# **SPOTLIGHT ARTICLE**



# Rethinking the history of plague in the time of COVID-19

# Nükhet Varlık



#### Correspondence

Nükhet Varlık, Rutgers University-Newark & The University of South Carolina, Columbia, SC.

Email: varlik@newark.rutgers.edu

#### SPOTLIGHT ISSUE

Histories of epidemics in the time of COVID-19

#### **GUEST EDITORS**

Erica Charters and Koen Vermeir

#### **Abstract**

We are currently experiencing one of the most disruptive pandemics in modern history. The outbreak of COVID-19 that was first recorded in Wuhan, China and guickly spread across the globe has resulted in nearly 5 million confirmed cases to date and more than 300,000 deaths. Where we stand now, it is still uncertain how many it will infect or kill worldwide, how long it will continue, and when-if everlife will return to normal. What we know for sure is that this is a pivotal moment and that we are experiencing a historic event that will transform our societies both profoundly and irreversibly. As we wade into this new age of pandemics, it is critical to rethink how we write the history of pandemics. With a conviction that the past helps us to understand the present and that the present should help us to rethink the past, I turn to the legacy of past plagues. In this essay, I take stock of the lasting legacies of past plagues because they continue to shape the way we think about new pandemics. In particular, I address persistent problems, such as European exceptionalism, triumphalism, and epidemiological Orientalism, that are not only ubiquitous in plague studies, but also staples of public opinion about pandemics, past and present.

### **KEYWORDS**

COVID-19, disease, epidemic, Marseille, Orientalism, plague

### 1 | INTRODUCTION

We are currently experiencing one of the most disruptive pandemics in modern history. The outbreak of COVID-19, first recorded in Wuhan, China, quickly spread across the globe, and has resulted in nearly 5 million confirmed cases to date and more than 300,000 deaths. Where we stand now (mid May 2020), it is still uncertain how many it will infect or kill worldwide, how long it will continue, and when—if ever—life will go back to normal. What we know for sure is that this is a pivotal moment and that we are experiencing a historic event that will transform our societies both profoundly and irreversibly. Nonetheless, it is difficult to predict what the pandemic's long-term legacy will be.

There is little in our recent memory against which we can compare this contagion, but rethinking past pandemics might offer clues about what COVID-19's legacy could be. Some people have turned to wartime experience, especially WWII, as a point of comparison. Others, seeking disease affinities, draw their analogies from the pandemic influenza of 1918–1920 (known colloquially but incorrectly as the "Spanish Flu"). There are obvious parallels between the two diseases: the pandemic influenza of 1918–1920 and COVID-19 are both caused by airborne viruses (H1N1 and SARS-CoV-2, respectively), both are transmitted rapidly from person to person, and both generated global pandemics. The pandemic of the last century is perhaps not such a distant mirror for evaluating how we make sense of our own ongoing pandemic, since it allows us to reflect upon how such diseases can change societies globally. Ironically, however, the pandemic influenza was fast forgotten in the American memory; at least until one historian, Alfred Crosby, published his monumental study, America's Forgotten Pandemic: The Influenza of 1918, which reminded us of our collective amnesia. Crosby's work was a huge success and inspired countless subsequent academic studies. Today, in the minds of many, the pandemic of 1918–1920 serves as the best point of comparison for better understanding the COVID-19 pandemic.

According to Crosby, the pandemic was forgotten mainly because of wartime circumstances. Although the number of deaths from the disease was actually higher than all those attributed to the war, the two statistics were mingled in memory and soon forgotten. Most pandemics do not vanish from collective memory so quickly. For better or worse, they each leave a legacy behind. Some, like the mid-14th-century Black Death, have become so deeply entrenched in historical memory that even hearing its name can still elicit fear and terror today. And for good reason: the Black Death (1346–1353) was the greatest pandemic in recorded human history. It was a pandemic of plague that spread across much of Afro-Eurasia and killed about 40–60% of the population. Yet it was not a singular outbreak; its initial burst started a new disease regime that continued for several centuries—what is now known as the Second Plague Pandemic. In other words, after the Black Death, plague never went away; it kept recurring in regular (or sometimes irregular) intervals, every decade or so, and sometimes even more frequently. Living with the plague became a fact of life for many societies of Afro-Eurasia.<sup>3</sup> That is why plague is a model disease for studying infection and gaining insights into the dynamic interplay between a new pathogen and a population encountering it for the first time, as we contemplate the idea of learning to adapt to COVID-19 as it imposes a new disease regime on our contemporary world.

As a historian of plague, there are other reasons why I think it is important to think about past pandemics as we wade into this new age of pandemics. It is not only that the past helps us to understand the present; the present should help us to rethink the past. So my goal here is not to suggest that COVID-19 is similar to plague and to invoke plague metaphors, as relevant as they may be. Rather, I will take stock of the lasting legacies of past plagues because they continue to shape the way we think about—and therefore act against—new pandemics. For this, I turn to the

<sup>&</sup>lt;sup>1</sup>Brunet (2020); Wilson (2020).

<sup>&</sup>lt;sup>2</sup>Crosby (1989).

<sup>&</sup>lt;sup>3</sup>There is a large body of scholarship on the Black Death and its recurrent waves through the late medieval and early modern periods, as well as on public health efforts that signal how societies struggled to live with the disease. For a brief selection of recent works, see the following: Green (2014); Campbell (2016); Chouin (2018); Borsch (2005); Crawshaw (2012); Tomić & Blažina (2015); Bowers (2013); Cook & Cook (2009); Wray (2009); Cohn (2010); Stearns (2011); Ayalon (2014); Varlık (2015; 2017b); MacKay (2019); Jones (2021).

plague outbreaks of the Second Pandemic, and in particular to one that left behind a deep legacy, even in contemporary discourse: the Plague of Marseille of 1720–1721. It is significant that this year—2020—is its tricentennial.

# 2 | THE PLAGUE OF MARSEILLE

An outbreak of plague that started in 1720 in the Mediterranean port city of Marseille soon spread to other parts of Provence and Spain. Although it lasted less than 2 years, the human toll of the outbreak, according to some calculations, amounted to 120,000 souls, nearly half of whom died in Marseille proper. The news of this epidemic spread globally, causing great panic and fear everywhere it was heard. Because not only the city of Marseille itself, but also all the other Mediterranean centers of trade in Spain and Portugal, were globally connected, the outbreak and fear of the disease spreading further prompted an unprecedented level of organized effort to forestall it. Boards of health were set up or reactivated, new legislation passed, alerts sent to Spanish, Portuguese, and French overseas provinces and trading partners, and recommendations for protection against plague enacted. All of this has left behind a paper trail that historians have been examining for the last three centuries. Only recently, however, have the Plague of Marseille's global connections been better reconstructed to put the emphasis beyond its local or regional impact. Cindy Ermus's latest work reframes the outbreak as the Plague of Provence, and explores its global impact.

Even though this was not the largest outbreak of plague in European history, it came to symbolize an important turning point. Over time, in fact, it came to be seen as the end of the plague regime in Europe—that is, the end of the Second Pandemic. In other words, the Plague of Marseille, or rather its memory, fulfilled a dual role. Not only was it viewed as the last great plague in Europe—a vantage point from which plague's history was to be written—but it also marked Europe's triumph over plague. This, in turn, gave way to the emergence of discourses predicated on the belief that European efforts against plague during this particular outbreak, such as setting up border controls, quarantines, and isolation stations, were unique and unparalleled success stories and hence should be imposed elsewhere. These two narratives developed in tandem, and they were quite remarkably successful, being recycled again and again over the last three centuries.

But contemporaries of the Plague of Marseille did not immediately see their outbreak as the end of plague. On the contrary, they remained profoundly worried about the plague for at least another century, if not more. The outbreak left behind a legacy of fear and a profound imprint in the European imagination that plague could recur anywhere and at anytime. European nations were constantly on the alert to police their borders and quarantine their ports. The outbreak also prompted a flurry of publications. New plague treatises were published, while older ones were published again with new introductions. Leading physicians of the time went to Marseille and wrote about their observations and examinations, producing a significant body of medical literature. This body of literature, and later contributions to it from the rest of the 18th century, helped to forge a certain consensus about plague: its origins, history, and alleged end. Three hundred years later, plague is still being studied in modern historical scholarship with the basic tenets established in the early 1720s: (a) plague came from the Orient; (b) the Plague of Marseille marked the end of the Second Pandemic; and (c) Europeans' methods of fighting plague were the only ones that ended the disease. This essay will challenge all three of these tenets—still taken as gospel by specialists and nonspecialists alike—that developed in the context of the Plague of Marseille. Three hundred years and another global pandemic later, we need to dismantle these older tenets.

<sup>&</sup>lt;sup>4</sup>Ermus (2016; 2015); Takeda (2011).

<sup>&</sup>lt;sup>5</sup>Varlık (2017a).

<sup>&</sup>lt;sup>6</sup>For example, the English physician Richard Mead composed his well-known plague treatise, A Short Discourse Concerning Pestilential Contagion, and the Method to Be Used to Prevent It (1720), in response to the Plague of Marseille and in consideration of its possible spread to England. Similarly, Daniel Defoe's famous A Journal of the Plague Year, which describes the Great Plague of London of 1665, was also inspired by the Plague of Marseille. It was first published in 1722.

### 3 | NARRATIVES ABOUT PLAGUE'S ORIENTAL ORIGINS

The historical scholarship about the Plague of Marseille presents a very precise origin story. On May 25, 1720, the merchant ship *Grand-Saint-Antoine* arrived from the Levant and brought plague to the port of Marseille. From there, the disease spread to the entire city and its surroundings. The narrative that attributed the origin of the plague to the Muslim Orient—that is, the Ottoman Empire—was nothing new in the early 18th century. I have discussed elsewhere in greater detail the genesis and evolution of these narratives, and how they came to be engrained in the European imagination of plague. Here I will limit myself to quoting from the *Encyclopédie* of Diderot and d'Alembert, composed in the mid-18th century, to demonstrate how the story of the *Grand-Saint-Antoine* and Oriental origins of European plague was already accepted as a historical fact about 30 years after the outbreak:

Plague comes to us from Asia, and for two thousand years all the plagues that have appeared in Europe have been transmitted through the communication of the Saracens, Arabs, Moors or Turks with us, and none of our plagues had any other source.<sup>8</sup>

Thus, plague's alleged Oriental origins had been confidently proclaimed by the Enlightenment's leading lights. The belief that diseases come from exotic Oriental cities kept Europeans pointing fingers at the East for centuries. Indeed, the trope of the sickly Orient has been such a relentless one that it continues to be freely mobilized quite frequently even today.<sup>9</sup>

If we go back to the story of the Grand-Saint-Antoine, however, there is no conclusive evidence to either prove or disprove its role in the spread of disease on the basis of historical sources alone. <sup>10</sup> Paleogenetics research offers new interpretations of the possible origins of the Plague of Marseille—ones that are at odds with this 300 year old story. A study published in 2016 demonstrated that skeletal materials recovered from plague victims in Marseille yielded a strain of Yersinia pestis (the bacterium that causes plague) that was a direct descendent of the Black Death strain. According to this research, "the strains responsible for the Black Death left descendants that persisted for several centuries in an as yet unidentified host reservoir population, accumulated genetic variation, and eventually contributed to the Great Plague of Marseille."11 What this means is that the lineage of Y. pestis that caused the Black Death may have persisted in western Europe and seeded later outbreaks, such as the Plague of Marseille, nearly four centuries after its initial introduction to that region. This finding supports the hypothesis that the infection was kept alive in (now extinct) plague reservoirs in or around western Europe and that it reemerged repeatedly, even in the absence of new reintroductions from outside. In other words, the science suggests that plague likely came from a reservoir in or around Marseille itself, rather than from the eastern Mediterranean. The latter possibility cannot be definitively ruled out, given the lacunae of ancient DNA (aDNA) evidence from that region. 12 However, this study is not an isolated finding. The more immediate historical context of the mechanisms of persistence of Y. pestis in western Europe was already proposed by historian Ann Carmichael in 2014. In her groundbreaking study, Carmichael hypothesized the possibility of a European plague reservoir that may have sustained the infection and led to repeated outbreaks of plague. 13 Following suit, other paleogenetics studies have confirmed the persistence of plague in Europe. 14

<sup>&</sup>lt;sup>7</sup>Varlık (2015, pp. 72–88; 2017a).

<sup>&</sup>lt;sup>8</sup>de Jaucourt (1765, vol. 12, p. 452): "La peste nous vient de l'Asie, & depuis deux mille ans toutes les pestes qui ont paru en Europe y ont été transmises par la communication des Sarrasins, des Arabes, des Maures, ou des Turcs avec nous, & toutes les pestes n'ont pas eu chez nous d'autre source."

<sup>9</sup>Reenacting these tropes, President Trump called COVID-19 a "Chinese virus" and a "foreign virus," which coincided with a surge in racist and xenophobic attacks against Asian groups in the US and in Europe. On why this is dangerous, see Shoichet (2020). Interestingly enough, the latest genetics research tells us that most of the coronavirus cases in New York City, currently the epicenter of the outbreak in the US, actually had their origins in Europe. See Gonzalez-Reiche et al. (2020); Zimmer (2020); Abelson et al. (2020).

<sup>&</sup>lt;sup>10</sup>Historical data collected from the Ottoman archives do not indicate a major outbreak of plague in the eastern Mediterranean—the alleged origin of the outbreak—preceding or contemporary with the Plague of Marseille. The historical evidence is addressed in greater detail in Green & Varlık (2020). 
<sup>11</sup>Bos et al. (2016).

<sup>&</sup>lt;sup>12</sup>Currently, there is no published paleogenetic *Y. pestis* material from the eastern Mediterranean. Almost all of the existing *Y. pestis* aDNA comes from European samples, which means that we do not exactly know whether the Plague of Marseille did indeed come from the eastern Mediterranean. This needs to wait until there is more conclusive aDNA evidence. For a critique of paleogenetics studies' bias toward Europe, see Varlık (2014).

<sup>13</sup>Carmichael (2014).

<sup>&</sup>lt;sup>14</sup>Seifert et al. (2016); Feldman et al. (2016).

To put the historical and paleogenetics evidence in context: plague arrived in Europe during the Black Death and spread across that subcontinent, establishing local reservoirs in the process; it did the same thing nearly simultaneously in the Middle East, North Africa, and elsewhere. Different strains of Y. pestis thus came to be involved in causing outbreaks in different locations. Those strains of the bacterium were distributed widely and kept circulating across the Mediterranean world in complex patterns. Yet western Europeans were sure that plague came to Europe each time as a new introduction from the East. This was the immediate cultural context for plague's origins that was developed in the 18th century by Enlightenment thinkers, which produced in turn the singular "documented" narrative about the (real or imagined) origin of the outbreak: the story of the Grand-Saint-Antoine.

# 4 | END OF PLAGUE NARRATIVES

The prolonged fear that stemmed from the Plague of Marseille eventually gave way to another dominant narrative: namely, that this was the last great plague in western Europe. As mentioned above, this was not yet clear to its contemporaries or succeeding generations, who were worried about the plague as an "Eastern question" until at least the late 19th century. Even though outbreaks of plague continued for at least another century in southern and eastern Europe (1813 in Malta, 1815 in the Italy's Bari province, and so on), the Plague of Marseille still came to be regarded as the harbinger of the end of plague in western Europe. A celebration of relief from an old ill soon turned into an element in the triumphalist "rise of the West" narratives of the 19th century.

This was indeed a turning point in the history of plague: it now came to be written as a Eurocentric contagion narrative. To a large extent, this narrative was perfected in the 19th century with the rise of modern history of plague. Most importantly, the German physician and medical historian Justus Friedrich Carl Hecker published his *Der schwarze Tod im vierzehnten Jahrhundert* (*The Black Death in the 14th Century*) in 1832, the first of many such works to appear on the history of the disease. <sup>16</sup> A physician at the Friedrich Wilhelm University in Berlin, Hecker was interested in all aspects of plague: its history, origins, causes, spread, and treatment. He also wanted to establish disease as a force in human history. His book was a spectacular success that was immediately translated into English, going through multiple editions. Translations into Italian, Dutch, and French soon followed, leading to Hecker being recognized in Europe as the foremost authority on historical epidemiology. <sup>17</sup>

The most immediate historical context that informed Hecker's work was the global cholera pandemic that struck Europe in the 1830s. In the decades that followed, cholera pandemics repeatedly hit Europe, much like the rest of the world, and caused a great number of deaths. It was not long before cholera's spread was understood to be associated with water, which made sanitation the main focus of discussions about epidemic diseases. This was a time when epidemiological and sanitary anxieties were intensifying everywhere in Europe, causing repercussions for medicine and policy-making as they pertained to public health, border control, and the like. These concerns were also prominent themes in the historical scholarship. Hecker's book is generally regarded as the beginning of modern historical scholarship on plague. In many ways, his work and the works of those who followed him are responsible for creating the history of plague that has prevailed to the present. Modern historical plague scholarship still carries Hecker's legacy.

The effects of Hecker's work on European historiography were substantial. The first of its kind as a work of history that embraced the Black Death as a subject of intellectual pursuit, this work turned historical epidemiology into a captivating field of study in historical scholarship for the rest of the 19th century. Other medical authors of the 19th and early 20th centuries followed suit, developing the basic tenets of historical epidemiology and eventually helping lay the foundations of the burgeoning field of modern scientific epidemiology.<sup>18</sup> The German epidemiological

<sup>&</sup>lt;sup>15</sup>Occurrences of plague were noted in many late 19th- and early 20th-century works, such as in Simpson (1905, pp. 36–39), Sticker (1908).

<sup>16</sup>Hecker (1832).

<sup>&</sup>lt;sup>17</sup>Getz (1991, p. 279); Hecker (1959).

<sup>&</sup>lt;sup>18</sup>For a discussion on how Hecker and other writers in historical epidemiology contributed to scientific epidemiology, see Getz (1991).

tradition is exemplified by the efforts of August Hirsch (d. 1894), a professor of medicine at the University of Berlin, whose *Handbuch der historisch-geographischen Pathologie* (*Handbook of Geographical and Historical Pathology*) was translated into English by the British physician and medical author Charles Creighton and published in 1883.<sup>19</sup> Other western European epidemiologists and medical authors quickly followed suit. For example, Charles Creighton published his own two-volume *History of Epidemics in Britain* between 1891–1894.<sup>20</sup> These historical works were composed while pandemic cholera kept recurring in Europe and as the Third Plague Pandemic spread out of Hong Kong after 1894. It is in this context that the Plague of Marseille found its star position as the *finale* of the Second Pandemic. No longer written as a story of death and suffering, the Plague of Marseille was now (re)written as a European story of triumph.

## 5 | TRIUMPHALIST NARRATIVES OF COMBATING THE PLAGUE

It is rather perplexing that plague's gradual retreat and eventual disappearance at the end of the Second Pandemic is still tackled almost exclusively in the context of Europe. Europeanist scholarship has long accepted the Plague of Marseille as the end of the pandemic, since the "disappearance of plague" is understood as its "disappearance from Europe." Informing this historical imagination was a long tradition of what I call *epidemiological Orientalism*—the totality of discursive practices of how western Europeans viewed, experienced, imagined, reproduced, and represented the Ottoman healthscape as the European alterity.<sup>21</sup> This was the immediate epistemic context for the emergence of modern epidemiology, which still bears all the marks of its birth.

In the early 19th century, plague had largely disappeared from western Europe, but continued with the same vigor in the Middle East and North Africa. This divergence in epidemiological experience cultivated binaries of epidemiological differences, real or imagined. Since at least the Plague of Marseille, western Europeans had believed that plague came from the eastern Mediterranean ports of the Ottoman Empire. The Western gaze on the Ottoman land-scape and the manner in which the Orient (and Oriental bodies) was constructed as a site of sickness resulted in, and helped to justify, a concerted effort to implement protective measures, first locally, then regionally and internationally. Quarantines established in port cities and *cordons sanitaires* set up along land borders served as the custodians of European public health. Post-Enlightenment plague knowledge, heavily imbued with epidemiological Orientalism, left behind a lasting legacy.

Throughout the 19th century and part of the 20th century, historians, public health officials, and medical authors in western Europe regarded the plague as the "great teacher," eliciting the development of anti-disease legislation, institutions, and technologies of surveillance, containment, and control—the staples of positivistic public health histories. Against this backdrop, the disappearance of plague was envisioned as resulting exclusively from the public health regulations, changes in urban planning, housing structures, and hygiene practices that were implemented exclusively in western European societies. An artifact of a particular historical context (that is, a Eurocentric, urban, and human-centric context), this master narrative of plague qua contagion privileges the story of plague's "eradication" as a result of solely human action. Yet plague is a vector-borne, zoonotic disease that entails a vast array of natural processes in which humans are certainly not the only protagonists. As long as there are wild rodents that keep the bacterium alive, there will be incidences of human plague, either as sporadic cases resulting from sylvatic exposure, or spillover events that may result in full-blown epidemics, large or small. The master narrative of plague as a disease that can be eradicated only by (European) human action is thus entirely a fiction, and can no longer be

<sup>&</sup>lt;sup>19</sup>Hirsch (1883). Hirsch was part of a medical commission sent by the German government to central Asia to study the plague epidemic in Vetlianka in 1878–1879. Unlike his predecessors, he had the opportunity to observe the plague on site.

<sup>&</sup>lt;sup>20</sup>Creighton (1891-1894).

<sup>&</sup>lt;sup>21</sup>Varlık (2017a).

<sup>&</sup>lt;sup>22</sup>Such histories of public health that associate it with Western European modernity has recently come under increased criticism by scholars working on the medieval and early modern eras. See, for example, Geltner (2019; 2013; 2012); Rawcliffe & Weeda (2019).

allowed to guide historical research. Only by shifting the methodological lens to a dynamic multispecies one, by distributing agency also to rodents, fleas, and the bacterium itself—and not only to human efforts to control disease—can we fully comprehend disease ecologies in their social, climatic, and environmental contexts.

# 6 | CONCLUSION

In an age of pandemic, historical narratives about past plagues are ever more pervasive. In such times, historical perspectives are actively sought by the public, mainly as a body of knowledge from which lessons can be drawn for the future—if not as a way of seeking comfort in the resilience of past societies that witnessed even worse pandemics. Historical knowledge also serves policy-makers in public health and epidemiology, and guides experts in making informed predictions. Yet historians, as gatekeepers of this body of knowledge, have additional responsibilities in such times to recognize how holding on to some of these older narratives can be harmful. Here, I use the Plague of Marseille as an example that represents a moment when some of those narratives were forged-300 years ago, and yet still serviceable in meeting the needs of public opinion. Remarkably, many of the tropes that have been deeply entrenched in the public imagination since the Plague of Marseille are still being employed today, as we witness during the COVID-19 pandemic. For example, the imagining of the disease as a foreign entity is a common thread that still continues. Especially in the midst of a pandemic in which many different regions, countries, and continents are experiencing the same disease, regardless of origin, with local mutations and adaptations happening apace, this particular imagination is not helpful—and can even be deadly in its own right. Our globally connected world of the early 21st century should itself prevent us from making this 19th-century argument. Associating diseases with certain groups of people, or even worse, their cultural practices (it will be recalled that eating preferences in China, disdained by many as "backward" and even "barbaric," have been central to the conversation since this pandemic's inception) is scientifically and morally unacceptable, just as it was unacceptable, if common, in the past to point fingers at Oriental cities as the "perpetual Seminary of the Plague" or the homeland of plague, which was propagated and maintained by the "insalubrious" conditions in which Muslims wallowed.<sup>23</sup> Three hundred years later, these toxic narratives are not only harmful to the development of reliable historical scholarship, but also socially dangerous in the way they shape public opinion and attitudes, as well as for policy development moving forward.

#### ORCID

Nükhet Varlık https://orcid.org/0000-0001-6870-5945

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<sup>&</sup>lt;sup>23</sup>Mead (1744, p. 18); Proust (1897, pp. 110-112).

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