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Duality in planning
(1841–1898)

1841 Captain Charles Elliot, R.N., administered from 26.1.1841 to 10.8.1841. H.K. is taken over (26/1) and Govt. administered by Capt. ELLIOT as Chief Superintendent of Trade of British subjects in China in accordance with proclamation issued by him (29/1) which also declared that Chinese should be governed according to laws of China and others according to laws of Gr Britain. 2nd proclamation (1/2) promised free exercise of religious rites, social customs and private rights. (Historical and Statistical Abstract of the Colony of Hong Kong 1841–1930, Hong Kong, Noronha & Co., 1932)

In 1843, using European cities as a model, the colonial government designated the northern coast of Hong Kong Island as the city’s boundary, establishing government departments and building commercial facilities for the entrepôt, expending human and other resources in constructing the City of Victoria. In the second half of the nineteenth century, the development of the City of Victoria was restricted by natural resource shortages and a poor natural environment. In response, the government had to make use of new construction techniques and infrastructure to solve daily life problems resulting from the population growth, which included housing, transport facilities, water and electricity supply, law and order and public hygiene, in order to make Hong Kong a place of residence for Europeans coming to the East for business. How did town planning reflect government policies and choices? How did changes in the social background influence planning? The analysis below seeks to study the characteristics of nineteenth-century town planning via two important entry points: the government’s use of engineering techniques in formulating the layout of the City of Victoria; and how the government solved the law and order and public hygiene crises in the densely populated Chinese communities and strengthened its rule over them. This will strengthen our understanding of the reasons behind the splitting of the City of Victoria into two districts of widely different styles in the nineteenth century, and enables us to assess the effects of the government’s active development of the European district while neglecting the living environment and hygiene problems in the Chinese communities.
Conception

The present-day territory of Hong Kong includes Hong Kong Island, the Kowloon Peninsula, the New Territories and over 230 outlying islands. From August 1842 to October 1860, the territory of Hong Kong consisted only of Hong Kong Island, which had an area of 32 square miles (82.9 square kilometres). Between October 1860 and June 1898, Hong Kong’s territory expanded northwards to Boundary Street on the Kowloon Peninsula, gaining 3 square miles (7.8 square kilometres). With effect from July 1898, the United Kingdom leased from the Qing government the New Territories (south of the Shenzhen River and north of Boundary Street), as well as some 230 islands within Hong Kong’s territorial waters, with a claimed land area of 957 square kilometres (the New Territories and the outlying islands occupied an area of 226,918 acres (918.3 square kilometres), thus increasing Hong Kong’s total area to 1,009 kilometres. According to an official announcement following land surveys carried out in the New Territories and the outlying islands between 1900 and 1906), Hong Kong’s total area was 1,047.7 square kilometres. In 2014, Hong Kong had an area of 1,105 square kilometres, only 24 per cent (i.e. 265 square kilometres) of which was developed land. Of that total, 59.3 square kilometres was land reclaimed from the sea after the war. Before the war, records of land reclamation were incomplete, and the government figure was around 5 square kilometres. The total area of reclaimed land is therefore 64 square kilometres. While this represents only 6 per cent of the total land area of Hong Kong, it also represents 24 per cent of built-up areas. Should the pre-war reclaimed area be greater than 5 square kilometres, the percentage would be even higher.

The discussion concerning nineteenth-century Hong Kong town planning in this chapter is based on the City of Victoria on the northern coast of Hong Kong Island in the early 1840s and covers Hong Kong Island and the Kowloon Peninsula south of Boundary Street from 1860 to 1898. It does not include the New Territories and the outlying islands.

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1 The number of outlying islands that are considered to be within Hong Kong’s territories has decreased over the years as a result of land reclamation works that link these islands to the Mainland. Prominent examples include Chek Lap Kok Island and Stonecutters Island.

2 The Kowloon Peninsula referred to the area south of Boundary Street at the time, which differed from today’s concept of including the districts that used to be known as New Kowloon. ‘Report on the Census of the Colony for 1931’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1931, p.99.

3 CO882/5, J. Stewart Lockhart, ‘On the Extension of the Colony of Hong Kong’, 8 October 1899, p.36.

4 According to the figures in the 1899 Hong Kong Government Gazette, the New Territories had a land area of 376 square miles. The government undertook land surveys in the New Territories and the outlying islands between 1900 and 1906, and the announced figure in 1907 was 226,918 acres (918.3 square kilometres). The figure obtained by land surveys is used here. See Hong Kong Blue Book, Hong Kong, Noronha & Co., 1907.

5 The total land area of Hong Kong has increased as a result of reclamation. According to Hong Kong Guide, Hong Kong, Lands Department, 2015, Hong Kong had an area of 1,105 square kilometres. Hence different eras showed slightly different figures. According to page 1 of Land Utilization in Hong Kong, Hong Kong, Government Printer, 1966, Hong Kong only had an area of 1,032 square kilometres. This is even smaller than the figure of 1,060 square kilometres provided by the 1899 government record. This means Hong Kong would have a reclaimed area of between 44 and 66 square kilometres.
Choice of stronghold

Hong Kong Island is situated at latitude 22° 11’ to 22° 17’ north, longitude 114° 07’ to 114° 15’ east, and is the southern most extension of the South China hills into the sea, with geographical features similar to those of the South China regions. The island is mountainous, with significant variations and frequent changes in terrain within very short distances. The island’s terrain alternates between highs and lows, with as much as 82 per cent being mountainous land. Highland is not concentrated at the centre of the island, but is rather spread around different regions, 13 per cent of which is alluvial soil. Lowland occupies very little area, amounting to only 5 per cent of the entire island, and consists of narrow strips of coastal lowland mainly situated on the island’s northern and southern coasts. From the northern coast to the south is a range of hills that run across the east and west. On the west side of the range is the 554-metre Victoria Peak, with the 531-metre Mount Parker on the east side. Hong Kong Island slants from the north to the south, with a flatter terrain in the south with altitudes of 250–300 metres. The protruding highlands in this region are the peninsulas of Stanley and Cape d’Aguilar. Hong Kong Island has very limited flat land available for development.

The British occupied Hong Kong Island in order to build a trade settlement. In the era of maritime trade, geographical locations and harbour depths, even more than natural resource deposits, were the prerequisites for developing a trading port. From 1806 to 1819, the East India Company, which had a monopoly on Britain’s trade with China, engaged the hydrogeologist James Horsburgh to conduct explorations of the topography of the Pearl River Estuary. He found that the maritime traffic to and from Hong Kong was unparalleled in the region. From his explorations of Hong Kong waters, Horsburgh believed that west of Kap Shui Mun, the East Lamma Channel between Hong Kong Island and Lamma Island, Lei Yue Mun on the east side of Hong Kong Island and Tai Tam Bay on the south side of Hong Kong Island were all good typhoon shelters and ideal berths for ships. R.E. Collison’s exploration of the waters around Hong Kong Island in 1845 yielded similar results. According to indications on Collison’s maps, the deepest waters around Hong Kong Island at the time were as follows:

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6 So, C.L., Xianggang dili (Geography of Hong Kong), Guangzhou, Guangdong keji chubanshe, 1985, pp.18–37.
7 The Governor had stated that the British had no intention of migrating to Hong Kong.
8 In the early nineteenth century, Guangzhou was the only Chinese port open to foreigners, and European merchants bound for Asia had to pass through Hong Kong. European trading vessels sailing east would usually stop for food and water resupply in Hong Kong before heading further north to Guangzhou, or down south to the South-east Asian countries. Thus the Europeans had an excellent knowledge of Hong Kong’s coastal situation. Geoffrey Robley Sayer, Hong Kong, 1841–1862: Birth, Adolescence, and Coming of Age, Hong Kong, Hong Kong University Press, 1980, p.23.
1. Lyemoon (Lei Yue Mun) Pass off the eastern coast of Hong Kong Island. It was 46 metres (150 feet) deep and only 402 metres (1,320 feet) from the New Territories mainland. It was the bottleneck when entering the harbour from the east, and was an ideal typhoon shelter, as ships could avoid typhoons hitting from the north-east.

2. The East Lamma Channel between the south-west of Hong Kong Island and north-east of Lamma Island was 46 metres (150 feet) deep and was a place that ships entering Hong Kong from the south could not miss. Aberdeen, which was in the south-west of Hong Kong Island, was shielded by Ap Lei Chau and was an ideal mooring point in the southern part of Hong Kong Island.

3. The northern coast of Hong Kong Island (the coastal area between Admiralty and Sheung Wan today), now known as the Victoria Harbour, was not as deep as the two places mentioned above, being only 18 metres (60 feet) at its deepest. As the converging point of maritime traffic entering Hong Kong from the east and the west, it could also serve as a berthing location for ocean-going vessels, which had a draught of only some 6 metres (20 feet) then.

When British forces landed at Possession Point in Sheung Wan in 1841, they did not choose either Lei Yue Mun in the east or the East Lamma Channel in the south-west, which had deeper waters, as their stronghold. Instead they set up camp around East Point (Kellett Island in the nineteenth century, which was reclaimed after the war and is now the area west of Gloucester Road, near Victoria Park) and Shek Tong Tsui. This is because these two places were buttressed by Jardine’s Lookout and Victoria Peak respectively and, being situated in the east and west of the northern coast of Hong Kong Island, had important military use, as they allowed for a clear monitoring of the Qing government’s activities on the opposite coast of the Kowloon Peninsula. While Lyemoon Pass, off the eastern coast of Hong Kong Island, was the bottleneck when entering the harbour through the east, it offered shelter from typhoons. Many fishermen were living there and building a city there might lead to their opposition. If British soldiers were to construct a city in the south-west of Hong Kong Island, a large number of men would need to be stationed on the northern coast of the island to guard against counter-attacks by Qing soldiers from the opposite coast, it would be a difficult task with insufficient troops.

In the mid-nineteenth century, trade was mainly conducted by barges and sailing boats. Even ocean-going vessels at the time had a draught incomparable to today’s large ships. Therefore, the northern coast of Hong Kong Island, with its 18-metre-deep harbour, was sufficient for the needs of ocean-going vessels at the time. With Victoria Peak in the south and the Kowloon Peninsula in the

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12 Xianggang shangye huibao, ed., *Xianggang jianzao ye bainian shi* (One Hundred Years of Building Construction in Hong Kong), Hong Kong, Xianggang shangye huibao, 1985, p.40.
north shielding against typhoons, the area around Central and Admiralty was ideal for mooring ships. Because of the above factors, the northern coast of the island naturally became the core of the city. Therefore, in choosing the location for the construction of the city, the British in fact did not base their decision solely on an economic perspective that a wide and deep harbour would be ideal for developing entrepôt trade, which was always stressed by the colonial government. On 14 June 1841, Henry Pottinger, for the very first time, sold land from East Point in the east to Sheung Wan in the west by public auction, for the purpose of raising funds from land sales as well as developing Hong Kong Island with private investments. Major trading firms bid enthusiastically for the coastal lots in this first sale of land by auction, reflecting investors’ favourable view of the advantages of Hong Kong Island’s northern coast. This also indirectly caused the northern coast to become the city’s core later on.

On 29 March 1842, the government appointed Captain George F. Mylius as the Land Officer, responsible for land surveying and assessment, designing naval bases, shipyards and road distribution, and solving water supply problems. He was the first town planning engineer of Hong Kong. In April 1842, the government officially named the city after Victoria, Queen of the United Kingdom, and in January 1843 Governor Pottinger appointed the engineer Alexander T. Gordon as the Land Officer, Surveyor and Inspector of Roads of Hong Kong, responsible for planning the city’s public facilities such as government buildings, roads and seawalls as well as projects including land formation, water supply and sewerage systems, so as to formulate a blueprint for building the City of Victoria.

Planning

On 6 July 1843, in a letter to the then Acting Colonial Secretary, Gordon set out an idea for a belt-shaped city (see Figure 1.1). The city’s primary facilities, with the transport network being the first, would be built up using the layout of contemporary European cities as a model. Queen’s Road, as well as a main road around the city that would go through Sai Wan, Stanley, Shek Pai Wan, and so on, would be built for the convenience of citizens as well as to serve as a main route for military patrols around the island. It would be followed by planning for the locations of the political and economic heart of the city, and lastly the layout of areas for residential, religious and cultural activities. Owing to the vast terrain of the Wong Nai Chung valley, it was proposed that the valley be filled

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13 *Friend of China and Hong Kong Gazette*, 31 March 1842.
14 *Friend of China and Hong Kong Gazette*, 7 April 1842.
15 *Friend of China and Hong Kong Gazette*, 5 January 1843.
16 In 1844, the government established the Surveyor General’s Office. In 1883, the Surveyor General’s Office was renamed the Public Works Department and, in 1891, the Surveyor General was renamed the Director of Public Works. *Hong Kong Blue Book*, Hong Kong, Noronha & Co., 1844–1892; Ho Pui-yin, *The Administrative History of the Hong Kong Government Agencies 1841–2002*, Hong Kong, Hong Kong University Press, 2004, p.119.
Figure 1.1 The first city development blueprint drafted by Gordon (6 July 1843)
up to serve as the city’s core district (this proposal was ultimately rejected, as the government considered that the low terrain would trap swamp gas and miasma and thus be a health hazard to residents). It was also proposed that the area around the Mid-Levels in Central and Admiralty be developed. The Mid-Levels in Central would be the Government Hill, with primary government institutions to be built around the Governor’s residence. A church would be built on the flat land in front of the Governor’s residence, with the courts to the south of the residence. To the south of Queen’s Road, the land from the Government Hill to Lot No. 14 would be designated as residential areas for Europeans, and Queen’s Road would only be allowed for houses and stores developed by Europeans. The area stretching from the south of Queen’s Road to west of the harbourfront (around today’s Sheung Wan) would be developed into a residential area for the Chinese, while Wellington Street in Central and Bonham Strand in Sheung Wan would become the Upper and Lower Bazaars respectively.\(^{17}\) Seawalls would be erected along the coast from Morrison Hill in Wan Chai to Central for the development of a centre of commercial activities and government administrative institutions, while Morrison Hill in Wan Chai would be a cluster location for educational institutions. A canal would be constructed at Wan Chai (near today’s Canal Road Flyover) for sailing boats to load and unload goods conveniently. And barracks would be built from Central to Admiralty, as well as from the Lower Bazaar in Sheung Wan to the coast at Sai Wan. The planning was reflective of a governing philosophy that focused on economic development. The distribution of roads and public spaces and the buildings in the core district all had their administrative functions, and due consideration was given to the day-to-day life as well as the religious, cultural and recreational space of Europeans living in the city.\(^{18}\) Gordon’s idea was adopted by the government and was realised, step by step. This explains why the area from the Government Hill to Central’s coast is the centre of political, commercial and cultural activities today.

On 9 May 1844, Gordon was officially promoted to Surveyor General and was responsible for the staged construction of government buildings with administrative functions. The European buildings erected in the 1840s in the city’s core district were not only landmarks that gave the City of Victoria the impression of a European town, but also a prominent sign of the various administrative functions of its different districts. The temporary residence (Johnston House) of the Governor, who represented the pinnacle of power, was situated at the starting point of Queen’s Road, halfway up the hill, and was built between 1842 and 1843. In 1879, the building was purchased by Emmanuel R. Belilios, the general manager of the Hongkong and Shanghai Banking Corporation and a Legislative Council member; it was renamed Beaconsfield Arcade in 1889 in honour of British Prime Minister Benjamin Disraeli (Earl of Beaconsfield). The building was then sold to the Missions étrangères de Paris for 380,000 Hong Kong dollars in 1915, and was rebuilt as an administrative building for the French Mission in 1917. After

\(^{17}\) CO129/4, ‘Despatch from Colonial Land and Emigration Office’, 9 December 1843, pp.216–220.  
\(^{18}\) CO129; Ho Pui-yin, Challenges for an Evolving City: 160 Years of Port and Land Development in Hong Kong, Hong Kong, Commercial Press (HK), 2004.
the Second World War, it was used for a time as the provisional government’s headquarters. From 1953 to 1997, the building was used as offices for multiple government departments. It was declared a historical monument in 1989 and, after refurbishment, served as the Court of Final Appeal of Hong Kong from 1997 to 2015. On 8 September 2015, the Court of Final Appeal was relocated to the Legislative Council Building in Central. The former French Mission Building has been taken over by the Department of Justice and is to be used by institutions providing mediation and legal services. The northern part of Hong Kong Island (the area from today’s Admiralty to Sai Ying Pun) encompassed important military locations – military buildings included the Murray Barracks, the Victoria Barracks, the Explosives Magazine Compound and the British Military Hospital. Next to the Governor’s temporary residence was the Central Police Station, responsible for law enforcement and public order, as well as the Victoria Prison and the Central Magistracy. St John’s Cathedral, a centre of religious activities, was also close by, while the office building of the Harbour Master’s Office (responsible for overseeing commerce) was situated at the corner of today’s Wyndham Street. The coastal area on the north side of Hong Kong Island was the operation base from which foreign firms developed their trades. While private enterprises eagerly built piers, dockyards and godowns, the Harbour Master’s Office (today’s Marine Department) and the Post Office also had piers for loading and unloading goods. The area around today’s Wan Chai and Happy Valley served as a base for cemeteries, religious groups and schools.19

Private firms were the primary force driving the city’s development. Before the first land sale by auction, Pottinger, the first Governor of Hong Kong, classified land into marine, inland and bazaar lots according to locations. Land use was not expressly provided for, and the market determined the land price by its location. Most successful bidders developed their land on the basis of mixed commercial and residential uses. For example, piers were built by trading companies in front of their buildings, using the ground-level shops for commercial use and at the same time making available guest rooms. While there were Chinese participating in bidding for the Upper Bazaar (around today’s Wellington Street) land in the first land sale in the early 1840s, the government, in the 1850s, consciously developed Central as a commercial district for Europeans and gradually drove those Chinese who had opened their businesses in Central out of the district into Sheung Wan. The government did not have comprehensive plans for the development of Sheung Wan, which was mostly inhabited by the Chinese. Using respect for the Chinese traditional culture as an excuse, the government neglected the management of public hygiene in Sheung Wan as the district gradually became a densely populated Chinese area. In 1888, to prevent sanitation problems in the Chinese communities from spreading to the European communities, the government even deliberately designated specific European residential areas that were off limits to the Chinese.

The colonial government was aware of the importance of open space in the city’s development. By the 1860s, cultural and recreational facilities in the European style had been completed. The Government Gardens, which existed beside the Governor’s residence, were also known as ‘Garden for the Chief of Soldiers’, as the Governor was also the Commander-in-Chief of the British Forces Overseas Hong Kong. In 1848, the then Registrar General, Charles Gutzlaff, proposed at the Royal Asiatic Society the construction of a public garden. This proposal was accepted by the government in 1856 and, on 12 October 1861, the Garden Committee was established.20 The proposal was eventually realised in the 1860s by the Surveyor General’s Office. Thomas McDonaldson was appointed as the curator, overseeing the construction of the public garden on the land which had been the Government Gardens. The garden’s plants and their seeds were mainly imported from Britain and Australia. The garden was inaugurated by Governor Lord Rosmead and officially opened to the public in 1864. The Parsee community even made donations to provide for regular performances by a military band in the garden. In 1870, the government promulgated the Public Gardens Ordinance;21 and the garden was renamed the Botanical Gardens in 1871.22 Charles Ford was recommended by Sir Joseph Hooker, Director of Kew Gardens, to be Superintendent of the Government Gardens and Tree Planting Department. He assumed office on 13 May 1871, taking charge of all matters in relation to plants and trees, as well as the tree-planting in the Government Gardens and by the roads and the afforestation of hillsides.23 At first, the Botanical Gardens only had various types of plants as well as a collection of trees and flowers of commercial value to Hong Kong planted for the general public’s appreciation. Later on, however, the Public Gardens Advisory Committee was established and held the first Flower Show in 1872. By 1878, the Hong Kong Herbarium was added to the Botanical Gardens, making the Botanical Gardens a botanical centre in the Far East.24 The Botanical Gardens were not only a green space in the city’s core district, but also a driving force in promoting botanical research.

The cultural activities of the European bourgeoisie also began taking root in Hong Kong. The old City Hall, designed by French architect A. Hermitte and officially opened by Prince Alfred, was Hong Kong’s cultural centre in the late-nineteenth-century Hong Kong that promoted European bourgeoisie

20 Hong Kong Government Gazette, Hong Kong Government, 12 October 1861, p.315.
21 Leung Ping-wa, ed., Xianggang zhongxiqu fengwu zhi (Heritage of the Central and Western District, Hong Kong), Hong Kong, Central and Western District Council, 2011, p.285; Wu Hao and Zhang Jianhao, eds, Xianggang laohuajing zhi shenghu jiumao (Hong Kong Reading Glasses – Old Memories of Livelihood), Hong Kong, Huangguan chubanshe (Xianggang) youxian gongsi, 1996, p.155.
culture. The building’s structure and functions were modelled on the social life of the European upper class – with a 569-seat royal theatre, the magnificent St George’s Hall and St Andrew’s Hall, music rooms, a public library, conference rooms, a museum and offices for the Hong Kong General Chamber of Commerce. Balls, concerts, conferences and lectures were often held in the halls. The Morrison Library, an integral part of the public libraries, already had 8,000 books in 1871. In the first half of the twentieth century, the old City Hall gave way to economic development, and its main building was converted into the headquarters of the Hongkong and Shanghai Banking Corporation in 1933, while the rest was used as the clubhouses of private clubs, including those for the military, between 1934 and 1946. In 1947, it was redeveloped into the old Bank of China building.

The landmark buildings in Central imitated the European building style of the time. Examples included: Murray House (Government Headquarters), Flagstaff House and the clubhouse of the Hong Kong Club, built in 1846; St John’s Cathedral, the foundation of which was laid in 1847 and construction completed in 1849; the Central Police Station, the Victoria Prison and the Central Magistracy, built in the 1840s; the Government Gardens built in 1864; buildings including the old City Hall, which was built in 1869; and the Supreme Court, completed in 1911. They all had European characteristics: stone pillars, semi-circular window heads, geometric decor for the doorframes, Roman bellfries, Gothic spires, castles from the European Middle Ages, and so on. The construction not only exuded aesthetically the elegance of European cities, but also corresponded functionally to the Western administrative mode of operation. Central was like a miniature British city. On the other hand, the construction in Sheung Wan was funded by the Chinese. From the design to the materials, the structures adopted the standards used by the common people under the Qing rule. They were of crude design and high density, contrasting strongly with the European design in Central.

Construction

Roads

Roads are like blood vessels in the human body. The design of a city’s road network illustrates its government’s jurisdictional purview, while serving as an important facility for enhancing its economic development. To establish the city’s core area, the colonial government first built Queen’s Road on the northern coast, which ran eastwards and westwards, while streets leading to Queen’s Road ran northwards and southwards. The 50-feet (15 metres) wide Queen’s Road first headed east before extending west, as Jardine Matheson had already established its foothold at East Point and quite a few buildings had been built in the east. On 1 July 1848, a contractor from Wuhua in Guangdong Province named Tsang Sin signed a contract with the then Colonial Secretary, William Caine, and Colonial Treasurer, William Thomas, for the formation works of Queen’s Road Central and the Government House, and paid a 300 silver dollar
bond as surety that the works would be completed on time.\textsuperscript{25} The works on Queen’s Road were completed by the end of the 1840s. A thoroughfare that wound through the northern coast of Hong Kong Island, Queen’s Road was the starting point for all visitors upon arrival in Hong Kong by sea. As the altitude of the terrain rose gradually from the low-lying coastal region towards the north, travelling along Queen’s Road upon arrival in Hong Kong had a connotation of presenting oneself before the Queen. At the beginning of the twentieth century, the colonial government built Statue Square near the pier where government officials would disembark, reinforcing the British overtones of the area. Queen’s Road, connecting the pier on the northern coast and the commercial and residential areas, ran along northwards and southwards, and was winding and narrow as a result of the constraints of the terrain.\textsuperscript{26} During the mid-nineteenth century, insufficient flat land proved to be the major obstacle in building roads on the rough and rugged terrain of Hong Kong Island’s northern coast. As a result, the geographical and physical environment dictated the distribution of roads.

The Praya, built in the nineteenth century on the northern coast of Hong Kong Island, was between 50 and 100 feet wide and used by both pedestrians and carriages. The method adopted to build this road was similar to that employed in land reclamation. First, a seawall was built at the coastline, and the space between the seawall and the coastal area was then filled up. The seawall not only broadened the harbourfront, but also smoothed out the coastline to facilitate the docking of ships and loading and unloading of cargo. Government files showed that the construction of the harbourfront and seawalls was a recurrent government expenditure in the nineteenth century, accounting for a total of 70,620 pounds sterling over the 38 years from 1844 to 1882.\textsuperscript{27} Such works were mainly carried out between 1859 and 1867, indicating that harbourfront works were a major construction project of the City of Victoria in the 1860s. The roads and facilities along the coast facilitated entrepôt trade. From 1889 to 1903, the government spent millions of Hong Kong dollars on extending the harbourfront northwards by 75 feet, which began from the Hong Kong and China Gas Works in Shek Tong Tsui in Sai Wan in the west and stretched east to Murray Pier in Central. A total land area of 58.5 acres (23.68 hectares), 10,200 feet long and 250 feet wide, was ultimately obtained by reclamation,\textsuperscript{28} primarily for the construction of a new road to address transport needs. The original Praya was renamed

\textsuperscript{25} HKRS No. 149, D & S No. 2/81, ‘Bonds for $300 by Affat as Surety for Assen the Contractor to Cut and Level Site for New Government House’.


\textsuperscript{28} ‘Report of the Director of Public Works’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1893–1903; ‘Praya Reclamation Scheme’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1889, pp.23–30; Ho Pui-yin, Challenges for an Evolving City: 160 Years of Port and Land Development in Hong Kong, Hong Kong, Commercial Press (HK), 2004, p.73.
after the tenth Governor of Hong Kong (in office between 1887 and 1891), George William Des Voeux, and was called Des Voeux Road. In 1890, Prince Arthur, Duke of Connaught and Strathearn, visited Hong Kong when the new Praya was being built, and the government consequently named it Connaught Road, after his title. Queen’s Road, Des Voeux Road and Connaught Road were the main passages running through the heart of the city, and their importance is reflected in the fact that they were all named after significant establishment figures of the time.

Although Hong Kong’s territory extended to the Kowloon Peninsula in 1860, the peninsula was used by the British as a military stronghold. Thus, commercial activities remained primarily on Hong Kong Island. Robinson Road, leading from Mody Road in Tsim Sha Tsui northwards to Austin Road, was the earliest main transport avenue developed on the Kowloon Peninsula. The road was named after the fifth Governor of Hong Kong, Hercules Robinson (1824–1897), who was in office between 1859 and 1865. Land reclamation was conducted at the end of the nineteenth century for the construction of a railway terminus at the southern end of the Kowloon Peninsula. After reclamation in Tsim Sha Tsui Bay, Salisbury Road (its Chinese name changed after 1970 to what it is today) extended east, connecting with Robinson Road, which extended south.29 After 1909, Robinson Road was renamed Nathan Road, after Mathew Nathan, the 13th Governor of Hong Kong, who was in office between 1904 and 1907. (See Figure 1.2.)

In the 1870s, the government began developing the western part of the Kowloon Peninsula (the area around Yau Ma Tei today) by way of public auction. In 1876, the government sold Kowloon Marine Lot Nos 29, 30 and 31, which included the seabed from today’s Temple Street in Yau Ma Tei in the east, to Kansu Street in the south, Reclamation Street in the west and Wing Sing Lane in the north. The lots allowed their purchasers to undertake reclamation and build sections of Station Street (renamed Shanghai Street in 1909). The roads in west Kowloon were named after various provinces and cities in China to reflect the community-driven nature of the area’s development. In 1899, the government again sold by public auction the waterfront west of Station Street, allowing purchasers to build Reclamation Street.30 The pace of development of roads in Kowloon in the second half of the nineteenth century suggests that the government was focused on building main roads that would run through the Kowloon Peninsula. At the same time, using private investments, the government sought to develop the areas to the west of the peninsula. The government’s intentions to rule the Chinese and foreigners separately at the time were obvious. The large-scale land reclamation works at the southern end of the peninsula were a result of coordination with planning for the Kowloon–Canton Railway terminus.

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As marine transport was a main form of transportation in the nineteenth century, trading companies and government departments strove to set up their headquarters haphazardly on the northern coast of Hong Kong Island, building piers, dockyards and godowns. From 1841 to 1845, the government spent 559 pounds sterling on building the first pier at today’s Chater Garden in Central: the Harbour Master’s landing steps were the first government-built pier.

**Figure 1.2** Street map of the Kowloon Peninsula in the nineteenth century
works, which included the Harbour Master’s temporary living quarters, only accounted for 1.2 per cent of total government spending from 1841 to 1844. Apart from the Harbour Master’s landing steps, the dedicated landing place for officials was by the shore of the Victoria Barracks.

From 1841 to 1882, Hong Kong spent up to 16,060 pounds sterling on building and maintaining piers, of which 11,389 pounds sterling was invested in building new piers, or 71 per cent of such total expenditure. The number of piers built or rebuilt during this period was estimated to be about 30, with each costing an average of 380 pounds sterling and mostly built within the City of Victoria. Piers built by the Chinese communities were not large in scale. One pier built in the Taipingshan District cost only 16 pounds sterling, illustrating the crudeness of its construction. According to the Hong Kong Blue Book and the annual reports of the Public Works Department, 120,300 Hong Kong dollars was spent between 1889 and 1901 on building Blake Pier, the construction of which began soon after the initial stages of the land reclamation works from Sai Wan to Central. This shows how much the government valued the pier. The project was contracted to Messrs Kinghorn & MacDonald and supervised by J.F. Boulton and J.R. Mudie of the Public Works Department. The pier was 200 feet (60.96 metres) long and 40 feet (12.19 metres) wide, with its foundation made up of 126-feet (38.40 metres) wide granite ashlar, and protruded 40 feet (12.19 metres) from the harbourfront, with four sets of landing steps each on both sides. The pier was built with concrete, and was the largest pier in Central from the end of the nineteenth century to the early twentieth century. Owing to difficulties encountered in the construction of piles, the project took longer than expected to complete. Blake Pier, which commenced construction on 1 December 1889 and was completed in November 1900, was unveiled by Governor Henry Blake and opened to public use on 29 November the same year. When Hong Kong was struck by a strong typhoon in 1905, the roof of Blake Pier suffered serious damage, causing the government to build piers with a concrete and steel structure.

On 5 January 1897, the government rebuilt Murray Pier, using 5,989 cubic feet of granite ashlar, 63 cubic yards of lime concrete and 628 cubic yards of cement concrete. These concrete-built piers were considered large-scale
projects at the time, and signified the importance of entrepôt trade for Hong Kong at the end of the nineteenth century.

The people of Hong Kong have a strong emotional tie to Queen’s Pier (originally named Queen’s Statue Wharf). Queen’s Pier was actually completed after Blake Pier. The first Queen’s Pier was even more primitive than Blake Pier and Murray Pier, with its history being traced back to 1899. The naming of Queen’s Pier was deeply connected to Statue Square. After the completion of the land reclamation works at the harbourfront outside the old City Hall in 1896, the government built Statue Square at the junction between Connaught Road and Wardley Street, and had plans to build the Supreme Court near the square, as well as Wardley Street Wharf at the harbourfront opposite the square, which would replace the government pier close to Victoria Barracks. On 19 June 1897, the Governor announced that a fireworks display would be held over the harbour and forbade any Chinese without a pass from going to Wardley Street Wharf, thus showing that completed in 1897, a year after Statue Square was built, the wharf area was reserved for Europeans. By comparing maps of Central at the end of the nineteenth century and the beginning of the twentieth century, one can see that Wardley Street Wharf was situated at the same location as Queen’s Statue Wharf. In January 1899, the Government Gazette proclaimed multiple piers in Central, including Queen’s Statue Wharf, to be off limits to livestock. This piece of information is the earliest mention of Queen’s Statue Wharf in any official records, and it is reckoned that Wardley Street Wharf was renamed Queen’s Statue Wharf in 1899. According to records of the Legislative Council of 12 July 1904, Legislative Council members Gershom Stewart and A.M. Thomson inquired as to whether the government would improve the facilities of Blake Pier and Queen’s Statue Wharf, to which the Colonial Secretary’s reply was that Queen’s Statue Wharf was a temporary construction, thus showing that the structure of Queen’s Statue Wharf was very primitive at the beginning of the twentieth century.

The government had proposed rebuilding Queen’s Statue Wharf in 1906, 1908 and 1910, but such proposals never came to fruition. At a Legislative Council meeting held on 15 September 1910, Governor Francis Henry May, when approving the public expenditure for the year 1911, set aside 30,000 Hong Kong dollars for the reconstruction works of Queen’s Statue Wharf. However,
official records of the government show that, before the wharf was rebuilt in 1921, the government did no more than repeated repairs and maintenance. In November 1920, Maurice Fitzmaurice visited Hong Kong and proposed extension plans for the old Queen’s Statue Wharf. The Public Works Committee discussed the plans and ultimately approved reconstruction, thus officially commencing such works. Built with concrete, the new pier was 160.7 feet long, 41.3 feet wide and 16.8 feet deep. It was supported by 80 concrete piles that were 60 to 68 feet tall, with a roof made of steel to withstand typhoons. The basic construction of the new Queen’s Statue Wharf was completed by the end of 1922, with follow-up works carried out in 1923 and 1924. Total construction cost amounted to 204,000 Hong Kong dollars.

Queen’s Statue Wharf was the first landing spot for principal government officials on their arrival in Hong Kong, allowing them to see the statue of Queen Victoria in Statue Square immediately after disembarking. Its significant political implication indicates that the wharf not only served transport functions, but also was a political tool in shaping the city’s image. Owing to its unique architectural features, Queen’s Statue Wharf was an important landmark of Central. It was situated on the most expensive land in Central, off limits to the Chinese without a pass whenever important ceremonies were held there. Queen’s Statue Wharf, Murray Pier, Blake Pier and Ice House Street Pier (later renamed Star Ferry Pier) in Central all forbade the transport of livestock (the government only allowed the transport of livestock at the Yau Ma Tei Police Station Pier every day from seven o’clock in the morning to five o’clock in the afternoon, and livestock transport at the Hung Hom Pier at the same hours). The piers, therefore, were not a daily transport facility for the general public at the time, but rather something for the privileged or economically celebrated and businessmen. For the average citizen, taking a ferry ride was probably a major event in one’s life.

Reservoirs

The construction of reservoirs was the most costly of the various infrastructure works in urban construction. It was also the most difficult, as the works were unique to Hong Kong, without examples from other cities to follow. Such construction plans would be hard to realise without good planning in years of tight finances. In the 1840s and 1850s, the people of Hong Kong mostly relied on creeks, streams and groundwater sources to meet their daily fresh water needs. After the Taiping Rebellion in 1850, Hong Kong’s population grew 46 Hong Kong Blue Book, Hong Kong, Noronha & Co., 1911, F40–F41; Hong Kong Administrative Reports, Hong Kong, Noronha & Co., 1911, Appendix P, p.22.
continuously. As Hong Kong lacked rivers and lakes with an abundant supply of water, it was impossible to satisfy the growing population’s needs for fresh water by solely relying on scarce natural water sources.

On 14 October 1859, the government offered a reward of 1,000 pounds sterling to publicly solicit proposals to develop water sources. On 29 February 1860, S.B. Rawling, Clerk of Works, Royal Engineers, suggested building a man-made reservoir in the Pok Fu Lam valley to collect rainwater and then, by making use of the higher terrain of the Pok Fu Lam valley and the principle that water flows downwards, to carry the collected rainwater through aqueducts to densely populated regions in Central and Sheung Wan. His proposal was adopted by the government. With the first reservoir, which was built in 1863, the people of Hong Kong began drinking fresh water from reservoirs that store rainwater, and these reservoirs have become a unique characteristic of Hong Kong. At its completion, the Pok Fu Lam Reservoir only had a capacity of 2 million gallons (9.08 million litres). With the population of Hong Kong standing at 124,000 in 1863 and assuming each person consumed 4 gallons (18.16 litres) of water daily, the daily water consumption of Hong Kong would be 500,000 gallons (2.27 million litres). The Pok Fu Lam Reservoir could therefore only supply four days’ consumption for the entire population of Hong Kong at the time. According to the statistics in the Key Facts, August 2015 of the Water Supplies Department, in 2014 Hong Kong consumed an average of 2.63 million cubic metres (2.63 billion litres) of fresh water daily, equivalent to an annual total of 959 million cubic metres (959.5 billion litres). The Census and Statistics Department estimated Hong Kong’s population to be 7.27 million at the end of 2014, which means that each person in Hong Kong consumed an average of 0.362 cubic metres (362 litres) of water daily, a twentyfold increase over 1863.

As the population climbed, the government employed vast economic resources in building additional reservoirs to meet people’s need for fresh water. The government built the Tai Tam Water Supply System in the Southern District on Hong Kong Island from 1883 to 1917, raising the capacity of reservoirs to 2.2 billion gallons (10 billion litres), and introduced new water pumps to improve the efficiency of the water supply system. In 1917, Hong Kong’s population was about 540,000, and the Tai Tam Water Supply System could supply 11 gallons (50 litres) of fresh water for each person daily. The government further built the Shing Mun Reservoir, which has a capacity of 3 billion gallons (13.62 billion litres), between 1929 and 1939, so that each day an average of up to 3.5 to 4.5 million gallons (15.89 to 20.43 million litres) of fresh water would be conveyed to districts throughout Hong Kong by submarine pipelines.
In the few decades after the war, collecting rainwater by building reservoirs remained the primary source of fresh water for the people of Hong Kong. As the result of a rapidly growing population and abundant economic resources, the new reservoir projects grew larger in scale. By the 1950s and 1960s, newly completed reservoirs included the Tai Lam Chung Reservoir (with a capacity of 5 billion gallons (22.7 billion litres)) and the Shek Pik Reservoir (with a capacity of 5.4 billion gallons (24.52 billion litres)). Although both of these reservoirs are larger than the Shing Mun Reservoir (which was the largest reservoir before the war), they still proved insufficient to meet the rapidly rising need for fresh water after the war. The Plover Cove Reservoir and the High Island Reservoir, built in 1968 and 1979 respectively, were epoch-making constructions – the design philosophy and practical functionality behind the construction of these reservoirs are a testimony of the rapid pace with which Hong Kong developed as a society. Utilising the topography of the Tolo Harbour, the Plover Cove Reservoir was the largest coastal lake in the world when it was built, with a capacity of 51.7 billion gallons (234.75 billion litres). The High Island Reservoir, built with the benefit of the experience from the construction of the Plover Cove Reservoir, was even larger in scale and had a capacity of 60 billion gallons (272.44 billion litres), thus helping to solve Hong Kong’s water supply problems. The annual rainfall in Hong Kong is very unevenly distributed. According to the yearly average rainfall recorded by the Hong Kong Observatory from 1883 to 2014, the average annual rainfall for those 131 years was 2,256 mm.54 (from 2010 onwards, the Hong Kong Observatory began adopting a different calculation method – calculating the average rainfall with the use of the standard climate normal between 1981 and 2010). As the annual rainfall for 1997 was 3,343 mm and the climate normal before 1981 was not included in the calculations, the official average annual rainfall for 2014 in Hong Kong was 2,399 mm.55 However, the rainy season is mostly concentrated between May and September each year, with a drastic variation in rainfall between the wet (May to September) and dry (October to April) periods. In a dry year like 1963, when the annual rainfall was only 901 mm,56 the rainwater collected was clearly insufficient to meet people’s needs. It was not ideal to rely on rainfall to solve Hong Kong’s water supply problems, for, if there were no rain, there would be no rainwater to collect regardless of how large the reservoirs were. Therefore using rainwater for drinking was only a solution compelled by circumstances. An insufficient fresh water supply plagued the overall development of Hong Kong.

On the other hand, the building of reservoirs required that catchment areas be reserved close to the reservoirs, so that catchwaters could be built to channel

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55 Summary of Meteorological Observations in Hong Kong, Hong Kong Royal Observatory, 1993–1999.
rainwater into the reservoirs and to drain away torrents during the rainy season. To minimise the loss of rainwater and slow down surface erosion by the elements, plans that would facilitate the drainage of water, such as horsetail trees, slash pines, forest grey gums and lemon-scented gums, were planted in catchment areas in abundance. These catchment areas therefore have become Hong Kong’s green areas, and the reservoirs built to supply fresh water are a unique characteristic of Hong Kong and great picnic destinations for the people of Hong Kong during the holidays. (See Table 1.1.)

The City of Victoria in the nineteenth century had all the essential political, cultural and religious infrastructure of a European city. Balancing the interests of different sectors, the city provided Europeans with space to develop their political, economic and daily life activities. Furthermore, in response to the city’s unique environment, a great deal of human and material resources were employed to build the basic and important infrastructure required for the establishment of an entrepôt, which included seawalls, main roads and piers, while the construction of reservoirs proved to be investment projects of the largest scale. The spending of government resources prescribed the focus of development on the northern coast of Hong Kong Island and the area south of Government Hill in the second half of the nineteenth century. Western District of Hong Kong Island was not mentioned in the blueprints of completed projects, indicating that this district was developed at a later stage.57 The city’s reliance on rainwater for its survival was only altered in the 1960s, when China agreed to supply Hong Kong with fresh water from the Dongjiang (East River).

Crises

Fire disasters: land reclamation

Since the City of Victoria was built on the northern coast of Hong Kong Island,58 the population of Hong Kong had continuously grown. The topography of Hong Kong Island is hilly and tilts from the north to the south, with the northern part composed mostly of land that is mountainous with an altitude of 250 to 300 metres. Only a very small area of flat land is available for development. In order to accommodate the growing population and develop as an entrepôt trade centre of the Asia-Pacific region, Hong Kong had to make use of new technology in construction to solve its housing, water supply and transport problems. Of the various Western construction techniques, land reclamation was most useful for solving the problem of land shortage in the city’s core district. The newly reclaimed land was in fact located within the core district. In other words, the core district of the city was mostly built by manual labour. The realisation of land reclamation plans at that time faced as many challenges as it does today. Apart from insufficient resources, there was also obstruction by private landowners, as

58 Friend of China and Hong Kong Gazette, 7 April 1842.
Table 1.1 Construction year and scale of Hong Kong reservoirs

<table>
<thead>
<tr>
<th>Reservoir</th>
<th>Establishment</th>
<th>Total</th>
<th>1996</th>
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<tr>
<td></td>
<td>Year</td>
<td>Reservoir storage ('000 gallons ('000 m³))</td>
<td>Total area of catchment (acre (km²))</td>
<td>Expenditure (HK$'000)</td>
</tr>
<tr>
<td>----------------------------------</td>
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<tr>
<td>Pok Fu Lam Reservoir</td>
<td>1863</td>
<td>2,000</td>
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<tr>
<td></td>
<td>(9)</td>
<td></td>
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<tr>
<td>Tai Tam Reservoirs</td>
<td>1889</td>
<td>312,330</td>
<td>680</td>
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<td>1904</td>
<td>22,400</td>
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<tr>
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<td>(102)</td>
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<td>1908</td>
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<tr>
<td></td>
<td>(956)</td>
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<td></td>
<td>1918</td>
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<td>(6,455)</td>
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<td>1899</td>
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<td>(138)</td>
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<tr>
<td></td>
<td>1906</td>
<td>352,500</td>
<td>438</td>
<td>1,234</td>
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<tr>
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### Table 1.1 (continued)

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<thead>
<tr>
<th>Reservoir</th>
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<th>Total</th>
<th>1996</th>
<th>2015</th>
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<tr>
<td></td>
<td>Year</td>
<td>Reservoir storage ('000 gallons ('000 m³))</td>
<td>Total area of catchment (acre (km²))</td>
<td>Expenditure (HK$'000)</td>
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<td>33,150</td>
<td>96</td>
<td>164</td>
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<td></td>
<td>1931</td>
<td>185,500</td>
<td>90</td>
<td>519</td>
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<tr>
<td>Kowloon Byewash Reservoir</td>
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<td>116,100</td>
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<td>1926</td>
<td>185,500</td>
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<td>519</td>
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<tr>
<td>Shing Mun Reservoir</td>
<td>1939</td>
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<td>8,664</td>
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<td></td>
<td>1890</td>
<td>4,420</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>1939</td>
<td>3,000,000</td>
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<td>8,664</td>
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<td>1931</td>
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<td>1939</td>
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<td>Reservoir</td>
<td>Year</td>
<td>Capacity</td>
<td>Storage</td>
<td>Peak Storage</td>
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<tr>
<td>------------------------</td>
<td>------</td>
<td>----------</td>
<td>---------</td>
<td>--------------</td>
</tr>
<tr>
<td>Lower Shing Mun Reservoir</td>
<td>1965</td>
<td>950,000</td>
<td>4,318</td>
<td>4,299</td>
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<tr>
<td>Tai Lam Chung Reservoir</td>
<td>1957</td>
<td>4,500,000</td>
<td>2,000</td>
<td>2,000</td>
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<td>Shek Pik Reservoir</td>
<td>1963</td>
<td>5,515,000</td>
<td>8,959</td>
<td>8,959</td>
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<td>Plover Cove Reservoir</td>
<td>1968</td>
<td>37,378,000</td>
<td>407,000</td>
<td>435,000</td>
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<tr>
<td>High Island Reservoir</td>
<td>1978</td>
<td>60,280,000</td>
<td>1,348,300</td>
<td>1,348,300</td>
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</table>

Note: * Statistics as at 1 December 2015.

MAKING HONG KONG

well as opposition from the British military. After the first large-scale reclamation project commenced in the 1850s, the government had intended to press on with land reclamation in earnest. However, it was only after some 30 years of disputes that the approval of various parties was obtained in 1899 to relaunch reclamation projects.

The first large-scale manpower-dependent land creation project in Hong Kong was actually sparked by a major fire that broke out on Wednesday, 28 December 1851 at 10 p.m. at the Lower Bazaar (today’s Jervois Street in Sheung Wan) and lasted until 5.30 a.m. in the early morning of 29 December 1951. It was a milestone for the expansion of the core district towards the west through reclamation. The fire started at Che-cheong Clothes Shop at No. 601, Lot No. 16 of Sheung Wan, only 150 feet from the warehouse of Gibb, Livingston & Co. in Central. The fire was most severe at 1 a.m. on 29 December, spreading eastwards to the present-day junction between Queen’s Road Central, Jervois Street and Wellington Street, southwards to Queen’s Road Central, westwards to the intersection of Jervois Street and Morrison Street, and northwards to the harbourfront north of Jervois Street. The fire affected an area of 189,792 square feet (about 4.4 acres).

During the fire, in order to stop it from spreading east into the Central districts, the army and the navy used 100-pound explosives to collapse houses to cut off the fire. The fire resulted in 450 houses destroyed, two lieutenants, R.A. Tomkyns and R.A. Lugg, killed, several servicemen injured, 200 Chinese missing, and some 30,000 pounds sterling worth of damage to property. Factors including the high density of houses, the large amount of stored goods, and a lack of sources of water for putting out the fire, as well as crude fire protection equipment, all contributed to the fire spreading rapidly and becoming out of control, and the site of the fire suffered severe damage as a result. The government, which had up to that point always been critical of the environmental hygiene and public order of the Chinese settlements in the coastal area around Taipingshan, saw the fire as an opportunity to give the Chinese community an overhaul.

After the fire, Surveyor General Gordon made plans for the first large-scale reclamation project at Praya Bonham Strand, Sheung Wan. The works commenced at the junction of today’s Wellington Street, Jervois Street and Queen’s Road Central and ended at the interchange of Jervois Street and Morrison Street. The project saw a 50-feet-wide praya by the waterfront, extending along Bonham Strand north. The materials used for reclamation were primarily taken from hills on Hospital Road, while some were construction waste from Taipingshan area. The estimated construction cost was 2.78 Hong Kong dollars per square foot. The government sold the marine lots publicly by auction, and the owners of these

60 Friend of China and Hong Kong Gazette, 3 January 1852, p.2.
marine lots had to bear the construction cost of piers, part of the reclamation works and seawalls. On the other hand, the government allowed the marine lot owners to collect a fee from members of the public who used the piers. By asking the private landowners to fund the reclamation works and the construction of piers and collecting Crown rent from these new landowners, the government managed to cut costs while at the same time raising revenue for the Treasury.

Most marine lot owners did not favour reclamation, as they had to shoulder the costs for reclamation in order to attain ownership of the reclaimed land. Furthermore, the original piers would not be able to remain in normal operation while the works were in progress, thus bringing economic loss to the owners. The reclamation works at Praya Bonham Strand were able to be carried out smoothly because of the fact that most of the owners were Chinese, who typically did not dare to oppose government policy. The only lots owned by European owners were Gibb, Livingston & Co. of Lot Nos 1 and 4, J.G. Mornson of Lot No. 6 and L.M.S. Chapel of Lot No. 191. Moreover, most of the leases for the lots were going to expire in two to three years. There was therefore little reason for owners with these leases to oppose reclamation. Under these circumstances, the government was able to reach agreements more easily with owners.62

The completed Bonham Strand was the centre of gold and silver trading by the Chinese at the end of the nineteenth century and the early twentieth century. The Chinese Gold and Silver Exchange Society, established in 1910, also moved into 52 Bonham Strand in 1933. The construction method of land reclamation by making use of materials from hills and building seawalls proved to be a model followed by reclamation projects to come. After the reclamation project of Bonham Strand, the government further proposed plans for the Praya Reclamation Scheme as well as reclamation in Central, in order to actively develop Hong Kong’s land resources.

The data on the Sheung Wan reclamation works disclose in detail the techniques and construction characteristics of early reclamation projects. The key part of the works was the building of the seawall. Once it was built, the seabed between the seawall and the coast was filled with sediment and rocks in order to connect the seawall to coastal land. The seawall was built using the method of Pierre-perdue, which was similar to the modern method of vertical seawall construction: using large rocks (each no smaller than 8 cubic feet in size) as its foundation, the seawall would have a gradient of 2:1 on the seaward side and 1:1 on the landward side.63 The interstices were then filled with rubble. The stonework above the seawall footings foundation was constructed of ashlar masonry. To ensure the strength and durability of the new seawall, the masonry was set in cement mortar in place of pure cement. The use of lime was not allowed in any part of the work.64

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62 *Friend of China and Hong Kong Gazette*, 3 January 1853, pp.2–3.
After being struck by the severe typhoon of 1874, the government proposed large-scale reclamation works along coastal areas in 1875. However, these proposals were never realised, owing to a lack of funds. By the 1880s, the seabed of the northern coast of Hong Kong Island had become increasingly shallow as a result of prolonged accumulation of alluvium from the Pearl River Delta. When the tide was low in spring, the shallow waters were under 20 feet deep. As the tonnage of ocean-going ships continued to climb, the waters could no longer allow for the berthing of the larger vessels. On 13 July 1887, Paul Chater, taipan of the Hong Kong and Kowloon Wharf and Godown Co., reintroduced discussion on the Praya Reclamation Scheme. This was because, during the reclamation works, dredging works could also be carried out to deepen the coastal channels and solve the berthing problems for ocean-going vessels. Moreover, with the price of land rising continuously, landowners stood to make a profit even after taking into account the construction costs and other losses. Chater’s proposal was therefore well suited for society’s needs at the time. With consensus reached between the government and the commercial sector, a reclamation scheme of the largest scale since the mid-nineteenth century commenced in 1889.

The land reclamation from 1889 to 1903 covered an area from the Hong Kong and China Gas Works in Sai Wan (today’s Whitty Street) in the west to Murray Pier in Central (today’s City Hall multi-storey car park) in the east. A total of 2 miles (about 3,218.6 metres) in length and creating 59 acres (23.9 hectares) of land, the reclamation project was the main reason behind the existence of Connaught Road and a range of new facilities. From 1921 to 1931 the government created a further 86 acres of land by reclamation from Central to Wan Chai. These two projects established the mechanism for future reclamation in Hong Kong: in order to save government spending, reclamation works would continuously be included in land to be sold, so that the works could be funded by the private sector; and, to ensure that the reclamation materials and construction techniques used by the private developers as well as the reclamation area would suit the government’s overall development plans, the government would specify the fixed completion date and specifications before selling the land to facilitate future regulation. This process not only increased revenue for the Treasury through the creation of land, but also utilised the economic power of the private sector in undertaking the reclamation works to develop coastal land. As for issues concerning the respective rights and obligations of the government and private landowners, such as construction costs, ownership of the newly created land, the determination of the land premium and Crown rent, and the future development of the land, they were dealt with in advance through contracts. In the second half of the nineteenth century, the City of Victoria gradually extended in a belt shape from Central and Sheung Wan to Sai Wan in the west, and subsequently to Wan Chai and Causeway Bay in the east.

By the first half of the twentieth century, the reclamation techniques used in Hong Kong had become rather mature. Apart from building facilities that could withstand storm surges and typhoons, the government also had to manage both the new and the old ancillary facilities of reclaimed land, for example the connection of new and old water pipes and sewerage pipelines, the convergence of
roads, traffic arrangements during construction, and so on. In the 1970s, before
the use of the band drains in speeding up settlement, the reclamation works in
Hong Kong mostly utilised the European method of rock-mounding in building
seawalls. Reclaimed land may only be built on after it has settled, allowing its soil
to lose moisture. While settlement was in progress, the government would use
the reclaimed land as small bazaars, allowing merchants to set up store and street
performers to perform. Such land was therefore called the ‘commoners’ night-
club’, and was a favourite among the general public looking for entertainment in
their leisure time.

In densely populated areas, land reclamation projects with systematic plan-
ing are a way for the government to expand a city’s core district. In carrying
out reclamation projects, one has to balance the society’s needs, its political and
economic development, and the interests of various parties. The reclaimed land
in the coastal areas on Hong Kong Island, the Kowloon Peninsula and the New
Territories has allowed the latest harbour facilities to be built up along the coast
towards both the east and the west. (See Table 1.2.)

Typhoons: redeveloping the harbourfront and building typhoon
shelters

Every year from June to October, Hong Kong is subject to typhoons moving
north from the Philippines towards South-east Asia and the South China Sea.
From 1956 to 2014, a total of 349 tropical cyclones (an average of 5.9 per year)
necessitating a tropical cyclone warning signal to be hoisted by the Hong Kong
Observatory were recorded. In the same period, as many as 919 tropical cyclones
were recorded within Hong Kong’s area of responsibility.65 ‘Typhoons usually
hit during the summer, and in the nineteenth century when buildings were still
quite primitive they caused severe damage to life and property.

Before the Hong Kong Observatory was established in 1883, there was no
professional department within the government responsible for observing and
recording the movement of typhoons, nor were there any specific procedures
for releasing information on typhoons. As a result, there was an almost com-
plete lack of data on typhoons at the time. After the establishment of the Hong
Kong Observatory, more detailed records of the direction of movement, average
hourly wind speeds and maximum gust of typhoons began to accumulate.
According to newspapers at the time, the strongest typhoons causing the most
serious damage before 1883 were those of 1867, 1870 and 1874.66 In particu-
lar, the typhoon that hit Hong Kong on 22–23 September 1874 was the most
ferocious, and was the strongest typhoon of the second half of the nineteenth
century. The city’s original constructions were almost completely destroyed by
the typhoon, and the number of deaths just a few days after the typhoon hit
was estimated to be as high as around 2,000, with the actual number of victims

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65 Hong Kong Observatory, Tropical Cyclones in 2014, Hong Kong, Hong Kong Observatory, 2015, p.86.
### Table 1.2 Statistics on land reclamation in Hong Kong over the years

<table>
<thead>
<tr>
<th>Fiscal year</th>
<th>Area reclaimed during the year (km²)</th>
<th>Total area reclaimed (km²)</th>
<th>Area of Hong Kong (km²)</th>
<th>Fiscal year</th>
<th>Area reclaimed during the year (km²)</th>
<th>Total area reclaimed (km²)</th>
<th>Area of Hong Kong (km²)</th>
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Note: The total area of Hong Kong in the financial year 2006–2007 became smaller in comparison with the previous year owing to a change of calculation method.

Sources: Hong Kong Lands Department, Architectural Services Department and Civil Engineering and Development Department.
expected to be much higher. Among those affected, the boat people, accounting for 17 per cent of Hong Kong’s population of 120,000 at the time, expected to be much higher. Among those affected, the boat people, accounting for 17 per cent of Hong Kong’s population of 120,000 at the time,67 suffered the most casualties.

The reports submitted after the typhoon to the Colonial Secretary on 30 September 1874 by the heads of various departments of the government, including the Captain Superintendent of Police, the Colonial Surgeon, the Director of Public Works, the Surveyor General and the Harbour Master, detailed the severity of the situation. The typhoon was at its strongest from 1 a.m. to 4 a.m. in the early morning of 23 September, and the 0.75-mile-long area from the busy old City Hall to Tung Kai Street (today’s Cosco Tower at Wing Lok Street), the 1-mile-long harbourfront from Tung Kai Street to the Mariner’s Club (the junction of Western Street and Des Voeux Road West, where the Western Police Station, or ‘Police Station No. 7’, was – this is now known as the Western District Headquarters and Western Police Station) and the seawall along the coast of East Point had all been destroyed and required reconstruction. None of the godowns or piers along the coast had been spared. The bodies recovered by the police included 604 Chinese and 17 Europeans, while the Office of the Registrar General recorded 712 drowned and 84 crushed under collapsed buildings. The number of casualties was so numerous that it was difficult to be accurate, with initial estimates reaching over 1,000. Drowned bodies were left floating across the harbour days after the typhoon, buffeted by the waves. Moreover, the sewage outfalls along the coast were blocked because of damage to the seawalls, causing sewage to flow backward. The stench of death hung over the city. In addition, 200 houses collapsed, two ocean-going vessels were stranded, eight ships sank, and hundreds of sailing boats and sampans were destroyed. Government buildings were also damaged to various degrees by the typhoon, with the Government Civil Hospital suffering the most severe damage: its doors and windows were damaged and the building’s top-floor ceiling was blown away. Other buildings with their roofs swept off by the typhoon included police stations, post offices, six primary markets of the City of Victoria, and public schools. Victoria Prison and Stonecutters Island Prison were also seriously damaged. The majority of plants in the Botanical Gardens were destroyed, and the trees in the city were also pulverised. The streets were blocked by trees that had fallen. Telegraph stations and gaslights in the city were destroyed and, as a result, the streets were left with no illumination at night. Devastation filled the City of Victoria, leaving almost no safe shelter. The damage caused by the typhoon made the government realise that construction materials were not strong enough to withstand typhoons.68 After disaster struck, reconstruction of the seawalls became a priority. Reclamation was also undertaken as part of the reconstruction works.

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67 The total population of 1874 is actually data from 1872. *Hong Kong Blue Book*, Hong Kong, Noronha & Co., 1874, p.122. From 1873 to 1876, the government did not conduct any census and only cited figures from 1872 as reference. *Hong Kong Government Gazette*, Hong Kong Government, 24 February 1877, p.81. Such figures are provided here as well for reference only.

In 1875, the government proposed large-scale construction of the Praya. Governor A.E. Kennedy appointed Registrar General C.C. Smith, Surveyor General J.M. Price, Superintendent of Fire Brigade C. May, P. Ryrie of Turner & Co., and H. Rowlock of Gibb, Livingstone & Co. to a committee discussing the reconstruction of the Praya and the large-scale reclamation works from west to east along the coast. The plans also included the waterfront that would connect the barracks in Central and Wan Chai. Districts with wider reclamation areas included the District No. 2 (Sai Ying Pun) and District No. 4 (Sheung Wan) of the City of Victoria, and also the area from White’s Lane at Sheung Wan’s harbourfront (today’s Wing Wo Street in Sheung Wan) to the Government Wharf in front of the Cricket Ground in Central, the navy’s dockyard and the coastal area of the neighbouring buildings of the British military. (See Figure 1.3 and Table 1.3.) In order to reinforce the seawalls against typhoons, the government proposed using new construction technologies that increased construction costs. The owners of marine lots in Sai Wan and Sheung Wan were invited to participate in the plans. However, although the original owners were guaranteed the ownership of the reclaimed land by the government, most were only willing to pay for the basic reclamation works and not the additional works for reinforcing the seawalls. The government was facing economic difficulties after the typhoon and could not afford such major expenditure. It was also difficult to find financial backers other than the prospective owners of the reclaimed land. The committee therefore had no choice but to propose a loan from the British government.

The government planned to borrow a loan of 214,500 Hong Kong dollars from the United Kingdom at an interest rate of 5 per cent per annum, to be repaid over 15 years. With an annual payment of 15,000 Hong Kong dollars, the loan principal repayment amount would be 14,250 Hong Kong dollars after deducting interest of 750 Hong Kong dollars. The 15-year loan would have been sufficient to cover the reclamation costs. One thing of note is that the British military had always opposed reclamation in front of the land it owned before the typhoon hit Hong Kong in 1874. However, the typhoon had blocked the drains and sewers of the coastal land owned by the British military, causing water to accumulate and sewage to backflow during heavy downpours. In addition, after the typhoon struck, local residents disposed of garbage by discharge along the coast, badly affecting the hygiene of the barracks. The British military therefore also supported the reconstruction of the harbourfront and its expansion by way of reclamation. Regrettably, the government failed to secure the loan in the end. With unfavourable economic conditions after the typhoon, Governor Kennedy was unable to implement the plan during his time in office.
Figure 1.3 Reclamation plan for Victoria Harbour in the late nineteenth century
The reclamation works from the Hong Kong and China Gas Works in Sai Wan to the Government Wharf in Central did not commence until 1889. Compared to reclamation works, building typhoon shelters requires less funds. The government’s building of the first typhoon shelter in Causeway Bay for boat people was also a response to the devastation the boat people suffered in the 1874 typhoon. Causeway Bay Typhoon Shelter was completed in 1883, and cost around 97,000 Hong Kong dollars to build.\textsuperscript{74} When it was first built, the breakwater was only 1,400 feet long\textsuperscript{75} and could not accommodate a lot of ships.\textsuperscript{76} It therefore could not offer sufficient space when typhoons struck. In December 1903, Legislative Council member Gershom Stewart proposed an expansion of the Causeway Bay Typhoon Shelter, which was approved unanimously in the Legislative Council. However, despite approval, the plan was not implemented, owing to insufficient funds. In 1904 and 1906, although being pressed by Legislative Council members and the Hong Kong General Chamber of Commerce, the government was still not able to expand the Causeway Bay Typhoon Shelter.\textsuperscript{77} On 18 September 1906, Hong Kong was again struck by a strong typhoon, which destroyed 3,653 ships and killed over 15,000, most of whom were boat people.\textsuperscript{78} The expansion of the typhoon shelter was thus again brought to the forefront, and in March 1908 the government accepted the proposal of the General Chamber of Commerce dated 16 July 1904, increasing the depth by 9 feet and expanding its area by 75 acres. In 1953, the government undertook reclamation works at the Causeway Bay Typhoon Shelter, and the typhoon shelter was moved north from its original location.\textsuperscript{79}

From the end of 1906 to the beginning of 1907, the Legislative Council considered building a new typhoon shelter at one of these locations: Cheung

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\textsuperscript{74} Report of the Director of Public Works for the Year 1909, \textit{Hong Kong Administrative Reports}, Hong Kong, Noronha & Co., 1910, Appendix O.
\textsuperscript{76} \textit{Huazi ribao} (Huazi Daily), 2 November 1906.
\textsuperscript{77} \textit{Huazi ribao} (Huazi Daily), 2 November 1906.
\textsuperscript{78} ‘A Review of Natural Disasters of the Past’, in Ho Pui-yin, \textit{Weathering the Storm: Hong Kong Observatory and Social Development}, Hong Kong, Hong Kong University Press, 2003, p.81.
\textsuperscript{79} \textit{Wah Kiu Yat Po}, 19 June 1960.
Sha Wan, east of Stonecutters Island, Kellett’s Bank in Causeway Bay, the harbourfront of Kennedy Town, and so on. In 1908, the Public Works Committee agreed unanimously that Mong Kok Tsui in Yau Ma Tei would be most suitable. The typhoon shelter, upon completion, would have an area of 166 square acres\(^{80}\) and was estimated to cost 1.54 million Hong Kong dollars.

On 7 March 1908, the Hong Kong government submitted the proposal and budget for the Mong Kok Tsui Typhoon Shelter to Britain for approval. On 2 September 1908, in order to make timely precautions against typhoons, the government purchased the hopper dredger \textit{St Enoch} from Messrs Punchard, Lowther & Co. to start dredging works at the site even before approval was obtained from Britain. The design plans of the typhoon shelter were considered and revised by engineer J.F. Boulton of the Public Works Department and other consulting engineers, and the new plans were approved by the Legislative Council in November 1909. Dredging works were completed by the end of January 1910. Construction works were contracted to Messrs Him Tai on 27 October 1910 at the lowest price, and included building a breakwater that was 3,325 feet long with a foundation 192 feet wide, as well as a 450-feet-long and 30-feet-wide concrete pier to be built on the south of the harbour by reclamation. Upon completion, the typhoon shelter area within the breakwater would cover 165 acres (0.67 square kilometres). The depth would be affected by tidal movement and would range from 9 to 18 feet, with 82 per cent of the waters at 12 feet deep and 56 per cent of the waters deeper than 15 feet. There were two entrances into the typhoon shelter: the northern entrance was 300 feet wide, while the southern entrance was 390 feet wide.\(^{81}\)

Building the Mong Kok Tsui Typhoon Shelter necessitated raising the level of Reclamation Street, which was originally adjacent to the sea, as well as relaying sewage and water discharge facilities. The government was also of the view that the houses with a frontage to the sea should be rebuilt, as they were damaged by lack of repair or even destroyed by typhoons or fires in some cases. However, when the redevelopment plans were introduced, the owners of Marine Lot Nos 29, 30 and 31 opposed the new reclamations and demanded that the government compensate them for the loss of value in their land as a result of losing their favourable coastal positions. The government paid 161,217 Hong Kong dollars as compensation to the owners of Marine Lot Nos 29, 30 and 31 in April 1911.\(^{82}\) The works spanned five years and were finally completed in August 1915 as scheduled. The typhoon shelter was unveiled by Governor F.H. May on 16 December that year. The works cost 2.21 million Hong Kong dollars, exceeding the originally estimated 1.54 million

\(^{80}\) ‘Correspondence Regarding the Typhoon Shelter at Mongkoktsui and the Proposed Temporary Increase in Light Dues’, \textit{Hong Kong Sessional Papers}, No. 24, 1908, Hong Kong, Noronha & Co., 1909, pp.506–507.


Hong Kong dollars by 670,000 Hong Kong dollars. On 2 September 1937, Hong Kong was again ravaged by a strong typhoon, and the space provided by the typhoon shelter proved insufficient. However, it was not until 1962 that the government would build additional typhoon shelters. In the 1970s, the government implemented a priority settlement housing programme for boat people voluntarily giving up their fishing vessels and settling inland. Hong Kong’s floating population has drastically dropped since. By 2015, the floating population only accounted for 0.2 per cent of the entire population of Hong Kong. (See Table 1.4.)

Carrying out reclamation works and building reservoirs and typhoon shelters – these were all Hong Kong’s responses in answer to nature’s challenges,
drawing on both human and material resources to strive for the city’s survival. Swift responses in the face of adversity have also helped develop a habit amongst the people of Hong Kong where speed is pursued in everything. The city’s numerous constructions served as the government’s means to drive urban development in its attempt to take the initiative in the city’s town planning. However, was infrastructure alone sufficient in meeting the needs of an ever growing population?

The bubonic plague: redeveloping the Taipingshan District

After the typhoon in 1874, not only did the city’s hygiene not improve, but it actually grew worse. This is because, while the population increased ceaselessly, the government had taken no measures to improve the environment. From January to May 1894, a bubonic plague broke out in Guangzhou, taking tens of thousands of lives. In May, the first case of the plague was found in the Taipingshan District in Hong Kong, and by June the bubonic plague had reached its peak. Some had speculated that this was due to the warm and humid weather at the end of spring being conducive to bacterial growth. From October 1893 to 16 May 1894, no rain had fallen in Hong Kong. In districts with a crowded living environment where residents already paid little attention to hygiene, the issue of cleanliness was even more neglected in periods of insufficient fresh water supply.

The abhorrent hygiene environment caused the disease to spread rapidly. The government hired Dr M. Wilm to conduct a study of the bubonic plague from 1894 to 1896. The doctor pointed out that the living environment of Chinese residents was overcrowded: small living areas that were generally one-tenth or one-fifteenth of those of Europeans. In 1894, the Chinese population was about 210,000, while the European population was only 6,000. A typical Chinese residence would be a three-storey stone cottage with small windows facing the street. Each floor would house around 16 to 25 residents, adding up to at least 48 residents in total in the tenement without a well-laid sewerage system. In the early stages of the plague, voluntary cleaning groups were organised, which included as members the voluntary servicemen of the Shropshire Light Infantry and the police. These groups, under the supervision of the Sanitary Board executive committee, disinfected the Taipingshan District with lime water. About 7,000 Chinese residences were quarantined for inspection, 350 of which were sealed off where the plague bacteria were found. However, Chinese residents

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84 ‘Medical Report on the Prevalence of Bubonic Plague in the Colony of Hong Kong during the Years 1895 and 1896’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1897, p.289; Huazi ribao (Huazi Daily), 21 June 1895, 30 December 1895.
85 Staff Surgeon Wilm, Epidemic of Bubonic Plague at Hong Kong in the Year 1896, Hong Kong, Noronha & Co., 1897, p.23.
were disgruntled by the government sending quarantine personnel into their homes for hygiene inspections, as they considered this a disturbance to decent ladies staying at home, and thus an affront to traditional ethics.  

According to the government’s medical reports, by mid-May in 1894 there were 150 confirmed cases of the plague, and over 70 were hospitalised daily because of the plague. Glass Works Hospital, a hospital managed by the Tung Wah Hospital, admitted some 200 patients, twice that of Tung Wah Hospital’s capacity. In fact, those willing to be admitted and treated were in the minority – the actual number of infected might well be far more than recorded numbers. At the end of May the number of deaths announced by the government was over 450, and by 15 June the number announced by the government had risen to 1,900. Among those infected, the rate of death of the Chinese was 93 per cent higher than that of Europeans or other ethnicities.

Commercial activities in Hong Kong were deeply impacted by the plague. A lot of business owners brought with them their employees and families and returned to Guangdong, while those who had plans to come to Hong Kong for business delayed such plans. By 15 June, the number of people leaving Hong Kong and returning to Guangdong reached 80,000 (accounting for 38 per cent of the population of Hong Kong). Of the population of 210,000, only 130,000 remained. As a result of a shortage of supply caused by the declining trade and commercial activities, the prices of food and daily goods soared 30 to 50 per cent. In addition, the Victoria Harbour was ravaged by two consecutive typhoons in September and October 1894. With the government at its wits’ end with the plague, the 11th Governor, William Robinson, ordered Sheung Wan and the entire district of Taipingshan to be sealed off and all residences within the districts demolished. Hong Kong was declared an infected city, and those infected with the plague were prohibited from leaving Hong Kong.

Ripon, a British engineer, was of the view that the Hong Kong government should immediately increase the capacity of Hong Kong’s two reservoirs, with the supply capacity of Tai Tam Reservoir to be increased by 80 million gallons. He also suggested that the government devoted resources to cleaning each house with a generous amount of water in order to destroy the bacteria. However, to increase the supply capacity of reservoirs was easier said than done. While the government had no way of improving the circumstances on water supply, the situation was worsened by the unfavourable weather conditions. Hong Kong experienced a drought year in 1895, with annual rainfall only at a

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87 Ripon, ‘Governor’s Despatch to the Secretary of State with Reference to the Plague’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1894, p.283.
88 Ripon, ‘Governor’s Despatch to the Secretary of State with Reference to the Plague’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 20 June 1894, p.286.
89 Ripon, ‘Governor’s Despatch to the Secretary of State with Reference to the Plague’, Hong Kong Sessional Papers, No. 21/1894, Hong Kong, Noronha & Co., 20 June 1894.
90 William Robinson, ‘Governor’s Despatch to the Secretary of State with Reference to the Plague’, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1894, p.288.
91 Ripon, ‘Governor’s Despatch to the Secretary of State with Reference to the Plague’, Hong Kong Sessional Papers, No. 21, Hong Kong, Noronha & Co., 20 June 1894.

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total of 45.8 inches (1,163 mm) – half of the yearly average. To conserve water, the government had to restrict water supply to three to four hours a day from April to June and from October to December that year. The average daily water supply per capita was only 7.7 gallons (35 litres) from April to June, while that of June to July was 9.7 gallons (44 litres). Some contaminated wells were sealed shut in order to impede the spread of the plague, thus further worsening the shortage of water supply. In 1895, the recorded number of deaths as a result of the plague was 2,000. It should be noted that the official number of deaths was based on records made of bodies found. There were still cases beyond count where the Chinese had dealt with the bodies privately. It is therefore undisputed that the plague was out of control.

From 4 to 29 January 1896, a further 45 cases of the plague were diagnosed in Hong Kong. The infected were immediately transferred to the Kennedy Town Hospital in the Western District for quarantine, and their houses were sealed off. From 25 February to 21 April the same year, the Sanitary Board’s quarantine personnel inspected Chinese houses every ten days, disinfecting 3,200 houses, or a total of 8,330 floors of residences. Abandoned bodies of the infected were found by the government in the streets, at the piers and in the sea. To prevent the spread of the plague, the government decreed that infected bodies must be buried with lime. The Chinese were also prohibited from leaving Hong Kong. Governor Robinson’s methods of quarantining patients for inspection were met with opposition from the Chinese, and an increasing number demanded to be allowed to return to Guangdong for treatment. The government in the end lifted the prohibition order on 21 March, allowing people to leave Hong Kong. Despite the various government measures, the plague remained uncontrollable. Of the 715 Chinese patients infected with the plague who were treated by the government from January to May that year, 639 died, representing a death rate of 89 per cent.

In 1896 the Government Analyst conducted a sampling survey on 40 wells in the Yau Ma Tei, Tsim Sha Tsui and Mong Kok districts in Kowloon and in Central and Sheung Wan, and found that the well water was severely contaminated by wastes from both humans and livestock. In a water well at 267 Queen’s Road West, the level of chlorine was found to be 373.8 milligrams per litre. The average chlorine level of the 40 wells was 106 milligrams per litre, whereas today people are worried about carcinogens where the level of residual chlorine is 1 milligram per 1 litre of water. The large quantity of chlorine in water at the time was due to people trying to sterilise their water by using bleaching powder, a method of sterilisation not unlike drinking poison to quench thirst. With the

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93 Joseph Chamberlain, Governor’s Despatch on the Incipience and Progress of the Bubonic Plague in Hong Kong during 1896, Hong Kong Sessional Papers, No. 27, Hong Kong, Noronha & Co., May 1896.
95 According to the report on the hygiene standards of Hong Kong’s fresh water published by the Water Supplies Department in 2000.
water supply contaminated by human and livestock wastes, the water had a high E. coli content, causing gastroenteritis in those who drank it, or other gastrointestinal diseases such as cholera and dysentery in more severe cases. The reason for such contamination of the water supply was overpopulation. The fresh water in the Chinese communities was of poor quality and insufficient supply. The physical safety of the residents at the time was truly worrying.

Dr M. Wilm’s report in 1896 showed that the bacteria of the plague could survive for 20 days in distilled water, 16 days in 200 millilitres of cultured samples taken from tap water and well water, and 6 days in 200-millilitre samples taken from seawater. In June, when the plague was spreading swiftly, Dr Wilm took water samples from three wells at Yau Ma Tei on the Kowloon Peninsula still in use at the time, and found that one well, which was situated in lowland and always overflowing, had a large quantity of the plague bacteria in its water, while the other two remained uncontaminated, owing to the fact that they were situated on higher ground and thus the water level was almost 4 yards away from the mouth of the wells.96 Apart from well water, water from rivers and the sea was also highly susceptible to contamination by bacteria. The entire harbour was under the threat of the plague in 1896. In September, the number of deaths announced by the government was 2,000. However, the actual number may well have been much higher than this. The government’s reluctance to disclose the actual circumstances concerning the plague was a sign of its helplessness against the plague.

Health reports from the end of the 1890s show that those who died of the plague were mostly from Central and Sheung Wan. In particular, the situation was most serious in the Taipingshan District. In 1861 the district had a population of only 18,000.97 This rose to 31,000 in 1891.98 By 1891, 272,000 square feet of private land was divided into 355 land lots in just 31 years. There were estimated to be about 400 tenement buildings, 76 of which had at least three infected residents per building. Assuming each tenement building housed some 70 residents, these small and densely populated land lots were stuffed with the poorest in society in terrible hygiene conditions. They were therefore the areas where the plague was most severe. Apart from the 272,000 square feet of private residence, the district was also home to the Chinese charitable organisation Tung Wah Hospital, the Pound Lane Police Station, No. 8 Police Station and the Taipingshan market. It could only be imagined that, with the police stations keeping public order and the hospital providing shelter to patients, there was little space left for any other activities. Such was the kind of place the Chinese lived in at the time.

On 17 September 1894, the Legislative Council passed the Taipingshan

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96 Staff Surgeon Wilm, Epidemic of Bubonic Plague at Hong Kong in the Year 1896, Hong Kong, Noronha & Co., 1897, p.27.
97 ‘Return of the Population and of the Marriages, Births and Deaths’, Hong Kong Blue Book, Hong Kong, Noronha & Co., 1861.
Resumption Ordinance, 1894 (or ‘An Ordinance for the Summary Resumption of Certain Crown Lands Situate in the Taipingshan District of the City of Victoria and for Other Purposes’) after the third reading. In March 1895, Surveyor General F.A. Cooper submitted the Scheme for the Improvement of the Resumed Area in the District of Taipingshan.99 The Surveyor General divided the district into 11 sections – A to K. In accordance with Ordinance No. 8 of 1894,100 the Surveyor General submitted the plans for ‘Enclosed Area Taipingshan, with Details of Lots’ in August 1895. The government accepted the proposal of Belilios and burnt down the district by fire starting from August that year. From August to October 1895, the wooden structures and houses on Taipingshan Street, Market Street, Upper Station Street, Square Street, Bridges Street and Tank Lane were the first to be demolished. At the same time, in order to avoid old gutters hindering the progress of the redevelopment of Taipingshan, new stormwater drains were laid from Hollywood Road to Caine Road. Demolition works were halted by heavy rainfall in February 1896, and were only half done by June. The entire project was not completed until 1898.101 A total of 6.2 acres (0.025 square kilometres) of land was resumed from private owners for replanning (Figure 1.4), as the government required that each adult should have on average a minimum of 21 square feet of living space. It was estimated that 820,000 Hong Kong dollars was paid for this private land.102 With these measures in force, the district lost 12,554 (40 per cent) of its population. By 1897, the population left in Taipingshan District was 18,784,103 such was the impact of the plague on the district.

In 1900, the government attempted to improve public hygiene in Chinese communities by introducing new waste disposal methods. Five public latrines, each with about 40 cubicles, were added in five locations with Chinese communities: in the east end of Wing Lok Street, Taipingshan District, at the slaughterhouse at the end of Queen’s Road West, So Kon Po and Gough Street. Some 2,000 to 4,000 Hong Kong dollars was invested in each of these public latrines, with the dry closets replaced with water closets. This was considered a public hygiene breakthrough at the time, as it not only changed the daily habits of the Chinese, but also introduced the use of water closets into the Chinese communities.104

In 1903, the plans for the redevelopment of Taipingshan District were publicised by the government. The most striking was Blake Garden, which was to be built in sections D and E in the middle area of the district after the houses there were burnt down. The garden would cover an area from Square Street in

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99 Hong Kong Government Gazette, Hong Kong Government, 30 March 1895, p.262.
100 CO129/264, ‘Sanitary Board . . .’, 7 September 1894, pp.83–86.
102 Hongkong Telegraph, 11 January 1895.
Figure 1.4  Map of Taipingshan District (1895)

the east to Po Hing Fong in the south, Pound Lane in the west, and Kat Cheung Street in the north. The entire eastern portion of Taipingshan District – the original lots in sections A and B – was to be replanned from the ground up. In the south-east, the Bacteriological Institute was to be built on land in section G (today’s Caine Lane) after clearance, and to the south-west of the Institute would be the staff quarters for the disinfection work staff of the Sanitary Board. No. 8 Police Station in the south would be expanded, as the houses in section G were to be demolished, and sections H and I in the west (today’s Rutter Street to Po Hing Fong) would be replanned as larger land lots after clearance. Inland Lot No. 700 (today’s Wa On Lane to Po Yan Street) was to be overhauled as the Chung Hing cinema. Section K, after clearance, would become a new wing of Tung Wah Hospital. While inland Lot No. 361 would continue to be used by Tung Wah Hospital, section F beside the hospital would become inland Lot No. 1356 after clearance and would be used by Tung Wah Hospital and would eventually become the founding site of Po Leung Kuk. A small portion of land in the north would be retained for private residential development, though at a much lower density.

According to figures published by the government in 1905, compensation paid for the resumption of Taipingshan District reached 821,000 dollars. Adding this to the 123,000 Hong Kong dollars of expenditure in relation to roads and sewerage systems, cost totalled 944,000 Hong Kong dollars. On the other hand, sale of private land after redevelopment brought in 171,000 Hong Kong dollars, and profits from the sale of construction waste from the clearance as reclamation materials amounted to 20,000 Hong Kong dollars, bringing total income to 191,000 Hong Kong dollars.

After redevelopment, the density of buildings was greatly lowered, with land available for private development reduced from 272,000 square feet (25,270 square metres) to 97,000 square feet (9,012 square metres). (See Table 1.5.) The redeveloped Taipingshan District has added public open space in the form of Blake Garden, an entertainment venue in Chung Hing Theatre, and health- and hygiene-oriented facilities including the Bacteriological Institute, quarters for the Sanitary Board’s disinfection, and public latrines. (See Figure 1.5.) These, together with the pre-existing Tung Wah Hospital and police station, made up a very complete set of public facilities that also served as a blueprint for the planning of future Chinese communities.

From 1894 to 1896, a large number of Chinese left Hong Kong for Guangzhou to escape from the bubonic plague, and the people around southern China were reluctant to trade with Hong Kong. According to statistics in

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Guangdong’s customs records, the number of people heading from Guangzhou to Hong Kong fell at an average rate of 10 per cent per annum over the four-year period 1894–1898. At the same time, the population moving from Hong Kong to Guangzhou was on the rise, with the highest rate of increase being recorded in 1898 – a 23 per cent increase when compared to 1897.108 Hong Kong’s economy was slowed down to almost a standstill, and the authorities faced major governing challenges. The Hong Kong government invited many experts from Britain to advise on the problem of the plague. As it was widely accepted at the time that the plague was spread by rats, the 12th Governor, Henry Arthur Blake, actively advocated rat eradication upon assuming office in 1898, calling upon the entire population of Hong Kong to participate and imposing a reward of 2 shillings per rat caught. In 1900, the people of Hong Kong got rid of up to 43,000 rats. However, despite the rising number of rat deaths, the hygiene situation barely improved. In the end the government found that some people were smuggling rats on to Hong Kong Island from the New Territories in order to earn the

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**Table 1.5** Land use comparison before and after the replanning of Taipingshan District

<table>
<thead>
<tr>
<th>Area</th>
<th>Before:</th>
<th>After:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lots leased or granted</td>
<td>272,021 (25,271.58)</td>
<td>Disposed of by public auction 46,631 (4,332.16)</td>
</tr>
<tr>
<td>Market and Police Station</td>
<td>11,492.5 (1,067.69)</td>
<td>Granted to Tung Wah Hospital, District Watchman’s Quarters, and Temple, Taipingshan Street 39,613 (3,680.17)</td>
</tr>
<tr>
<td>Roads</td>
<td>79,177.5 (7,355.83)</td>
<td>Utilised for Bacteriological Institute, Sanitary Board Quarters, Latrine and Bath House 28,169 (2,616.99)</td>
</tr>
<tr>
<td>Total</td>
<td>362,691 (33,695.10)</td>
<td>Laid out as public gardens (gross area including roads: 67,950) 47,700 (4,431.48)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Still available for sale 50,926 (4,731.18)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Devoted to roads, steps, lances, etc. 149,652 (13,903.13)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 362,691 (33,695.10)</td>
</tr>
</tbody>
</table>

Figure 1.5 Redevelopment plan for Taipingshan District (1905)

Source: Insanitary Properties Resumptions, Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1905.
reward. The rat eradication thus ended in confusion.\textsuperscript{109} Hong Kong would go on to live in the haze of the plague for the next decade.

**Governing**

The demarcation of Chinese and foreign residential areas

On 6 July 1843, when then Land Officer, Surveyor and Inspector of Roads Alexander T. Gordon\textsuperscript{110} was drawing up the building plans for the City of Victoria, the Chinese’s residential areas were intended to be mostly located in Sheung Wan. In the development plans for the city drafted by the first Governor, Henry Pottinger, in 1841, there was never a ‘Chinatown’ planned as a settlement area for the Chinese. In Pottinger’s plans, there was only a planned location for the bazaar. Among the pieces of land that the government offered for bidding by the private sector on 14 June 1841, a total of 268 pieces were bazaar lots, including the Upper Bazaar, consisting of 118 pieces of land of 504 square feet (14 feet by 36 feet) each, and the Lower Bazaar, consisting of 150 pieces of land of 800 square feet (20 feet by 40 feet) each. The Upper Bazaar is located west of today’s Aberdeen Street and north of Hollywood Road, around the area at Kau U Fong and Gough Street, while the Lower Bazaar is situated at today’s Jervois Street and Bonham Strand West. The first land sale did not prohibit Chinese participation. As the bazaar lots were smaller and thus would not require a large amount to invest in them, they attracted quite a few Chinese purchasers who were hoping to identify investment opportunities in Hong Kong. Therefore, there were a lot of Chinese landowners around Wellington Street and the Sheung Wan waterfront in the 1840s. Thus it can be seen that the extent of active territory of the Chinese in the early days was largely determined by commercial investment opportunities. While the government’s land development policies did not intentionally divide between Chinese and foreign communities, the disparate Eastern and Western cultures and the rapidly rising Chinese population had meant that each of the communities had created their own distinct and increasingly diversifying features based on their daily needs.

As Hong Kong’s status as an entrepôt continued to elevate and most of its commercial activities were concentrated in Central, the price of land in Central rose substantially. The military barracks at today’s Admiralty and the government department offices in Central had already occupied a large portion of the land in Central. The government very much intended to alter its original plans, resume the 1.5 acres (0.61 hectares) of land at the heart of the Central commercial district that was the Upper Bazaar and turn it into an area for European commercial activities in order to collect more Crown rent. The government’s plan was to designate the area east of Possession Street and around Taipingshan Street south of Queen’s Road Central as the commercial district for the Chinese


\textsuperscript{110} *Friend of China* and *Hong Kong Gazette*, 5 January 1843.

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– the Taipingshan District – and move the stores of the Upper Bazaar to that district.

At the end of 1843, Land Officer Gordon resold by auction the land around the waterfront at Sheung Wan (around today’s Bonham Strand to Gough Street) and the Upper Bazaar lots (west of today’s Aberdeen Street, north of Hollywood Road, Kau U Fong and Jervois Street). On 22 January 1844, the 27 pieces of land situated at the Upper Bazaar were successfully bid for by Europeans. Accordingly, the government ordered the businesses and residents of the Upper Bazaar to move out within six months from 15 January 1844. The Chinese of the Upper Bazaar therefore had to relocate.

The Chinese landowners were unhappy with the government reselling the Upper Bazaar lots without their consent. After the sale of the Upper Bazaar land, Governor Pottinger ordered then Chief Magistrate Major William Caine, Registrar General Charles Gutzlaff and Land Officer Gordon to form a committee to handle the relocation of the businesses of the Upper Bazaar. However, not only did the government not consider the interests of the original owners, but it declared that the land leases executed by the first Land Officer, George F. Mylius, were provisional in nature and had no permanent effect. Public opinion at the time was harshly critical of the colonial government forcing Chinese businesses out of the Upper Bazaar, even going so far as referring to the government as bandits. The government paid no heed to such opposition, but declared on 25 July 1844 that the Upper Bazaar businesses were to move out by September 1844. The Upper Bazaar was then transformed into a European commercial district.

With no bargaining power, the Chinese businesses had to accept the government’s arrangement to re-establish at Lot Nos 44 and 78 of Taipingshan District (the area around the east of today’s Possession Street and west of Shing Wong Street). The government exempted the annual Crown rent of the affected businesses until January 1849, and each business was paid 40 Hong Kong dollars compensation. However, Governor Pottinger was of the view that those conducting immoral businesses such as running gambling houses and brothels should not be compensated. Among the 112 businesses that were relocated by the government, only 81 were paid the 40 Hong Kong dollars compensation. During the relocation, the government spent some 5,900 Hong Kong dollars on forming land in Taipingshan District. Thus the area around Bonham Strand, Taipingshan Street and the Lower Bazaar in Sheung Wan became an area where the Chinese settled. As the government imposed no specifications on the houses built by the Chinese, they were allowed to build temporary houses with thatch or wood. Therefore, the constructions in areas where the Chinese were active

112 CO129/5, ‘Woosnam to Gordon’, 10 January 1844, p.69.
114 Friend of China, 10 August 1844.
115 CO129/6, ‘Carrie, Gutzlaff and Gordon to Bruce’, 21 May 1844, p.444.
were mostly very primitive. This, coupled with the dense population and poor environmental hygiene, resulted in a big gap between the environment of the Chinese commercial areas and their Western counterparts. The government thus made every attempt to segregate the Chinese communities from the foreigners. Chief Magistrate Caine even ordered that, except police officers, no Europeans be allowed to live in Chinese-populated areas.

From the seven districts to the ten districts

In 1844 the colonial government not only forced the Chinese businesses in the Upper Bazaar out of Central into Taipingshan District, but also enacted multiple laws in an attempt to deal with law-and-order problems by way of a Western legal system. In order to block undesirables from entering Hong Kong and maintain public order, the second Hong Kong Governor, Sir John Francis Davis, who had assumed office less than six months earlier, promulgated the Ordinance for Establishing a Registry of the Inhabitants of the Island of Hongkong and Its Dependencies on 21 August 1844 to monitor by administrative means those entering Hong Kong. The ordinance was to come into force on 1 November 1844, and provided that everyone entering Hong Kong should declare to the Registrar General within 24 hours their date and place of birth, address and marital status. In addition, those who had a monthly income above 20 Hong Kong dollars had to pay a 5 Hong Kong dollar annual registration fee to the office of the Registrar General, while those with a monthly income below 20 Hong Kong dollars and 10 Hong Kong dollars had to pay 3 Hong Kong dollars and 1 Hong Kong dollar, respectively.117 This annual fee became known as a ‘poll tax’.

From an administrative standpoint, the ordinance allowed the government to have a good grasp of information on the newly immigrated population and facilitated governing, while also increasing the government’s financial income. However, the ordinance was also criticised by various parties when it was announced: the foreign businessmen believed that a law preventing undesirables from entering Hong Kong should not apply to them, as people of economic status, as such an application would mean equal treatment between them and the Chinese as bad people, as well as that foreign businesses would have to go through registration procedures and be taxed as well. On the other hand, the Chinese workers, who were paid a salary of 2 to 3 Hong Kong dollars per month, considered the 1 Hong Kong dollar tax to be too severe a burden on them. On 2 November 1844, the day after the intended effective date of the ordinance, a strike broke out among workers in Hong Kong against the poll tax. A large number of Chinese workers left Hong Kong for their home towns. Meanwhile, British businesses also jointly petitioned Britain in opposition to the same tax. The government was ultimately forced to suspend the enactment of the ordinance.

On 13 November, the Legislative Council amended the original ordinance and named it *An Ordinance to Repeal Ordinance No. 16 of 1844 – Registry and Census of the Inhabitants of the Island of Hong Kong*. The amended ordinance provided that each male adult of 21 years of age or above had to register with the Registrar General upon arrival in Hong Kong and be declared a person with no criminal conviction before he could work in Hong Kong. The Registrar General would have the right to refuse residence in Hong Kong to those without a good record. However, those who belonged in the military or worked at government departments or the East India Company, whose annual salary was over 250 Hong Kong dollars or whose annual income was otherwise not less than 500 Hong Kong dollars, were exempted from registration. There was no mention of the imposition of any tax in the amended ordinance. Thus the poll tax originally intended for monitoring the incoming population was revised even before it took effect. The registration ordinance for Hong Kong residents, which was modelled on the governing methods of European cities, failed to be implemented according to plan, and Governor Davis was forced to step down.

Since the construction of the city, the government of Hong Kong had never implemented any policy that would prohibit the Chinese from entering Hong Kong, as the cheap labour force coming to the city looking for job opportunities was a solution to Hong Kong’s lack of human resources in its development. Separately, being situated at the centre of the Pacific Ocean and on the southern tip of China, Hong Kong was influenced by the Chinese political circumstances and was becoming increasingly important as it fell into pace with the global economy. In the 1850s, the Taiping Rebellion of the Qing Dynasty had caused the Chinese around the Guangdong and Guangxi area to escape south, and British-governed Hong Kong was considered a political refuge. At the same time, railroads were being built in America and Canada, while gold mines were being discovered in Australia. As a result, Hong Kong also served as a springboard for Chinese workers seeking to head to these places to make a living. Transporting Chinese workers overseas became a big part of the entrepôt trade of Hong Kong. According to government figures in the *Hong Kong Blue Book*, the population of the City of Victoria rose by 24 per cent from 25,000 in 1849 to 31,000 in 1850. By 1859, the population of Hong Kong had increased by 2.4 times when compared to that in 1849 (see Table 1.6).

The rapid increase in population of the City of Victoria exposed the weakness that the government was only focused on the city’s commercial constructions. Issues affecting the livelihood of the city’s people, such as public order, food, housing and health, had led to a governing crisis for the administration. As a result, it was obvious that the government’s pace of urban development was influenced by the relief measures employed to address the Chinese communities’ urgent social needs, and not driven by any long-term planning strategy. In fact, without mid- to long-term development goals in the governance of the city,

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Table 1.6 The statistics on Hong Kong’s population increase in the second half of the nineteenth century (1841–1897)

<table>
<thead>
<tr>
<th>Year</th>
<th>Chinese</th>
<th>Europeans and other nationalities</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>City of Victoria</td>
<td>Residing in the villages of Hong Kong</td>
<td>Kowloon</td>
</tr>
<tr>
<td>1841</td>
<td>800</td>
<td>4,350</td>
<td>–</td>
</tr>
<tr>
<td>1842</td>
<td>6,081</td>
<td>4,180</td>
<td>–</td>
</tr>
<tr>
<td>1844</td>
<td>6,640</td>
<td>5,068</td>
<td>–</td>
</tr>
<tr>
<td>1845</td>
<td>19,014</td>
<td>4,100</td>
<td>–</td>
</tr>
<tr>
<td>1846</td>
<td>15,675</td>
<td>4,774</td>
<td>–</td>
</tr>
<tr>
<td>1847</td>
<td>17,599</td>
<td>4,867</td>
<td>–</td>
</tr>
<tr>
<td>1848</td>
<td>12,281</td>
<td>4,897</td>
<td>–</td>
</tr>
<tr>
<td>1849</td>
<td>15,257</td>
<td>5,018</td>
<td>–</td>
</tr>
<tr>
<td>1850</td>
<td>16,712</td>
<td>4,898</td>
<td>–</td>
</tr>
<tr>
<td>1851</td>
<td>15,601</td>
<td>5,234</td>
<td>–</td>
</tr>
<tr>
<td>1852</td>
<td>17,070</td>
<td>6,168</td>
<td>–</td>
</tr>
<tr>
<td>1853</td>
<td>18,017</td>
<td>4,820</td>
<td>–</td>
</tr>
<tr>
<td>1854</td>
<td>26,252</td>
<td>5,359</td>
<td>–</td>
</tr>
<tr>
<td>1855</td>
<td>36,743</td>
<td>6,279</td>
<td>–</td>
</tr>
<tr>
<td>1856</td>
<td>38,007</td>
<td>5,800</td>
<td>–</td>
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<tr>
<td>1857</td>
<td>43,290</td>
<td>4,051</td>
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<tr>
<td>1858</td>
<td>45,417</td>
<td>4,704</td>
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<tr>
<td>1859</td>
<td>48,219</td>
<td>4,574</td>
<td>–</td>
</tr>
<tr>
<td>1860</td>
<td>56,856</td>
<td>5,276</td>
<td>–</td>
</tr>
<tr>
<td>1861</td>
<td>66,069</td>
<td>6,110</td>
<td>5,105</td>
</tr>
<tr>
<td>1862</td>
<td>68,277</td>
<td>5,866</td>
<td>6,431</td>
</tr>
<tr>
<td>1863</td>
<td>70,288</td>
<td>7,628</td>
<td>4,922</td>
</tr>
<tr>
<td>1864</td>
<td>73,982</td>
<td>7,967</td>
<td>3,869</td>
</tr>
<tr>
<td>1865</td>
<td>80,639</td>
<td>7,220</td>
<td>4,151</td>
</tr>
<tr>
<td>1866</td>
<td>72,264</td>
<td>6,200</td>
<td>3,418</td>
</tr>
<tr>
<td>1867</td>
<td>82,194</td>
<td>6,133</td>
<td>3,818</td>
</tr>
<tr>
<td>1868–69</td>
<td>79,698</td>
<td>6,696</td>
<td>4,468</td>
</tr>
<tr>
<td>1870–71</td>
<td>79,593</td>
<td>5,946</td>
<td>4,561</td>
</tr>
<tr>
<td>1872</td>
<td>82,026</td>
<td>6,474</td>
<td>5,198</td>
</tr>
<tr>
<td>1876</td>
<td>90,304</td>
<td>7,526</td>
<td>7,704</td>
</tr>
<tr>
<td>1881</td>
<td>102,385</td>
<td>7,585</td>
<td>9,021</td>
</tr>
<tr>
<td>1891</td>
<td>145,340</td>
<td>12,493</td>
<td>19,997</td>
</tr>
<tr>
<td>1897</td>
<td>160,273</td>
<td>11,644</td>
<td>26,442</td>
</tr>
</tbody>
</table>

it would be difficult to draw in the cheap labour force that would satisfy the ever growing entrepôt trade. With the failure of the attempt to implement legislation on household registration in 1844, the government had no choice but to divide the city into different districts and rule the districts separately. In addition, the government made use of the traditional Chinese community self-monitoring system or self-administration system (lijia system), and tried to get a better picture of the population in Hong Kong by asking the head of the community (jiazhang) to provide the number of people in each household and the occupation of each member of a household.

In the 1840s, the urban area of the City of Victoria did not include the entire Hong Kong Island, nor was the city divided into districts. The urban area of the city covered mostly Wan Chai in the east, to the Mid-Levels of Central in the south, the area around Sheung Wan in the west, and the coast in the north. The whole area consisted of about 1,000 acres (4 square kilometres) of land, with unclear borders and no notion of division into districts. In 1857, 13 years after the backlash on the *Ordinance for Establishing a Registry of the Inhabitants of the Island of Hongkong and Its Dependencies*, in order to compile statistics on the new population and its distribution in different areas, the government divided Hong Kong into nine districts: the City of Victoria, Shau Kei Wan, Sai Wan, Shek O, Tai Tam Tuk, Stanley, Heung Kong, Aberdeen and Pok Fu Lam. The City of Victoria was further divided into seven districts (yue) for the purposes of conducting a census. These seven districts of the City of Victoria were, from the west of Hong Kong Island: District 1 – Sai Ying Pun; District 2 – Sheung Wan; District 3 – Taipingshan; District 4 – Central; District 5 – Ha Wan; District 6 – Wong Nai Chung; and District 7 – So Kon Po. Among the seven districts, Taipingshan and Central were the most densely populated.

The government also transformed the much-criticised poll tax of 1844 into a household tax with each household as a unit, requiring the owner of every house or ship to register with the Registrar General and pay the tax within ten days of the arrival of a resident. The regular requirement of reporting the number of residents and each resident’s employment status thus became an accepted practice, and the burden of the tax was usually shifted from the owner who was renting out the premises to the tenant. Take the example of a manual labour centre: each tenant had to pay an extra 2 Hong Kong cents of rent per month, or 24 Hong Kong cents a year, which was less than the 1 Hong Kong dollar registration tax proposed in 1844. This could be seen as an alternative way for the government to levy a poll tax. Through the results of the census, the government could also get a rough idea of the size and composition of the population of the City of Victoria.

In 1858, the government extended the boundaries of the City of Victoria towards both the east and the west: to Shek Tong Tsui in the west and So Kon Po in the east. With the addition of Shek Tong Tsui as a district, the...
The number of districts rose to eight. In 1866, the city was divided into nine districts, which were, from the west of Hong Kong Island: District 1 – Shek Tong Tsui; District 2 – Sai Ying Pun; District 3 – Taipingshan; District 4 – Sheung Wan; District 5 – Central (south and north); District 6 – Ha Wan; District 7 – Wan Chai; District 8 – Bowrington; and District 9 – So Kon Po. There were four rings, or wan, within the nine districts – Sheung Wan, Central, Ha Wan (Admiralty) and the Wan Hai (Wan Chai). From the establishment of the City of Victoria in 1842 to 1903, its boundaries were extended seven times. In 1900, the city’s area increased to 1,434 acres (5.8 square kilometres).

Table 1.7 District distribution of the City of Victoria (1857–1930s)

<table>
<thead>
<tr>
<th>District</th>
<th>1857</th>
<th>1858</th>
<th>1866</th>
<th>1874</th>
<th>1886</th>
<th>1888</th>
<th>1902</th>
<th>1930s</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kennedy Town</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>D1</td>
<td>D1</td>
<td>✓</td>
</tr>
<tr>
<td>Shek Tong Tsui</td>
<td>–</td>
<td>✓</td>
<td>D1</td>
<td>D1</td>
<td>D1</td>
<td>D2</td>
<td>D2</td>
<td>✓</td>
</tr>
<tr>
<td>Sai Ying Pun</td>
<td>D1</td>
<td>✓</td>
<td>D2</td>
<td>D2</td>
<td>D2</td>
<td>D3</td>
<td>D3</td>
<td>✓</td>
</tr>
<tr>
<td>Sheung Wan</td>
<td>D2</td>
<td>✓</td>
<td>D4</td>
<td>D4</td>
<td>D4</td>
<td>D5</td>
<td>D5</td>
<td>✓</td>
</tr>
<tr>
<td>Taipingshan</td>
<td>D3</td>
<td>✓</td>
<td>D3</td>
<td>D3</td>
<td>D4</td>
<td>D4</td>
<td>D4</td>
<td>–</td>
</tr>
<tr>
<td>Chung Wan (Central)</td>
<td>D4</td>
<td>✓</td>
<td>D5</td>
<td>D5</td>
<td>D5</td>
<td>D6</td>
<td>D6</td>
<td>✓</td>
</tr>
<tr>
<td>Ha Wan</td>
<td>D5</td>
<td>✓</td>
<td>D6</td>
<td>D6</td>
<td>D6</td>
<td>D7</td>
<td>D7</td>
<td>✓</td>
</tr>
<tr>
<td>Wong Nei Chung</td>
<td>D6</td>
<td>✓</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Wang Hai</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>D7</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Wan Chai</td>
<td>–</td>
<td>–</td>
<td>D7</td>
<td>D7</td>
<td>–</td>
<td>D8</td>
<td>D8</td>
<td>✓</td>
</tr>
<tr>
<td>Bowrington</td>
<td>–</td>
<td>–</td>
<td>D8</td>
<td>D8</td>
<td>D8</td>
<td>D9</td>
<td>D9</td>
<td>✓</td>
</tr>
<tr>
<td>So Kon Po</td>
<td>D7</td>
<td>✓</td>
<td>D9</td>
<td>D9</td>
<td>D9</td>
<td>D10</td>
<td>D10</td>
<td>✓</td>
</tr>
<tr>
<td>Total no. of districts</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>9</td>
<td>9</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
</tbody>
</table>

Notes: D: District no.; ✓: District no. unknown.


121 Hong Kong Sessional Papers, Hong Kong, Noronha & Co., 1900, p.337.
particular government department. Different government departments came up with different concepts of division based on the social issues that emerged in the society in different periods. Therefore, the geographical and functional scope of each department’s division of districts was different from that of the others. While each government department used numbers to differentiate the districts, there was no coordination on this between the departments. In the 1860s, the police used security districts in order to supervise the neighbourhood household system and keep public order. They also assigned numbers to the districts and called the managed areas ‘districts’, yet the demarcation of these districts was different from that of the districts for population registration. This showed the confusing situation in the nineteenth century where the government was simultaneously headed in different directions.

Security districts

The lower classes that settled in Sheung Wan, Taipingshan and Ha Wan came from all kinds of background and all walks of life. Crime was therefore not uncommon. Information on nineteenth-century Hong Kong suggests that the City of Victoria was far from a secure place. According to 1868–1900 statistics from the government’s Prisons Department, Hong Kong had on average some 5,000 crimes per year, the most common of which were break-in robbery, theft, kidnapping and drunkenness. The records on such crimes were based on successful arrests. As Hong Kong was a port drawing in the grassroot class in droves, the actual crime situation could be much worse than these records show. Keeping public order and allowing commercial activities to be normally conducted was therefore a challenging problem for the government.

In October 1844, two months after the promulgation of the Registration Ordinance, the government promulgated an Ordinance for the Preservation of Good Order and Cleanliness within the Colony of Hong Kong, to be enforced by the Surveyor General.122 The ordinance provided that residents must use non-flammable construction materials to build houses, in order to lower the chance of fire caused by flammable materials such as wood, herbaceous leaves or thatches.123 The ordinance also required that any Chinese outdoors between 8 p.m. and 10 p.m. had to carry a lantern and apply for a night pass from a police station, and prohibited any Chinese from being outdoors after 10 p.m. on pain of being fined or imprisoned. In addition, firecrackers, the playing of drums, and any other noises were strictly prohibited in the morning and at night.124 These curfew laws were enforced until the end of the nineteenth century, and were designed to

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123 A serious fire that broke out in the Lower Bazaar burnt down 40–50 thatch houses. The government began to think about requiring the Chinese to build houses with bricks. Friend of China, 1 December 1842, 23 October 1844.
ensure the safety of Europeans by severely impeding any outdoor activities on the part of the Chinese. Prohibiting the Chinese from being outdoors at night allowed the authorities to make immediate arrests when suspicious individuals were spotted, as a means of more effective crime-fighting.

In the same year, the government promulgated the *Ordinance for the Appointment and Regulation of Native Chinese Peace Officers (Paouchong and Paoukea) within the Colony of Hongkong*, utilising the traditional Chinese community self-monitoring system to try to govern and control the Chinese in Stanley, Wong Nei Chung, Pok Fu Lam and other districts with Chinese settlements by allowing local Chinese leaders to manage law and order in districts where the Chinese were active. The Governor appointed local Chinese representatives as *paouchong* (native Chinese peace officers), who would have power equivalent to that of local police and were under the authority of the Chief Magistrate of Police. They were subject to the same criminal liability as the police, would be disciplined by the government if they made mistakes or were negligent, and had to wear a police badge when they were on duty. These *paouchong* carried out the work of maintaining law and order in the districts.

Furthermore, Ordinance No. 3 of 1853, *An Ordinance to Extend the Duties of Chinese Tepos Appointed under Ordinance No. 13 of 1844*, provided that taxpayers within Hong Kong Island could elect 5–12 *tepos*, who were then appointed by the Governor in the district they lived in. When fewer than 12 were elected, the Governor could appoint additional (up to 12) *tepos* according to the district’s needs. Such *tepos* were like local police officers. They would handle disputes between Chinese under the supervision of the Chief Magistrate and report to the Chief Magistrate the arbitration results. Each Chinese household was required to pay a *tepo* fee. *An Ordinance for Registration and Regulation of the Chinese People, and for the Population and for Other Purposes of Police* described more specifically the community self-monitoring system: every ten households were considered a ‘*kap’*, with a *kapcheong* (leader) appointed. The *kapcheongs* were responsible for crime prevention, as well as assisting the police with arrests and fighting crime within the area under their purview.

In August 1866, the government employed ‘watchmen’ to patrol the streets, strengthen local security and prevent crimes. This was a more systematic implementation of the Chinese local *paouchong* structure. Patrol routes in Hong Kong were divided among seven districts. However, the boundaries of these seven districts were different from those of the districts drawn up for the purposes of the census, as the primary focus of patrol routes was the distribution of streets. District 1 began from Shek Tong Tsui in the west on Hong Kong Island and

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125 'Ordinance No. 13 of 1844', *Historical Laws of Hong Kong Online*, http://oelawhk.lib.hku.hk/archive/files/b71f055644e0a4a4e2c4dd499cc3985c3.pdf.
126 'Ordinance No. 3 of 1853', *Historical Laws of Hong Kong Online*, http://oelawhk.lib.hku.hk/archive/files/id00c8e3e706663462e1ace1e48b8d8dd.pdf.
127 'Ordinance No. 6 of 1857', *Historical Laws of Hong Kong Online*, http://oelawhk.lib.hku.hk/archive/files/7abs906a0b9491d70d88f77887206a9f.pdf.
128 'Ordinance No. 6 of 1857', *Historical Laws of Hong Kong Online*, http://oelawhk.lib.hku.hk/archive/files/7abs906a0b9491d70d88f77887206a9f.pdf.
covered an area that included Shek Tong Tsui and Sai Ying Pun; District 2 covered Sai Ying Pun to Sheung Wan; Districts 3 and 4 were also in Sheung Wan; District 5 was in Central; and Districts 6 and 7 were in Wan Chai. These districts were mainly areas where the Chinese were active, but also included the business district in Central. (See Figure 1.6.) Each district had its own head watchman and three to nine watchmen.\textsuperscript{129} District 5 was the largest, with 73 streets to patrol.\textsuperscript{130} The head watchman of a district was recommended locally by the district and appointed by the Governor. Supervised by the Registrar General, the head watchman would have similar official power to the police. The number of watchmen to be hired for a district was proposed by the residents of that district, and they were then appointed by the Governor.\textsuperscript{131} A total of 40 per cent of these security teams’ funds would come from the government, while Chinese organisations shouldered the remaining 60 per cent.

Obviously, the security districts served different functions from those of the nine districts for population registration (Shek Tong Tsui, Sai Ying Pun, Sheung Wan, Taipingshan, south and north Central, Ha Wan, Wan Chai, Bowrington and So Kon Po). The districts designed to facilitate a census began from Shek Tong Tsui in the west on Hong Kong Island and stretched to So Kon Po in the east, with no overlapping of the area covered by each district. The security districts however were focused on streets with frequent commercial activities, and mainly covered the more densely populated areas of Central, Sheung Wan and Wan Chai. While varying in terms of functionality, both types of districts were identified by numbers. The security districts were supervised by police superintendents, while census and registration were the responsibilities of the Registrar General. As the powers and responsibilities of the two authorities did not overlap, there was no cross-referencing of each other’s area of jurisdiction. By the 1880s, health districts were set out to deal with health and hygiene issues, and were overseen by the Colonial Surgeon. The area covered by these health districts, as well as their numbering, was again completely different from that of the census districts and the security districts. Thus it was increasingly apparent that each government department was dividing the city up into areas according to its own needs and was enforcing relevant laws without regard to other departments.

Health districts

In nineteenth-century Hong Kong, Chinese districts were but a stone’s throw from the foreigners’ residential areas. However, there were no grand commercial buildings, courts, city hall, Hong Kong Club or European garden villas in the Chinese community. Most of the lower class lived in crude tenement buildings

\textsuperscript{129} ‘Number and Cost of District Watchmen’, Hong Kong Government Gazette, Hong Kong Government, 11 June 1881, pp.448–452.
\textsuperscript{130} ‘Government Notification No. 87’, Hong Kong Government Gazette, Hong Kong Government, 11 March 1983, pp.176–188.
\textsuperscript{131} ‘Hongkong Anno Tricesimo Victorie Regine No. 7 of 1866’, Hong Kong Government Gazette, Hong Kong Government, 25 August 1866, p.336; Victoria Registration Ordinance, 1866.
Figure 1.6 Distribution of security districts

Source: CO129
with mud-brick walls, thatch roofs and silt flooring. A tenement building would house dozens of people, with no mains water supply, electrical lighting, kitchen or even toilet.

The houses in Taipingshan in the 1850s were described in the Colonial Surgeon’s report as cramped, dark, airtight and foul-smelling, with garbage and faecal matter littering the streets and an overall terrible hygiene situation.132 Chinese workers who had recently left farming for work in Hong Kong would raise livestock at home in hopes of supplementing their family’s income. Adults and children, pigs, chickens and dogs all mingled in a dingy space with polluted and putrid air,133 and diseases spread as a result. Some inspection reports of the Colonial Surgeon even revealed up to 70 pigs being raised in a tenement building of around 300 square feet on various floors (not just in the basement), with some even found hiding under beds.134

The densely populated Chinese communities had poor sanitary conditions. At first, in 1866, Fan Ah Wai and three Chinese individuals, Tam Yik Sam, Lam Tak Kee and Wong Fung Wan, applied to the government for the appropriation of 9,100 square feet of land for building a Chinese hospital.135 However, the government felt that the sanitary conditions were not that bad, and twice rejected the application on issues with the land lots. Then in April 1869 it was reported in the China Mail that the Registrar General inspected the Kwong Fook I Tsz in Sheung Wan where the terminally ill shared a room with dead bodies. The situation at Kwong Fook I Tsz attracted the attention of both the media and the government. At the time, the Chinese did not trust doctors and feared that the doctors would perform a post-mortem on their bodies. Those who were sick therefore mostly did not want to be admitted into a Western hospital for treatment, and the Government Civil Hospital was not able to serve its purpose of healing the Chinese. Taking this into account and with a view to preventing the spread of diseases from the I Tsz (temples that provided shelter to critically ill Chinese, temporary storage of corpses and coffins, and placement of wooden memorial plaques), Governor MacDonnell swiftly drafted the Hospital Ordinance in 1869 (which was signed into enactment the next year) and called upon local elites to make an application to the Colonial Office for the establishment of a Chinese-run hospital that would utilise Chinese medicine in providing treatment. This eventually became the Tung Wah Hospital. Since 1869, the government had intended for those Chinese elites with financial power to act as representatives in dealing with the health issues of their community. From the 1870s to the 1890s, the Tung

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Wah Hospital differed from modern hospitals in that the majority admitted into the hospital were terminally ill patients. The hospital replaced the ITsz in accepting dying patients. The poor sanitary conditions in the Chinese residential areas were probably similar to those of industrial cities in Britain before the 1820s.

Since the industrial revolution in 1750, cities in Britain had a demand for a large labour force in production. However, those who lived in the rural areas were unable to adapt to the cramped living space and the factories with terrible sanitary conditions. As a result, a lot of farmers contracted diseases, and bacteria spread rapidly. The cities had great difficulty recruiting workers. In 1833, the radical Edwin Chadwick believed that workers were getting sick as a result of a terrible working environment, and proposed the Factory Act in answer to the sanitary conditions of the factories at the time. Edwin Chadwick also believed that the diseases were the reason behind poverty and that the diseases were transmittable. He therefore advocated a focus on the ventilation and sewerage systems of houses, improving living conditions of the poor, and the enactment of laws on prevention of diseases. In 1836, the Registration of Births and Deaths Act was passed in the UK, and the Bureau of Medical Statistics under the Poor Law Office was set up. The Bureau’s studies found that diseases in the community were directly linked to the surrounding environment, including the air, water supply system and sewage disposal. From 1844 to 1845, Parliament gave the government power to monitor the cities’ hygiene. In 1848, the Board of Public Health was established in the UK.136 As a pioneer in proposing legislation on city hygiene in Britain, Edwin Chadwick had a profound impact on his son, engineer Osbert Chadwick.

In 1881, the UK Colonial Office appointed Osbert Chadwick as a consultant to conduct extensive studies on the living environment, sanitary conditions and public health facilities of the City of Victoria in Hong Kong at the time. His reports in 1882, 1890 and 1902,137 which were publicised, remain to this day among the more comprehensive records of the livelihood of the Chinese at the end of the nineteenth century. It could be said that Chadwick had inherited his father’s views and introduced those British ideas into Hong Kong at the time.

Chadwick’s report on his study of Hong Kong’s hygiene situation in 1882 contained criticisms similar to those his father made on English cities in the 1840s. He pointed out that the City of Victoria had poor hygiene, lacked systems for excrement and sewage treatment, and had insufficient clean water supply, polluted air, a much too high population density and too tightly concentrated housing. In addition, the city’s water supply was very contaminated, and the supply was distributed in wells in low-lying areas, which were close to the surface and lacked depth. Most houses also did not have comprehensive sewage disposal facilities, leading to the accumulation of waste water in populous areas. The residents’ excrement being in close proximity to the water supply meant that the water supply contained a large amount of bacteria and was not suitable for

Chadwick examined the water quality of 18 wells in populous areas in the City of Victoria, and found that the water was turbid with a high concentration of E. coli, meaning that the well water was highly contaminated by both human and livestock wastes. The water pressure of the city’s water supply system was also insufficient, causing those living in mountainous regions to have insufficient fresh water as the result of insufficient water pressure. The bursting and leakage of water pipes were commonplace, and the damaged pipes allowed bacteria, effluent and waste gases to flow to all parts of the city. Houses in low-lying areas faced a high risk of malaria. To improve the living conditions of the City of Victoria, very challenging difficulties would have to be overcome.

The most significant differences between the houses Europeans lived in and the tenement buildings the Chinese lived in were that the European houses were built with stronger materials, had more windows, usually had corridors that facilitated ventilation, and were more adequately spaced, providing a tranquil environment. To prevent the unsatisfactory living conditions in the Chinese community from influencing the health of Europeans, the government had established dedicated residential areas for Europeans. In 1888, five years after Chadwick severely criticised the city’s hygiene, the government promulgated the European District Reservation Ordinance, demarcating the Mid-Levels in Central as a European residential district, for fear of the bubonic plague Chadwick warned of actually happening. Before 1887, there was no explicit labelling of the residential areas of the Chinese and the foreigners, just a prohibition of Europeans from living in areas where the Chinese were active. The European District Reservation Ordinance in 1888 prohibited the Chinese from living in European districts, thus more specifically underlining the separation of the two types of residential areas.

In May 1888 the government passed The European District Reservation Ordinance. On the basis of Europeans living in Hong Kong requiring sufficient space and well-ventilated air, the ordinance drew a line of demarcation east of Pok Fu Lam Road along High Street, Bonham Road, Ladder Street, Caine Road, Chancery Lane, Arbuthnot Road, Wyndham Street, Ice House Street, Battery Path, Queen’s Road, and the nullah in Wan Chai (today’s Stone Nullah Lane), up to Wong Nai Chung Road. To the north of the line, the Mid-Levels area 400 to 450 feet above sea level from Conduit Road to south of Bowen Road was reserved for Europeans’ residential use. The western border of the City of Victoria was extended to Kennedy and was better defined (see Figure 1.7).

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138 CO882, Osbert Chadwick, ‘Mr. Chadwick’s Reports on the Sanitary Condition of Hong Kong’, November 1882; Staff Surgeon Wilm, Epidemic of Bubonic Plague at Hong Kong in the Year 1896, Hong Kong, Noronha & Co., 1897, p.27.
Figure 1.7: The dividing line of European and Chinese residential districts (1888)

Source: HKRS209-6-2, Hong Kong Public Records Office, Reference No. Map MM-0111*, Plan of the City of Victoria, Hong Kong 1889.
In 1890, the government again invited Osbert Chadwick to Hong Kong for further studies on the health and hygiene conditions in Hong Kong. Unfortunately, this second study did not improve his impressions of Hong Kong. The city’s population had grown exponentially over the previous eight years. According to the census in 1891, Hong Kong’s population was 220,000, a 38 per cent increase from the 160,000 in 1881. The population growth within the city centre reached 37 per cent.\(^\text{143}\) The water supply, which was hardly clean to begin with, had only deteriorated in quality in the increasingly crowded living environment. However, the government had no comprehensive waste disposal facilities in place. The daily wastes of the residents were simply dumped around their living space, with the residents themselves living amongst their own wastes. In the hot summers, the accumulated waste was prone to give rise to bacteria. Fresh water was both in short supply and came from contaminated sources, posing serious risks to the residents’ health.

In the 1890s, people in Hong Kong often used silt to bury wastes and discharge sewage on to the ground close to where they lived. These waste treatment methods not only failed to dispose of waste completely, but were also a form of air pollution. In light of the hygiene situation at the time, Chadwick suggested building new sewerage discharge pipelines: to discharge wastes into the sea by using rainwater and water from streams, and to improve environmental hygiene by handling waste disposal by district.\(^\text{144}\) This suggestion became the foundation upon which the future sewerage system of Hong Kong would be built. Owing to the complicated nature of the sewerage works, British experts and works would have to be engaged for the construction. With the economic constraints at the time, the commencement of the works was delayed again and again. Before the sewerage system could be built, Hong Kong was hit by the catastrophe of the century – the bubonic plague.

According to official records, from the 1840s to the 1860s, most of those admitted into hospitals were patients with fever, exhibiting symptoms such as yellow fever, continued fever and intermittent fever. In the 1870s to 1890s, most of the patients admitted were suffering from diseases caused by poor environmental hygiene, with epidemics such as dysentery, typhoid and malaria being prevalent. However, the rate of death by these diseases could in no way compare to that of the plague that broke out in 1894. In that year, the number of Chinese deaths due to the plague was higher than the number of deaths of Europeans and other ethnicities by 93 per cent.\(^\text{145}\) The government was almost convinced that the policy of dividing the residential areas of the Chinese and Westerners was working. However, the plague eventually spread to the Europeans’ residential
areas as well in 1895. It was as Edwin Chadwick described – diseases would not only occur in the slums, but spread to the entire city.\textsuperscript{146} In 1896, to effect hygiene governance planning in the city, the Department of Health divided the city into eight health districts, which was increased to ten districts in 1897 (Figure 1.8). The Department of Health became responsible for the registration of the population in the districts, including records of birth, contraction of infectious diseases, hospital admission and death, in order to gain control of the spread of the plague. The borders of the City of Victoria further extended towards the Mid-Levels, while the borders of the European residential districts moved north, covering Districts 2 and 3. The concept of dividing the Chinese from the foreigners and ruling each separately was by then more specifically defined.

1. In 1895, Hong Kong had ten health districts. Districts 2 and 3 were residential areas of foreigners.
2. In 1902, the southern border of the City of Victoria at the Mid-Levels in Central was extended to today’s Tregunter Path, 600 feet above sea level.
3. In 1903, the southern border at the Mid-Levels in Central was further extended to 700 feet above sea level.

Planning from the 1840s to the 1880s had all along avoided the health issues faced by the Chinese. The plague that broke out in 1894 was a turning point for the city’s planning. Before this point, Europeans took the position that they could not understand and did not wish to involve themselves in the livelihood problems of the city. Apart from discriminating against the Chinese for being uncivilised and uneducated, the Europeans proposed no solutions to such problems. The difficulties encountered by migrating Chinese workers who came to Hong Kong looking for work were deemed temporary problems, and these temporary problems gradually became a major obstacle in the city’s continued development. In its early planning when the city was built, the government had failed to make long-term plans for the growth of population, and was biased in its focus on the commercial needs of European businessmen while neglecting the daily life issues faced by the Chinese communities. These factors led to the governing crisis of the city in the 1880s to the 1890s.

Summary

Old postcards of Hong Kong showed the City of Victoria in the second half of the nineteenth century as an elegant European city. The seawalls, piers and roads built from thick granite, the Roman clock towers and Gothic churches and convents erected in Medieval European architectural style, the Baroque pillars and neo-classical semi-circular arch window lintels, the geometric doorframes adorning the government buildings and foreign businesses – all this infrastructure of Western construction techniques allowed the government to showcase

Figure 1.8 Distribution of the ten health districts of the City of Victoria (1897)
its Western governing power taking root in the city, and told a story of the development of a modern Western city structure in a Chinese community. Important administrative departments such as police stations and magistracies were built around the Governor’s House to form the Government Hill, which served as the political hub; the Harbour Master’s Office and the Post Office were located on the harbourfront to provide assistance to commerce; and education institutions were set up on Morrison Hill in Wan Chai. In addition, the city had gardens that provided recreational space, the City Hall for cultural activities, and the Upper and Lower Bazaars for daily purchases. The city’s overall arrangement revealed the government’s strategy on land use and the distribution of major political and commercial departments. A city with the scale of an entrepôt was thus born in a tumultuous political environment.

The City of Victoria, built on the military stronghold on the northern shore of Hong Kong Island, had to overcome nature’s challenges in order to become an entrepôt. From 1843 to the 1890s, the City of Victoria was ribbon-shaped. The government reclaimed land at the northern shore to open up new space for development and to solve the problem of having too little flat land and too much mountainous land. The foreign firms, piers and godowns set up along the northern shore became the focus of commercial activities, and the commercial district expanded towards the east and west along Hong Kong Island’s northern coast. To accommodate the ever growing commercial activities, historical constructions all around Hong Kong Island, including roads, piers, reservoirs, typhoon shelters and reclamation projects, were gradually completed after careful planning and with large amounts of human and material resources employed in a prudent manner. At a time when resources were limited, projects had to be prioritised, and policy decisions are naturally likely to cause controversies when the supply was simply not able to satisfy the demand. Could we get a sense of such arduous processes and the difficulties involved when we revisit the historical sites and see the various creative works made by hand?

The scope of development of the City of Victoria in the second half of the nineteenth century was reflective of a few characteristics of a city’s early planning. First, the government had to rely on advanced construction techniques to overcome the deficiency in natural resources – by reclaiming land from the sea, and building roads, reservoirs, typhoon shelters and other public facilities. Large-scale infrastructure facilities were the foundation on which Hong Kong established itself as a major entrepôt in the Asia-Pacific region. As the construction techniques at the time were not able to completely overcome the unfavourable geographical circumstances, and there was a limited area available for development on both Hong Kong Island and the Kowloon Peninsula, not to mention the fact that the city centre of Hong Kong Island was located on a slope, most of the city’s buildings had to be constructed on the hillside. The construction projects required a large supply of techniques and materials, leading to high costs in developing Hong Kong’s architecture. Second, the City of Victoria was managed with two completely differently strategies. The Central District was mainly modelled on what was practised in the West. Commercial activities and trade were conducted in a systematic manner, and the enactment
and strict enforcement of laws were key to the implementation of policies. Since 1844, the government had promulgated laws that would complement the city’s development, securing the legitimacy of its governance through the legal system. However, Sheung Wan in the western part of the city, the densely populated area where the Chinese community lived, suffered from poor housing and hygiene conditions as well as high crime rates. There was no proper town planning before the outbreak of the bubonic plague in 1894. Third, the external political and economic environment also influenced the priority and speed of development of the city’s different districts. Examples of such influence can be seen from the 1840s to the 1860s, when foreign funds were invested in the development of Central, while after the 1870s Chinese capital focused on the development of Sheung Wan and Yau Ma Tei on the Kowloon Peninsula.