5. The Inconvenient Truths:
Sanitation in Hong Kong

Good health depends on good sanitation and a clean living environment. In an urban environment, decent sanitation requires an adequate supply of clean, unpolluted water and food, high-quality drainage and sewerage, efficient removal of solid waste and refuse, and housing that provides adequate ventilation and light.

In the Middle Ages, most cities were magnets for diseases. Human waste was flung into the streets to mingle with that of dogs and horses. Rats, mice, and other vermin burrowed through most human habitat. Until the nineteenth century little was done in England or anywhere in Europe to promote public health. There was practically no medical education, and therefore no knowledge of the causes of diseases or their remedies. Not until the great epidemics of cholera that swept Europe in the 1830s and reached England in the 1840s, did the concept of health and disease change, along with recognition of the importance of sanitation. Severe outbreaks in 1832, 1849, and 1854 stunned and alarmed England, rousing it to take the first steps in administrative sanitary reform.

In 1842, a lawyer named Edwin Chadwick published the Report on the Sanitary Conditions of the Laboring Population of Great Britain. It described the incredibly overcrowded and unsanitary living conditions of the vast majority of working men, as well as the high correlation between poverty and death rates. Chadwick's revelations shocked the conscience of the middle class, motivating them to clean up this serious national evil. In a number of large cities the public took independent action and formed Metropolitan Health of Towns Associations to carry out sanitary reforms. In 1848, the first Public Health Act in England established a Board of Health to coordinate the activities of the local boards, which were responsible for providing clean water and adequate drainage. Subsequent legislation in 1866 and 1872 made local councils responsible for the disposal of sewage and rubbish, the provision of street lighting, and improvements in the quality of new housing. Government
intervention and legislation led to great improvements in sanitation and living conditions for the lower social class.\textsuperscript{3}

In Hong Kong, development of sanitation during the first half century of colonial administration lagged far behind those in England. When Osbert Chadwick, son of Edwin Chadwick, visited Hong Kong in 1882, he was appalled by the Colony’s unsanitary condition and made recommendations for sweeping reforms. The government’s response was inadequate, and by 1894 the Colony’s overcrowded and unsanitary conditions had led to the disastrous plague that would ravage the population for the next 30 years.

Decades of Neglect (1842–1882)

In the early 1840s, as the city boomed, sanitation was not even an afterthought. During the 1850s, a continual flow of Chinese leaving unrest on the mainland for opportunities in the Colony resulted in a critical shortage of accommodations. Overcrowding, widespread poverty, lack of building construction standards, exploitation of indigent and illiterate families, and shortage of satisfactory water supplies and other public utilities gave rise to an intolerable unsanitary condition in Hong Kong, especially in the Tai Ping Shan area, where most Chinese lived.

Colonial Surgeons had repeatedly drawn attention to the unhealthy state of the Colony, warning of impending epidemics in their annual reports. While they were concerned with the limited water supply and faulty sewage and drainage system of the city as a whole, their main focus was on the unsanitary conditions in Tai Ping Shan. Certainly, the Colonial Surgeon’s annual reports were read by the governor and the Secretary of State for the Colonies in London. Why then was nothing done to improve the situation?

It is worth remembering that the first Public Health Act was not passed in England until 1848, and in the early years of the Colony’s existence, the state of sanitation in England was not radically different from the situation in any of its colonies. Thus early colonial governments saw no need for reform. Moreover, Tai Ping Shan was not the only place in Asia with such filth in the nineteenth century.\textsuperscript{4} Most of the major cities in China were mired in the same unsanitary state as Hong Kong.

While sanitation had advanced in England considerably by the 1870s,
the unhygienic environment in China and Hong Kong remained. Most Chinese rationalized that this environment did them no harm, and as they had lived this way for centuries, they did not know any better. The governors in Hong Kong would hide behind the excuse that they did not want to interfere with the age-old customs of the Chinese, whom they did not wish to distress, when most of the time there simply was no money available to effect change. The Chinese also used the same reason to resist changes that would cost them financially. Moreover, why should they spend money to improve sanitation for the benefit of foreigners?

It is true that foreigners did not have quite the same immune resistance as the Chinese. For the Chinese to reach adulthood in the nineteenth century, they had to be immunological elite, surviving an assortment of assaults from childhood illnesses such as smallpox, measles, diphtheria, and a multiplicity of gastrointestinal infections. While foreigners who had never been exposed to a similar sort of hostile environment would more likely succumb to these diseases, the Chinese, having developed immunity, were often resistant to them. Nevertheless, exposure to epidemics of diseases such as bubonic plague or to organisms that had undergone genetic mutation such as influenza virus could still cause havoc.

Clearly the Colony did not fulfill Governor Pottinger’s forecast that it would become the “Emporium of the Far East” during its first two decades. After the third governor, Governor Bonham, was told to retrench and balance the budget, no major public works were accomplished during his term (Table 1.2 of Chapter 1). Once the entrepot trade began to flourish during Governor Robinson’s administration (1859–1865) and the revenue improved, funds remained scarce, as the home government insisted that the Colony pay its share of military expense—£15,000 in 1865, a sum increased to £20,000 per year in 1891, despite vigorous objections from the merchants in the Colony.

Very few Europeans or Chinese were interested in settling permanently in Hong Kong, or had developed any pride in the city. Nor did they appreciate any government interference in their lives, particularly when it required payment of taxes. They imagined themselves as sojourners coming to Hong Kong to take advantage of the facilities offered by British, hoping to earn money and then return to their own villages to end their days. Even the richer, propertied Chinese in Hong Kong did not, as a rule, settle in Hong Kong with their whole families.
The first or principal wives remained at the home of their ancestors in their native village. Except for the successive Colonial Surgeons, very few demanded or even cared about improvements in sanitation.

Colonial Surgeons could do little more than just embed their complaints in their annual reports, and these were often edited before submission to the Colonial Office. In fact, the Colonial Surgeons had no real power. In 1845 the basic annual salary of a Colonial Surgeon was around £600 (about one eighth of the governor), one of the lowest in the colonial administration—reflecting what the Colonial Office thought of them and how they were exploited at that time. Salary increases for the colonial medical officers were not automatic, but awarded at the pleasure of the governor. The medical officers could supplement their salaries in private practice, but such a privilege was at the discretion of the imperial administration. Yet, despite the harsh working conditions, relatively low pay compared with similar jobs in England, and high mortality, there was no shortage of applicants due to the glut of underemployed practitioners. Medicine was such a popular calling in Britain that the profession could not assimilate all its members in the domestic market. The oversupply of medical practitioners meant that few would be prepared to do anything that would displease the imperial administrators.

In addition, the Colonial Office had no master plan for health and sanitation, and administration and policy were left in the hands of the incumbent local governor. The wide variance of policies is revealed in the range of responses of the different governors to the urgent warnings of their Colonial Surgeons, concerning the tremendous overcrowding and unsanitary conditions in the Tai Ping Shan district.

**Governor Sir John Bowring’s Response: A Pernicious Double Standard**

In 1854 the Colonial Surgeon, Dr. J. Carroll Dempster, examined the streets, lanes, and houses in Tai Ping Shan and was alarmed not only by the presence of open drains, but also by the unhygienic conditions of the densely packed houses. He bemoaned the faulty drainage and sewerage in the Colony:

> I must express my regret that Hong Kong should present so much filth and so many nuisances, the more especially as its
site in many respects well adapted for Drainage and Sewerage. In carrying out my assertions it will be only necessary for me to report on the Taiping-sheng district. The Lanes (certainly not streets) are in a most objectionable state, containing almost invariably cowsheds, pigsties, stagnant pools—the receptacles of every kind of filth, all which nuisances have remained unheeded for a considerable time.

In this District are two large open Drains, which at all times are most offensive.... The great want of Privies and suitable Depots for dirt, is observable everywhere the Native population reside.

Dempster warned that diseases thrived in overcrowded dwellings where cleanliness, ventilation, and drainage were neglected. The lack of sanitary measures, he cautioned, would lead to development and spread of diseases. 9

Dempster’s report of 1854 caught the attention of the Secretary of State for the Colonies who sought advice from the General Board of Health in England. The Board of Health then forwarded guidelines for improvement in sanitation to Governor Sir John Bowring, the incumbent governor. 10 Bowring’s response was dismissive, asserting that “he was not prepared to confirm the strong opinion expressed in the Colonial Surgeon’s report.” He avowed that the City of Victoria was remarkably clean and healthy compared with most Chinese cities and with the rural population in the orient. 11 Bowring also enclosed the report of C. G. Cleverly (Surveyor General), suggesting it was pointless to do anything. His assurance that sewerage was not necessary in Tai Ping Shan, as the night soil (excrement) was manually removed every day, and that any improvement in drains would be tampered with, shows a striking double standard—one for “civilized communities” and a different one for the Chinese:

... to provide a system of sewerage (and such as is adapted in the better parts of this Town) ... would be attended with injurious effects and would totally frustrate the object, for the drains would most assuredly become choked either by carelessness, want of water to flush each house connecting drain, intentional damage, or absolute robbery of the various appliances to a perfect system of Sewerage ...
Cleverly’s remarks betray a sense of class entitlement that he carried with him to Hong Kong. In suggesting that it would be as impossible to compel the low, dirty class of residents in Tai Ping Shan to keep clean as it was difficult to force servants of their private homes to keep their premises clean, he was likely expressing the feelings of the majority of the Europeans who employed Chinese as their coolies and domestic servants.12

Thus, while the rest of the city gradually enjoyed a better system of drainage, sewerage, removal of refuse, and paving of roads, Tai Ping Shan residents were deprived of proper sanitation, and even clean water. The government justified its inaction by citing Chinese customs, Chinese incorrigibility, and Chinese carelessness or criminality as excuses. Even though Bowring finally appointed an Inspector of Nuisances in 1859 to deal with the sanitation problems including drains, water supply, and scavenging, this small concession was too little, too late. With only one person attending to sanitation, and with the ongoing lack of funding, problems would remain unresolved.

**Governor Sir Hercules Robinson: Water First**

Dr. John I. Murray, Colonial Surgeon, echoed Dempster’s opinion throughout his years of service. In 1859 he remarked that because Hong Kong was basically a hilly island, most dwellings were located on the hill slopes, and technically it could be effectively drained. He saw the barrier to good sanitation as more of an administrative than an engineering problem. The city had adequate laws to safeguard the sanitation of dwellings, but the lack of enforcement of the laws had resulted in deteriorating, unsanitary conditions.13 The new Governor, Sir Hercules Robinson, dissented from “several of Murray’s conclusions and (could) not approve altogether of his report of 1859.”14 But Robinson did attack the problem of water shortage with ingenuity. Up to this point, people in the city had obtained their water from nearby streams or wells, but these sources were unable to support the rapid growth of the population. Robinson offered a reward of £1,000 to anyone who could provide a workable solution, allocating a budget of £25,000 for the project. S. B. Rawling, a Royal Engineer, won the award with his proposal to construct a dam across the valley of Pok Fu Lam to collect rainwater. Although the reservoir was completed in 1863, there was inadequate funding for
its construction, and its small size and poor system of water distribution rendered it ineffective.\textsuperscript{15}

In 1862, following a cholera outbreak, Robinson appointed a Sanitary Committee composed of the Colonial Surgeon, the Surveyor General, Medical Officer of the Military, and two other individuals. The Committee produced an 88-paragraph report of useful recommendations one year later, including reconstruction of public dust bins, provision of public privies, and improving night soil removal methods, sewerage, and drainage. The Surveyor General, Cleverly, who was on leave when the report came out, claimed that the recommendations were too impractical and expensive to implement. Cleverly repeated his stereotypical claims about the dirty habits of the Chinese, and re-articulated his belief that the connection of house drains in Tai Ping Shan district to existing drains would cause blockage. He thought that most of the recommendations regarding drainage and sewerage were superfluous and wrong,\textsuperscript{16} and the report of the Sanitary Committee was shelved.

\textbf{Governor Sir Richard G. MacDonnell: No Vital Statistics}

Murray continued to report on the unhealthy conditions of the Colony in his annual reports. The next Governor, Sir Richard G. MacDonnell, tried to be more proactive, and immediately made plans to improve Tai Ping Shan by paving the streets, improving surface draining, and linking dwellings with the main drainage. Regrettably, in a climate of economic recession, he was unable to do much more than introduce an Order and Cleanliness Ordinance in 1866, which prohibited the keeping of pigs and similar animals in dwelling houses without a license. The law was not enforced, as Dr. P. B. C. Ayres, the next Colonial Surgeon, would discover.

Government works expenditure under MacDonnell was further reduced by an increase of contributions to military expense to £20,000 every year. In 1867 he had to postpone work on water storage and distribution improvements from the Pok Fu Lam reservoir because of a lack of funds.\textsuperscript{17} While MacDonnell encouraged the Chinese elite to build the first Chinese Hospital in Hong Kong, when the Colonial Office asked MacDonnell to gather statistics on births, deaths, and marriages, vital information for health planning, he demurred, reluctant to arouse Chinese suspicions.\textsuperscript{18}