Plague and Empire in the Early Modern Mediterranean World: The Ottoman Experience, 1347–1600. Nükhet Varlik. Cambridge: Cambridge University Press, 2015. xviii + 336 pp. \$99.99.

Plague and Empire is the first book to systematically explore plague in the Ottoman world from the Black Death into the seventeenth century. It rests on prodigious research into scientific studies of plague, literature on Ottoman history and empires, and primary sources in French, German, Italian, Latin, and Turkish. Until the sixteenth century the documentary sources are limited to narrative works and often travel reports by foreign merchants and diplomats. With the sixteenth-century expansion of the empire, the Ottomans began producing an impressive bureaucratic paper trail, on which Varlik relies, principally the *mühimme* orders sent from Istanbul to provincial administrators.

Plague and Empire presents new theses: (1) the Ottoman Empire before 1750 has been largely ignored by scholars, not only because of a paucity of sources, but because of the prevailing image of the unchanging "fatalistic Turk"; (2) early plagues to 1517 spread from Europe to the East, not in the opposite direction as has been presumed; (3) before 1517 plagues East and West recurred at the same frequency, about once every ten years; (4) afterward, with Ottoman expansion, the trajectories of plague became increasingly complex because of interlinking networks of commerce, communication, and power relations within the Ottoman Empire; (5) by the 1570s Istanbul became the "hub" of these interregional networks of plague; (6) during the sixteenth century, patterns of plague in the Ottoman Empire diverged from Europe's (the author makes no distinction between Italy, France, Spain, and other countries). With the growth of trade, population, urbanization, and power, plagues became more frequent in the Ottoman Empire, occurring at least every three years and becoming more deadly. In Istanbul plague deaths could reach 3,000 a day. A plague of 1574 in the district of Üzeyir produced mortality rates of 75 percent, unheard of for any plague anywhere during the Third Pandemic.

According to Varlik, the shift in these Ottoman plague patterns are explained by the spiraling increases in urbanization and the development of empire from the sixteenth century on, which interlinked vast expanses of territory through power relations, commerce, and the consequential exponential increase in the movement of people and things. Her explanation, however, does not consider the question comparatively. At the

same time, Europe was experiencing much the same economic, demographic, and political developments with the spread of the Spanish Empire into the Low Countries, Naples, Sicily, the Duchy of Milan, and with further annexations extending into the New World during the reign of Charles V. The population of cities such as Naples, Rome, Milan, Madrid, Venice, Paris, London, and many others soared, increasing their commercial and political dominance over vast hinterlands. Yet the trajectory of plagues turned in the opposite direction: gaps between successive plagues widened significantly, first, in fact, in Ragusa, a city tied by tribute to the Ottoman Empire. Between its plague of 1482 and penultimate one of 1526-27, the gap was forty-four years (see Zlata Blažina Tomič and Vedsna Blažina, Expelling the Plague [2015]). Italy came next, with plague gaps extending to fifty and even a hundred years by 1630. Later in the century these gaps widened in regions north of the Alps. The topography of these developments followed one key variable --- quarantine and concomitant mechanisms controlling the movement of people and goods in plague time, factors that Varlik never discusses. Of course, as scientists and afflicted communities soon discovered during the Third Pandemic, quarantine was useless in arresting the rodent-flea-vector disease: the pathways of rodents and fleas were undeterred by quarantines on humans. This is not to say that the pathogen of the Second Pandemic was not a strain of Yersinia pestis (as geneticists now agree). Yet as geneticists, biologists, and archaeologists now working at the Norwegian Academy of Sciences under Nils Christian Stenseth, Lars Walløe, and Barbara Bramanti are discovering from late medieval sites in Europe, the strains of this pathogen during the Second Pandemic may not have depended on the slow-moving and relatively ineffectual mechanisms of dissemination by rats and flea vectors. Certainly, Varik's evidence points in this direction as her yearly maps of plague circulation through great expanses of the Ottoman Empire show, along with one in the Crimea in 1571, which spread "like a wildfire," reaching Poland and northwest Russia less than a year later (192).

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