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# CONNECTED HISTORIES AND PANDEMICS: NOTES ON THE TRANSMISSION OF THE BUBONIC PLAGUE IN SOUTH ASIA

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#### CONNECTED HISTORIES AND PANDEMICS: NOTES ON THE TRANSMISSION OF THE BUBONIC PLAGUE IN SOUTH ASIA\*

GAZI MIZANUR RAHMAN<sup>#\*</sup>

#### Abstract

This article studies connected histories through the lens of the transmission of bubonic plague during pre-colonial and colonial South Asia. In doing so, this study attempts to address two interrelated issues: Firstly, it briefly notes the plague's origin during the second and third pandemics. Second, it deals with maritime and overland transregional connectivity, which facilitated the transmission of plague. This study shows that global trading networks and Trans-Asia connectivity assisted plague transmission in South Asia earlier than in other parts of the world. Along with the countries of East Asia, South Asia contributed to disseminating Yersinia pestis to Europe and beyond. As a burgeoning area in historical studies, connected histories are rarely focused on in South Asian scholarships. By examining historical materials and current literature, this article suggests that transregional connectivity was significant for spreading contagious diseases in the past. It is still relevant for the present and future pandemics. Transregional connectivity has become convenient and faster than in previous eras for upgrading transportation systems, facilitating the rapid transmission of diseases such as COVID-19. The invasion and multiplication of microorganisms such as viruses, parasites and bacteria move hand in hand with transregional flows of people and commodities. In terms of an economic viewpoint, presently, 'One Belt One Road' is a mega commercial project of the Chinese Government that may facilitate the spread of contagious diseases, along with the mobility of ideas and goods. This article, therefore, offers a new

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perspective at the connected histories and the histories of public health in South Asia, in general, and global health for future pandemics.

**Keywords:** connected histories; Black Death; bubonic plague; pandemics; South Asia; India; Bengal.

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#### Introduction

Every region was exclusively connected through maritime networks and land routes during the pre-modern and early modern periods. Therefore, a new trend of historical studies focuses on connected histories or global history in recent decades. The theme of global history is a remarkable stride in our understanding of past human mobility, transregional connections, circulation of goods, and culture worldwide (Douki and Minard 2007). A group of scholars has explored the maritime and inland transregional connectivity between South Asia and other parts of the world during the pre-modern and colonial periods (Mukherjee 2011; Hall 2011; Subrahmanyam, Kulke 1999; 1997; Chakravarti 1989). Their scholarships have revealed the flows of commodity and currency, voluntary and involuntary migration, sharing of ideas and culture, and interactive networks between Asia and Europe. As their studies deal with global issues, some historians began identifying their scholarships as transnational history in the late 1980s. The notion of transnational histories transcends any modern nationstate, empire, or other politically defined boundaries (Iriye and Saunie 2009; Bayly 2006). Transnational histories have a close association with transregional connectivity or crossborder mobility. An example of transregional connectivity is One Belt-One Road or OBOR, which resembles ancient maritime and inland Silk routes between Asia and Europe. Different policymakers and experts have shown overwhelming interest in OBOR for facilitating trade, commerce, and infrastructural developments (Yhome and Chaturvedy 2017). Apart from business and mobility of people and ideas, the transmission of diseases and infections is a factor of connected histories or transnational histories, mainly understudied.

Cross-border connections facilitated the transmission of several epidemics, such as smallpox, cholera, influenza, tuberculosis and HIV. The bubonic plague was a contagious disease that broke out several times across human civilisations and caused three great pandemics (Devaux

2013: 171). The first pandemic of plague appeared in Egypt in the 6th century. It was further transmitted to Europe. The Black Death was the second pandemic in recorded pre-modern history (Aberth 2005). The third one affected mostly South Asia, called the 'modern' pandemic (Snowden 2019: 333). People died in large numbers during the second and third pandemics because transregional connections spread the plague globally through sea and inland routes. Therefore, pandemic scholars often term disease transmission as the 'globalisation of disease' (Catanach 2001: 131–153). A recent example of disease globalisation is the novel coronavirus or COVID-19.<sup>†</sup> It originated in Wuhan, China, in December 2019 but rapidly affected more than 220 countries and territories worldwide. Therefore, the World Health Organisation declared COVID-19 as a pandemic on 11 March 2020.

It was mentioned earlier that connected histories are one burgeoning area in historical studies, which deals with the transregional mobility of people, goods, ideas, diseases and cultures across the globe. Pandemic historians mainly discussed remedies, socio-economic and religious aspects and political impacts of epidemics (McNeill 1976; Horrox 1994; Byrne 2006). A South Asian pandemic historian, namely Srilata Chatterjee (2006: 1194–1201), has examined the government's response to the third pandemic in British India, particularly Bengal. Therefore, connected histories remain unexplored in their scholarships. This article shows that South Asia and the originating place of the plague had a long transregional connection well before the outbreak of great pandemics. These Trans-Asia connections facilitated the transmission of epidemics to South Asia earlier than in other parts of the world. Even South Asia, along with China, contributed to carrying the bacteria to Europe and beyond.

This study focuses on two interrelated issues to examine the connectedness and invasion of bubonic plague. First, it briefly notes the epidemic's origin during the second and third pandemics. Second, it deals with the maritime and overland trading networks, which facilitated the transmission of plague. This paper suggests that regional connectedness was a significant factor in the spreading of infectious diseases in the past. It is still relevant for

<sup>&</sup>lt;sup>†</sup> It is an infectious disease named '2019 novel coronavirus' or '2019-nCoV', a new virus linked to the same family of viruses as Severe Acute Respiratory Syndrome (SARS).

future pandemics. This study also indicates that the government and people need to change their attitudes and behavioural patterns in the early stage of future pandemics to contain its spread and reduce mortality.

#### **Origin of Bubonic Plague**

Deoxyribonucleic Acid (DNA) studies identified the root cause of the plague as bacillus, a rod-shaped bacterium (Eroshenko et al. 2017; Damgaard et al. 2018: 369–374). In 1894, a French biologist, Alexandre Yersin, named the bacteria *Yersinia pestis* (Laes 2017: 408). The *Yersinia pestis* (hereinafter *Y. pestis*) was transmitted through infected rat fleas, which jumped from nonhuman hosts to the human body. It was the aetiological agent of the plague's pandemics (Slavicek 2008: 27–28; Bramanti et al. 2019). This paper focuses on the second and third pandemics of bubonic plague, which originated near or in China and affected South Asia before further transmission to Europe.

There is a debate on the place of origin of the second plague pandemic. Pandemic historians, notably George D. Sussman (2011: 319) suggested no evidence of a severe epidemic in India and China in the 1340s. However, scholars have disagreed with Sussman and indicated that a pandemic appeared in North China in the early 1320s or 1330s (Beckwith 2009: 195; Horrox 1994: 9). Later on, the disease spread throughout the country and killed thousands of people in China (Snell 2020). Some other studies have shown that the Black Death originated at Lake Issyk-Kul (Kyrgyzstan) or Lake Balkhash (Kazakhstan) in the Central Asian steppes, arguably in 1339 (Anandavalli 2007: 20-21; Nardo 2011: 15-16). Ibn al-Ward (b. 1292-1349), a contemporary Arab historian who died of the plague, corroborated that the Black Death originated around Central Asian steppes in the late 1330s (cit. in Aberth 2005: 11). Then, it spread eastward to China through the Silk Road and depopulated the region (Byrne 2006: 4-5; Slavicek 2008: 30, 40). Therefore, we can conclude that the second pandemic originated in Central Asian steppes or near North China's border. Gradually, it invaded neighbouring areas, including South Asia, before appearing in Europe. McNeill (1976: 145) suggested that the second pandemic originated in Asia's 'Land of Darkness' before invading the European world. He further noticed that the pandemic transmitted to northern Asia, starting with China and then India and the Arab world (ibid.).

The third or modern pandemic of bubonic plague appeared in Yunnan's mountain valleys, China's southwestern province, in 1855. Soon it was transmitted from Yunnan to neighbouring regions of China (Dey 2020). It invaded Hong Kong in 1894 and gradually was trans-shipped to different port cities in Asia, including Bombay (Mumbai) and Calcutta (Kolkata) (Snowden 2019: 337). In 1896, the plague appeared at a grain warehouse in Bombay (Echenberg 2007: 50; Nathan 1899: 182), and in the same year, some suspected plague cases were found in Calcutta (Plague Commission 1899: 2). Thus, from British India and Hong Kong, the third pandemic was transmitted across the world.

Topographically, South Asia covers a vast area,<sup>‡</sup> which has been connected with the rest of the world since at least the 2nd century BCE. Transregional connectedness depended exclusively on maritime, overland, or both, until the air transportation system commenced. Such connectedness facilitated the transmission of *Y. pestis* through infected persons or plague-ridden rats and fleas (Vogler et al. 2013). However, the above discussions show that plague pandemics originated near or in China and further proceeded to South Asia and Europe through trading routes. Yue et al. (2017) noted that the plague spread worldwide through trade routes. The following sections demonstrate how overland and maritime connectivity between China and South Asia facilitated the spread of two global epidemics.

#### Connected Seas and Lands during the Black Death

The Bay of Bengal made it possible to connect with South Asia's eastward seaports, which stretched from Calcutta to Burma (Myanmar), the Malay Peninsula, the western coast of Sumatra, and the China coast of the South China Sea. This waterbody was a significant corridor to convey ideas during the pre-modern period. It also facilitated transcultural networks in the Indian Ocean world. The two largest religions, Hinduism and Buddhism, emerged in South Asia. These religions were also transferred to Southeast and East Asia through the Bay. Scholars have shown the flows of knowledge and ideas between India and China during the pre-modern period (Sen 2006: 305; Neelis 2011: 250, 252; Chew 2015: 34).

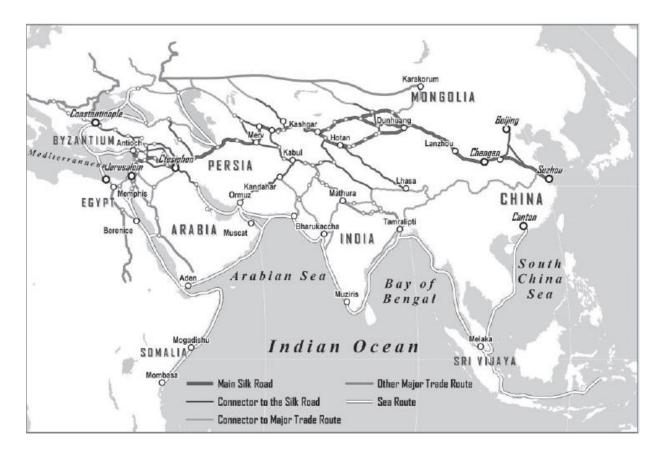
<sup>&</sup>lt;sup>‡</sup> The geographical boundary of South Asia stretches from the Indian Ocean on the south, the Himalayas and Karakoram mountains on the north, the Arabian Sea on the west, and the Bay of Bengal and Bangladesh borders on the east.

Bernstein (2008: 95) demonstrated how Indian Muslim traders facilitated the dissemination of Islam to Southeast Asia.

The Bay of Bengal also played a significant role in developing maritime trading routes. During the 13th century, the Chinese merchants visited Madurai, a commercial centre, and the Pandyan Kingdom (India) (Anandavalli 2007: 23). They further proceeded towards the Middle East and the Mediterranean world. Along with these sea-routes, Ibn Battuta, a contemporary Moroccan traveller, widely visited South and Southeast Asia and China during the 14th century. He apparently saw thirteen Chinese junks and merchants at Calicut (Kozhikode) (Levathes 1994: 88; Bernstein 2008: 2). The Chinese merchant continued extensive maritime trade on various commodities, including silk and Chinese ceramics, with India and Bengal during the 14th and 15th centuries (Levathes 1994: 138–39). Like the Chinese, South Asian traders exported various manufacturing and agricultural products, including textiles, rice and wheat, to the Chinese coast and the Malay archipelago. In return, they imported spices, camphor, porcelain, sandalwood and cowries (Andaya 2015: 98). These merchant ships or sacks of commodities transported the infected rat fleas from the Chinese coast.

South Asia's westward sea routes are linked with the Arabian Peninsula. During the time of the Black Death, the Delhi Sultanate (1206–1526), particularly the regime of Muhammad bin Tughlaq (r. 1325–1351), was connected with the Red Sea and the Persian Gulf. Cambay (Khambhat), a seaport in Gujarat, was under the jurisdiction of Muhammad bin Tughlaq (Sussman 2011: 333–34). This port was one of the trading hubs across the Arabian Sea. Another port, Calicut, also attracted traders from the Indian Ocean's rim. At South Asian seaports, Muslim merchants brought different luxurious goods, including rose water, incense, carpets, seeds and grains from the Middle East (Hall 2011: 310, 330). Figure 1 shows the transportation systems and connectivity between South Asia and other parts of the world. These routes were responsible for trade and plague transmission from the Middle East and Central Asia.

#### Figure 1: Sea routes in the Indian Ocean from the 8th to 14th centuries



Source: Rodrigue et al. (2013: 43)

Like the maritime trading networks, South Asia was connected with the Eastern and Western worlds over lands. The Silk Road linked China with the West and other parts of Asia in ancient times. The Silk Road's northern route was joined at Kashgar, heading towards Samarkand, Bactria (a flat region located in Central Asia), Afghanistan, Pakistan, and India (Beckwith 2009: 21; Neelis 2011: 246–252; Gill 2020: 2019). A Chinese Buddhist monk, Hsuan Tsang (c. 602–664), travelled from China to India via Central Asia through the northern Silk Road. The southern Silk route connected China with the Indian subcontinent via the Sichuan-Yunnan-Burma-Bengal passages. After the bubonic plague appeared in China, caravansaries carried the bacillus to Central Asia and the Middle East within a few years (Szczepanski 2020). Snell (2020) suggested that the plague reached South Asia from China via common trading routes along the seldom-travelled mountains of Tibet. The Indian merchants mainly imported horses and Turkish slaves from Central Asia, particularly Samarqand, Bukhara, and Tirmidhi (Uzbekistan) (Chew 2015:34). These slaves were deployed as soldiers or servants of the *amirs* and sultans in India. Sacks of grains and flour

were given as foodstuff to the enslaved people during their long journey. The live and dead rat fleas were transported easily with the foodstuffs. Therefore, the bubonic plague spread through the northern and southern Silk routes (McNeill1976: 168).

The second plague pandemic was harboured across the Bay of Bengal with the Chinese merchant ships or passage along the caravansaries routes because the Delhi Sultanate had a strong trading network with the plague-infested East and Central Asia. Therefore, the above discussions show the possible ways the Black Death invaded South Asia, such as eastward and westward seaports and over the Silk Road. Ibn Battuta noted that the bubonic plague outbroke at Telingana (Telangana) during the regime of Muhammad bin Tughlaq. The Sultan was encamped with his army during the expedition at Telingana; however, Amir Abdullah of Herat died of the plague (Ibn Batuta 1976: 101, 112). Scholars corroborated two plague outbreaks in India between the 1330s and the 1340s (Spear 1958: 304; Khan 2013: 306; Anandavalli 2007: 20–23). In India, millions of people were decimated between 1346 and 1348 (Horrox 1994: 18, 41–49, 70–76; Szczepanski 2020). The question is how the plague spread from Asia to Europe; this issue will be discussed in the following section.

#### **Passage to Europe**

The plague outbreak occurred in Italy and India in the 1340s and the 1330s respectively. These years indicate that the pestilence appeared in South Asia well before Europe. Therefore, it is likely that the pandemic was transmitted from South Asia to Europe. Scholars have shown the possible way of rodent transportation. South Asia's westward maritime network stretched from Calcutta, Bombay and Karachi ports to the Mediterranean basin, passing through the Persian Gulf and the Red Sea. Ibn Battuta saw some Syrian ships at Calicut crossing the Arabian Sea (Levathes 1994: 88). Snell (2020) suggested that merchants and pilgrims regularly travelled from India to the Arabian Peninsula. Merchants also sailed from the opposite direction to South Asia; for instance, the Mediterranean and Arabian worlds traders voyaged towards South Asian ports since the early Christin Era (Rodrigue et al. 2013: 44).

The westward maritime routes covered a coastwise voyage down Alexandria (Egypt), passing through the Red Sea and the Persian Gulf to South Asian seaports. The Muslim merchants exported typical cloths and the most elegant fabrics from Bengal, the Coromandel Coast and Gujarat to the Muslim Empires in the Middle East and West Asia (Bernstein 2008: 252–53). These trading networks from and to South Asia caused the dissemination of the plague to the Mediterranean world or Italy. Horrox (1994: 80) noted an unexpected and universal pestilence trajectory from India to Syria, and Palestine and finally reached Greece in 1349.

Some other scholars have shown the transmission of plague from Central Asian steppes or North China to Eastern Europe. They have suggested that the Central Asian steppes are near China's northern border, immediately to Issyk-Kul or Balkhash. Therefore, the pestilence was transported initially from Issyk-Kul to Astrakhan. After that, it proceeded at Kaffa (Feodosia) in Crimea in 1346 (Bernstein 2008: 140). In 1347, some 12 merchant ships from the Black Sea were docked at the Sicilian port of Messina (Italy). These ships passaged rat fleas. People noticed that most sailors of those ships were dead, and some were covered with black boils that trickled blood and pus (history.com editors 2020). Following the Italian seaports, by 1349 the trading ships carried the plague into other European port cities, such as France, Spain, Britain and Ireland. Finally, it visited Germany, Scandinavia, the Baltic states and Russia in the 1350s (Slavin 2019: 59; Cartwright 2020).

The above discussions show the historical trajectory of the Black Death, which started near China and invaded other parts of Asia, including India. Along with China, the westward maritime network of South Asia and the westward aquatic passages of East Asia, contributed to the transfer of the infected rats or persons to Europe. The second pandemic's routes towards India and Europe are settled; what follows is a discussion of the third or the modern pandemic.

#### **Modern Pandemic: Crossing Regional Boundaries**

It was mentioned earlier that the third pandemic of plague originated in Yunnan in the 1850s. From the coast of China and Hong Kong, the plague was transported towards South Asia between 1891 and 1896 (Simpson 1905: 138). The British established dominance over the Bay of Bengal during the late 18th century. The East India Company's military, passenger and merchant ships sailed from South Asia to the Malay Peninsula, China and Hong Kong (Singapore Free Press and Mercantile Advertiser 1856: 2; Ray 2007: 53–54). The logbook of arrival and departure indicates that the British ships voyaged from and to Bengal, Bombay, Madras (Chennai), Malay Peninsula, Borneo and China (Singapore Chronicle and

Commercial Register 1831: 3). Infected rats were frequently harboured along these routes because *Y. pestis* could travel long distances and survive up to 50 days, depending on favourable temperatures (Liston 1905: 43–49).

Seaport cities were vulnerable because pathogens entered into new lands from 'plague ships' (Vogler et al. 2013: 1). For example, Bombay was one major seaport in colonial India. British opium-laden ships and sacks of grains, such as rice and wheat from Hong Kong, discharged infected rodents at Bombay port in 1896 (Morelli et al. 2010: 1140–43). The first case was detected at Mandvi, near the dock of Bombay seaport. Within a short period, people noticed that rodents died in Mandvi's warehouses, and the residents near granaries became sick of a mysterious disease, which was later diagnosed as bubonic plague (Snowden 2019: 342; Dey 2020). The Advisory Committee for epidemic in India investigated four villages, namely Sion, Wadala, Parel, and Worli, near the Bombay seaport. They corroborated that people got sick from infected rat fleas in warehouses in those villages (Advisory Committee 1908: 212–13).

The British civilian or non-civilian ships regularly visited the Calcutta port, particularly from the China coast and the Malay Peninsula (Skinner 1982: 21–29). This maritime connectivity was responsible for the spreading of the plague pandemic in Bengal. In 1896, a *dom* (a lower caste individual or community) assisted in a plague victim's autopsy in Calcutta, and that incident facilitated the spread among the residents (Anonymous 1900: 340). In 1898, a ship from the British India Steam Navigation Company disembarked the soldiers of King's Light Infantry of the British Army at Calcutta port; this ship harboured infected rodents (Plague Commission 1899: appendix ii).

The *Y. pestis* was extensively transported from seaports to rural areas through railway wagons and traditional transports, such as coastal craft and bullock carts. The seaports of South Asia, including Calcutta, were linked with inland roads and rails for trade, labour migration and pilgrimage. The Eastern Bengal and Assam railways contributed to inland connectivity and facilitated the spread of plague within the British Indian Empire. The railways conveyed migratory rat fleas through sick persons, clothesand food grains from one town to another as 'stowaways'. The disease was carried to many destinations, including Bihar, Hooghly, 24-

Parganas, Midnapore, Burdwan, Saran and Patna (Liston 1905: 56; Clemesha 1906: 355). It moved from Bombay to Poona (now Pune), Karachi and other northeastern towns of the subcontinent through inland transportation. These places were a hotspot of plague, so the mortality rate was high.

Apart from the Calcutta seaport, there was another land route to bring the rat fleas to Bengal. The third outbreak of bubonic plague transcended the boundaries of Yunnan to north-eastern India via the Himalayan reservoir (McNeill 1976: 168). Yunnan was also connected with South Asia's eastern frontier via Burma (Myanmar) because Bengal's location left a narrow landbridge with mainland Southeast Asia and China (Chowdury 1991).§ These connections became more visible and extensive through some mighty transboundary rivers. During the colonial period, rivers were the primary source of inland transportation and trade. The Tibetan-Himalayan glaciers are the source of a few transborder rivers, including Brahmaputra, Ganges, Indus, Irrawaddy, Mekong, Salween, Tarim, Yangtze and Yellow. These rivers played a significant role in developing cross-border connections across southwestern China, Burma, Bengal, and north-eastern India. Dick and Rimmer (2003: 155) have shown the changing nature of transport and communications patterns in the lower river valleys of the Irrawaddy, Chao Phraya and the Mekong since 1850. Therefore, the British colonial surveyors experimented with connecting Brahmaputra and Irrawaddy Rivers to the province of Yunnan (Iqbal 2015: 71-73). This aquatic and cross-border connectivity intensified the passage of commodities, culture as well as diseases.

The British Government also developed rail communication from Calcutta to Yunnan and mainland Southeast Asia via Dacca (Dhaka) and Comilla. In the 1870s, the Chittagong-Mandalay railway route was considered the 'shortest and direct' one for a possible connection between Bengal, China and other areas of the Malay Peninsula. In 1899, the Associated Chambers of Commerce recommended that Chittagong be connected with Calcutta and Mandalay-Rangoon Railway. Consequently, the British Indian government agreed to make several lines from Burma to China on behalf of the consul-general in Yunnan

<sup>&</sup>lt;sup>§</sup> A. M. Chowdury illustrated an overland transregional connectivity among Bengal, mainland Southeast Asia, and South China during the ancient period.

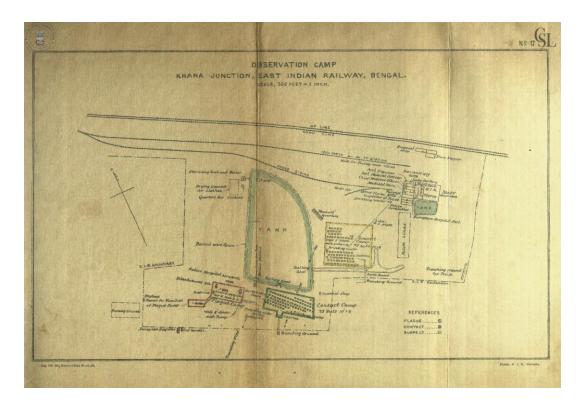
by 1904 (Iqbal 2015: 74). This rail communication might have facilitated the crossroads of transportation of goods and diseases.

At the beginning of the outbreak of the epidemic, there were no special laws to prevent the spread of the plague, and the government had no administrative experience regarding the control of the disease. The Bengal government was unwilling to apply military force because indigenous people and their leaders could have opposed it. For this reason, the government created the Medical Board consisting of official and non-official members who would help to influence ordinary people's mindset (Chatterjee 2006: 1194).

Different measures were taken to prevent the spread of the plague; for example, the Punjab Government passed a resolution on 11 Jan 1898 regarding the evacuation and dislocation of the infected areas, which stated that healthy persons were being separated and houses were being disinfected before re-occupation. Moreover, the resolution instructed to remove plague patients from the care of their relatives, friends, sympathisers and intimate attendants. However, the people did not understand the measures taken for their protection and resisted the medical officers. The consequence was that the pestilence spread almost unchecked. It was worst in Bombay and the central part of India (Anonymous 1948: 141).

The British Government introduced the Epidemic Diseases Act of 1897 to suppress the pandemic in the Indian subcontinent. This Act allowed the government to take some special measures for passengers who travelled by road or rail. These included surveillance of arrivals from infested places, inspection of railway passengers, removal of suspicious plague cases from trains, and disinfection of railway luggage and carriages. In addition, the authorities segregated and compulsorily hospitalised the passengers who were suspected of the plague (Jennings 1903: 200). Similar regulations were introduced for the erection of field hospitals and observation camps (Simpson 1905: 70). One observation camp of the East Indian Railway Bengal was erected at Khana Junction (figure 2). However, the modern pandemic devastated South Asia, with about twenty million people dying of *Y. pestis*. Before the pandemic finally subsided in India, the death toll was about 95 per cent of the total global mortality (Snowden 2019: 334).

#### Figure 2: Observation Camp Chausa Station in Bihar, East Indian Railway, Bengal.



Source: R. Nathan (1898)

In the same manner as the bubonic plague, almost every country followed aggressive nontherapeutic measures to prevent the spread of COVID-19. For example, the UK Government introduced the Coronavirus Act 2020 to deal with the COVID pandemic. Bangladesh and India also followed the same route. In Bangladesh, the government initially declared the enforcement of a lockdown for 10 days; later, it was extended for several months. However, the government also allowed mass travel during the Eid festival from Dhaka (a place full of COVID-19 hotspots) all over the country without maintaining proper social distancing. Shortly after, the government was unsuccessful in maintaining a proper lockdown due to the need for coordination between different authorities and groups. However, some significant steps were taken too, including forming a national COVID-19 response committee headed by the Minister for Health, closure of all government and private offices and closure of all educational institutions in the country.

The Epidemic Diseases Act of 1897 (EDA) was enacted during the British colonial rule to contain the bubonic plague. During COVID-19, the Indian Government amended the EDA. The Telangana Government invoked the EDA by issuing a regulation called 'the Telangana

Epidemic Disease (COVID-19) Regulation 2020'. This regulation empowered all local bodies and institutions to take measures to contain COVID-19, involving all hospitals, both public and private. The regulation also prohibited the spread of misinformation on social media and print media, and necessary action could be taken against violators. Hence, the State Government of Telangana emphasised keeping the institutional structures solid and robust to contain COVID-19 (Gowd et al. 2021). There are certain sections in the National Disaster Management Authority (NDMA) that helped the Central Government to impose the lockdown and restrict all kinds of transportation in the country. For the better execution of the national lockdown, numerous states likewise enforced section-144 of the Criminal Procedure Code (CPC) (ibid.).

Turning to historical sources on the transmission of plagues even within India, the bacterium was transmitted throughout Europe and the Americas from British India (Morelli et al. 2010: 1142–43; Snowden 2019: 39, 333). Therefore, some foreign governments, including Egypt, imposed an embargo on Indian merchant ships that had embarked for overseas trade (Patterson 1899: 489). Consequently, the Indian Government took precautions to interrupt the plague's spread through sea routes (Seal 1969: 289). The government inspected and disinfected the passengers and crews of ships before any sea voyage from the Indian seaports. They fined ships and passengers who disobeyed the government's instructions (ibid.). The government also inspected ships, passengers and belongings that arrived from outside the country and introduced a quarantine system at Calcutta port (Nathan 1899: 137–38, 190–221; Jennings 1903: 200). Sarat Chandra Chattopadhyay illustrated how the Calcutta port authority inspected ships' crews and passengers before departure (1999: 93–4).

The plague was an infectious and contagious disease that travelled along trade routes; nothing could illustrate the relationship between trade and the conveyance of transmissible disease better. The above explanations justify the claim that the Black Death visited India and China earlier, and later on invaded Europe in the late 1340s. With British colonialism, Trans-Asian connectivity became frequent and dynamic. The modern transportation system facilitated the third pandemic rapidly from the China coast to South Asian ports through merchant and military ships. Therefore, it could be said that China and India's significance in the third.

pandemic has undoubtedly contributed to the persuasion that these regions must also have played a significant role at the beginning of the second plague pandemic.

Transregional connectivity and bubonic pandemics during pre-colonial and colonial South and East Asia have been discussed above. Now it is relevant to show the postcolonial connected histories in South Asia. By the early 21st century, two significant nation-states in South and East Asia, namely India and China, took diplomatic initiatives to promote economic, strategic and cultural relations, which boosted transregional connectivity. In 2013, the Chinese government introduced the One Belt-One Road (OBOR) (Witte 2013), the most extensive intercontinental connection between Asia, Europe and Africa through maritime and inland routes. The OBOR has two main components which try to revive the memory and symbolic significance of the ancient Silk Road. It sheds light on pre-modern transregional connectivity. Experts considered it the 21st-century Maritime Silk Road (Chaturvedy 2017). Following the declaration of the Chinese megaproject, the Indian Government announced the Act East Policy in 2014,\*\* which facilitated more firm connections between India and Southeast Asia, East Asia, and the Asia-Pacific region. Shortly after, the government showed interest in the policy's three C's – culture, commerce and connectivity (Mehrotra 2012; Barua 2020). The Act East Policy and OBOR draw considerable attention among policymakers and academia. Both diplomatic strategies are considered 'trans-regional economic corridors' and 'Silk Road Economic Belt', which will promote trade and economic activity (Sundararaman 2017; Jetin 2017). It can complement the movement of goods and people with economic development in specific sectors. However, the worrying point is that policymakers and scholars are not aware of the transmission of disease along these trading routes; we have seen this in action during the second and third plague pandemics.

#### Conclusion

In the last few decades, connected histories have been considered a bourgeoning area in the historical discourse. Therefore, some world historians focus on transregional connectivity,

<sup>&</sup>lt;sup>\*\*</sup> In the 1990s, the Indian Government emphasised the Look East Policy (LEP), which deals with transregional connections between India and ASEAN countries. After a couple of decades, the government announced the Act East Policy in 2014. The latter policy is the successor to the earlier one.

concentrating on the flow of goods, people, diseases and ideas. However, the transmission of infections and pandemics has been overlooked in the studies on South Asia. This paper shows connected histories through the spread of bubonic plague in South Asia and beyond. Though bubonic plague originated near or in East Asia in the 1330s and the 1850s, it turned into a global epidemic because maritime and inland highways facilitated trade, human mobility, and the transmission of bubonic plague. Although this paper has shown that South Asia was interconnected with eastward and westward seaports in the Indian Ocean and had inland connections during the plague pandemics, it is incredible that these connections even exist until now. This was the reason why the second and third pandemics of bubonic plague hit South Asia from China within a few years after its outbreak. This paper suggests that connectedness was a significant factor in the spreading of infectious diseases during the medieval and modern periods in South Asia, demanding the considerable attention of pandemic historians.

Transportation systems have been upgraded unprecedently since the mid-19th century. Undoubtedly, the modernisation of the transport system has made our life easy and convenient; however, this easy communication also facilitated the transmission of contagious diseases. Nowadays, it is very easy for migrants and infections to easily from one region to another. The rapid transmission of the COVID-19 virus across the globe might be an example: a newspaper in Afghanistan named *Salaam Times* reported in early 2020 that the Mahan Airline of Iran continued flights between Tehran and China while the pandemic spread, and that it played a vital role in the massive outbreak of coronavirus in Iran and throughout the region and beyond (Anonymous, 2020). Due to the development of the conveyance system, the COVID-19 virus arrived in South Asia within three months after its outbreak. It has resulted in multiple unexpected outcomes, including high mortality, interrupted mobility and economy, changed human behavioural patterns and many other socio-economic problems. According to the statistics of worldometers, as of 6 August 2021, COVID-19 infected more than 202.3 million people in 220 countries and territories, of which about 36 million positive cases were found in South Asia alone.

The rapid transmission of the COVID-19 virus might be a relevant example of future pandemics. Scientists have predicted more pandemics in the near future (Gill 2020; Anonymous 2020), which will threaten the state's security, public health and social order. By the 21st century, India and China introduced two strategic policies, the One Belt-One Road project and the Act East Policy. About 60 countries, half of the world's population, are under the OBOR project. Such extensively connected networks might be a significant route for spreading future pandemics or infections, making policymakers anxious for global health. Due to the mass rapid transportation system, mobility of people and diseases has become faster than in previous eras. Therefore, connectedness is still a relevant factor in the spread of subsequent pandemics. This study suggests preventive measures to reduce the transmission risk and death rate. To suppress contagious diseases, the government and people need to change their attitudes and behavioural patterns in the early stage of the pandemic. However, more research might lead to a deeper understanding of connected histories, future pandemics and public health in South Asia, more generally, in world history.

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