Meetings with Disease

Death by Migration. Europe's Encounter with the Tropical World in the Nineteenth Century. PHILIP D. CURTIN. Cambridge University Press, New York, 1989. xx, 252 pp., illus. $39.50; paper, $11.95.

Loss of life arising from movement into a new disease environment is an age-old phenomenon and has often played a decisive role in military campaigns. The preservation of the Spanish empire in the Americas in the 18th century, for example, was largely due to ravages of yellow fever that doomed British expeditionary forces to failure in 1742 and again in 1762; and French losses in Haiti in 1802 brought victory to the rebelling slaves of that country also. Many similar examples could be cited all the way back to the collapse of the Assyrian army before Jerusalem in 701 B.C.

The present monograph on this theme exploits British and French military medical records between 1830 to 1914 to measure what Curtin calls "relocation costs"—meaning loss of life rather than monetary expenditures—involved in sending European soldiers to garrison the West Indies, the Madras Presidency, and Algeria. Curtin's starting point was defined by the inauguration of usably accurate statistics, and he chose his three regions because they offered a "sample area that provided data for the largest number of troops over the longest period of time, with the least distortion from frequent campaigning."

At the beginning of the period Curtin studied, tropical garrison duty involved heavy loss of life among European soldiers encountering new and lethal infections without the protection of immunities acquired in childhood. But in the course of the 19th century, advances in sanitation and preventive medicine reduced disease deaths drastically:

> Annual average death rates dropped by 85 to 95 percent between the earliest surveys of the 1820s and 1830s and the eve of the First World War . . . What the military doctors and their civilian colleagues achieved in this period was to put an end to the vast majority of unnecessary deaths among the young—whether in Europe or in the tropics. It was simply the first and largest step toward a world in which infectious disease has ceased to be the main cause of death for this age group [p. 159].

How they did it and the stages by which this dramatic transformation of disease encounter was achieved are Curtin's subject. He discerns three periods: an initial level of disease deaths that constituted "a prolonged plateau of relatively high mortality, stretching back still further into the past" (p. 4); a mid-century drop in death rates, when a variety of changes in garrison routines (quinine, latrines, relocation to more healthful locations) reduced mortality dramatically (chapters 2 and 3); and a final period when the accurate decipherment of patterns of infection (beginning in the 1880s) allowed military doctors to safeguard troops far more effectively than before by programs of mosquito control, inoculation, testing of water supplies, and the like (chapters 4 through 6). For each period, Curtin first provides the statistical evidence of changing relocation costs and then discusses what military medical experts thought and did to achieve their dramatic results.

Graphs and tables abound, and there is no need to summarize the statistical results of Curtin's research here. He faced his share of difficulties in deriving uniform and more or less accurate statistics from the records available to him, and he explains the character of his sources and their limitations in a lengthy appendix with tables (pp. 162–222). I am no judge of his statistical procedures, but Curtin gives every outward sign of handling his sources wisely and well.

Curtin's statistical labors provide some mild surprises. Chief among them is the importance of mid-century alterations in garrison routines in reducing disease deaths.

> The greatest drop in absolute death rates—in deaths per thousand men—came over the mid-nineteenth century both in Europe and overseas. The main cause was neither quinine nor smallpox inoculation, although both played some role. The improvement came instead from empirical measures, like moving troops into the highlands to escape malaria, moving them under canvas and away from cities and barracks to escape cholera and yellow fever, or improving the water supply [p. 160].

Curtin projects two further monographs based on the same statistical materials. One will deal with the disease experience of native troops serving side by side with Europeans in tropical environments, and a second will examine the relocation costs faced by non-Europeans who were transferred from their home environment as soldiers in European armies. Upon the completion of their projects, he will be in a position to assess an aspect of the costs of European imperialism that has hitherto almost escaped historians' attention.

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The Uses of Paperwork

Control Through Communication. The Rise of System in American Management. JOANNE YATES. Johns Hopkins University Press, Baltimore, 1989. xxii, 339 pp., illus. $29.50. Studies in Industry and Society.

Most history has been written from the top down. In school we were taught about the great presidents, the conquering generals, and a few of the most engaging scoundrels. So too in the history of business, where the great banker J. P. Morgan holds a secure niche in our perception of the past, as do Andrew Carnegie and Henry Ford and maybe a grand thief or two. But people like ourselves have, for the most part, been left out of the books historians have written and the courses they have taught.

In both political and social history, the last generation of professional historians has been busy trying to correct that situation. They have dug down to the local level of society, peering at who voted and why, analyzing the family, describing how communities, churches, factories, and farms actually functioned and how they were perceived by the people who kept them going.

Now, if JoAnne Yates charts the course, business history will develop a similar concept of the past. In *Control Through Communication*, Yates takes business history out of the boardroom and into the office, the conference room, and even the shop floor. She shows us how business communication changed in the decisive period between 1850 and 1920, as informal, oral modes gave way to a system that depended heavily on written documents. She describes the hardware—the Wootan Patent Desk, Edison's Electric Pen, the Underwood typewriter—and shows us when and to what effect these technical advances were introduced. She meticulously traces the emergence of the memorandum and helps us see the major changes that took place in downward (mostly orders) and upward (mostly reports) communication in American business firms. The author wisely provides case studies: the Illinois Central Railroad, the Scovill Manufacturing Company, and DuPont. These detailed studies anchor her gen-