Introduction

This book could not have been written ten years ago – at least with the confidence we have today – without the recent spectacular new leap in plague scholarship that has transformed both humanistic and scientific research. Research in molecular archeology, and genetics in particular, has made remarkable achievements by extracting and analyzing ancient DNA (aDNA) and mapping out the phylogenetic (evolutionary) history of *Yersinia pestis* (the pathogen that causes the plague). In 2011, this research culminated in the reconstruction of the full genome of *Y. pestis* entirely from fourteenth-century human remains. The implications of this endeavor are truly revolutionary. For plague historians in particular, this heralds liberation from decades-long reticence that dominated their field of scholarship: students of past epidemics were methodologically restrained and cautioned against the pitfalls of retrospective diagnosis, using a disease category drawn from modern microbiological knowledge and applying it anachronistically to a past where that knowledge did not exist. Today, recognizing the significance of what science has to offer, the student of past plagues can integrate nonwritten evidence into historical analysis with great confidence.

Presently, there is international scholarly consensus that the three historical pandemics that were believed to have been *Y. pestis*-caused plague were indeed so: the First Pandemic, known as the Justinianic Plague (541 to circa 750); the Second Pandemic, known as the Black Death (1346–53), and its recurrent waves, which continued for centuries after the initial outbreak; and the Third Pandemic, which spread globally after its eruption in Hong Kong in 1894.¹ This book is concerned with perhaps the most controversial, ¹ For the conventionally accepted periodization of historical pandemics of plague, see Lester K. Little, “Plague Historians in Lab Coats,” *Past and Present* 213, no. 1 (2011): 270–71. For the Eurocentrism of this periodization and why the Ottoman experience of plague complicates it, see Nükhet Varlık, “New Science and Old Sources: Why the Ottoman Experience of Plague Matters,” *The Medieval Globe* 1 (2014): 193–227. For the scholarly consensus and
the Second Pandemic. Although the new scientific research will transform what is already a monumental scholarship devoted to the Second Pandemic, there are certain historiographical caveats that one must bear in mind.

First of all, Europe has been the primary benefactor of Black Death studies and thus continues to hold a privileged position in the scholarship compared to other parts of the world that may have been at least as badly affected by it, if not more gravely. For example, our current knowledge about how various parts of Asia, the Middle East, and Africa were affected by the pandemic is at best fragmentary and disconnected. Even though fine historical studies have examined the plague experience of these areas, these are difficult to bring together owing to their temporal and spatial breadth of coverage.

Second, a substantial portion of the available plague scholarship is devoted to the initial outbreak of the mid-fourteenth-century Black Death and its consequences, at the expense of the recurrent outbreaks of the Second Pandemic that continued for several centuries. Although some exemplary studies are exceptions to this general trend, the privileged position of the Black Death itself in the scholarship is undeniable. This emphasis may feed into a distorted historical perception of post–Black Death epidemics. Bearing in mind the many waves of plague that continued after the dreadful but brief episode of the Black Death, it becomes all the more evident that the recurrent waves of the Second Pandemic are underrepresented in the scholarship.

Third, and perhaps stemming from this underrepresentation in the scholarship, how and why plague persisted for such a long time during the Second Pandemic has hitherto gone largely unexplored. Focusing on the European case, the scholarship has often considered the Great Plague of London in 1665 or the Plague of Marseille in 1720-21 as the end of the pandemic and produced discussions of the “disappearance” of plague. However, it is well known that outbreaks of plague continued in Russia in the 1770s and in the areas controlled by the Ottoman Empire well into the nineteenth century. These cases beg for a reconsideration of the Second Pandemic’s chronological and geographical framing, the historical conditions that helped sustain it, and its effects in areas outside of Europe.

Fourth, as far as the broader Mediterranean world is concerned, the traditional scholarship seems to suffer from assumptions of differences between Christian and Muslim (or Oriental and Occidental) societies with respect to their experiences of plague. Even in studies that aim to offer a unified


Mediterranean vision, these divisions play an important role in explaining the very differences in the spread of plague and the responses it stirred. These dichotomies not only bind the scholarly analyses to reductionist perceptions of past societies but also produce a rather thin sense of the historicity of plague epidemics and the means through which they were experienced in the Mediterranean world. In fact, there is compelling evidence in support of the Mediterranean as a unified disease zone, with shared epidemiological experiences, as well as a common heritage of medical traditions. To achieve a more connected understanding of the historical epidemiology of the Mediterranean world, it is imperative to study the plague experiences of those regions that are assumed to be essentially different from Europe. This book aims to contribute to a connected vision of the post–Black Death Mediterranean by integrating the Ottoman experience into the historical narrative. In these pages, we carefully position the Ottoman case on the dissection table, with a view to identifying the major nodes that were attacked by persistent outbreaks of plague, tracing the main arteries that enabled the circulation of infection and the overall responses of its people in the face of these epidemic invasions. The goal is to make it clear to the reader that the Ottoman experience of plague is not only eminently comparable to other such historical experiences but also indispensable for a better understanding of the post–Black Death Mediterranean plagues.

Fifth, and in conjunction with the previous points, the present state of the scholarship does not afford a proper understanding of the Ottoman experience of plague during the Second Pandemic. The only extensive scholarly monograph on the history of plague in the Ottoman Empire covers the years between 1700 and 1850. As such, the emphasis on the later centuries of the empire’s history may obscure the nature of the Ottoman experience of plague in the late medieval and early modern eras. This may especially be misleading because it seems to reproduce a historical narrative that heavily draws from a nineteenth-century Eurocentric vision of the Ottoman society and projects this vision to earlier eras. According to this narrative, the Ottoman Empire, as the “sick man of Europe,” came to represent a plague exporter, the home of all plagues that assailed Europe’s shores. With this in view, Europe strove to protect itself by implementing quarantine measures and establishing cordons sanitaires. But how is it that the Ottoman Empire is understood to be the primary plague exporter to Europe when the Ottomans’ own experience of plague still remains unknown in the scholarship: when

3 See Daniel Panzac, La peste dans l’empire ottoman, 1700–1850 (Leuven: Peeters, 1985). For a more detailed discussion of the scholarship on Ottoman plagues, see Chapter 2.
and how did it arrive in the Ottoman world, how did it circulate there, how did its people perceive it, and what, if anything, did the administration of the empire do about it? Curiously, whereas scholars interested in the European experience of plague are satisfied with the conclusion that plague came from the Ottoman Empire and have little or no interest in how it originated there, the historians of the Ottoman Empire rarely assign much importance to the role of plague in the empire’s history. Scholars working outside the field of Ottoman studies cannot be expected to interest themselves in plague in the Empire if the Ottomanist scholarship does not produce the research that would assist them in doing so. And yet the plague in the Ottoman-ruled areas before the eighteenth century has remained largely unexplored. Was there no plague in the empire before 1700 worth being the subject of a scholarly monograph? Surely there was, as allegedly all European plagues originated there, but silence prevails.

The reasons for the silence in the Ottomanist scholarship can barely be accounted for by the depiction of the Ottoman Empire in this particular manner. Rather, there is a complex web of historical and historiographical reasons why this subject remains a bête noire in this field of scholarship, especially for the first centuries of Ottoman history, as is discussed at length in these pages. However, suffice it to say here that despite the recent flurry of interest in the subject, there exists no systematic study of the geographical and chronological scope of plague epidemics that affected the Ottoman lands before the eighteenth century, let alone an exploration of the nature of the specific diseases involved in them; their social, economic, demographic, and other such effects on Ottoman society; or the Ottoman perceptions of (and responses to) this phenomenon. Indeed, these have hitherto remained largely unexplored in the Ottomanist historiography.

In view of these limitations in the scholarship, this book takes upon itself the twofold task of demonstrating that Ottomanist literature should take plague more seriously and that studies of historical epidemiology should grant the Ottoman experience its due consideration. For doing so, on one hand, we seek to answer the question of why the Ottoman experience matters for an understanding of the post–Black Death Mediterranean plagues. On the other hand, we deal with the question of why plague matters for an understanding of Ottoman history. By addressing these questions, this book seeks to demonstrate that the histories of plague in the Mediterranean world and that of the Ottoman Empire should be considered in conjunction with each other.

Plague and Empire

In the following pages, I argue that the growth of the Ottoman Empire and the expansion of plague epidemics are intimately entwined. With a view to
demonstrating this entwinement, this book reconstructs a historical narrative of plagues that affected Ottoman-controlled areas from the Black Death to the end of the sixteenth century (1347–1600), traces their trajectories and recurrence, and establishes their links to the patterns of growth and consolidation of the Ottoman power, with a special emphasis on conquest, urbanization, and networks of exchange.

Why this chronological frame? It should be noted at the outset that the selection of this time frame has been a conscious one. The study of this two-and-a-half-century-long period is critical for demonstrating the intimate relationship of plague and empire: not least because this era coincides with both the expansion of the Ottoman power and that of the plague, but more importantly because this is when the basic trajectories of dissemination of the epidemics took shape. This is especially true for what is referred to in this book as the long sixteenth century, that is, from the conquest of Constantinople to the end of the sixteenth century. Plague outbreaks gradually became more frequent and widespread in Ottoman cities during this era; hence, tracing the spatial distribution and periodicity of plagues of the long sixteenth century promises to afford a better understanding of plagues of the post-1600 period. Moreover, this is also when we see a critical change in the Ottoman perceptions of (and responses to) plagues, which may help explain the developments that followed in the seventeenth and eighteenth centuries.

At this point, it may be useful to remember the observation made by a great historian of medicine about two decades ago. In his colossal book The Greatest Benefit to Mankind, the late Roy Porter pointed out that empires, like trade and wars, triggered the spread of epidemic diseases. Even though Porter had the early modern Spanish example in mind, his insightful comment still holds true for other empires in that era. As a matter of fact, empires and plagues have often been mentioned in conjunction with each other in historical scholarship. One does not fall short of finding examples of “great plagues” in the “great empires” of history. It is interesting to note, however, that plagues more readily conjure up associations with the “fall” of empires. Regardless, the relationship between the two historical phenomena remains insufficiently explored. Instead, there seems to be a stronger inclination to associate pandemics with historical phenomena that had effects on a larger, hemispheric scale. Perhaps because empires conjure up notions of borders and boundaries, large-scale events such as pandemics seem to have called historians to adopt a world-historical perspective. It


is no coincidence that historical studies of epidemics and pandemics have often emphasized the process of globalization as the fundamental modality for facilitating the spread of disease. However, historians of empires caution us against overexploiting the concept of “globalization,” especially for the premodern era. For the sixteenth century, for example, Jane Burbank and Frederick Cooper remind us that “thinking about a history of connections” can afford a better understanding than that offered by “globalization.”

It is thus critical not to project modern definitions of globalization onto the premodern world, where the precise nature of disease spread is blurred. Even though it is true that regional systems emerged in the premodern world and that their gradual integration contributed to the formation of a global system, this was not a linear process by which globalization was achieved in a smooth and uncontested manner. Despite the insights offered by such notions as “microbial unification” or the emergence of “disease zones,” how exactly the assumed process of gradual globalization furthered the spread of disease remains far from clear.

Hence, with regard to disease spread, thinking about a history of connections might serve our purposes better.

In the example of the early modern Mediterranean, the driving force for these connections seems to have been assumed by (multi-)regional empires: the growth of territorial or tributary empires, rather than a process of global unification, seems to constitute a better context for understanding the spread of epidemic disease. These empires, not only as political entities but also as configurations of networks of exchange, seem to have been the principal agents of epidemic expansion in the early modern era. Conceived in this manner, empires exercise myriad forms of power (such as military, administrative, or economic) along the connections they nurture and proliferate. Plague, like trade goods, people, animals, and ideas, circulated along these networks. As this book shows, the growth of the Ottoman domains produced an increased level of communication, interaction, and mobility between individual regions brought together by conquest. These newly conquered regions came to be bound within an administrative, military, and commercial system. Indeed, it did not take long for widespread plagues to follow. Consolidating the intersecting trade networks connecting the Balkans, Caucasus and Central Asia, Asia Minor, the Arabian Peninsula, Persia, North Africa, and the eastern Mediterranean provided a new set of connections over which plague could spread extensively both within the Ottoman domains and beyond. In this manner, the rise and expansion of the

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10 For the Ottoman empire as a tributary empire, see Peter F. Bang and C. A. Bayly, *Tributary Empires in Global History* (New York: Palgrave Macmillan, 2011).
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Ottoman Empire constituted a constellation of connections for the spread of plague in the post–Black Death Mediterranean.

Plague Ecologies

Plague is an infectious disease caused by a bacterium, *Y. pestis*, that attacks the lymph nodes, usually causing inflammation that produces painful swellings in the groin, armpit, or neck, called *buboes*—a characteristic symptom of bubonic plague. Other symptoms, such as fever, chill, headache, and extreme exhaustion, may accompany buboes. If the bacteria infect the lungs, pneumonic plague develops, which then can be transferred from person to person via infected droplets spread in the air as a result of coughing or sneezing. When the bacteria multiply in the bloodstream, fatal septicemia may develop, causing shock, organ failure, and sudden death. In bubonic form, plague may be fatal (between 40 to 70 percent mortality). Today, bubonic plague can be treated successfully with antibiotics if diagnosed early. Pneumonic plague, however, still remains a fatal condition that can kill within twenty-four hours if not treated promptly. Even though some may believe that plague is a disease of the past that conjures up images of the Middle Ages, it is very much alive in some parts of the world (e.g., the southwestern United States, Central Asia, Madagascar), where it is enzootic among rodent populations and may “spill over” to human populations.11

Once plague is introduced to a new environment, if the infection finds a rodent population to sustain it, it tends to form enzootic foci, either in the wild or in human settlements. The enzootic foci in the wild normally are not a direct threat for human societies. Only those individuals who come into close contact with infected or dead plague carriers (rodents or other mammals) or their arthropod vectors would be exposed to risk. Hence, it is possible to imagine that the infection can be carried to human settlements near enzootic foci. In such places, this sort of sporadic isolated breakout probably occurred often enough, without being documented in the historical sources. Even when the infection is communicated to the commensal rodents living in close proximity to humans, there would be local and perhaps repeated outbreaks. Even if no communication existed among infected human settlements (no trade, no travel, etc.), enzootic plague could still continue and produce epizootics and epidemics at times. Such breakouts would allow us to identify their area of origin, spread, range, and periodicity, in some recognizable patterns. For example, when plague was introduced (or reintroduced) to Anatolia and the Balkans during the Black Death, it affected

certain locations, circulated along main routes, and eventually died down each time, to recur every ten to fifteen years. This being the typical behavior of the plague, it continued more or less in this manner until the mid-fifteenth century or so.

Starting in the second half of the fifteenth century, plagues occurring in Ottoman lands diverged from these patterns. From then on, the spread and frequency of the outbreaks become unrecognizably different, so much so that, for example, there is a recorded incidence of plague in Istanbul almost every year. This divergence certainly demands an explanation. I argue that this explanation needs to be sought in the formation of the Ottoman Empire. To build a centralized empire, the Ottoman polity regulated, mobilized, and organized its “natural” resources, including crops, livestock, people, and minerals. These items circulated in a manner imposed by the empire’s administration – the effects of such ecological engineering have been shown convincingly in recent works. As an unintended consequence, the very same constellation of connections helped circulate plague. This book is an attempt to demonstrate the effects of the empire’s ecological management with respect to plague.

Plague Networks

Throughout the book, the reader will encounter terms, such as plague networks, networks of exchange, or networks of disease exchange, that will be used almost interchangeably. In addition, I also refer to plague hubs (major and minor) and plague nodes along these networks. What do I mean by these terms? I refer to a plague network as a dynamic set of relationships that not only enable the flow of the disease but also simultaneously circulate its meaning and effects as well as perceptions and knowledge about it along each node and segment of these connections. Thus, at its simplest level, one can conceive of a plague network as a set of circuits or pathways that connect a plague focus (a reservoir of plague, in which the infection is kept alive by animal hosts without causing large-scale mortality) to a human settlement, where the disease may assume an epidemic form. At a slightly more complex level of analysis, several urban and rural human settlements that are connected to one another with commercial, diplomatic, or economic relationships can be superimposed onto the simple set of trajectories that connected plague foci to them. In this picture, plague nodes and hubs are useful conceptual tools. Further expanding the scope spatially can help us identify larger zones of plague exchange. Each of these sets of relationships can be conceptualized as a plague network.

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Why plague networks? Looking at the experience and effects of plague in a given city or region can tell a lot. For example, it is possible to reconstruct the experience of a community with the disease at the local level. However, expanding the scope of the inquiry both temporally and geographically can offer new ways of understanding. Thus, tracing change through mobility and movement can add tremendous insight to the analysis. It may be possible, for instance, to detect patterns of spread, trajectories, and frequency.

More importantly, a conceptualization of disease along a set of relations in time and space can also expose social, political, and economic structures and inequalities. For example, the effects of plague were more visibly dramatic in Istanbul than elsewhere in the Ottoman realm. If not entirely an artifact of the sources, then plague, along with its opportunistic rodent hosts and parasitic vectors, was a free rider that moved toward centers of affluence. It may have moved toward the Ottoman capital in the same way that silk, wool, and fur did; just as sugar, spice, and rice did; and just as the same people, knowledge, and texts did. Istanbul was where multiple networks converged. Hence, most of our story is in or about Istanbul, and in this sense the picture that emerges in this book is heavily Istanbul-centric. To be sure, there were cases of plague in other cities and villages of the empire, but they do not receive equal attention in these pages. Yet, this should not be read as an apology owing to the emphasis given to Istanbul in the sources. Being fully aware of this methodological predicament, the historical analysis in this book aims to demonstrate an epidemiological phenomenon that may be called the capital effect. According to this, large urban areas, especially capitals of empires, tend to be visited by a greater number of epidemics than smaller towns or villages. Large cities like Istanbul worked like magnets; just as they attracted goods, people, capital, and knowledge, they also attracted disease. In the context of the political economy of an early modern empire, Istanbul’s history can be reconstructed as the capital of plague. ¹³

Furthermore, studying plague networks allows glimpses of how the imperial power was operationalized. Not only the circulation of plague along those networks but also the flow of reports and regulations about the disease may help in understanding this. As the case may be, the empire projected power from the center, but this power was not felt and exercised everywhere in the exact same manner. The imperial power was mediated within a given set of relationships at the local level. As a rule, the center sent agents to provinces in charge of carrying messages, documents, and papers on which imperial decrees were formulated. Provincial administrators

¹³ A similar pattern can be observed during the city’s Byzantine past. See Dionysios Stathakopoulos, Famine and Pestilence in the Late Roman and Early Byzantine Empire: A Systematic Survey of Subsistence Crises and Epidemics (Aldershot, UK: Ashgate, 2004), 30–32.
formulated responses and translated, mediated, and negotiated these decisions while drawing from firsthand knowledge of local circumstances. As far as cases of reporting plague are concerned, it may be possible to trace the processes, identify the agencies, and witness how local knowledge was used to define, refine, and modify the imperial vision of power. Taken as a whole, then, the empire itself consisted of a set of connections, operationalized at every step of the way through projections, mediations, and negotiations of power. Just like the plague, the empire operated on a porous, uneven, and patchy space, amid the nodes and trajectories that constantly strove to bring them together. Thus, this was as much an empire of paper, politics, and power as it was an empire of plague.

Last, we may need to address briefly the question of whether the recorded increase of plague reflects a real increase or a historical artifact. Both narrative and archival sources suggest an increase in recorded incidence of plagues in the sixteenth century and especially in its latter half. However, there is also an overall increase in record keeping in the very same period. Although this problem seems not an easily quantifiable one and may have had its share in shaping our historical perception, it may nevertheless prove itself to be framed, not in terms of an either-or dichotomy, but instead as concomitant manifestations of a larger force at work. In other words, instead of situating more plague in opposition to better recording, I propose apposing them as signs and symptoms of the formation of an imperial body and its vital networks facilitating collecting, recording, and distributing information, on one hand, and circulating disease, on the other. Hence, I suggest that the very same mechanisms sustained and enabled both plague and its mobilities of exchange.

Periodization, Sources, and Terminology

This book follows a system of periodization that draws from Ottoman political and military history, more specifically, from key Ottoman conquests, as well as from major plague outbreaks. For reasons elaborated at length in the following pages of this book, Ottoman conquests had a significant effect on plagues. Hence, the selection of dates such as 1453 or 1517 is owed to the lasting effects of those conquests for studying the Ottoman history of plagues. Such dates are used in conjunction with a periodization drawn from dates of outbreaks, such as the cases of 1347 and 1570. The obvious methodological complications of developing a system of periodization of plague notwithstanding, the approach adopted here offers some practical advantages. The secondary literature on the history of plague in the Mediterranean world (especially for the areas adjacent to the Ottomans and/or those conquered by them) has followed this system of periodization – for example, historians of the Byzantine Empire generally tend to study the history of