



CHAPTER 1

Introduction

When to the foregoing calendar of horrors, we add the malignant fever, which swept off foreigners by the score, due, as was supposed, to the noxious gases exhaled from the surfaces of decomposed granite laid bare during the erection of the city, we must admit that the island fairly earned its reputation as the grave of Europeans.

Both it and the native inhabitants have undergone marvellous changes within the last twenty-five years. A splendid town has been built out of its barren rocks; and the hillsides are covered with trees, which not only enhance the picturesqueness of the place, but are of great value in purifying the air, and improving the health of the population.

—John Thomson, 'Hong Kong', *Illustrations of China and Its People*, 1873.

When the Scottish photographer John Thomson wrote his entry for Hong Kong before embarking on his pioneering journey into China, the port city had become a haven for foreign residents and flocks of curious tourists. For many westerners, including Thomson, encounters with China began now with Hong Kong. It served both as a basecamp and gateway. It framed the vast mainland in sharp juxtapose as a first point of reference. The grand arcades and terraced streets balanced, in their solid assurance, the transience of the island community. The recent afforestation of the once-stark hillsides filled the air with a moist fragrance as if a city within a garden oasis. Trade was humming. Crime was containable. It was now a colony with a counterpart, Kowloon, beaming at it across the harbour (**fig. 1.1**). But old-timers did not have to cast their memories that far back to recall how this transformation had been far from certain; how, in fact, Hong Kong had nearly failed.



Fig. 1.1. J. Thomson, View Along Waterfront Road (now Des Voeux Road), Hong Kong Island, 1868. © Wellcome Collection, London (18693i).

Hong Kong's early urban history—comprising then just the island—has been written in several ways, from studies on land conveyancing and its civil and commercial administration to the growing influence of Chinese elites. Yet it is odd that this, one of our major world cities, lacks a coherent study of how the settlement, then a colony, was precariously established and *physically* developed in the mid-nineteenth century. We still do not systematically understand how the place transformed, from what Britain's then foreign secretary, Lord Palmerston, would famously denounce as a 'barren Island with hardly a House upon it', into a fully functioning city.¹

In reading through a range of source material it is evident that the beginnings of settler life in the colony of Hong Kong in the early 1840s was anything but smooth. It was pockmarked by a variety of traumas, both human and natural, with, at times, the natural upheavals inadvertently amplified by the manufactured. As with many other locations

across both tropical and subtropical regions settled on by European colonists, Hong Kong's early foreign population had to deal with the consequences of an aggressive climate: typhoons and tempestuous rains, scorching hot and humid days, combined with unexpected fires that swept through the early bamboo, matting, and timber city like a match to tinder. Among the manufactured shocks were the personal attacks on the early settlers from local brigands, highway robbers, and sea-faring pirates, and the occasional night attacks on warehouses and homes—the culprits escaping by slipping across the harbour into Chinese territory and outside of the town's fledgling jurisdiction. In contrast, British colonial justice was often meted out to both the deserving and undeserving harshly, peremptorily, and with blatant racial bias. As familiar history recounts, the new inhabitants fell victim to petty politics, the small, island-locked government intent upon demonstrating its new presence, issuing ordinance after ordinance as if to amplify its sense of self-importance, but with the effect of stifling the spirits of those optimistically engaged in commerce.

One of the most frightening and significant traumas to affect the fledgeling city was the emergence of wave upon sudden wave of human sickness. It would shape the reactionary strategy of settlers in the planning and construction of their settlement and its infrastructure and provide a symbolic imprint that carried several other manufactured traumas in its wake. 'Frightening' because these fevers struck, at first unexpectedly, in different positions across the city and sometimes in a brutal manner. The small group of medical professionals upon the island developed several theories to explain these deadly fevers and to support their uncertain countermeasures. In this pre-bacteriological world, the locus of the malignancy was thought to reside in the elements: in water; in rank vegetation; from within decayed rock; the misalignment of strange electromagnetic forces; or from the rays of the sun at its zenith, and the subsequent exuding of airborne contamination. There was ultimately no escape from the 'miasma' except by collective action in order to reform the city itself.

Hong Kongers' perceptions of their colony in the face of these threats to their well-being and, conversely, how remote outside audiences perceived the territory acted as significant pressures, agents of transformation. We must examine these in concert if a meaningful study is to be made on how the city developed and established an initial physical and behavioural pattern. This book examines, in detail, the first nine years of Hong Kong's development, presenting it as a sequence of related events, their causes and reactions, that provided the city with its 'accidental' urban grammar that would serve as its future template.

Malaria as Miasma

It is not the intention to pin an entire city creation story and its urban morphology upon the presence of malaria. One may look at the urban and architectural 'birth' of colonial Hong Kong through the lens of its economic and mercantile ambitions, of its rapid multi-ethnic immigration and the attendant threats to its peace and security. Or one can examine it from a traditional historian's perspective, through its political and local government development and its relations with Qing Dynasty China. Nevertheless, of all the underlying motifs that could be called upon to explain the decision-making processes that contributed to its physical development, contemporary concerns of *health* and *well-being* form the most natural glue. More than any other theme, these overarch and tie the disparate storylines, making collective sense of both the perceptions and responses of the early colonists towards the shaping of both space and discourse. Of these concerns, nothing so preyed upon the mind than that fatal ailment that seemed to arrive and depart within the warmer months of each year, yet whose manifestation, location, and virulence seemed to escape preparation. European settlers even gave the worst outbreak the name of the island itself, the 'Hongkong Fever', in 1843.

In addition, while many case studies of settlements around the world analyse the urban effects of disease upon changes to various governmental hygiene policies; upon the development of housing and construction; and the formation of sanitation infrastructure within cities and towns across the nineteenth century in both the tropical and temperate spheres and across colonies and metropolises; few can be said to offer as dramatic a study as that of the beginnings of colonial Hong Kong. Despite a significant Chinese population along the southern part of the island, new settlers perceived the stretch of coastal land to the north as a *tabula rasa*, a blank slate. Upon this, colonists vigorously interrogated their first impressions at a fundamental level, of topography and basic shelter, in response to sickness. Malaria, quite literally, operated as a transforming force upon the colony's genesis story.

The name malaria, derived from the Italian *mal'aria*, in turn derived from the Latin *malus aria*, 'bad' or 'evil air', betrayed a general belief that the disease was airborne, certainly up until the 1880s. The dominant view among most medical professionals in Europe during the 1840s was that of 'miasma theory' and 'contagion theory'. As Roy Porter neatly puts it: 'If it arose from the bodies of the sick, it would be called contagion;

if from marshes and standing water, miasma.² ‘Germ theory’ would only be postulated within medical circles from about the mid-1860s.³ In his report for the Hong Kong government’s annual Blue Book to parliament in 1850, the Colonial Surgeon William Morrison pondered:

The exact operation of those subtle atmospherical influences called malaria on the human body is one of the great mysteries which will only be revealed when we are able to solve the rationale of those laws of attraction and repulsion by which form is given to matter, and millions of worlds are permitted to revolve in space without danger of collision.⁴

Therefore, an obvious question arises: *Was the ‘Hongkong Fever’ actually malaria?* This present study does not attempt to answer this question from a current understanding, in part because what we now consider to be ‘malaria’ cannot be presumed to match what was then understood to be the same disease. The problem is essentially one of defining. ‘Miasma theory’ is a branch of disease aetiology (causation). From western antiquity up to the latter half of the nineteenth century, it was a generally held belief that disease could be caused by ‘gases given off by putrefying decomposing organic matter, rotting flesh and vegetables’.⁵ Before the development of the microscope and a more significant focus upon pathogenesis (the mechanism by which an aetiological factor causes a disease), the inability to map the changes in cells and tissues within the human body inevitably resulted in a focus upon the external. European doctors within the armed services in the 1840s were united by a belief that fevers arising from the (euphemistically named) China Expedition, military excursions often upon or by land that was marshy or surrounded by paddy, were caused by malaria.

. . . The prevailing Diseases in the Naval Forces in China have been Remittent, and Intermittent Fevers, Acute Dysentery, and occasional Cases of Cholera.

Now the Remittent and Intermittent Fevers, and in some degree the Dysentery are known to arise from Malaria, or Marsh Miasma . . .⁶

Malaria’s invisible operations could only be identified through association with various symptoms. For example, one writer, evidently a doctor—since he signed himself anonymously as *Medicus*—wrote to the local Hong Kong press in 1844, enclosing his thoughts upon the nature of malaria and protections required.

This, like heat, is an invisible, mysterious agent, but very deleterious to the human constitution. We cannot explain its modus operandi, and how much less do we know the laws which regulate its production, diffusion, and influence; and yet we are fully assured that such a poison is eliminated, from the earth's surface, at certain seasons and places, and that when it comes into contact with our bodies, that we are seized with fever, dysentery, and other disorders, which destroy myriads of people every year, especially in the tropics.⁷

Malaria was, therefore, thought of as an external agent that brought about fever, but not the fever itself. This aspect is important to note. Until we get to germ theory and the concept of infection, malaria was considered as a miasma or vapour: a nebulous, gaseous phenomenon that sickened or weakened the human constitution to the point where fever was an outcome. In this regard, one can consider that Hong Kong, as with other stations on the China coast, became a theatre for malaria and the fevers they induced—according, that is, to the paradigm of medicine at that time. That the fevers themselves were caused by malaria as we now know it—the protozoan (single-cell) parasitic organism *Plasmodium*, propagated by the female *Anopheles* mosquito (the ‘vector’)—seems highly plausible in most cases but not necessarily certain in all. The records used to determine this are obscured by the theoretical position with which contemporary medicine understood the cause.⁸ The answer, then, to the question is both ‘yes, certainly’ to the old understanding of the disease and ‘yes, probably’ to our current understanding. This book is principally interested in the first reply, as herein lay the observations, opinions, and responses that shaped the outcomes which significantly contributed to the physical development of 1840s Hong Kong. In other words, this account focuses upon the *built environment* of the early colony and how perceptions shaped reality. Arthur Starling has attempted to do what this book has not—to diagnose, from a modern medical standpoint, the disease behind the ‘Hongkong Fever’. Yet he too has concluded that ‘it is not certain from the available accounts of Hong Kong fever, whether it was one disease or several . . . but most certainly, malaria would have been at least the most important of those diseases’.⁹

Causes and effects, however, are not quite so straightforward. Some historians of medicine, such as Randall M. Packard, have asserted that epidemics of malaria and their patterns of transmission have, in the past, arisen from dramatic shifts within an environment. Often, these result from complex human factors, making predicting malarial outbreaks difficult while also accounting for its opportunism and resilience. Packard argues that three essential ingredients are needed for an epidemic to occur: the local

presence of malaria-transmitting mosquitoes; an environmental change that favours the breeding of these mosquitoes, essentially changes which disrupt the original flow and distribution of water; and the introduction of a new, large human population, particularly one comprising of malaria carriers or ‘immunologically naïve’ individuals.¹⁰ Early colonial Hong Kong provided all three of these factors, making the argument for malaria particularly convincing. Settlers began the disruption by constructing the main coastal carriageway, the Queen’s Road, blocking nullahs (streams), churning up earth, and thereby providing numerous pockets of stagnant water for mosquitoes to breed in, increasing the problem through widespread pits created from the excavation of land for construction. Contrary to previous historical accounts, it seems from military statistics that malaria was unwittingly *brought* to the island by sick troops of the British armed forces, the healthier members of whom proved both ‘immunologically naïve’ and therefore particularly susceptible to the first attacks across the years 1841 and 1842. As the colonial medical historian Mark Harrison asserts, ‘War favours the spread of malaria in several ways. The movement of large numbers of troops and civilians introduces parasites and vectors into areas formerly free of them; the destruction of dams and levees cause low-lying areas to be flooded, providing ideal breeding grounds for mosquitoes.’¹¹ Due to both rampant city-building and the settlement as a military depot for sick soldiers, by early 1843, the disease had infected a critical mass of people. This number all but ensured the city-wide epidemic that would take place later that year. But, as this book will chart, indeterminacy as to the sources of malaria or ‘marsh miasma’—this mysterious agency of fevers, diarrhoea, and dysentery—lent, by its very elusiveness to ascribable causes, certain pliability to political manipulation by special interest groups and personal agendas.

Miasmata, as a sickening force arising from a natural landscape, though first extending back as a recorded idea to Hippocrates (460–377 BCE), had also more recently captured the imagination of the Romantic Movement in quite a significant way. It could show the hand of God at work in the humbling of arrogant humanity in the quest to conquer and control nature. It could also play into the hands of a growing lobby of protesters writing in the early nineteenth century about the inherent dangers of the British military forces enduring tropical climates in which the European constitution was irreconcilably ill-suited. Francis Danby’s painting *The Upas, or Poison-Tree, in the Island of Java*, is a startling example of the emotional and religious impact of exotic ‘miasmatical’ tropics on the minds of the early nineteenth-century British (**fig. 1.2**).



Fig. 1.2. F. Danby, *The Upas, or Poison Tree, in the Island of Java*, ca. 1820. Oil on canvas.
© The Victoria and Albert Museum, London.

Danby's preferred subject matter was of an apocalyptic and biblical kind. Painted in 1819 and exhibited in London in 1820, it won his election into the Royal Academy. The 'tree', a single thin spike, protrudes from an utterly desolate landscape, the surface sickened by its toxic presence. Bodies are strewn in the right foreground with the last, grief-stricken survivor (evidently a pale European) trapped yet futilely attempting to shield himself from its malignancy. This painting gripped the British imagination and, contrary to what might be supposed, it was not seen as an allegory. The tree, or at least the deadly landscape of Java, was actually thought to exist. The London *Literary Gazette*, reprinted locally for Hong Kong's nervous readers in December 1846, would record, twenty-six years after Danby's painting, an incredibly similar description of a supposed real environment.

THE VALLEY OF DEATH. The following is a probable explanation of the origin of the upas tree story: 'A real valley of death exists in Java; it is termed the Valley of