II and the Chinese Civil War led to cholera and other diseases spreading once again.[14]

After 1949, Mao's China saw a new system of population mobility, one that shaped the specific features of the 1961 pandemic. It is generally argued that virtually no migration took place in China between the Communist victory in 1949 and the initiation of the Reform and Opening Up policies in 1978. Historians have called these three decades the "static decades" because of the household registration and work unit systems, which reduced population mobility to a minimum.[15] However, this does not mean that there was no population mobility at all. Current scholarship has noted that the state directed and controlled substantial internal migration during those three decades for the purposes of economic development and transforming ideological beliefs; there were relocations and labor migration for industrial projects, migration to support the borders, and even migration as a form of punishment.[16] In geopolitical terms, China, though isolated from the West, was committed to establishing partnerships and increasing its political, military, and ideological presence in developing and socialist countries.[17] This engagement also brought about some degree of international population mobility. Mao's China was generally characterized as being a sedentary society with limited and orderly population movement.

However, some basic facts still should be noted about the features of this population mobility. In the 1950s, Chinese society experienced large-scale, uncoordinated population mobility mainly because of national industrialization projects and loose population management. Meanwhile, unorganized, uncontrolled, and spontaneous migrations still occurred, like peasants who made their way to cities, migrations between rural areas, famine-related migrations, and the movement of refugees.[18] By the early 1960s, however, China had become an

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essentially immobile society. The transformation from large-scale and uncoordinated movements in the early 1950s to limited and orderly population mobility in the early 1960s is one of the most significant features of these crucial transitional years between the Great Leap Forward and its associated famine and the Cultural Revolution, when the cholera pandemic ravaged southeastern coastal China.

As this study shows, the transformation of population mobility was entwined with the three thorny tasks that the Chinese government faced in the early 1960s—dealing with the postfamine crisis, restoring social order, and preparing for the war. Although the famine was approaching its end in late 1961 and early 1962, hunger, disease, and death were still affecting some areas of China. Rural migrant workers who rushed into urban areas for employment and drifters who had left their homes due to hunger during the Great Leap Forward and associated famine were "repatriated" to their places of origin, while some urban workers were sent to rural areas as part of economic reconstruction. In the process, the rural/urban divide was further reinforced.

Meanwhile, the household registration and work unit systems were implemented in a more comprehensive manner and the People's Commune system was adjusted so that the government could regain control of the economy and the vast rural society. The household registration system, which started in 1958, is an institutional exclusion scheme that assigns every Chinese citizen a geographically defined location and an associated sociopolitical status and identity, practically for life. The work unit system is a hierarchy of state-owned workplace allocations that provides economic benefits and implements political control. The People's Commune system was a form of collective organization of agricultural production and life for peasants. These three systems were the basis of the sociopolitical structure in Mao's China and effectively restricted the physical mobility of populations, confined the rural population to villages, and consequently formed an immobile and enclosed society.[19] Limited, orderly population movement gradually emerged as a defining social feature of the consolidation of this rural/urban duality. In contrast to the largely static regular population, troop maneuvers along the coast opposite Taiwan meant that the PLA was highly mobile, and together with the visits of overseas Chinese and the interprovincial flow of fishermen, southeastern China had a relatively complex population mobility scenario.

Internationally, the Cold War entered a new stage in the early 1960s. China's geopolitical partnership with countries in the Non-Aligned Movement proved to be fragile. The radical change in Sino-Indonesian relations around the issue of

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the dual nationality of Indonesian Chinese unexpectedly caused transnational population movements between Indonesia and China in 1959–1961.[20] One of the key factors behind this was the movement of Indonesian Chinese, who became suspected carriers of cholera, causing it to escalate from an endemic disease in Indonesia to a global pandemic that spread into southeastern coastal China in 1961. At this point, the population mobility modes described above and complicated by Chinese national politics shaped the spread of the new pandemic, at least in China.[21] The impact of national and transnational political changes on disease and mobility in 1961–1962 comprises the first subtheme of this book.

SOCIAL DIVISIONS AND BORDERS

The household registration, work unit, and People's Commune systems were the three crucial, integrated parts of the social restructuring initiated in the 1950s. These systems were further significantly adjusted and strengthened in the early 1960s and became the cornerstones of the social structure in Mao's China in the following two decades. This social restructuring brought about some immediate results, notably the rise of social divisions and borders, which had major impacts on social epidemiology, quarantine, and isolation during the cholera pandemic in southeastern coastal China in 1961–1965.

As scholars in the field of the history of disease have argued, diseases reflect inequality in different social settings, including class, income, social geography, occupation, age, and gender. In particular, the distribution of diseases in infected areas is affected by social class, as people's chances of getting an infection are shaped by living standards, housing conditions, and hygienic habits. The social distribution of diseases among different social classes has always been uneven.[22] For example, the third global bubonic plague pandemic (1894–1950) struck hardest among the poor. In countries with large numbers of poverty-stricken people, plague broke out repeatedly, and mortality rates were usually very high.[23] Cholera was another disease that was typically associated with the poor. In his studies of the cholera pandemic in Hamburg in 1892, Richard Evans argues, "Cholera, more than most diseases, indeed, was the product of human agency, of social inequality and political unrest."[24] As a waterborne epidemic disease, cholera usually spread among the lower social classes, who congregated in areas without clean water supplies and basic sanitation infrastructure. For instance, as Charles E. Rosenberg points out, "the majority of the 853 cholera victims in Baltimore in the summer of 1832 were of the 'most worthless' sort."[25] Similarly, Margaret Pelling finds that "the

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worst-conditioned parts of the population would be most subject to the disease [cholera]" in England during the mid-nineteenth century.[26] This characteristic continued into the seventh cholera pandemic, in the twentieth century. As Oscar Felsenfeld pointed out in 1965, "the present El Tor outbreak is restricted to poor people inhabiting bustees and slums, to off-shore fishermen living under bad sanitary conditions and to boat dwellers with less than minimal sanitary facilities."[27]

In China, there has been repeated criticism of the inequitable distribution of medical services under the rural/urban social structure because it tends to discriminate against peasants, who suffer disadvantages in terms of social class and income. The most representative of these criticisms are Mao's 1965 critique of the Ministry of Health and, in more recent years, social commentators' and scholars' criticism of the extreme marketization of medical services at the turn of the millennium.[28] However, to date there has been no empirical study of social epidemiology and disease distribution between the rural and urban sectors since 1949. Current scholarship is limited to broad critiques of the system's unfairness toward rural dwellers. In fact, the inequities in the provision of medical services and the resulting social epidemiology and disease distribution are gradual processes. As this book indicates, there was little noticeable difference between rural and urban epidemiology and disease distribution as late as 1949. Among other things, medical resource distribution and sanitary environments were not dramatically different between rural and urban areas in China, except for treaty ports and major cities, such as Tianjin, Shanghai, Guangzhou, and Chongqing.[29]

However, from the mid-1950s onward, the distribution of medical resources, the implementation of the medical welfare scheme, and sanitary infrastructure projects gradually had an impact on social epidemiology and disease distribution, but urban residents were the primary beneficiaries. Moreover, the various administrative levels, such as prefectural city, suburban areas, county towns, and rural districts, demonstrated a hierarchy of morbidity rates, mainly due to differentials in their sanitary environments and medical resources. As this book shows, the incidence rates in urban areas were usually lowest, while rates of disease in rural areas were the highest. The cholera pandemic in 1961–1965 therefore showed both a widening divide and the increasingly hierarchical character of incidence rates between rural and urban areas. Government investment patterns played a crucial role in this process.

The social restructuring that began in the 1950s and was strengthened from 1961 onward not only brought about social divisions between rural and urban areas but also gave rise to specific gender-based and military/civilian divisions.

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Women's liberation, which was proclaimed and promoted by the government after 1949, contributed to the feminization of agricultural production in China and resulted in specific illnesses among women as a result of onerous labor undertaken since the Great Leap Forward of 1958–1960.[30] However, the gendered impact of these agricultural production changes on the social epidemiology of disease outbreaks and pandemics has not yet been studied sufficiently, not to mention women's participation in epidemic prevention and treatment campaigns. Cholera was one of the most common and most devastating acute infectious diseases to affect China, and the 1961–1965 pandemic arrived shortly after women began to participate in agricultural production on a large scale. Consequently, this pandemic is an excellent case for furthering our understanding of the dynamic relationship between gender and disease in Mao's China, including women's vulnerability to epidemics and their active roles as medical practitioners and health-care workers.

The cholera pandemic is also an ideal case for analyzing social epidemiology and disease distribution in terms of military/civilian divisions. As this book shows, the conjunction of a disease pandemic with active troop mobilization in the same geographic locality enables us to see differentials between soldiers and citizens from a historical perspective. The cholera distribution in 1961–1965 was sharply divided between the military and civilians: strong soldiers on the one hand and weak civilians on the other. The differences were due to different physiques, nutrition, and medical care, all of which were significantly shaped by broader sociopolitical changes since the 1950s and strengthened by the "Preparation for War" campaign during the pandemic.

In the meantime, it should be noted that environmental and ecological change had been another crucial factor in shaping rural/urban, gender-based, and military/civilian divisions during the cholera pandemic in 1961–1965. As Robert Peckham argues, epidemics are "environmental events produced by the stresses of these natural, economic, social, and political convergences." He points out that, to some extent, epidemics should be understood as the outcome of environmental crises.[31] As this book indicates, population pressures affected the environmental and ecological system in Wenzhou after 1949, which contributed to the outbreak of cholera and shaped its distribution. The environmental change brought by the new cropping system also increased women's exposure to cholera. In contrast, military camps were protected from the contaminated environment and cholera. Furthermore, epidemics are "episodes that foreground the convergence of human and natural ecologies."[32] As this study shows, typhoons,

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rainstorms, and floods in the summer of 1962 also played a specific part in the transmission of cholera.

While social restructuring brought about rural/urban, gender-based, and military/civilian divisions, it also created a system of internal borders. Social divisions combined with specific aspects of grassroots social organization to create an additional layer of borders within the new social structures. Production brigades and work units became China's basic sociopolitical units in rural and urban areas, respectively. Commune members and their families were confined to this integrated grassroots organization of production and life, while urban residential spaces were characterized by individual and family dependence on work units.[33] For example, the urban neighborhood—run by a work unit—was the hub of the redistributive network in the socialist urban economy. This neighborhood group performed crucial government functions, instituting social order in a spatial, administrative, and political formation.[34] These rural and urban organization units therefore shared three key features—compositional homogeneity, economic egalitarianism, and political surveillance, as this book explores.

These characteristics of the organizational units that emerged with China's social restructuring contributed to the rise of the concept and implementation of internal borders between and among rural and urban residents. These borders further interacted reciprocally with disease quarantine and isolation processes. They were adopted to combat the cholera pandemic in 1961–1965 as two key components of classic interventionist approaches, though their effectiveness was called into question by the World Health Organization in April 1962.[35] Nevertheless, the policing of new social borders created a dynamic relationship between quarantine, isolation, and social restructuring. The social structure of 1950s and 1960s China and the newly drawn borders within the country facilitated the implementation of quarantine by creating social homogeneity, economic egalitarianism, and political surveillance within these designated groups.

Establishing a quarantine zone in the 1960s also helped consolidate the new borders created by the government. In her work on the role of quarantine in the formation of Australia as a nation in the early twentieth century, Alison Bashford argues, "Quarantine, more than any other government technology, is the drawing and policing of boundaries. Boundaries are required for the creation of nations in a modern Western sense, and quarantine is, in essence, the putting of these boundaries to a particular use by the administrative nation-state. Quarantine and national administration produce and monitor the same space: that is, the border of a nation has often been where a quarantine line was drawn. This

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same border might well have a military, political and economic significance."[36] Bashford further explains that the border of a quarantine zone contributed to a new Australian identity. Public health management, quarantine in particular, can shape and inform national identities. As she puts it, "the maritime quarantine line was one important way of imagining Australia as a whole, as the island-nation it was." The new nation was further strengthened through the effective coordination and assessment of quarantine measures.[37] In this sense, quarantine and isolation could be interpreted as a synchronized process of nation-state building.

Under some circumstances, the border solidified by quarantine and isolation illustrates both the national and racial dimensions of implementing medical inspections and immigration regulations. As Alexandra Minna Stern points out in *Eugenic Nation*, a protracted and aggressive quarantine along the U.S.-Mexican border scrutinized and racialized the bodies of Mexican immigrants during the first half of the twentieth century. The medicalization and militarization of the borders under the authority of the U.S. Border Patrol created "a regime of eugenic gatekeeping on the U.S.-Mexican border that aimed to ensure the putative purity of the 'American' family-nation while generating long-lasting stereotypes of Mexicans as filthy, lousy, and prone to irresponsible breeding."[38]

Bashford's and Stern's arguments lead us to understand quarantine and isolation in the cholera pandemic of 1961–1965 in the sociopolitical context of China. As this book reveals, quarantine and isolation symbolized the rise of multiple borders in both the cholera pandemic itself and the social restructuring that took place during the pandemic. During this process, natural, administrative, military, and quarantine borders overlapped or were reclassified and further strengthened. However, the practice of enforcing multiple borders also brought problems. In particular, quarantine and isolation procedures were unable to identify suspect cholera carriers as effectively as expected. Nonetheless, these two "intrusive intervention" approaches of infectious disease surveillance brought about coercion and interfered with personal rights and freedoms, which had already been constrained by the sociopolitical control schemes.[39] As the most crucial element of public health emergency response, these interventionist measures also functioned as social control mechanisms and significantly contributed to the rise of an emergency disciplinary state during the cholera pandemic. In this way, quarantine and isolation played a part in the social restructuring process and then strengthened the borders that had been recently created and reclassified.

In the meantime, the formation and strengthening of new borders was not a seamless process during the pandemic. Social class differences that formed

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during the broader social restructuring process introduced distinctions based on hierarchy, privilege, and status into quarantine practices and sometimes resulted in evasion. These hierarchies further complicated the implementation of quarantine and isolation in relation to these multiple borders and revealed the limit of the emergency disciplinary state during the pandemic. Social epidemiology and interventionist approaches to cholera prevention (i.e., quarantine and isolation) seen from the perspectives of social divisions and borders constitute the second subtheme of this book.

DATA AND SOCIAL STRUCTURE

The cholera pandemic of 1961–1965 gave rise to a new channel for strengthening the restructuring programs by integrating social and production data (i.e., household registration and accounting registers) with pandemic data. As this book shows, within the borders created by social restructuring and the quarantine and isolation schemes, the government faced the immediate, crucial task of implementing comprehensive inoculation programs and managing epidemic information, both of which involved large quantities of population data.

In terms of comprehensive inoculation, effective control of disease in the population required, as Katherine Mason has argued, "accurate biostatistics that provided scientific truths about the population and a reliable means of sharing those statistics."[40] Both population data and local agents (for sharing information) are indispensable factors for successful inoculation efforts. Local administrative systems played a crucial role in these programs and determined their success or failure, which was illustrated by different cases in different sociopolitical settings in modern China and Asia. Typical contrasting examples of this occurred in Manchuria and Taiwan under Japanese colonial rule before the mid-twentieth century. In some Manchurian villages, because of the scarcity of adult men to serve as local agents, old, fragile women and children resisted the Japanese inoculation program.[41] In contrast, on the island of Taiwan a similar public health intervention was much more successful because headmen and local police served as local agents and helped round up targeted populations for the Japanese sanitary police corps.[42] Similarly, as Warwick Anderson points out, American public health bureaucrats controversially attempted a Filipinization of health service to solve the passive resistance of Filipinos to the new order of colonial hygiene in the Philippines in the early twentieth century.[43]

A similar situation occurred in China in the early twenty-first century. As

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Mason found in her fieldwork in Tianmai (her pseudonym for a large, cosmopolitan city), the lack of information on migrant workers and the absence of mechanisms with which health officials could engage with their communities posed serious challenges to disease control and inoculation. Medical professionals from the Municipal Center for Disease Control still needed to rely on traditional *guanxi* (i.e., a network of mutually beneficial relationships) to work with district- and street-level public health institutions and connect them indirectly to factory bosses and village leaders, who had communication channels through which to contact migrant workers.[44]

These examples of inoculation and public health practices led me to explore the comprehensive inoculation campaign launched during the cholera pandemic of 1961–1965 through population data and from the perspective of local agents during the integration of the medical and administrative systems. As this book shows, cadres, household registration, and accounting registers acted as local guides and sources of population data that would facilitate inoculation programs in villages during the pandemic. More significantly, the comprehensive inoculation campaigns also directly contributed to broader social restructuring by generating inoculation registers and certificates. These campaigns involved the administrative and medical systems while combining social, production, and epidemiological data in a reciprocal process. Comprehensive inoculation enabled social control, facilitated the imposition of a new top-down and far-reaching social structure, and contributed to the formation of an immobile society. The inoculation program also contributed to the broader social restructuring goals of the central PRC government by extending social control and performing political and social experiments. Thus, as a significant element of the public health emergency response, comprehensive inoculation effectively played the role of biopolitical and population control and greatly facilitated the rise of the emergency disciplinary state during the pandemic. However, it should be noted that, like quarantine, the effectiveness of cholera inoculation was called into doubt by the WHO as of April 1962.[45] Nonetheless, the cholera inoculation campaign was launched throughout Mao's China. In this sense, the inoculation campaigns of 1961–1965, presented as an exercise in public health protection, were instrumental in achieving the government's goal of social and political reorganization.

Like the comprehensive inoculation campaigns, the management of epidemic information also played a crucial role in the social restructuring by collecting data and controlling the public. Information about the epidemic was significant throughout the history of the state and government in the twentieth century.

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In his path-breaking book *A Passion for Facts*, Tong Lam argues, "We take it for granted that the gathering of social facts is indispensable to everyday life, and even more so when it comes to governance." Lam regards the production of social facts as a crucial activity for China's new nation-building process from the early twentieth century onward. In his opinion, such "investigative modalities," which included censuses, ethnographic studies, sociological surveys, and similar modes of knowledge production, were all technologies of the modern state. They not only involved collecting empirical facts but also served governing purposes through the ordering, classification, calculation, preservation, and circulation of facts. By fundamentally transforming the nature of governance, the production of such facts aimed to make the complex human world appear knowable and manageable. As new governance technologies, social surveys symbolized China's transformation from a dynastic empire to a nation-state.[46] After 1949, statistical work gradually became an indispensable part of the nation-state building process in China. As Arunabh Ghosh argues, the midcentury statistics mainly developed in the context of the overwhelming drive toward the modernization of statecraft. There were two principal means of statistical data collection: the complete enumeration periodical report and the survey based on typical sampling.[47]

Moreover, the formation of preliminary and imperfect epidemic information management systems in the mid-1950s was significant in Chinese historical epidemiology because epidemics were recorded irregularly in Chinese medical history using vague terms like *yi*, *wen*, and *zhang* (referring to epidemic diseases). There were no standardized records of types, etiologies, and symptoms.[48] Mirroring these deficiencies in epidemiological records in imperial China, there has been criticism over the intentional secrecy around epidemic statistics in contemporary China. In the discussion around the SARS pandemic in 2002–2003, scholars and social commentators attributed the outbreak and spread to the fact that, in the early stages, the Chinese government covered up information about the epidemic.[49] Scholars have noticed that it is in the nature of authoritarian governments to control information because "Communist China had a long history of obsession with secrecy."[50] This does not mean that China is devoid of a mass communication system, but it is true that the government tends to keep epidemic information confidential. In fact, the Chinese government "often creates asymmetric information system[s], that is, top leaders have access to abundant information while ordinary people are provided with little information."[51] The many reasons for censoring epidemic information include fear of social panic and economic disaster.[52]

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However, the politics of epidemic statistics between imperial and twenty-first-century China are still unexplored. This study of the cholera pandemic in 1961–1965 addresses this vacuum because the epidemic statistics scheme and the politics established in this pandemic shaped the politics of pandemic information in Mao's China and in subsequent decades. As this book argues, the establishment of a bottom-up epidemic information collection scheme integrated the grassroots medical and sociopolitical systems through the process of the broader social restructuring that was taking place simultaneously. This restructuring was in turn reflected in the institutionalization of the medical system, the medicalization of the administrative system, and the epidemiological categorization of populations. This finding contributes to the comparative understanding of epidemic statistics in other sociopolitical settings, both past and present. As Myron Echenberg argues, "statistics for cholera cases and deaths in the nineteenth century are impressionistic and serve only to provide a qualitative picture."[53] By the early twenty-first century, cholera cases were still being underreported everywhere due to their confusion with other cases of acute diarrhea, as well as denial and fear. According to WHO, "Annual global case and fatality rates [are] at least ten times higher than annual official reports indicate." In particular, cholera is significantly underreported in Asia.[54]

My examination of epidemic statistics schemes in the cholera pandemic further explores the historical origins of the traditional secrecy around epidemic statistics in contemporary China. As this book shows, the term "No. 2 disease" was created to control cholera epidemic information from the top down in order to maintain social order, justify the CCP's legitimacy, and prevent mass panic. More significantly, epidemic information was not simply biodata but was also endowed with the political functions of disciplining and indoctrinating local cadres, medical professionals, and the general public in the sociopolitical contexts of social restructuring. All these factors therefore shaped the politics of epidemic statistics in Mao's China, which also functioned as an isolated nation in a global health community in the cholera pandemic of the early 1960s. In general, the politics of epidemic statistics, as the crucial component of the government's public health emergency response, significantly contributed to the rise of the emergency disciplinary state through the collection and control of epidemic information. As a consequence, inoculation campaigns and epidemic information, viewed from the perspective of data and social restructuring, make up the third subtheme of this book.

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METHODOLOGY, MATERIALS, AND THE STRUCTURE OF THIS BOOK

This book traces the spread of the cholera pandemic from Makassar, Indonesia, to Guangdong Province, China, in 1961, before focusing on Wenzhou Prefecture, Zhejiang Province, in southeastern coastal China, for the duration of the 1962–1965 outbreak there. I chose to center my study on Wenzhou Prefecture simply because the incidence of cholera in that area was the highest in southeastern coastal China, according to the statistical data available, and Zhejiang was also among the provinces with the highest incidence of the disease out of all those affected by cholera at the time (Guangdong, Fujian, Zhejiang, Shanghai, and Jiangsu).[55] El Tor cholera first appeared in Rui'an County in Wenzhou Prefecture on July 5, 1962—this was the first cholera case in Zhejiang Province. By the end of 1962, there were 10,747 reported cases of El Tor cholera and 606 people had died in the Wenzhou area. The figures were much higher than those in Guangdong and Fujian Provinces, in which there were 8,666 and 3,975 reported cases, respectively. The cholera cases in Rui'an County, Pingyang County, and Wenzhou City accounted for 97 percent of the total number within Zhejiang Province.[56]

Wenzhou Prefecture is at the northern end of China's southeast coast and is adjacent to the southern end of the Yangtze River region in terms of division of socioeconomic macroregions. Since the 1950s, Wenzhou's large coastal regions and extensive river and delta access have endowed it with specific geopolitical significance. The Nationalist government based in Taiwan regarded it as the bridge across which it would "Reclaim the Mainland," while the Communist government identified Wenzhou as the frontier of anti-imperialism and anti–Chiang Kai-shek groups. The military confrontation between the Nationalists and Communists reached its peak in 1962, precisely when the cholera pandemic was ravaging Wenzhou Prefecture. In this sense, Wenzhou functioned as a front line in the Nationalist-Communist conflict amid the wider Cold War in Asia. To further complicate this situation, many overseas Chinese were from Wenzhou and Zhejiang, though the latter was nowhere near as significant in that regard as Guangdong and Fujian Provinces. People who had migrated to Hong Kong, Macau, and Indonesia from Wenzhou came back periodically to visit throughout the 1950s and 1960s. The ways that cholera affected Wenzhou, as the center of the epidemic, and the ensuing emergency response scheme came to be reflected throughout other areas of southeastern coastal China, through illness itself or the cascading social and economic impacts.[57]

Any study of the history of disease and epidemics in China after 1949 faces

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immediate difficulties and challenges related to accessing original materials of any sort, not to mention those on pandemics. The Communist government recorded in official internal files all disease and epidemic information, including minutes of meetings, investigation reports, work reports, and policy documents kept by different levels of the party committees and governments from 1949 onward. As this book shows, when cholera swept into China in the early 1960s, files concerning this pandemic were classified as top secret, confidential, or secret. This rule was also applied to other diseases and epidemics in Mao's China. It was impossible for researchers both in and outside of China to access to reliable information on the extent of the pandemics and the nature of the responses to them. Access to original archival documents concerning diseases and epidemics improved in China thanks to the changes that have occurred since the 1990s and the country's opening up to the academic world but then became more difficult again a few years ago, particularly at the central level. However, reliable information on cholera pandemics is available at some Chinese archives at the provincial and county levels. These sources are particularly fruitful because they include detailed, relatively loosely managed records of real situations at the grassroots level. Archival documents of this type, mainly from each of the county archives in Wenzhou Prefecture, form the core materials of this book.

Archival documents, when used in conjunction with other sources, can illuminate many of the dark corners of PRC politics.[58] Some local gazetteers describing medicine, health care, and epidemic prevention from 1949 onward and published since the late 1980s made up for the limited access to archival documents at the central and provincial levels. In the 1990s, the compilation boards for these gazetteers, organized by either health bureaus or sanitation and epidemic prevention stations, were authorized to read these original archival documents and cited some of them in their works. These gazetteers provide a lot of references and clues when searching through archival documents. Furthermore, like other counties in Zhejiang Province, each county in Wenzhou Prefecture published its own newspaper from the outbreak of the Great Leap Forward to 1962, when the Great Famine basically ended. The Wenzhou Prefecture newspaper, *Zhenan dazhong* (Masses of southern Zhejiang), was published from the very beginning of the new regime to the middle of the Cultural Revolution, in 1972. Issues of these newspapers provided original material on the social and political history of local society in official discourses.

In-depth interviews with the dwindling population of witnesses and survivors of this global pandemic were another core source of material for this book. I

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mainly conducted interviews in Rui'an County, Pingyang County, and Wenzhou City because these three areas saw the highest morbidity rates in southeastern coastal China in 1962. These local narratives from the perspectives of individual and collective memories include interviews with former medical doctors and epidemic prevention staff at sanitation and epidemic prevention stations, county health bureau cadres, production brigade and team cadres, and ordinary villagers. Sigrid Schmalzer argues that interviews "emerge from specific contexts of production and are transformed through specific contexts of circulation," like diaries, memories, biographies, and academic publications. These oral history materials, mediated by some political and social motivations, require careful, critical analysis.[59] However, informants in this study recounted their memories half a century after the pandemic, and their commentary was not arranged by the government and had few sociopolitical and ideological constraints. As this book indicates, interviewees narrated their suffering, complaints, and resistance at the grassroots level. Thus, scrutiny of these narratives can rectify and supplement original archival records and local gazetteers that were written under the guidelines of the official historiography.

This book has three parts. The first, "Global Pandemic and Mobility" (chapters 1 and 2), analyzes the global and local cholera pandemics in Southeast Asia and China in the context of transnational politics and domestic social restructuring. Chapter 1 explores the Chinese diaspora and the global cholera pandemic in the transnational politics surrounding Indonesia and China from the late 1950s onward, including the outbreak of the pandemic, its spread from Indonesia to China, and the movement of Indonesian Chinese as suspected carriers. Chapter 2 examines how the dynamics of population mobility from the 1950s onward contributed to the emergence of a generally sedentary rural society simultaneous with the rise of a mobile coastal society. It also traces how population mobility further shaped the spatial and temporal distributions of the cholera pandemic, together with human ecology and social customs in Wenzhou Prefecture in summer 1962.

The second part, "Contagion, Social Divisions, and Borders" (chapters 3 and 4), discusses social epidemiology and interventionist cholera prevention methods (i.e., quarantine and isolation) within the social divisions and borders created by the social restructuring process. Chapter 3 examines how the social divisions that had gradually formed since 1949 and were strengthened in 1961–1962 resulted in specific social epidemiology features and the distributions of cholera cases along rural/urban, male/female, and military/civilian divides.

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Chapter 4 addresses how quarantine and isolation redrew and interwove multiple borders (including natural, administrative, militia, and quarantine borders) and explores how the problems these practices encountered in preventing the spread of cholera reflected key features of the restructured social system.

The third part, "Pandemic Emergency, Data, and Social Structure" (chapters 5, 6, and 7), examines the reciprocal integration of the anticholera campaign and social restructuring through the combining of social, production, and epidemiological data (i.e., household, accounting, and inoculation registers and certificates). Chapter 5 explores how the restructured rural social systems facilitated the entry of comprehensive inoculation emergency programs into vast rural areas by providing local agents and household and accounting information, as well as how the inoculation campaign adjusted, improved, and finally strengthened the recent social restructuring process through the compiling of inoculation registers and certificates. Chapter 6 explores how the epidemic statistical politics based on the institutionalization of the medical system, the medicalization of the administrative system, and the epidemiological categorization of populations strengthened the social structuring process. It also looks at how all these systems suffered institutional dysfunctions during this process. Chapter 7 investigates why the cholera pandemic was highly politicalized as the "No. 2 disease" and how information about it was endowed with the political functions of disciplining and indoctrinating local cadres, medical professionals, and the general public in the domestic and international politics of China in the early 1960s.

The concluding chapter examines the significance of the global pandemic as a sociopolitical event in the crucial transitional years between the Great Leap Forward and its associated famine and the Cultural Revolution. The book ends with a discussion of the rise of the emergency disciplinary state and its far-reaching impact on public health emergency response in the changing sociopolitical contexts of the decades following the cholera outbreak, including the cerebrospinal meningitis epidemic in 1966–1967, the SARS pandemic in 2002–2003, and the ongoing COVID-19 pandemic.

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