

Plague epidemics in the post-Black Death Mediterranean and the Ottoman Empire

Introduction:

In the history of plague epidemics, the Black Death of the mid-fourteenth century remains notorious for the virulence of its attack, the speed with which it spread, and the shock it caused everywhere it dealt its violence. Once plague was introduced to the Mediterranean world in 1347, though, it was there to stay. Wave after wave of plagues followed causing great destruction and death in Europe, the Middle East and the surrounding areas. There is convincing evidence, however, that the disease started losing its momentum from seventeenth century onwards. Yet, it still continued to break out sporadically until the end of nineteenth century in some parts of the region.

In a nutshell, this was the general state of plague from the late medieval into the modern era for the broader Mediterranean world that can be conceived as a unified disease zone.¹ However, this is not exactly the picture that emerges from the available literature. Studies of the history of plague in the Mediterranean world are dominated by an epidemiological division based on assumed differences between Christian and Muslim, or “Oriental” and “Occidental” societies, despite the shared experiences of disease and a common heritage of medical traditions. Individual studies tend to stick with the boundaries of those invisible divisions. So what we have is a vast number of studies that focus on the history of plagues in Europe, and a lesser number on the Middle East/Islamic world. Even in those studies that aim to bring in a more unified Mediterranean perspective, these divisions play an important role in explaining (in fact, rather justifying) the very differences in the spread of plague and the responses it stirred.²

According to the narrative that emerges from the scholarship that has now become the convention, plagues that started in the mid-fourteenth century continued unabated for about three centuries or more before they started receding from Europe.³ However, plague lingered longer in the Ottoman world and the areas it controlled in the eastern Mediterranean before the pestilence disappeared completely. This being so, we are left with a skewed understanding of the post-Black Death Mediterranean world: for Europeans, the Ottoman empire came to represent a plague-exporter, the home of all plague that assailed Europe’s shores. With this in view, Europe strove to protect itself by implementing quarantine measures and establishing a *cordon sanitaire*, and ultimately urging the adoption of quarantine measures by the Ottomans themselves in the nineteenth century.

¹ Emmanuel Le Roy Ladurie, “Un Concept: L’unification Microbienne Du Monde (XIVe-XVIIe Siècles),” *Schweizerische Zeitschrift Für Geschichte* (1973).

² Jean-Noel Biraben, *Les Hommes et La Peste en France et Dans Les Pays Européens et Méditerranéens*. (Paris: Mouton, 1975).

³ The literature on plague is extensive and highly controversial, especially around hotly debated issues like the nature of the disease, its spread, mortality, etc. Most of these problems are now being revisited in the light of recent archeological DNA findings and their scientific analyses. For an excellent summary of the state of the art of plague research, see Lester K Little, “Plague Historians in Lab Coats,” *Past & Present* 213, no. 1 (November 1, 2011): 267–290. For a relatively recent work that brings together earlier research in an excellent synthesis, see Ole Jørgen Benedictow, *The Black Death, 1346-1353: The Complete History* (Woodbridge, Suffolk, UK; Rochester, N.Y., USA: Boydell Press, 2004).

How is it that the Ottoman empire is understood to be the primary plague-exporter to Europe when the Ottomans' own experience of plague remains a *bête noire* in the scholarship: when and how did it arrive in the Ottoman world, how did it circulate there, how did the people perceive it, and what, if anything, did the administration of the empire do about it? Curiously, while 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, Ottomanists rarely assign much importance to the role of plague in the empire itself. Ironically, judging from the scholarship, the Ottoman-ruled areas do not seem to figure as an important playground for germs until the empire came to be perceived as the "sick man" of Europe.⁴ In the current scholarship, there is almost no mention of plagues in Ottoman-ruled areas until after the eighteenth century or so.⁵

In brief, scholars working outside the field of Ottoman studies cannot be expected to interest themselves in plague in the Ottoman empire if Ottomanists themselves are not producing the research that would assist them in doing so. In order to demonstrate that the Ottomanist literature should take plague more seriously and the studies of historical epidemiology should grant the Ottoman experience its due consideration, I shall argue that the rise of the Ottoman empire and the expansion of plague epidemics are closely intertwined. More specifically, I shall argue that the rise and expansion of the Ottoman empire was one of the most important factors in the post-Black Death plague epidemics in the Mediterranean world.

This specific relationship between the growth of the Ottoman empire and the resulting expansion of plague has so far gone unnoticed. For example, in his authoritative work on the history of plague epidemics in France and the Mediterranean world, Jean-Noel Biraben noted that, in Europe, the number of places infected by plague increased from the mid-fifteenth century until the end of the sixteenth. He also observed that the same pattern of expansion was applicable to a broader region including the Balkan peninsula, Ukraine, the Caucasus, Anatolia, Iran, the Levant, and all of North Africa. It is indeed no coincidence that much of this area came under Ottoman rule during the same period, though Biraben makes nothing of this connection.⁶ Overall, the Ottoman expansion prompted an increased level of communication and mobility between individual regions bound together by the commercial interests and the administrative and military organization of an early modern empire. This, in turn, promoted widespread and persistent plague outbreaks in a manner shaped by the conditions of the empire's growth.

⁴ Even though I am aware that this term started circulating some time around the mid-nineteenth century, which is after the implementation of Ottoman quarantine institution, its powerful image might have shaped historical vision retrospectively.

⁵ The only extensive scholarly monograph on the history of plague in the Ottoman empire covers the years between 1700-1850. See Daniel Panzac, *La Peste Dans l'Empire Ottoman, 1700-1850* (Leuven, Belgique: Éditions Peeters, 1985). Was there no plague in the empire before 1700 worth being the subject of a scholarly monograph? Surely there was, since allegedly all European plague originated there, yet nothing is made of that fact

⁶ Biraben, *Les Hommes et La Peste*.

From the Black Death to the Conquest of Constantinople (1347-1453):

When the initial wave of the Black Death arrived in Anatolia in 1347, the Ottoman principality under the rule of Orhan (1324-62) was a small regional emirate on the eastern periphery of the Byzantine empire. Already in the early decades of the fourteenth century, the Ottomans had captured important Byzantine strongholds in Bithynia such as Bursa (1326) and İznik (1331). On the eve of the Black Death, they had incorporated the lands of the neighboring principality of Karesi, and thus had reached as far west as the Dardanelles. At the time plague arrived in Anatolia, Ottoman rule therefore extended to almost all of the region south and east of the Sea of Marmara. Although the Black Death affected many areas of Anatolia – its presence in cities such as Trabzon, Constantinople, Divriği (Tivrik), Antioch, Karaman, and Kayseri (Caesarea) is well documented in historical sources⁷ – our current knowledge of its presence in Ottoman lands is still rudimentary. We do not know precisely to what extent the Ottoman dominions were affected by this first outbreak, though analogies suggest that it must have been very destructive.

After the initial introduction of the disease to the region, several waves of outbreaks followed it throughout the next century, when the Ottoman expansion was taking place at full speed both in the Balkans and in Anatolia. Even though there are no detailed accounts of these outbreaks in Ottoman sources, some must have been serious enough to find their way into the historical calendars and chronicles of the time, like the outbreak of plague that ravaged Bursa in 1429-30.⁸ However, it is not until the mid-fifteenth century that plague acquired real momentum in Ottoman areas.

In 1453, about a century after the initial wave of the Black Death, the Ottomans conquered the Byzantine capital, Constantinople. The conquest of Constantinople, a city with a notorious history of pestilence, was certainly one of the most significant turning points in this double process of simultaneous growth of empire and of disease. Located in the midst of trade routes connecting the Black Sea and its Eurasian hinterland, Anatolia, the Balkans and the Mediterranean, it was always at great risk of infection. Even though there had been plague outbreaks in Ottoman lands before 1453, both the frequency and the patterns of expansion of outbreaks after 1453 were dramatically different from those before. By the turn of the sixteenth century, the Ottoman rule extended over large areas in Anatolia and the Balkans, and by 1600 had further extended their dominions to include Syria, Egypt, Iraq, North Africa, parts of the Caucasus, most of the Black Sea coasts, and all of southeastern Europe. All of these conquests created greater opportunities for the spread of plague to Ottoman lands, by bringing them into contact with cities, which were already established as centers of plague, such as Aleppo and Cairo. Consequently, from the second half of the fifteenth century onwards, plague epidemics became a recurrent phenomenon in Ottoman cities and remained so until the mid-nineteenth century.⁹ More

⁷ Uli Schamiloglu, “The Rise of the Ottoman Empire: The Black Death in Medieval Anatolia and Its Impact on Turkish Civilization,” in *Views from the Edge: Essays in Honor of Richard W. Bulliet* (New York: Columbia University Press for the Middle East Institute, 2004), 265–6.

⁸ Nihal Atsız, “Fatih Sultan Mehmed’e Sunulmuş Tarihi Bir Takvim,” *İstanbul Enstitüsü Dergisi* 3 (1957): 21; Osman Turan, *İstanbul’un Fethinden Önce Yazılmış Tarihi Takvimler*, 3. baskı. (Ankara: Türk Tarih Kurumu Basımevi, 2007), 25. For a more detailed account of the outbreaks of plague in Ottoman areas between 1347 and 1453, see my forthcoming manuscript, *Plague and Empire*, Cambridge University Press.

⁹ For an in-depth study of plague epidemics in the Ottoman empire between 1700-1850, see Panzac, *La Peste*. For a summary list of plagues between 1500-1850, see Varlık, “Plague in the Islamic World (1500-

specifically, the period from the conquest of Constantinople in 1453 until the end of the sixteenth century was when both the trajectories of contamination and the patterns of recurrence of outbreaks in Ottoman domains were set.

What exactly was the nature of the relationship between the growth of the empire and that of the plague? The hundred and forty seven years between 1453 and 1600 can be generally characterized on the one hand by the growth of Ottoman rule through the conquest of key points for international trade, and on the other, by the creation of new urban areas. In respect of the former, various forms of human spatial mobility all seem to have played a part in the process of spreading the plague. The entire period is marked by intense warfare and military campaigns, resulting in regular movement of large bodies of men over vast distances. As a result of conquests and vassalage relationships, the Ottomans began to exert control over long-distance trade from the early fifteenth century onwards, and in the sixteenth were particularly keen to promote both maritime and overland routes. Conquest not only stimulated trade by providing a secure flow of goods, but also simultaneously introduced new commercial linkages into the existing networks of international trade. It also provided the main channel for the spread of plague. Additional factors included other means of spatial mobility in the form of long-distance pilgrimage and migration.

Urbanization is the other key characteristic. The fifteenth and sixteenth centuries witnessed the rapid rise and development of many new urban clusters throughout the Ottoman realm. Urban clusters with dense populations where people lived in close proximity provided the best environment for the local spread of disease. In the sixteenth century, several villages in Anatolia grew into new towns and previously undistinguished smaller cities developed into thriving larger ones, where new industries developed apace alongside prosperous trade. For example, in 1520 the only large cities in Anatolia, possessing 10,000 inhabitants or more, were Bursa and Ankara. By 1580, eight more cities had reached that size: Konya, Kayseri, Kastamonu, Tokat, Sivas, Urfa, Ayntab and, in northern Syria, Aleppo. The number of medium-sized cities of between 3,000 and 9,000 inhabitants in Anatolia almost doubled in the sixteenth century.¹⁰ In each case, improved economic opportunities attracted new immigrants to cities and towns alike, which contributed to the manpower resources of emerging urban economies. As this new urbanization took hold, cities benefitted from increasing civic and charitable enterprises. Building activities flourished in Ottoman urban centres with mosques, schools, hospitals, bathhouses, and hospices being constructed at breakneck speed. Such cities became magnets attracting constant immigration from the hinterlands, and preparing exactly the densely populated environment where plague would be most deadly.

There are significant differences between plague outbreaks of the late fifteenth century and those of the sixteenth, with respect to their scope, spread, and frequency of recurrence. Firstly, the intervals between the occurrences of individual outbreaks gradually diminished throughout the sixteenth century. Secondly, the areas touched by outbreaks steadily expanded to cover a broader area. And lastly, the patterns of its spread both within and outside Ottoman lands also changed. Hence, it is imperative to identify

1850),” in *Encyclopedia of Pestilence, Pandemics, and Plagues*, ed. Joseph P. Byrne, Westport, CT, Greenwood Press, 2008.

¹⁰ Suraiya Faroqhi, *Towns and Townsmen of Ottoman Anatolia: Trade, Crafts, and Food Production in an Urban Setting, 1520-1650* (Cambridge: Cambridge University Press, 1984), 14.

the distinct phases of outbreaks between 1453 and 1600, especially with regard to their links to the broader context of Ottoman history. In particular, I shall study the plague outbreaks that affected various regions under Ottoman rule in the fifteenth and sixteenth centuries in three distinct phases: the First Phase (1453-1517), the Second Phase (1517-1570), and the Third Phase (1570-1600).

The First Phase (1453-1517): Plague Comes From The West

During this first phase Ottoman lands witnessed two main waves of plague for a total of around twenty-five years. The first wave lasted for about a decade, between 1466 and 1476. It broke out initially in Europe and was then communicated to Ottoman lands through Mediterranean ports, following both maritime and overland caravan routes through the Balkans. The infection most probably travelled from Venice to Ragusa (Dubrovnik), and then via Bosnia, Herzegovina, Macedonia, and Thrace, to reach Edirne, Gallipoli, Bursa, and possibly western parts of central Anatolia.

Nowhere was plague more devastating than in Istanbul in the summer of 1467, as described graphically by the Greek historian Kritovoulos of Imbros. He records that, as the death toll reached six hundred deaths per day – which may have represented ultimately a loss in total of up to a third of the population – many fled fearfully from the city, never to return, while others confined themselves to their residences and never went out, which made the city look deserted. According to Kritovoulos, many corpses remained unburied for days since there were no workers to remove them, and even then two or more corpses would be buried in a single coffin without religious rites, as there were too few coffin-makers and men of religion to serve the demand.¹¹

A second major wave of infection lasted from 1491 to 1503. Like the previous one, this was also introduced from Mediterranean port cities in Europe, either through overland or maritime trade routes, or both. In terms of scale, this wave affected an even larger area in Anatolia, which might be indicative of an increase in communication and mobility. Ottoman sources mention this outbreak as one of the most destructive plagues of the fifteenth century. According to the chronicler Oruç, a most devastating plague ravaged Anatolia, Balkans, Egypt, Syria, and Iran in 1492.¹² The historian Mustafa Âli (d. 1600) also mentions this great pestilence that killed thousands, mostly on the basis of the account of Oruç.¹³ Bernardo Michelozzi and Bonsignore Bonsignori, two Florentine gentlemen travelling in the Levant, confirm its presence in western Anatolia in the spring of 1498. Independently, the Florentine merchant Giovanni Maringhi witnessed multiple outbreaks between 1497 and 1502.¹⁴ After 1503, outbreaks continued sporadically for another decade in Ottoman lands and the neighboring regions.

In this first phase, until 1517, plague almost always spread to Ottoman lands through commercial contact with European port cities in the Mediterranean, and generally proceeded from coasts to inland regions. This pattern of propagation suggests

¹¹ Kritovoulos, *History of Mehmed the Conqueror*. (Princeton N.J.: Princeton University Press, 1954), 220–221.

¹² *Oruç Beğ Tarihi : Giriş, Metin, Kronoloji, Dizin, Tıpkıbasım* (Istanbul: Camlica Basım Yayın, 2007), 153.

¹³ Mustafa Âli, *Künhü'l-ahbar*, ed. Ahmet Uğur et. al., Kayseri, 1997, v. 1, part II, p. 868.

¹⁴ Heath Ward Lowry, *Ottoman Bursa in Travel Accounts* (Bloomington, IN: Indiana University Turkish Studies Publications, 2003), 71–72.

that the networks through which plague spread to Ottoman cities functioned along a main east-west Mediterranean axis. The plague trajectory during the sixty-four years between 1453 and 1517 correlates closely with the formation of new trade and communication networks connecting Istanbul to the European port cities of the Mediterranean.

Equally significant in the first period are the intervals between outbreaks in Ottoman lands. Such outbreaks seem to have occurred with an average interval of ten years, which is similar to the intervals between outbreaks in both eastern and western Mediterranean cities in the post-Black Death era. An average interval of recurrence for plague outbreaks in Egypt between 1347 and 1517 has been calculated as between eight and nine years and in Syria as 9.5 years.¹⁵ Intervals of eleven to twelve years occurred in France for the period 1347 to 1536.¹⁶ However, the intervals between plague outbreaks in Ottoman lands decreased in duration from 1517 onwards, when new mobility networks and pathways for the spread of plague arose simultaneously.

The Second Phase (1517-70): Multiple Plague Trajectories

The conquests of 1516 and 1517 mark a major turning point in Ottoman history, not least in the doubling of the geographic size of the empire and of its population. The acquisition of Syria, Egypt, and the Hijaz was important not only for bringing the former Mamluk lands and the Muslim Holy Cities under Ottoman control, but also because it enhanced the position of the Ottomans in the Mediterranean as a whole. Via the Red Sea, the Ottomans also gained access to the Indian Ocean and to its lucrative trade in spices and textiles. It is possible that eastern acquisitions also served as new channels of plague contamination, even in territories beyond the easternmost periphery of the Ottoman world. There was a two-fold effect of such conquest and expansion: on the one hand, there were more intensified outbreaks in regions already struck by plague as well as eruptions in regions hitherto unaffected by it, and on the other hand, in major urban centers intervals between episodes reduced from an average of ten years to three.

This second phase is dominated by several major waves of plague, the three most important of which took place between 1520 and 1529, 1533 and 1549, and 1552 and 1567. In order to have a sense of the death rates during the last of these outbreaks, consider the account of Ogier Ghiselin de Busbecq, Habsburg ambassador to the Ottoman empire from 1554 to 1562. One of his servants and his doctor having succumbed to plague, Busbecq was granted permission by the sultan to take refuge outside the city. Visitors from Istanbul informed him that, during the course of three months, at its height 1,000-1,200 people died each day and at its lowest point near the end of that period merely 500 died per day, which was interpreted to mean that the plague was receding.¹⁷ It is important to note here the alarming increase in death rates compared to the figures of the previous century.

In contrast to the first phase between 1453 and 1517, when outbreaks of plague spread along the main east-west axis of the Mediterranean, the second phase is best

¹⁵ Michael Dols, *The Black Death in the Middle East* (Princeton N.J.: Princeton University Press, 1977), 168–169.

¹⁶ Biraben, *Les Hommes et La Peste*, I, 121.

¹⁷ Ogier Busbecq, *The Turkish Letters of Ogier Ghiselin De Busbecq, Imperial Ambassador at Constantinople, 1554-1562*. (Oxford: Clarendon P., 1968), 182–190.

characterized firstly by the emergence of a new north-south axis, and secondly by the incorporation of further tangential networks of trade and communication along the existing east-west axis. An additional factor that may have supplemented both the north-south but especially the east-west axes of exchange after 1518 was the spectacular rise of piracy in the Mediterranean, a claim supported by Biraben.¹⁸ Generally speaking, the spread of outbreaks now followed a more complex pattern of expansion, limited not merely to the Mediterranean basin, but including also the networks of the Black Sea and its Eurasian hinterlands, the Red Sea and the Indian Ocean. All urban centers, including Cairo, Aleppo, Damascus, Salonica, Edirne, Trabzon, Erzurum, and many others were repeatedly affected.

However, of far greater importance for north-south interaction within the Mediterranean in particular is the increased significance of maritime trade and communication under direct Ottoman control. Following the conquests of 1516-17, the Ottomans needed to maintain a large fleet to communicate safely between Egypt and Istanbul, particularly for the provisioning of Istanbul with the produce of the Nile valley, and for securing the pilgrimage route to the Muslim Holy Cities. The conquest of the island of Rhodes in 1522 was essential to ensure the unobstructed passage of Ottoman ships. A north-south administrative and commercial connection in the eastern Mediterranean then developed which, already in the early 1520s, served as a new north-south channel for the spread of plague.

An early example is connected with the conquest of Rhodes. Although there is little definite evidence to support it, there are indications that plague was brought from Rhodes to the Ottoman mainland immediately after the siege. A certain İsa made a claim in court that his brother, a military commander, had died of plague in İznik while returning to Istanbul from the Rhodes campaign.¹⁹ However, we do not know if this soldier and others contracted the disease in Rhodes or at another point on their journey home, which passed through Marmaris, Muğla, Sultanhisar, Alaşehir, Akhisar, Mihaliç, Mudanya, Gemlik, and Üsküdar on their way to Istanbul.²⁰

To offer a more general illustration of the prominence of the newly established north-south network, consider the relationship between Istanbul and Cairo. Before 1517, when there was no regular or direct maritime connection between these two cities, plague probably did not circulate between them; when it did break out in each city in an episode between 1511 and 1514, it was probably the result of their individual contact with European port cities, especially Venice. However, after 1517, whenever there was an outbreak in Cairo, it typically spread to Istanbul, and vice versa. This provides additional evidence of the new north-south connection. Furthermore, the presence of plague in 1522-23 in several locations in the Aegean and Adriatic regions – the western Anatolian coast as well as Epirus, Morea, the Venetian colonies of Crete, Corfu and Zante, and in

¹⁸ Biraben, *Les Hommes et La Peste*, I, 106, 109.

¹⁹ Yvonne Seng, “The Üsküdar Estates (tereke) as Records of Everyday Life in an Ottoman Town, 1521-1524” unpublished Ph.D. dissertation, University of Chicago, 1991, 45.

²⁰ Donald Pitcher, *Osmanlı İmparatorluğu'nun Tarihsel Coğrafyası: Başlangıcından 16. Yüzyılın Sonuna Kadar Sultanlığın Genişleme Sürecini Gösteren Ayrıntılı Haritalarla Birlikte*, 3. bs. (Istanbul: YKY, 2007), 162.

the Archipelago²¹ – indicates that immediately after the conquest of Rhodes, the north-south network for the spread of plague was being integrated into the previously existing east-west network.

In the period 1517 to 1570, two factors conditioned the development of an Anatolian urban network. Firstly, the urban population of Anatolian towns roughly doubled between 1520 and 1580.²² Secondly, the incorporation of eastern Anatolia and territories beyond meant that by the 1530s the entire peninsula had become a relatively well-integrated area under Ottoman rule. The first eastern military expedition during the reign of Süleyman (1520-66) was undertaken from 1533 to 1536, resulting in the conquest of the eastern Anatolian cities of Bitlis, Erzurum and Van. A direct link was thus provided to Tabriz, which is of singular significance here in that plague may have been brought to Tabriz by Ottoman armies.²³

After these conquests, all of Anatolia experienced an explosion of urban growth and solid links were forged between existing Ottoman possessions and newly conquered cities.²⁴ So, it could be hypothesized that, while in the first period plague outbreaks had not spread far into central and eastern Anatolia, in the second period the entire peninsula began to suffer widespread outbreaks. An Anatolian plague outbreak in 1542 affected several towns in eastern and southeastern Anatolia. Evidence for this is found when the fearful flight of soldiers from a plague outbreak in the fortress of Hınıs is mentioned in an order sent from the central administration to the director of the provincial treasury (*mal defterdari*) of Diyarbekir and the governor-general (*beylerbeyi*), in March 1545.²⁵

Later in the mid-sixteenth century, a similar process occurred around the Black Sea. Süleyman annexed lower Moldavia, Transylvania became a tributary state, and the conquest of the coastal strip of the lower Danube allowed land contact with the vassal state of the khanate of Crimea. By the mid-sixteenth century, the Black Sea had fallen wholly under Ottoman control. This offered the additional benefit of safeguarding the Muslim pilgrimage route from Central Asia and encouraging the revival of Anatolian cities on the Black Sea coast, such as Trabzon and Sinop, both as important urban centers and as trade entrepôts. Therefore, the revitalization of the Black Sea network – in particular its integration into both the north-south network of the eastern Mediterranean through Istanbul and into the Anatolian tangential network – provided yet another set of connections for the propagation of plague. The outbreak of 1565-66 in Trabzon, when travel and trade were briefly disrupted, the elite fled the city, and even its environs were affected, clearly illustrates this case.²⁶

²¹ Biraben, *Les Hommes et La Peste*, 442; Peter Schreiner, *Die Byzantinischen Kleinchroniken*. (Wien: Verlag der Österreichischen Akademie der Wissenschaften, 1977), 563–564; Georg Sticker, *Abhandlungen Aus Der Seuchengeschichte Und Seuchenlehre* (Gießen: Töpelmann, 1908), I, 90.

²² Faroqhi, *Towns and Townsmen*, 1, 14.

²³ Hasan Rumlu, *Ahsan al-tawārikh: A Chronicle of the early Safawis*, ed. and trans. C.N. Seddon, (Baroda, 1931-34), p. 153.

²⁴ Faroqhi, *Towns and Townsmen*, 13.

²⁵ *Topkapı Sarayı Arşivi, H. 951-952 tarihli ve E-12321 numaralı mühimme defteri* (haz.) Halil Sahillioğlu, pp. 235-6, 272.

²⁶ Ronald Jennings, *Studies on Ottoman Social History in the Sixteenth and Seventeenth Centuries: Women, Zimmis and Sharia Courts in Kayseri, Cyprus and Trabzon* (İstanbul: Isis Press, 1999), 670.

The Third Phase (1570-1600): Istanbul As Plague Hub

The definitive characteristic of the third phase is the situation of Istanbul as the principal nexus of the various communication, commercial and plague networks, concomitantly serving as the hub for the transmission of disease from one region of the empire to another. These networks had functioned semi-autonomously in the pre-1570 period; they lacked precisely the primary locus that Istanbul would provide after that date.

It is especially important to understand this change in conjunction with what proved to be the most terrible plague outbreak of the sixteenth century. Beginning in 1570, plague attacked areas as remote from one another as the Black Sea region and the north African coast, or western Europe and the Persian Gulf. Indeed, it is possible to document the presence of plague in at least one location of the Ottoman empire for each year between 1570 and 1600. This sustained eruption peaked in 1578, 1586, 1587, and between 1597 and 1599, but continued well after 1600.

The centrality of Istanbul with respect to plague is systematically testified in administrative documents. Mühimme registers ('Registers of important affairs'), which contain copies of orders sent from the Ottoman central government to provincial administrators, are particularly useful for tracing the movement of plague, especially in the last three decades of the sixteenth century. Several mühimme cases contain striking evidence to suggest that the flow of information within the empire followed a similar trajectory to that followed by plague. Furthermore, these registers also illustrate that with the development of new networks of communication, there was a faster flow of information throughout the empire, always through Istanbul. This enabled the centre, now much better informed of what was happening throughout its domains, to monitor needs and respond to them in a timely fashion. Examples from Salonica prove the point. When hit by plague in the summer of 1572, the woolen cloth weavers of Salonica petitioned for permission to leave the city because of the outbreak; this was granted by the central administration in Istanbul on the condition that they finish their weaving duties on time.²⁷ The central administration sent another order during an especially virulent eruption of plague in 1576-77, which killed many in Salonica and reduced its work force dramatically.²⁸ Two years later, yet another order authorized only those who maintained looms outside the city to leave, in order to prevent delays in the weaving of woolen cloth.²⁹ Istanbul was therefore intimately involved in Salonica's experience of plague on three occasions in approximately seven years. This involvement illustrates not only the centrality of Istanbul but also the rapidity of the flow of information between the center and the provinces.

After 1600:

It may be fruitful to comment briefly on how the processes described in this third phase paved the way for later developments in the history of plague in the Ottoman

²⁷ Mühimme Defteri 19, 201/417

²⁸ Suraiya Faroqhi, "Textile production in Rumeli and the Arab provinces: Geographical distribution and the internal trade (1560-1650)" in *Peasants, Dervishes and Traders in the Ottoman Empire* (London, 1986), XII, p. 68; Mühimme Defteri 27, 275/655

²⁹ Mühimme Defteri 36, 281/738

empire.³⁰ Speculatively, once Istanbul became the primary commercial and political hub of the Ottoman empire, land travelers and ships that would have stopped or paused at other cities or ports now visit Istanbul in greater numbers. One can only wonder about how much the number of plague-carrying agents, namely rats, would have increased in the city as a result of this visitation. If so, then it is possible that plague became *endemic* in Istanbul, which is to say in this context that the city was its own self-sustaining plague-producing engine. But it bears repeating that this is merely interesting speculation. What we do know is that plague continued to recur almost every year throughout the seventeenth century, becoming even more of a routine or seasonal event. The seventeenth century witnessed several major outbreaks everywhere in the empire including Istanbul. Of these the most important outbreaks took place in 1603, 1611-1613, 1620-1624, 1627, 1636-1637, 1647-1649, 1653-1656, 1659-1666, 1671-1680, 1685-1695, and from 1697 until the early years of the eighteenth century. The outbreaks of the eighteenth century were reported as mostly minor outbreaks, though major ones took place in 1713, 1719, 1728-29, 1739-43, 1759-65, 1784-86, and 1791-92. However, although major outbreaks took place in 1812-19 and 1835-38, plague epidemics gradually disappeared during the course of the nineteenth century, which is generally credited to the adoption of quarantine measures and their implementation from 1838 onwards.³¹

³⁰ For the seventeenth through the nineteenth century, I recommend the reader to see recent dissertations on the history of plague epidemics in the early modern Ottoman empire. See, for instance, Yaron Ayalon, 'Plagues, famines, earthquakes: the Jews of Ottoman Syria and natural disasters', unpublished Ph.D. dissertation, Princeton University, 2009; Birsen Bulmuş, 'The plague in the Ottoman empire, 1300—1838', unpublished Ph.D. dissertation, Georgetown University, 2008; Aaron Shakow, 'Marks of contagion: the plague, the bourse, the word and the law in the early modern Mediterranean, 1720-1762', unpublished Ph.D. dissertation, Harvard University, 2009.

³¹ Panzac, *La Peste*.