

# Empire's Little Helper

**Chinese history shows that where soldiers march, plague follows.**

By Peter C. Perdue

Empires are big and microbes small, but both have shaped history by conquering territories and bodies, leaving death, disease, and devastation in their wake. Yet humans have survived many such onslaughts and brought, at hard-won cost, peace, knowledge, and protection.

Conquerors such as the Romans in Britain or the Mongols in China first massacred local people who were not yet “immune”—that is to say, submissive. Huge numbers of people died, but afterward rulers and subjects worked out an accommodation where regular taxation replaced mere plunder. In the same fashion, diseases settled into an arrangement with humanity. The initial casualties as new viruses and bacteria emerged from the wilderness died down as immunity developed or diseases became less lethal, allowing a mutual, if uneasy, existence.

Disease and empire also marched together. In the Imperially Commissioned Golden Mirror of Medical Learning, a Chinese medical encyclopedia published in 1742, infectious disease marks the page. Illustration after illustration details the ravages of smallpox, a longtime scourge that Chinese armies would carry into other states: “swallow’s nests” of pustules clustered together, “crab claws” of marks dense at the top but light at the bottom, “mouse tracks” of pustules trailing across flesh.

The text was commissioned by the Qianlong emperor himself, to “rectify medical knowledge” throughout the empire, and compiled over three years by a dedicated group of 80 doctors and officials, from imperial physicians to student copyists. Over a hundred pages are devoted to smallpox alone. China knew the disease well. Doctors had been describing it since the 15th century, and the Chinese led the way in developing a partially effective vaccine known as variolation, by inserting scabs from infected people into the nostrils of the rest of the population.

Until the 17th century, smallpox remained confined to China, as Central Eurasia was nearly walled off from Chinese contact. The Manchus, however, who conquered the Ming dynasty in the mid-17th century and became masters of China as the Qing dynasty, extended their rule into Mongolia. The Qing rapidly familiarized themselves with the most modern techniques to fight the disease, including variolation. When the Manchus invited their Mongol allies to visit, they met them in a summer palace in Manchuria, not in Beijing, and even practiced social distancing as best they could. Qianlong, the fourth Qing ruler, was clearly happy with the results of the encyclopedia; he heaped gifts and new offices on the writers, including a detailed manikin showing key acupuncture points.

The Dalai Lama in Tibet also knew of smallpox’s danger; other lamas who visited Beijing tried to isolate themselves inside their monasteries. Yet Mongols and Tibetans did die in large numbers, as the virus could not be contained. The Qing were quick to take advantage. The last Mongol holdout against Qing domination, Prince Amursana, died of the disease in 1757; one historian estimated that up to 40 percent of his followers died of smallpox, more than from combat or famine. As lands emptied, Qing troops moved in, clearing the way for future Chinese

settlement—and for the sweeping claims the modern People’s Republic of China has made to Mongolia, Xinjiang, and Tibet.

A second disease, endemic in China since the 18th century, would take an equally global toll. The plague bacillus, which devastated Europe in the Black Death, remained active in the high mountains on the Sino-Burmese border into the 18th century. It then followed the tracks of merchants, miners, soldiers, and travelers through southwestern China. But at the turn of the 20th century it broke out of its Chinese bubble through Hong Kong to infect the entire world, producing several plague pandemics in the 1900s that struck North and South America and killed more than 100,000 people.

Chinatowns in Hawaii and San Francisco were quarantined. Newspapers in the American West attacked Chinese immigrants as disease-ridden hordes.

In 1910, when plague broke out again in Manchuria, Qing China’s first public health activists began to study the disease with the aid of Western specialists. The Malaysian-born physician Wu Lien-teh was the first to promote the wearing of cloth masks, which sharply cut the fatality rate. The World Health Organization later developed from this pioneering international alliance against a microscopic enemy.

The 1742 encyclopedia shows the dedication and depth of Chinese medical research and its imperial sponsors—knowledge that would be used both to save lives and in the making of empire. Pandemics, like wars, are ruthless auditors that test the resilience of national and international orders. Some regimes use them for domination; others find in them an opportunity for collaboration. At least once in the past, China and the Western world collaborated against a common threat. Can it happen again?

This article appears in the Summer 2020 print issue.

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