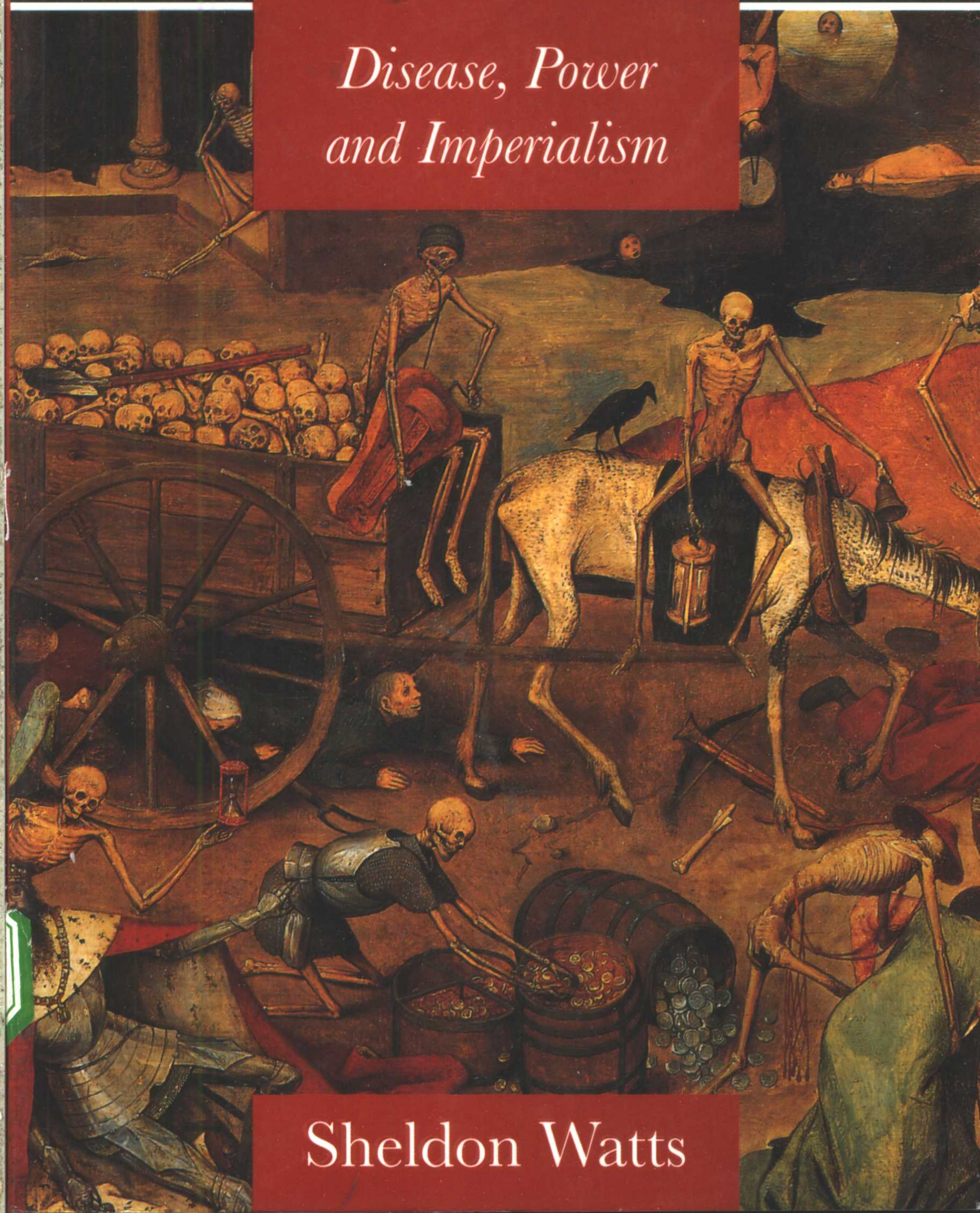


# Epidemics and History

*Disease, Power  
and Imperialism*



Sheldon Watts

# Epidemics and History

Disease, Power and Imperialism

SHELDON WATTS

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Cairo / Ilorin / Lokoja  
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# Introduction

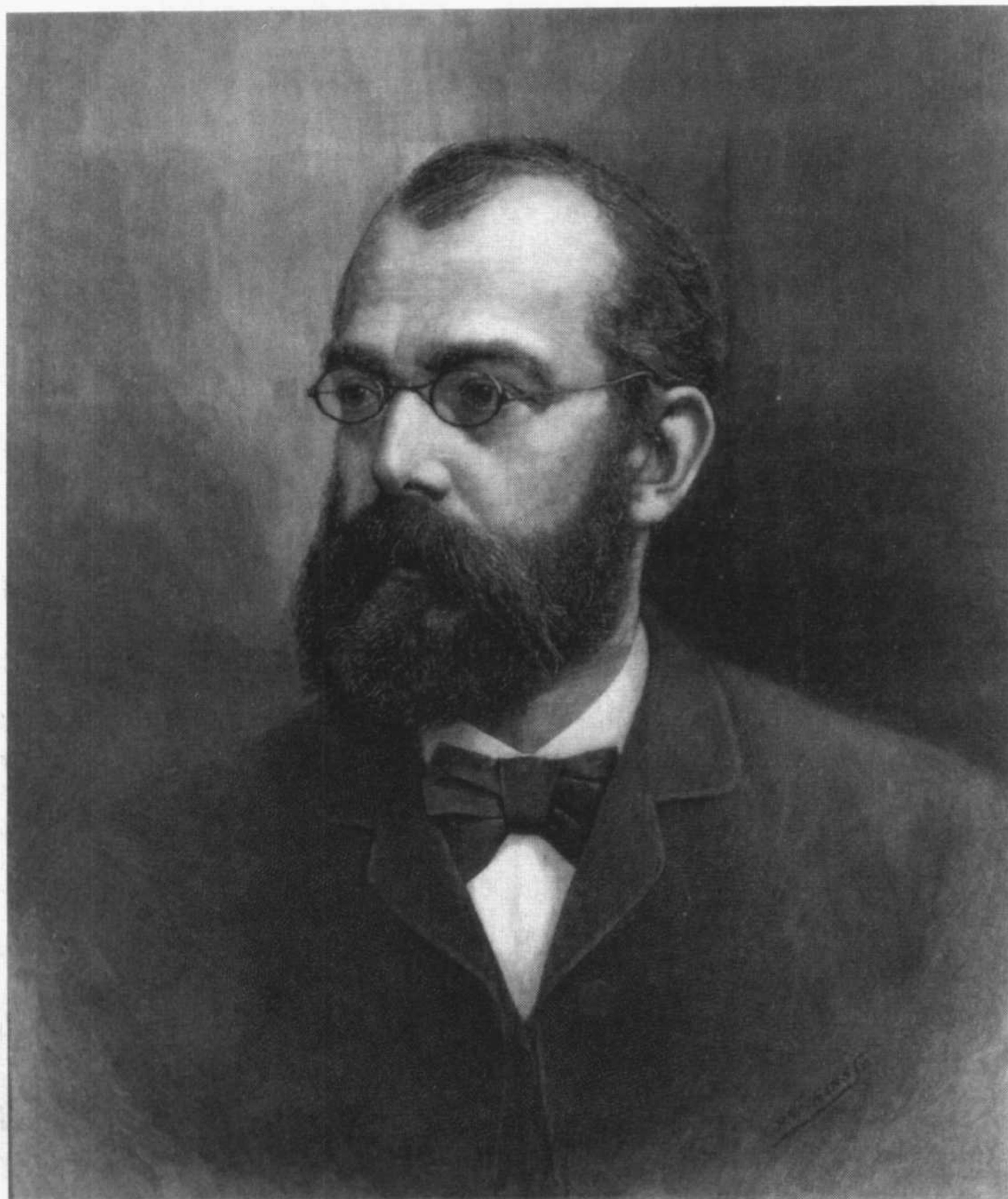
Cairo and Plague! During the whole time of my stay, the plague was so master of the city, and stared so plain in every street and every alley, that I can't now affect to dissociate the two ideas. . . . The orientals, however, have more quiet fortitude than Europeans under afflictions of this sort. . . .[In the cities of the dead], tents were pitched, and *swings hung for the amusement of children*—a ghastly holiday! but the Mahometans take a pride . . . in following their ancient customs undisturbed by the shadow of death.

Alexander Kinglake, *Eothen*, 1835<sup>1</sup>

Living and writing in largely Islamic Cairo 160 years after the author of *Eothen* observed it in time of plague, I am struck by the continuing integrity of Egyptian culture when confronted with life-threatening crises. I am also aware that the sort of cultural imperialism trumpeted by Kinglake is far from dead. For instance, one of the quality London newspapers recently available on Cairene streets revealed that a United Nations panel on climatic change estimated the cash value of each individual in the Third World at only one-fifteenth that of persons in Western Europe or America.<sup>2</sup>

One of the first questions to be asked of a study in comparative history concerned with power relations and the impact of epidemic diseases is about the role played by university-trained medical doctors; have they always performed the same functions as they do today? The short answer is a firm “no”. Until the early twentieth century and the “medicalization” of the West, most sick Europeans not of high or middling status relied on their family for basic health care. If the situation worsened, they might call in healers from the village and perhaps supplement this by cures recommended by wandering pedlars. Aside from financial costs and status considerations, one reason why ordinary Europeans so seldom had recourse to medical doctors was the perception that they were unable to cure any serious illness.

Following guidelines laid down by Galen (131–c. 201 CE) and Avicenna (in Arabic, Ibn Sina) (d. 1037), doctors themselves saw their task as providing clients with special individualized techniques for preventing ill health. When a client who had been acting on a medically prescribed regimen was



1. Professor Robert Koch. Engraving by P. Naumann for the *Illustrated London News*, 29 November 1890.

actually struck by a serious sickness, the doctor's function was to give the impression of *caring*, through placebos, bathings, bleedings, and dietary recommendations. He (before the nineteenth century, a woman doctor would have been a contradiction in terms) knew full well that he could not actually *cure* the illness.<sup>3</sup>

For our purposes, modern medicine begins with the work of the Prussian medical scientist Robert Koch (1843–1910). Koch discovered the tiny living organism (vibrio) that causes cholera while in Alexandria (Egypt) in 1883 and confirmed his finding in Calcutta (Bengal) in 1884; he had discovered the causal agent of tuberculosis two years earlier.<sup>4</sup> Yet it was some time before Koch's radical ideas won general acceptance and came to influence therapeutics. Doctors trained in the "scientific truths" of the Great Tradition held that most diseases were caused by miasmas, undisciplined life-styles, and anything other than tiny *living* organisms. Confronted with Koch's

ideas, they were unwilling to give up what they had always believed. Only with their retirement did younger men trained in the new paradigm finally come to the fore.<sup>5</sup>

The transitional years (1880s–1930s) that led to the full medicalization of the West (lay people's acceptance of medical doctors as their first line of defense against disease) coincided with the great age of European and North American imperialism; the two phenomena were not unrelated. Coming out of the scramble for Africa, the scramble for China, and the conquest of Spain's old empire in the Caribbean and Pacific by the USA was the new discipline of Tropical Medicine. From its very onset tropical medicine was thus an "instrument of empire" intended to enable the white "races" to live in, or at the very least to exploit, all areas of the globe. Justifying this new role were the "truths" concocted by Herbert Spencer and later incorporated into popularizations of Charles Darwin's seminal works on evolution. As generally understood, the Social Darwinistic message was that Europeans were at the very summit of the evolutionary chain and that they should, by right, dominate all other humankind.<sup>6</sup>

Yet as we know, the only thing new about these assertions was the scientism used to support them; as an actual phenomenon European imperialism dates back some five hundred years. Europe's first moves toward world domination were undertaken by the Portuguese and the Spanish in the fifteenth century, followed in the next two hundred years by the Dutch, French and English. Then in the mid-seventeenth century, emerging from what had already become a true global economy touching all habitable continents except Australia were the beginnings of mass consumerism. This phenomenon was part of a larger scheme, *Development*, which was managed by agents living in the financial capitals of Europe: Genoa, Lisbon and Antwerp and later Amsterdam and London.

Regarded for our purposes as a principal motor force of the early modern and modern world, Development was capable of taking on a multiplicity of forms. Most required four elements: (1) fertile land, seeds, forests, mineral and other *raw materials* that could be converted into products (some of them entirely new) which consumers could be enticed to buy; (2) the *laborers* who did the actual converting and who might or might not double as consumers, depending on what their owners or employers permitted; (3) the *credit* and credit facilities needed to meet the costs of bringing together on one site the raw materials and the labor needed to convert it into a saleable product and then to take it to whichever market would provide the highest profit; and (4) the *consumers* who, by handing over cash, promissory notes or verbal promises to pay, converted the finished product into gold or silver, the species on which the pre-1930s European credit system rested. Until the final quarter of the nineteenth century (when high-tech industry finally prevailed), the actual nature of finished products—whether completely manufactured by hand, by machine, or by a combination of both—was immaterial. What did matter was that the European agents of Develop-

ment kept its processes turning over and brought under its influence more and more of the world's people.<sup>7</sup>

Among the unintended consequences of Development was the creation of disease networks which—like the trading network first put in place by the Portuguese—spanned the world. Before Columbus's fateful crossing of the Atlantic in 1492, none of the epidemic diseases treated in this book—bubonic plague, leprosy, smallpox, cholera, malaria, yellow fever or venereal syphilis (as opposed to yaws) had existed in the New World. This happy condition has been seen as the result of two sets of happenings. The first was the migration of proto-Asian peoples overland across what is now the Bering Straits some 40,000 years ago; rising seas closed this route 30,000 years later. These incoming settlers formed the genetic core of the population of the pre-Columbian New World. Second, occurring in the Old World *after* the emigrants had departed, was the evolution of modern diseases.<sup>8</sup>

Theory—based on Europeans' idea that their own past establishes rules applicable always and everywhere—holds that in order to evolve, the types of epidemic disease we deal with here required sizeable populations of settled people. In the Old World, settled agriculture (as opposed to root-gathering and hunting) began between 10,000 BCE (in Asia) and 9,000 BCE (in Egypt and the Fertile Crescent). This chronology fits nicely with time schedules positing the evolution and appearance of Old World diseases. The theory however does not explain why (except for TB) these failed to develop in the New World. In the western hemisphere, in existence from around 500 BCE, principally in Meso-America, were large market towns and populous cities (many with over 50,000 inhabitants).

The evolution of microscopic organisms capable of causing epidemic diseases on the Eurasian land mass several thousand years *after* Native Americans' ancestors left meant that the latter's descendants had no occasion or need to develop immunities against them. The consequences of this were catastrophic, particularly in the case of smallpox. Beginning only twelve years after the death of Columbus himself, in any New World region invaded by infective Europeans, within a generation or so nine out of ten Native Americans would be carried off by smallpox, or other lethal illnesses which seemed like it, before they had time to have children of their own.

But for the Development agents in Europe who were determined to reap maximum profit from mines of gold and silver in the New World, the destruction of Native Americans was no great loss. Thanks to Portuguese naval technology (soon surpassed by that of the Dutch and English) and to Portuguese bases in Africa and Asia, it was relatively easy to import *African* slaves to work the *American* mines. Thus within a few short decades of European contact, the holocaust of smallpox (together with measles and typhus) combined with white greed and other human behaviors to transform the ethnic composition of the New World completely.<sup>9</sup>

In any polity, whether in Europe itself, or in a non-European-ruled region

being transformed by Development, or in a proper European colony, an epidemic impacted on the power relationship between the dominant few and the dominated many. Obviously, it was the rulers who determined the official response to the disease threat (sometimes in consultation with medical doctors). Though epidemiological contexts differed, very often the elite would claim that the disease targeted one particular set of people while leaving others alone. Arrived at through a complex of cultural filters, this perception was part of what I term the disease Construct (as in Construct leprosy, or Construct yellow fever). In establishing official responses, this Construct determined what—if anything—should be done in an attempt to limit disease transmission.<sup>10</sup>

Very often, ordinary people found that the policies put in force during an epidemic—the quick burial of corpses in lime in mass graves, confiscation of the property of the dead, closure of markets, establishment of quarantines—posed far greater threats to their world of lived experience and expectation than the disease itself. Yet the privileged few could never understand why their own ideas (taken to be exemplary of the wisdom of the learned Great Tradition) should not be taken as the universal norm. With the coming of the Enlightenment in France, England and Scotland, the divergence of elite and popular attitudes became wider still.<sup>11</sup>

In the following six chapters, I place each epidemic disease in two different cultural settings, one European and the other Non-Western. Contextualization in time, space and culture means that I have set myself a rather different task than William McNeill assigned himself twenty years ago; essentially what McNeill did was to assess the impact of epidemic diseases on humankind in general.<sup>12</sup> Working chronologically, I begin with a study of the bubonic plague in West Europe and in the Cairo-based Mamluk Middle Eastern empire, both hit by the illness in 1347. In Europe it disappeared in the 1690s/1720s but lingered in the Middle East until the 1840s. In the West, centuries after the plague had disappeared it remained the quintessential scourge against which later crises tended to be compared.<sup>13</sup> Yet, horrendous as Europe's experiences were, at least the plague did not open it to conquest by aliens in the way that smallpox later did the Americas.

The second chapter, on leprosy, begins in the Middle Ages in Europe with an examination of the growth of the potent Construct, the "leper" as stigmatized being, then proceeds to case studies of the way this Construct was applied in the colonized world in the nineteenth century. Beginning with Hawai'i and India, I move on to South Africa, Nigeria, the Philippines and Malaysia. The chapter ends with a note of warning: though there is now an effective cure for leprosy if applied in time, the medieval Christian Construct remains. People prone to accept current western wisdom about Construct lepers seldom seek medical care early enough to prevent the irreversible loss of fingers and toes.

Chapter 3 deals with smallpox in the Americas and in Europe. The fourth chapter examines the hidden plague, venereal syphilis, in Europe and in

the Americas after c. 1493. The chapter ends with a discussion of the ways in which the proud civilization that was China confronted Construct syphilis.

Cholera in India and in Great Britain is the subject of the fifth chapter. During the years of British rule, c. 1786–1947, cholera claimed the lives of upwards of 28 million people. Before the British arrived, it is unlikely that it had ever been a major threat to the subcontinent as a whole. Cholera thus may be seen as the quintessential disease of colonialism. Within the British Isles, where the disease first struck in 1831, cholera and Construct cholera (in this instance a Construct not related to the colonial experience) are seen as one of the several anvils on which the still inchoate middle class beat down their social enemies, the communitarian artisans and craftsmen, who in older understandings were the true people of England.

Malaria and yellow fever in the Atlantic world (Africa, the Caribbean, mainland America) are treated in the penultimate chapter. In the evolution of these diseases, Development (involving the involuntary migration of millions of potential laborers from East to West) is again found to be a principal motor force. As with leprosy in the nineteenth century, disease Constructs were important in shaping dominant peoples' attitudes. Construct yellow fever held that black Africans were immune to the disease. This mischievous understanding was taken to demonstrate that the Christian God had specially created them to serve as slaves in North, Meso- and South America. In Africa and Liverpool in the 1890s, British medical personnel further marginalized blacks by creating a malaria Construct.

This harsh vision of the uses of epidemic disease in the past leads in the "Afterword" to a brief discussion of the situation at the time this book went to press. I take as my point of departure the fact that, building on the insights of Robert Koch, modern doctors and technicians have finally achieved the capacity to control all of the epidemic diseases discussed in this study. In the case of malaria, today still a major killer, it can be argued that failure to control it is due to socio-intellectual-economic barriers rather than to technical ignorance *per se*. With the overcoming of similar barriers, smallpox was abolished from the face of the earth in 1977.<sup>14</sup>

Though scientific knowledge advances year by year, medical personnel remain part of larger social systems and cannot avoid sharing their underlying values. So it is that in the economically advanced North and in certain urban enclaves in the tropics, key groupings of people have agendas for personal gain that do not give high priority to the control of infectious diseases now found mainly in the South. Yet *ordinary* people of the sort Alexander Kinglake observed in Cairene cemeteries in 1835 and I see on Cairo's streets every day have time and again shown their willingness to accept the equal worth and dignity of each of their fellow human beings. In such people lie the seeds of a more humane future.<sup>15</sup>

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*Prints courtesy the Wellcome Institute Library, London.*

# I The Human Response to Plague in Western Europe and the Middle East, 1347 to 1844

## *Introduction*

In the summer of 1347 rats and fleas infected with bubonic plague boarded Genoese merchant ships at Caffa on the Black Sea. Later that year some of these ships passed through the Dardanelles, touched down at Messina (Sicily) and then sailed to Pisa, Genoa and Marseilles; other Genoese ships sailed directly from Caffa to the mouths of the Nile in Egypt. Within a few months pestilence of a form unknown to contemporaries began killing men, women and children on both sides of the Mediterranean. As 1348 wore on, the plague began striking populations along the Atlantic and Baltic coasts. Then, travelling up rivers, along paths and across fields, it reached Europeans living deep in the interior.

Though reliable information is scarce, it would seem that during the five years (1347–51) the Black Death was darting about, mortality varied from an eighth to two-thirds of a region's population. Overall it may have killed three Europeans out of every ten, leaving some 24 million dead. This remains the worst epidemic disease disaster in Europe since the collapse of the Roman Empire.<sup>1</sup>

Also appallingly high was the casualty rate in the Muslim Middle East: between a quarter and a third of the population died. Writing in 1349, Ibn Khatimah, a medical writer from Andalusia (Muslim southern Spain), testified that:

This is an example of the wonderful deeds and power of God, because never before has a catastrophe of such extent and duration occurred. No satisfactory reports have been given about it, because the disease is new. . . . God only knows when it will leave the earth.<sup>2</sup>

In the years after 1351, bubonic plague continued to make sporadic appearances, sparing neither lands to the north nor to the south of the Mediterranean. Though no category of person was immune, it seemed that on every second or third visitation the plague targeted a region's pregnant women and young children. The net effect was to prune back the sprouts of population growth by killing young people before they were old enough to

have children of their own. In the case of ill-favored Florence, generally taken to be the birthplace of the Renaissance, after being hit by plague eight times between 1348 and 1427 the city was left with little more than a third of its pre-plague population of 100,000.<sup>3</sup>

Then for reasons that remain unclear, after around 1450 mortality rates in Christendom began to diverge from those found in the Muslim Middle East; in the latter region pestilence continued to be a frequent population-slashing visitor until the 1840s. By way of contrast, in a Europe that was still overwhelmingly rural, except for localized outbreaks such as those which hit north Italian *urban* centers in 1575–76, 1630–31 and 1656, the ability of plague to significantly reduce the numbers of humans of reproductive age ended in the mid-fifteenth century. Thereafter, outbreaks of plague became increasingly random, missing whole regions for decades. This pattern allowed the population gradually to recover and then to forge beyond its 1347 proportions.<sup>4</sup>

Within this framework, beginning with Western Europe, I will explore the reasons why elites did not respond to the plague as a *sui generis* disease crisis requiring a special response until around 1450; only then did well-born north Italians create plague-specific policies based on what I will call the Ideology of Order.<sup>5</sup> After these policies were introduced in the most politically pliable provinces of Europe (Tuscany, Liguria, Lombardy, Venetia) there was a time lag of 200 years before they were given general continental application. As used after 1660, quarantine and the other standard control techniques probably were the agencies that forced pestilence into retreat, though not all experts agree on this.<sup>6</sup> Be this as it may, it is abundantly clear that the new policies severely strained traditional ideas about the roles appropriate to rulers and those who were ruled. As will be seen, within Europe the creation of plague controls greatly strengthened both the image and the reality of elite authority.

Turning then to the Cairo-based Mamluk Empire and the Ottoman Turkish regime that succeeded it in 1517, I will investigate why no interventionist policy was developed until Muhammad Ali became Viceroy of Egypt in 1805. By that time Egypt's population stood at a mere 3 million, less than a third of what it had been before the onset of plague in 1347.

In this chapter, I do not intend to enter into the debate about the role which urban and rural depopulation, caused by the Black Death and succeeding pestilences, played in the long-term fortunes of the various regions of West Europe and the Middle East. It should be pointed out however that these debates have led to the unsensational discovery that a sudden decrease in human numbers is only *one* of the variables that can decisively tilt the balance between an old established, flourishing economic region (such as northern Italy) and regions such as England and the Netherlands from which new-style entrepreneurial opportunists emerged. With regard to Italy, the Cambridge historian S. R. Epstein has recently compared the fortunes of Sicily and Tuscany. He suggests that though initial plague mortalities may