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# Pandemic Outbreaks and the Language of Violence



# Discussing the Origins of the Black Death and COVID-19

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The outbreak of COVID-19 has brought renewed attention to past narratives of disease outbreaks. What do the Black Death and COVID-19 have in common? How we tell outbreak stories is shaped by political, cultural, social, and historical contexts. It is deeply rhetorical. The general public relies on experts (scientists, historians, and government officials) to provide credible information, but uncertainties during an outbreak can make it difficult to provide definitive answers quickly. Experts need to be conscious about the contexts in which their statements would be received. Regarding the Black Death, historians of medicine have relied heavily on a single medieval account of the outbreak, which confirmed their preconceptions about Mongol violence, allowing them to present the Black Death as an instance of biological warfare. Looking at other medieval accounts, however, makes clear that this narrative of Mongol biological warfare is false. Similarly, modern outbreak narratives also tend to use militarized language, which results in othering peoples and cultures where a disease might have originated. Given the contemporary political tensions between China and the United States, narratives about the origin of the SARS-CoV-2 virus and its transmission have led to a transnational infodemic of misinformation as well as discrimination and violence against people of Asian descent. In light of this long-running pattern, we argue for more interdisciplinary collaborations between the experts whose work is used to build outbreak narratives to adopt more critical rhetorical approaches in communicating with the public. CHEST 2022; 162(1):196-201

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Discourses about infectious diseases often embody sociopolitical tensions. These can be reflected in the treatment of people infected with the diseases, government-driven public health responses, the public's perceptions of the crisis, and the rhetoric of "us vs them" that may lead to violence. The "outbreak narrative" has been defined by literary scholar Priscilla Wald as "a contradictory but compelling story of the perils of human

interdependence and the triumph of human connection and cooperation, scientific authority and the evolutionary advantages of the microbe, ecological balance, and impending disaster." We have seen this pattern appear in many public health crises, from villainizing Mary Mallon, the asymptomatic typhoid carrier, as "Typhoid Mary" in the early 20th century, to blaming the entire gay community for the HIV/AIDS

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epidemic in the 1980s. This pattern is also shown in dramatized portrayals of disease emergence and outbreaks in works such as the *New Yorker* article "Crisis of the Hot Zone" or the movie *Outbreak*, focusing on describing the "microbial traffic" as oneway: "from the primordial rainforests of the impoverished developing world to the metropolitan centers of commerce and capital."

In outbreak narratives, these "perils of human interdependence" are often constructed as caused by an "other," a group who introduces the threat of a transmittable disease into an otherwise healthy community. Wald<sup>1</sup> shrewdly observed that infectious disease has an intimate relationship with national belonging. This was painfully evident during the COVID-19 pandemic through rampant anti-Chinese and anti-Asian rhetoric and hate crimes in the United States and globally, encouraged by national leaders and shaped by the broader context of a global post-truth era.<sup>2</sup> However, China's current position as a rising world power meant that its government was equally eager to take advantage of the "us vs them" rhetoric to protect its global image by vilifying the United States, complicating the global political dimensions of the COVID-19 response.

Similar dynamics are at play in the outbreak narrative constructed by historians for the second plague pandemic, the Black Death of 1346 to 1353. That narrative ties the early spread of the disease to a Mongol or Tatar army besieging the Genoese in Caffa, a port on the Crimean Peninsula. Plague was supposedly transmitted from besiegers to besieged via the bodies of dead Tatar soldiers catapulted over the walls; when the surviving Genoese fled by sea, they carried the disease to Europe. Although this outbreak narrative is based on just one historical source, the author of which was not even present at the siege, it has been accepted by historians who would normally demand more substantial evidence because it reinforces the commonly held association of Mongols with violence and otherness.

Both the COVID-19 and Black Death outbreak narratives reflect a form of demagogic rhetoric that blames an "other" for creating or spreading a disease, even while presenting apparently logical evidence. This essay shows that an identity-driven argument is central to both the Black Death and COVID-19 origin stories, casting blame on the "other" rather than emphasizing global collaborations to understand the origin of a global pandemic.

## The Black Death

Since the late 19th century, historians have relied on a single source to tell the outbreak story of the Black Death. According to Gabriele de' Mussi, the outbreak reached Europe via the Black Sea, where a Mongol or Tatar army was besieging the Genoese port of Caffa. "The whole army was affected by a disease which overran the Tartars and killed thousands upon thousands every day... the dying Tartars, stunned and stupefied by the immensity of the disaster brought about by the disease, and realising that they had no hope of escape, lost interest in the siege. But they ordered corpses to be placed in catapults and lobbed into the city in the hope that the intolerable stench would kill everyone inside."3 Taking this account at face value, many scholars have therefore characterized the Black Death as an act of violence by Tatars against Italians, sometimes presenting it as an early instance of biological warfare.4

There are two fundamental flaws in this story. First, research on *Yersinia pestis*, the bacterium that causes plague, has made clear that the second pandemic did not begin in the 1340s. It began instead around 1196 or 1268 when *Y pestis* underwent a polytomy, a sudden divergence of several new genetic strains, one of which has been connected with plague fatalities from the Black Death. <sup>5-8</sup> Once historians, thus directed, began to look for plague in 13th century as well as 14th century sources, they found promising signs in Daliang in 1232, in Baghdad in 1258, and in the Horn of Africa in 1262, 1274, and 1275. <sup>9-11</sup>

However, genetics research was not necessary to prove the old outbreak narrative false. A cardinal principle of historical research is to seek sources that were written close in time and space to the events that they describe. By this standard, Mussi is not a good source for the 1346 plague outbreak. He worked as a notary; it is thus easy to show that he did not witness the siege or plague outbreak in Caffa because the dating clauses on his documents show that he stayed in Piacenza between 1344 and 1356.

A more reliable outbreak story would draw instead on texts composed by people who were present in the Black Sea in the mid-1340s. For example, the inhabitants of Caffa sent a petition to the doge of Genoa in February or March 1347, immediately following the Tatar siege described by Mussi. They explained that the Tatar army had experienced a severe disease outbreak just prior to lifting the siege, and they expected that they too would

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be affected in the near future. In other words, plague transmission from Tatars to Italians occurred not in a military context *during* the siege, but in a peaceful context *after* the siege. Peacetime plague transmission was connected with the resumption of the regional grain trade, first to the inhabitants of Caffa whose access to food had been restricted during the siege, and then to the Mediterranean, which was importing food after two failed harvests in 1346 and 1347.<sup>4</sup>

Unlike the biological flaw in the Black Death narrative, which has become clear only recently, the historical flaw should have been apparent for decades. A. G. Tononi<sup>12</sup> showed in 1884 that Mussi could not have been a direct witness to the siege of Caffa. Giovanna Petti Balbi<sup>13</sup> published the full text of the Caffan petition in 1978. Why did so many historians nevertheless choose to base their outbreak narrative on Mussi's account?

One reason may be the attraction of demagogic rhetoric. Historians may have preferred Mussi's treatise because it accorded with their preconceptions about Mongol otherness and violence. Such preconceptions have both medieval and modern roots. On the medieval side, our understanding of the Mongols is built almost entirely on records created by the people they conquered, which naturally emphasize Mongol otherness and violence. Furthermore, the Mongols, as nomads who preserved their mobility even as they created an empire, were less invested in the creation and storage of written records. Many of the records they did create were destroyed by subsequent dynasties. As a result, we lack the nuanced understanding of Mongols' self-image that could counterbalance their neighbors' depictions of them as violent "others."

On the modern side, the people of the Golden Horde, the Mongol state located north of the Black and Caspian Seas, fall awkwardly between two present-day ethnic categories. As "Asians," the Golden Horde may be lumped together with people ranging from India to China. However, although the Golden Horde's ruling class claimed Mongol lineage, their subjects came from a wide range of backgrounds, including many Slavic and Turkic speakers whose ancestors had lived in the region well before the Mongol era. At the same time, as "Muslims," the Golden Horde may be lumped together with people ranging from Saladin to the 9/11 terrorists. Yet, the Golden Horde fits uneasily into modern stereotypes about Islam since its rulers did not speak Arabic, claim an Arab genealogy, or reside in the Middle East. Although its rulers converted to Islam as part of an alliance with the Mamluk kingdom, their subjects professed a variety of religions, most notably Orthodox Christianity.

These complicating factors have not hindered medieval or modern commentators. We know that the immediate cause of the 1346 siege of Caffa was a three-way dispute between the Golden Horde, Venice, and Genoa over sovereignty and tax revenue in Black Sea ports.<sup>4</sup> Throughout this dispute, all parties remained aware that the prosperity of the ports over which they were fighting depended on trade across religious and ethnic boundaries. Medieval observers such as Mussi nevertheless presented the siege as a conflict between an ethnic group (Tatars) and a religious group (Christians), casting an ethnic aspect onto Christianity and a religious aspect onto Tatarness to tie the siege into a broader pattern of holy war. Modern scholars have made similar analytical moves. For example, according to Ole Benedictow<sup>14</sup>, the Golden Horde's conversion to Islam "involved increased religious fervour and fulminating anti-Christian attitudes, and the presence of Christian merchants was considered increasingly intolerable," culminating in the rulers' decision "to throw the Italians out of their trading stations in Kaffa and Tana to put a definite end to trade with Christians." Benedictow therefore argued that violent confrontation must have been responsible for plague transmission because no sane Christian merchant would have been doing business in such a hostile environment. In the meantime, historians of the Black Sea have proceeded under the assumption that plague was spread via the grain trade without realizing that the very existence of that grain trade was being questioned by historians of medicine.15

#### COVID-19

Treating the Black Death as an instance of biological warfare reflects the long history of politicized outbreak narratives. In today's "post-truth era," we might treat Mussi's account as misinformation. Although Mussi probably did not intend to mislead, his narrative has enabled modern academic parochialism and reinforced problematic modern assumptions about interreligious and interethnic conflict as a factor in disease transmission. The research reliant solely on Mussi's account has created a "disnarrative" about the Black Death outbreak that favors an "us vs them" interpretation often associated with infectious disease outbreaks. A similar pattern has been observed in the construction of narratives about the origin of the COVID-19 virus from the United States and China.

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Both the US and Chinese governments took advantage of the type of scientific uncertainties especially common in ongoing epidemiology research about new viruses and epidemics to advance a kind of demagogic rhetoric for their own political gains, ramping up nationalistic sentiments among their citizens. According to Patricia Roberts-Miller, 16 a scholar of rhetoric and public writing, demagoguery should be understood as "a discourse that promises stability, certainty, and escape from the responsibilities of rhetoric through framing public policy in terms of the degree to which and means by which (not whether) the outgroup should be punished for the current problems of the ingroup." What's important in Roberts-Miller's definition is that demagogic rhetoric is centered on group identity even if it often seems to be rational and evidence based. Combined with nationalism, an outbreak narrative's tendency to vilify disease carriers and marginalize them for the benefit of the "public good" reflects several characteristics of demagogic rhetoric. When politicians use belligerent arguments to play a blame game, attention is drawn away from the complexity of scientific research toward political war.

One of the most contested origin theories of the COVID-19 pandemic suggests that the virus was leaked from a laboratory. The US government was first to advance this theory by suggesting it leaked from the Wuhan Institute of Virology. This theory, first dismissed as a conspiracy theory partly due to President Donald J. Trump's xenophobic comments against China earlier in 2020, is now regaining scientific and media attention. To Conversely, the Chinese government has woven its own origin narrative in a similar vein, suggesting that the virus could actually have been leaked from a research laboratory in the US military base Fort Detrick. 18

Between these two theories, the Wuhan laboratory leak theory has certainly caused more controversy, even within the scientific community. 19,20 Although it was initially suggested with xenophobic intentions, more recent evidence has suggested that the Wuhan Institute of Virology was involved in conducting gain-of-function research and was experimenting with coronaviruses that could infect humans, thus reviving interest in this theory. The goal here is neither to endorse nor debunk the "Wuhan lab leak theory" because investigations are ongoing, and we may never be able to confirm it given the lack of transparency. Rather, we argue for critical attention to how to construct a narrative about this theory.

Recently, the US House of Foreign Affairs Committee Minority Staff led by Republican Michael T. McCaul published a report to advocate for the Wuhan laboratory leak theory. McCaul's report on the origin of the virus was written to appeal to national pride and identity, by justifying the Committee's motivation to investigate as a responsibility "to the American people." <sup>23</sup> In this report, evidence of a laboratory leak was contextualized with a description of the Chinese Communist Party's presence at the Wuhan Institute of Virology, strongly signaling McCaul's interest in Chinese political influence on and military involvement in the laboratory's work. Finally, the report ended with recommendations that are more politically than epidemiologically motivated, such as reviewing the visas of Chinese nationals researching and studying in the United States. The lack of transparency from China on the activities of the Wuhan Institute of Virology is not surprising given its track record, but constructing the Wuhan laboratory leak theory as an attack on China and Chinese nationals does not accurately portray the nuances and complexities of the issue. Rather, it perpetuates demagogic rhetoric, blaming an out-group (Chinese people) for the problems of an in-group (American people). Politicized demagogic discourse such as this risks intensifying xenophobic actions and policies.

In response to the persistent push by the United States for the Wuhan laboratory leak theory, the Chinese government has woven its own disinformation campaign arguing that the virus could have been leaked from a research laboratory in Fort Detrick. This example seems much less plausible and more demagogic. Two videos supported or created by the Chinese central television station and circulated on China's main social media platform, Sina Weibo, have constructed a narrative about the evil nature of Fort Detrick using a variety of evidence to suggest it as the source of the SARS-CoV-2 virus. One video highlights Fort Detrick's history in working with Japanese researchers from Unit 731 (a notorious bioweapon research team who experimented on Chinese people during World War II), effectively evoking strong nationalist sentiments among the Chinese audience.<sup>24</sup> Referencing critiques from the US public, including an article from the New York Times and another from the Washington Post that condemned the US government, this video aimed to build a trustworthy ethos while establishing Fort Detrick as a target. The other video edited together testimonies from World Health Organization experts exonerating China and appreciating its collaboration in the COVID-19

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origin investigation with a US news story about Fort Detrick's environmental damage to local communities to directly suggest its possible role in creating or leaking the virus. <sup>25</sup> Neither of these videos present any plausible evidence that connects Fort Detrick directly with COVID-19, yet both contribute to an "affective economy" of hate and anger toward the United States on Chinese digital media.

Both examples from the United States and China reflect a kind of demagogic rhetoric that aims to blame the other country for creating and/or leaking the SARS-CoV-2 virus, by presenting circumstantial and misleading evidence that seems to be logical but still contains logical fallacies. Driven by identity-centered arguments, both examples are polarizing narratives that sowed seeds of doubt, promoting certainty on uncertain things, to feed antagonistic attitudes among citizens from the two countries.

## Conclusions

What can we learn from the misrepresentation of the Black Death outbreak story and the COVID-19 laboratory leak debate? It is important to acknowledge that research often produces uncertainty and that conclusions are contingent on limited evidence. In communicating specialized knowledge, we need to make clear that research requires an open, ongoing process. This is difficult, but transnational and transdisciplinary collaborations among scholars, media outlets, and public health agencies can promote more effective communication about the research process as well as its results.

Even though a virus may not discriminate in its infection, the experience of its impact may vary widely across different populations. Communications about transmittable diseases are often couched in terms of supporting all those who are affected, but a disaster for some can provide an opportunity for others. It is essential for the public to understand the structural and ideological forces that shape both the impacts of a disease outbreak and our perceptions of those impacts. Discussions about public health crises, even within scientific and medical fields, should not ignore differences in impact and perception but make them apparent. Francis Collins, former director of the National Institutes of Health, was alarmed by the misinformation and the politicization of science surrounding COVID-19.<sup>27</sup> His comments indicate a recognition within the scientific and public health

communities that science communication is affected by factors such as group identification, culture, politics, and history—an opportunity for dialogue with scholars of the rhetoric and history of science.

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