

Dread the Grim Reaper: Early Warning Strategies as a Means of Plague Prevention. Hospitaller Malta's Fight Against Contagion.

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For plague is the flail of God
(Albert Camus)

Abstract

Plague brought social disruption and physical devastation on a large scale in pre-industrial society. This study strives to give an overview of the occurrence and socio-economic impact on society of the pestilence in the Mediterranean world and beyond from Antiquity up to the nineteenth century, with considerations on recent historiographical trends regarding the analysis of the outbreak and spread of the phenomenon based on a multi-disciplinary approach. Among the aspects discussed in the paper are the biological origins of the disease, how it spread across territories along trading and maritime routes, the different religious approaches to the epidemic, and, with special reference to Hospitaller Malta, the collaborative efforts between maritime centres for mutual alarm regarding possible contagion.

I

Plague, the grim reaper of preindustrial society, brought social disruption and physical devastation on such a scale as to warrant major literary attention both from contemporaries who witnessed the misery it perpetrated and by writers fortunate enough to live in centuries when this most fatal of epidemics was by and large only a distant memory. Its impact on society thus attained an immortality which only the arts are capable of guaranteeing. Boccaccio's *Decameron* is a collection of tales narrated by a group of town dwellers who isolate themselves in a country villa to flee the plague which had broken out in mid-fourteenth-century Florence. Manzoni's *The Betrothed* is set in a seventeenth-century Lombardy ravaged by the pestilence. The plague which hit Marseilles in 1720 provided the inspiration for more than one theme in twentieth-century French literature.¹ Albert Camus exposed the misery of human condition and the existential dilemmas that it inevitably generates by setting the scene of one of his best acclaimed literary achievements in a plague-ravaged Oran (Algeria).²

In the past century or so historiography has gradually changed its attitude towards the study of plague, or Black Death as the medieval version of the pestilence was called. New approaches to historical analysis ushered in the twentieth century, most notably by the French and American schools, have induced the historian to question, refine, and broaden his craft in order to

¹ C. Omnès, 'La peste de Marseilles de 1720 dans la littérature du XX^e siècle', *Provence Historique* (2003), 52, 211, 99-111, *passim*.

² A. Camus, *The Plague*. Trans S. Gilbert (London, 1960).

arrive at what Peter Burke defines as ‘a history (...) concerned with all human activities’.³ A ‘generalist’ approach, such as the one adopted by William H. McNeill in his *Plagues and Peoples*,⁴ is in many ways unavoidable when modern historiography attempts to tackle phenomena spanning times and territories. Branches of the social sciences such as sociology and economics, and scientific fields such as, among others, archaeology, climatology and related environmental studies, rodent and human demography, urban and rural population densities, diet and nutrition, sanitation, and epidemiology have become unavoidable subjects for the scholar who sets himself the arduous task of trying to unravel the mystery of this epidemic which haunted humanity for centuries on end with its ‘cyclic occurrence’.⁵

What was exactly the biological nature of this disease? The *New Encyclopaedia Britannica* describes it as ‘primarily a disease of rodents’.⁶ The plague bacillus, *Yersinia pestis*, incubates in rat fleas. These in turn transmit it to the secondary hosts or carriers, which could be other rodents, a host of domestic and farmyard animals, and humans.⁷ If the plague bacilli in a host multiply they attack the respiratory and nervous systems causing the death of their carrier. The disease manifested itself in three main variations:⁸ bubonic, the most common, with its most notable symptoms being inflammations in the neck, armpits, and groin, followed by haemorrhages right under the skin which eventually led to psychic disruptions; pneumonic, the only one humans could transmit to each other, which attacked the respiratory system, manifesting itself in a decrease in body temperature and coughs followed by blood spitting, with its severest pre-death condition being coma; and septicaemic plague, the rarest yet most fatal of the three variations, with death following within a day the rapid formation of a body rash after large quantities of bacilli invade the bloodstream.⁹

³ P. Burke, *History and Social Theory* (New York, 1993), 15.

⁴ The comment is by J. Goudsblom, *Fire and Civilization* (London, 1994), 10. McNeill adopts a broad sweep in his analytical approach to the problem, his arguments encompassing entire continents and civilizations. He stresses the impact infectious diseases have had on mankind’s history and is critical of many scholars who, according to him, have underestimated or ignored altogether ‘changes in disease patterns’ when analysing certain historical phenomena, singling out Hans Zinsser, who in his book *Rats, Lice and History* (London, 2000) adopts his know-how as a bacteriologist to assess changes that epidemics such as plague brought over society. In his introduction, McNeill states that the ultimate aim of his approach is ‘a fuller comprehension of humanity’s ever changing place in the balance of nature’. W.H. McNeill, *Plagues and Peoples* (Oxford, 1977).

⁵ Burke, 14-21; R.S. Gottfried, ‘Introduction’, *The Black Death* (London, 1986), xiii-xvii. J.T Alexander is another historian of the new school. He specifically states that one of his prime motivations to study the plague epidemic in Catherine the Great’s Russia was precisely because the subject ‘branched into multiple sub-fields’. J.T. Alexander, *Bubonic Plague in Early Modern Russia. Public Health and Urban Disaster* (Oxford University Press, 2003), xi.

⁶ *The New Encyclopaedia Britannica (Micropaedia)*, vol. 9 (Chicago, 2005), 492-3; For a fairly exhaustive explanation of the biological nature of the disease see J.T. Alexander, ‘Introduction’, 1-8.

⁷ For a brief description of the patterns of plague transmission see, for example, A.B. Appleby, ‘The Disappearance of Plague: A Continuing Puzzle’, *The Economic History Review*, Second Series, vol. xxxiii, 2, May 1980, 163-65.

⁸ Not all authors agree on the number of plague variations that exist. Some claim that only two exist, the third, septicaemic, being only a severe variation of the bubonic and pneumonic versions. Appleby, 162, footnote 8.

⁹ Gottfried, xiii; 6-8; For a more exhaustive explanation of the symptoms of various kinds of plague refer to *The New Encyclopaedia Britannica*, vol. 9, 492-3.

Such variegations in nature and manifestation of this disease demand and justify the multi-disciplinary approach to its analysis and comprehension hinted at above. DNA analysis of human remains can reveal the nature of a disease and therefore the possible presence of plague.¹⁰ The rise of densely-populated urban areas in the Middle Ages can explain, for example, the rapid spread in pneumonic plague through air transmission after coughing. Knowledge of frequently-traveled land and sea routes could help to understand plague transmission from one area, region, country, or continent to another. Living in close quarters with animals in rural areas, on the other hand, was often tantamount to exposure to bubonic plague and the almost absolute prevalence of agrocentric communities in preindustrial, and particularly medieval, society goes far to explain the frequent occurrence of this variation of the epidemic.¹¹ On his part Jean-Nöel Biraben, the French author of several scholarly works on plague, assigns a lot of importance to changes in climate for the widespread reach of the pestilence.¹² In cities and harbours exposed to the ‘Atlantic humidity’ the plague could incubate for years.¹³

The occurrence of plague was not confined to the temporal framework of the period under study. The Classical World, although comparatively free of pandemics – a recurrence of a disease, that is, which the Oxford dictionary defines as ‘prevalent over the whole of a country or continent’ –was not immune to widespread infectious diseases. Athens, for example, was hit by plague in the fifth century BCE.¹⁴ The Middle Ages, on the other hand, witnessed two major pandemics. The first was most severe in the Mediterranean region with the Byzantine Empire at its zenith, although its effects were as far-reaching as Britain and Scandinavia. It broke out in 541 CE and continued recurring at different intervals up to the mid-eighth century. The second plague pandemic, more pertinent to this study, broke out some five plague-free centuries later to hit Europe and the Mediterranean world around the mid-fourteenth century.¹⁵

The year of this second pandemic outbreak was 1347, the culprit a Genoese merchant fleet which in October of that year left the port of Caffa on the Black Sea tragically unaware that its cargo hosted plague-infected rats and fleas. Like a messenger of death the fleet sailed into the Mediterranean to help change the history of this part of the world for good. Part of the fleet landed in the Sicilian port of Messina, infecting the port and its rural district within months before sailing to Pisa, Genoa, and Marseilles. The rest of the fleet headed to Egypt. The spread of the contagion on either side of the region was thus assured. By the following year the northern and southern shores of the Mediterranean were hit by the bubonic version of the pestilence, which made its way up European land and riverine routes to reach unsuspecting Atlantic and Baltic

¹⁰ P. Christensen, “‘In These Perilous Times’: Plague and Plague Policies in Early Modern Denmark”, in *Medical History*, 2003 (London), 417, footnote 16.

¹¹ 90 % of the population of medieval England, for example, lived in small rural settlements. Gottfried, 59.

¹² *Ibid.*, xvi; J.N. Biraben, *Les hommes et la peste en France et dans les pays européens et méditerranéens*. vol. 1. (Paris, 1975-76), 114.

¹³ *Ibid.*

¹⁴ Gottfried, 5; The physician Rufus of Ephesus (1st – 2nd century CE) talks of a pestilence present mostly in Libya, Egypt, and Syria. *Encyclopaedia Britannica*, vol. 17 (University of Chicago, 1969), 1141- 44.

¹⁵ Gottfried, 10-13. For a succinct and efficient overview of the occurrence and spread of plague pandemics on a global scale, corroborated with tables and maps of disease-transmission, see P. Slack, *Plague. A Very Short Introduction* (Oxford University Press, 2012), chapter 2. For a sequential account of the occurrence of plague throughout Europe from the outbreak of the second pandemic onwards see *Encyclopaedia Britannica*, vol. 17, 1141-44.

populations.¹⁶ Oddly enough the southern part of the Low Countries was spared. It has been calculated that in the space of four years twenty-five million out of an estimated overall European population of eighty million perished.¹⁷

II

The problem facing the historian when dealing with the analysis of the past, and more pertinently with such a widespread phenomenon as the spread of an epidemic, is constituted by the sources of information. Relevant records not always are available and the existent ones are inevitably unevenly distributed along time and space. Evaluating the intensity of a plague in a given locality along a specific period is highly problematic. Biraben, for example, denounces the impossibility of compiling a proper statistical chronicle of the occurrence and spread of the contagion in pre-industrial France owing to archival deficiencies.¹⁸ Documentation for the medieval period is rare while seventeenth- and eighteenth-century municipal archives on the whole abound, a direct result of larger and more efficient administrative machines demanded by the centralization process of the major European states.¹⁹ Administrative and commercial centers, and therefore urban areas, where records related to all sorts of human activity had to be kept on a daily basis, offer the historian more documentary volume to chew upon than rural areas, some of which could be too remote to attract even the merest of statistical annotations.²⁰ The abundance of relevant sources differs from one country to another. Parish records in Denmark, for example, are not so common and the existent ones provide scant information not least because they say very little on plague mortality and because it was only in 1640 that it became compulsory to keep them systematically.²¹ Britain, on the other hand, makes for a better case study than many other countries since its parochial archives were more organized and kept with greater diligence and consistency.²² The Moscow plague of 1770-72, says John T. Alexander, 'left an enormous quantity and variety of records that allow it to be examined in greater depth than most epidemics before 1800'.²³ Then there is the stumbling block of the southern, non-European spheres of the Mediterranean, clearly denounced by the French historian Fernand Braudel, especially for the pre-colonial period, as regards North Africa at least, where archives, when present and accessible, are an unreliable maze which will always render any comprehensive historical study of the Mediterranean lame and incomplete.

This said, the historian has to deploy his craft in absorbing inference and interpreting data camouflaged in whatever documentary material spared by time. A decrease in the number of contracts drafted by the Jewry in a given community or a drop in rents in a town could well be indicators of a rise in mortality rates. If it is known that the area in question was hit by plague the

¹⁶ S. Watts, *Epidemics and History. Disease, Power and Imperialism* (New Haven and London, 1997), 1; Gottfried, xiii.

¹⁷ C. Cipolla, *Storia facile dell'economia italiana dal medioevo a oggi* (Milan, 1996), 29.

¹⁸ Biraben, 111-14; McNeill also denounces the problem of assessing 'large-scale epidemics' throughout history due to 'imperfect records'. McNeill, 'Introduction', 1-14.

¹⁹ Christensen, 416-17.

²⁰ Biraben, 113.

²¹ Christensen, 419-20.

²² Gottfried, 62.

²³ Alexander, xiv.

historian can use this information as a statistical foundation with which to substantiate the formulation of analysis regarding the spread of the pestilence and its effect on demography in that territory.²⁴ Similarly, the *Encyclopaedia Britannica* talks of the ‘exceptionally high’ numbers of graves during the Black Death as obvious proof of an abnormal mortality rate which could only have been caused by some epidemiological catastrophe.²⁵ Contemporary chronicles, obviously, cut through piles of arid data by providing eyewitness accounts which, if handled with the imperative dose of scholarly scepticism and the historian’s clinical eye for detecting exaggeration, outright mental fabrications, and flawed perception,²⁶ can be thoroughly revealing on the social conditions and mood of the age, as well as on perceptions of sheer human suffering. Extensive accounts such as the one by the Venetian notary Rocco Benedetti on the plague which hit his city in 1575-77, for example, act as a historical disclosure on both the remedies sought by society to deal with epidemic emergencies and, even more poignantly, on the depressing and maddening scenario into which an entire urban structure could end up transformed as the pestilence made progress. Benedetti talks of the plague’s death rate, with casualties increasing by the hour, including three members of his family; of body checks by doctors on corpses; of the isolation and loneliness of those afflicted or suspected to be so; of the *pizzicamorti* breaking into houses to remove corpses; of the ‘fearful sight’ of barred doors in sign of contagion; of quarantine-bound boats being towed to the Lazzaretto Nuovo. He mentions people coming out of quarantine as widows and orphans, sorrowful yet vociferous in their praise to God for being spared; he compares the Lazzaretto Vecchio – at times overflowing with as many as 8,000-10,000 sick - to Hell, a place effusing suffocating smells, moribund groans, and choking smoke from the burning of corpses; he talks of multiple bodies stacked on single beds; the harrowing spectacle of the severely sick being mistakenly buried alive; of nocturnal howls by those driven to dementia by the disease; of the never-ending need of medicinals and treatment aids: syrups, plasters, ointments, cloths, broth, pap, and distillations. He complains of the lack of sufficient nurses to see to the ever-growing number of sick; of San Lazzaro and San Clemente, emergency hospitals established on purpose by the authorities; of wooden dwellings, erected in haste to house those still unscathed and the *burchielli*, boats fetched in the Arsenal to act as dwellings for the poor; of the mass graves at Cavanella excavated to rid the city of the rotting bodies and the insufferable ‘stench’ they exhumed; of personal goods being ruined through too much exposure to the elements in order to be ‘aired’; and, finally, of the great expenditure incurred by the Doge and his administration who were overwhelmed by the catastrophe.²⁷

III

The consequences of plague were not reduced to the claiming of life of large demographic portions of society. The disease could leave in its wake a disrupted social fabric with some immediate and other long-term effects. It is beyond the scope and, indeed, the reach of this essay to encompass the entire gamut of repercussions caused by the contagion. Its undeniable devastating impact on the story of mankind has lead some historians to burden the disease with a

²⁴ Gottfried., chapter 4.

²⁵ *Encyclopaedia Britannica*, vol. 17, 1141-1144.

²⁶ Christensen labels them as ‘biased, inaccurate and unreliable’. Christensen, 413.

²⁷ D. Chambers, and B. Pullan, eds., *Venice. A Documentary History 1450-1630* (Oxford, 1992), 117-19.

share in the responsibility of quasi-apocalyptic phenomenon such as the fall of the Roman and Byzantine Empires,²⁸ however hazardous and far-fetched such hypothesis – almost impossible to prove with certainty – may seem.²⁹ Paul Slack denounces the flaws of these arguments regarding the epoch-moulding impact of plague cycles. While agreeing that epidemics of similar scale and reach had catastrophic effects on society and contributed to accelerate widespread and lasting change, Slack rebuts that blaming them for single-handedly veering the course of humanity in specific ages would be exaggerated and unfounded.³⁰

During the second plague pandemic Western Europe lost between twenty-five and fifty per cent of its population.³¹ Perversely, there was a ‘beneficial’ reverse side to the situation. Carlo Cipolla argues that the negative consequences of the demographic explosion that took place in Europe between the years 1000 and 1300 were in some ways balanced by the pandemic that broke out in 1347 which sliced population levels to such an extent that the new demand for labour improved workers’ conditions. According to Cipolla, the plague ushered ‘a totally new phase in the economic development of Western Europe’.³² The fall in demographic levels helped to attenuate the ‘subsistence crisis’, with more food becoming available for what was left of the population. The lower strata of society, and the peasants in particular, saw their wages increase since the sheer loss in labour force meant that their services became more in demand to the detriment, of course, of the landowning nobility and clergy who, in the aftermath of plague, tried to force a wage cap on peasant labour.³³ It is revealing that after 1351, for example, the number of those willing to work voluntarily on galleys diminished drastically.³⁴ But the rise in the demand for labour force was not only a medieval phenomenon. In 1655, for example, shortage of reapers in Zealand (Denmark) induced Danish authorities to deploy troops from Copenhagen to carry out harvest duties.³⁵

The medieval social order based on the age-long trinity of the landowner, the priest, and the peasant became practically defunct, creating social instability as the early modern era was

²⁸ Some social historians have formulated causation theories connecting the plague with the decline of the Church, the transition from the Middle Ages to the early modern era, and the coming of the Renaissance and the Protestant Reformation. Gottfried, xiv-xv; 10-11.

²⁹ Similar doubts on the far-reaching effects of plague in time and space are still being expressed within history - even though not-so-scholarly - circles. Mary Beard, reviewing William Rosen’s recently-published *Justinian’s Flea: Plague, Empire, and the Birth of Europe* (Vintage, 2007), is very explicit in dismissing as far-fetched the author’s claim that the ‘Justinian plague’ paved the way for the birth of a continental constitution as spelt out in the title of the reviewed publication. *The SundayTimes*, ‘Culture’, 27 May 2007 (London), 43. McNeill himself, a champion of arguments sustaining the plague’s role in ‘great social and political upheavals’ such as the decline of classical Rome and Athens, is honest and professionally lucid enough to acknowledge that he has ‘indulged’ in a lot of ‘speculation and guesswork’ which needs to be ‘scholarly challenged through expert analysis of ancient texts’. McNeill, 5.

³⁰ Slack, chapter 3.

³¹ Gottfried, 94. For very obvious and comprehensible reasons related to the availability and reliability of data when dealing with demographic estimates of such magnitude, mortality figures and percentages for these pandemics may differ substantially from one source to another. Yet historians seem to agree that the death toll of this pandemic reached, and even surpassed, the 25 million mark. For some plague mortality percentages of the Black Death see Gottfried, xvi.

³² Cipolla, 28-29.

³³ Gottfried, 94-103.

³⁴ Cipolla, 30.

³⁵ Christensen, 430.

creeping in.³⁶ Strife and rebellion increased in intensity and frequency. In the half-century after the plague was re-introduced through Messina in the Mediterranean world in 1347, France, England, and Florence, for example, had to come to terms with peasant uprisings, often adopting ruthless measures to restore order.³⁷ Given humanity's fragile, often incomprehensible, at times downright bizarre nature, reactions to plague outbreaks took extreme forms. Flagellant movements, offshoots of a religiously-charged and highly superstitious society, ever weary of the second coming and convinced that the pestilence was God's scourge – as indeed stated in the book of Revelations³⁸ – cropped up in various parts of Europe. Saints' reliquaries were paraded in the streets.³⁹ Jews, one of mankind's preferred scapegoats, chronically vulnerable – as many ethnic groups in history which ended up victims of diasporas – because of their minority status in practically whichever territory they resided, were victims of mass phobias and of the need by society – any society, anywhere, in anytime – to point its accusing finger at a convenient target when threatened. More than once, in times of plague, Jews were accused of poisoning wells and thus bringing mass death to the community through infected water.⁴⁰ The prejudice against them was such that they were considered the culprits of calamities still to materialize. The slaughter of Strasbourg in 1349, when around 900 Jews were burnt alive on St Valentine's Day with the city still untouched by that year's contagion, is a tragically telling example.⁴¹ Other anti-Semitic persecutions took place, among others, in German towns. One of the overall results was that a good part of the European Jewry migrated eastward, to Poland and Russia.⁴²

Up to the Middle Ages society at large adopted a quasi-passive approach to plague. The deficiencies in scientific and medical knowledge in the Western World and elsewhere, coupled with the scholastic conviction in Europe that the pestilence was an expression of divine retribution suffocated at the source whatever kind of progress was possible in the fight against the disease.⁴³ The lack of belief in the benefits of empirical study as a necessary baseline for a greater comprehension of the problem reduced further, and delayed, the possibility of discovering much-needed remedies. Hygiene standards were appalling by modern parameters and their notable absence was often not regarded as a possible agent of disease. In medieval Siena, for example, filth was regularly thrown in the main square and a pig left roaming to eat it up.⁴⁴ Also, centuries passed by, for example, before the link between the presence of rats and the coming of the infection was made. In 1630, the inhabitants of the northern Italian town of Busto Arsizio showed no signs of plague-related preoccupation when their houses were infested by the rodents.⁴⁵

Class and social standing mattered. Well-off people fled to their country residence with the first hints of plague, as did the wealthy middle class of Lyons in France during the plague of 1628,⁴⁶ and London's 'elite', drawing the indignant criticism of their contemporary pamphleteer

³⁶ Gottfried, 94-95.

³⁷ *Ibid.*, 103.

³⁸ As stated in Gottfried, 93.

³⁹ Watts, 10.

⁴⁰ Gottfried, 73.

⁴¹ Watts, 10.

⁴² Gottfried, chapter 4.

⁴³ Watts, 8.

⁴⁴ Cipolla, 28.

⁴⁵ Watts, 4.

⁴⁶ *Ibid.*, 15-16.

Thomas Dekker,⁴⁷ while the poor remained behind, often living in unhealthy close quarters, victims of cramped urban deprivation. Beyond the larger urban centers, however, rural topography at times provided the poor with a chance to escape and survive. In 1720, for example, the hills of eastern Anatolia welcomed several commoners who fled and settled there during the pestilence that hit the region.⁴⁸

Flight from plague-stricken or -threatened areas was definitely the most sensible thing to do given the medical impotence against the disease denounced above. It was a response to a basic and most urgent survival instinct stemming, as already mentioned, from the one certainty that preindustrial society managed to grasp about this spectre: contact was more often than not tantamount to contagion, the greater the distance from the infected surroundings, the lesser the chances of falling victim to the epidemic's mortal grasp. Yet, for certain categories and professions in society, flight from a community in times of need presented moral dilemmas clearly outlined by the historian Patrick Wallis,⁴⁹ who defines the duties and traces the behaviour of what he terms 'medical practitioners', including unqualified physicians who meddled in the profession, in early modern England. The growing Protestant world, observing the surrounding society from its self-established fortress of puritanical righteousness, could not remain insensitive to the questions arising from this debate: flee from the infected areas and preserve one's life or stay, brave the plague, and fulfill one's duty and obligations towards society by helping the sick? On the matter Martin Luther was against the justifications for flight coming from certain Calvinist quarters and stressed the duty to stay and help the needy.⁵⁰ This 'moral obligation' was arguably even more pertinent for the clergy, the self-assigned soul-healers of society, whose role imposed presence in times of calamity to provide solace and spiritual guidance to their flock. In this respect the Counter-Reformation bishop of Milan, Carlo Borromeo, was a symbol of fortitude in times of plague.⁵¹

IV

A very gradual change in European attitudes towards plague, however, is already perceivable by the second half of the fourteenth century when a tendency towards a more proactive, cognitive, and less fatalistic approach, based more on sober observation and the search for possible earthly remedies starts creeping in, as betrayed by contemporary chronicles.⁵² Around the middle of the fifteenth century specific and concerted action to fight the spread of plague started being applied in Western Europe with the northern Italian towns and provinces on the forefront.⁵³ Sheldon Watts reduces the controls that started being adopted in northern Italy to five basic measures: quarantine on land and at sea; the burial under several feet of ground of the deceased and cremation of their belongings; building and use of pesthouses for those sick with plague and

⁴⁷ P. Wallis, 'Plagues, Morality and the Place of Medicine in Early Modern England', in *The English Historical Review*, cxxi, 490 (February 2006), 5-6.

⁴⁸ Watts, 34.

⁴⁹ Wallis, *passim*.

⁵⁰ *Ibid.*, 5.

⁵¹ *Ibid.*, 2; 23; J. De Lamar, *Reformation Europe. Age of Reform and Revolution* (D.C. Heath and Company, 1992), 218-9.

⁵² Slack, 51-52.

⁵³ Watts., 2.

contemporary isolation of their households; the provision by local administrations of food and medicine for those segregated from the community; and aid to whoever had his livelihood disrupted due to the lack of foodstuffs following the closure of markets.⁵⁴

Venice, which suffered fourteen plague visitations between 1456 and 1528 alone,⁵⁵ makes for a good case study of one Mediterranean city's struggle against plague.⁵⁶ Being a city-port and one of Western Europe's gateways to the Ottoman world, it was particularly vulnerable and exposed to contagion. In 1423 it was decided to build a hospital dedicated to the care of plague victims on the island of Santa Maria di Nazareth.⁵⁷ In 1468 the Senate decreed that the Lazzaretto Nuovo, a quarantine hospital for those recovering from plague, was to be built on the island of Sant'Erasmus. The Health Office was set up in 1490. It was administered by the *Provveditori alla Sanità* and its responsibilities, apart from health-related emergencies, ranged from assistance to the poor to the monitoring of brothels. In 1541 this Health Office issued a set of strict ordinances which were to be applied immediately with the first signs or suspicions of plague. The ordinances were mainly geared at tracking down and isolating anyone, from family members to neighbours, who might have come into contact with the victims.⁵⁸ Improvisation to meet emergency situations was not lacking either. In the plague of 1576-77, which ultimately claimed around 51,000 lives, a number of galleons were used as hospitals when the old Lazzaretto was swarming with the sick.⁵⁹ Naturally enough the divine element was not discarded, both in the form of thanksgiving endeavours in order to express gratitude for the passing of another contagion, and in the conviction that God's will would have sufficed to spare the lagoon from yet another pestilence. In the late 1570s the architect Andrea Palladio was commissioned to build a sanctuary on the island of the Giudecca as a sign of gratitude for the passing of the plague.⁶⁰ In 1630, on the other hand, the state decided to fund the building of the church of the *Salute* in the hope of incurring God's mercy.⁶¹

Similar efforts to prevent or limit the spread of plague were often depressingly unsuccessful. Florence, for example, a city notorious for its rigorous application of controls, was still subjected to five plague outbreaks between 1497 and 1633.⁶² The set-up of the Health Office did not spare Venice further plague spells either. The outbreaks of 1575-7 and 1630-1 claimed 25 per cent and 30 per cent of the *Serenissima's* population respectively.⁶³ Controls weighed on the authorities' coffers. Building pesthouses and hospitals, paying civil servants to carry out routine checks, and seeing to the needs of the poor could sap up the financial reserves of a town or city. The public expenses of the French town of Angers multiplied fivefold during the plague of 1626.⁶⁴ Usually, the most obvious remedy sought by the separate municipalities was an increase in taxes while states, on the other hand, did grant tax exemptions to single towns hit by plague in order to relieve them of further burdens in times of sustained expenditure. The Danish town of

⁵⁴ *Ibid.*, 16-17.

⁵⁵ Chambers and Pullan, 113.

⁵⁶ See above, comments on account by the Venetian notary Rocco Benedetti.

⁵⁷ Chambers and Pullan, 114, footnote 16.

⁵⁸ *Ibid.*, 113; 115-16.

⁵⁹ J.J. Norwich, *A History of Venice* (London, 1982), 494.

⁶⁰ *Ibid.*, 494-95.

⁶¹ Chambers and Pullan, 113.

⁶² Watts, 16.

⁶³ Chambers and Pullan, 113.

⁶⁴ Christensen, 427.

Aarhus, for example, was twice exempted by the central government from paying taxes, in 1573 and four years later, following contagion.⁶⁵ In April 1464, the Senate of Venice decreed that every *sestriere* was to be patrolled by two carefully-chosen individuals, each to be paid four ducats a month by the Salt Office, who had the duty to see to the needs of plague-stricken victims singled out for segregation from the rest of the population. The state also provided funds for those dwellers of infected houses in order to convince them to leave the city.⁶⁶

Yet it took time – practically between one and two centuries – before the preventive controls which had been applied first in northern Italy were systematically adopted in the rest of Europe. Proper quarantine procedure, for example, was only put to practice in various countries from the 1660s.⁶⁷ The problem was that for centuries, from the appearance in Europe of the second pandemic, municipalities throughout Europe adopted independent measures in order to fight a disease which spread across territories with lightening speed. The Danish historian Peter Christensen stresses the importance of centralized efforts against plague by the major European states.⁶⁸ It was only from the mid-sixteenth century that common, and therefore more effective, preventive anti-plague measures started to be imposed by stronger central governments over provinces, cities, towns, and rural areas, first in the German Empire, then Spain, and later England, which started imposing anti-plague regulations throughout the country only from 1578.⁶⁹

The Europe that emerged from the peace of Westphalia in 1648 which ended the Thirty Years War was one which questioned itself on the horrors of armed conflict and which wanted to check the deliberate violence committed on civilians by armies.⁷⁰ Essentially it was a Europe which sought to create some guarantees for the protection and subsistence of civilians.⁷¹ Absolutist monarchies, the political answer to a seventeenth-century society strewn with strife, rebellion, and social instability, started forming throughout states in Europe. Their centralized administrations, a by-product of long wars which necessitated efficient tax-collecting bureaucracies, were the necessary evils supported by political theorists such as Thomas Hobbes whose dread of social chaos induced them to theorize in favour of societies ready to barter a measure of individual liberty in exchange of an iron-fisted rule capable of taming anarchy.⁷² France, for example, the strongest European state to emerge from the Westphalia settlement and the one with the largest population, started imposing a common group of anti-plague preventive measures only during the Colbert administration.⁷³

This was also the age when the metaphysical dilemmas which had started to creep in the Western mind were put to record. Religious convictions, which up to then had seemed unshakable, were being challenged. Attitudes towards the role of the divine in everyday life

⁶⁵ Ibid., 429.

⁶⁶ Chambers and Pullan, 114.

⁶⁷ Watts, 2.

⁶⁸ Christensen, *passim*.

⁶⁹ Watts, 18.

⁷⁰ For an authoritative account of the Thirty Years' War see G. Parker, *The Thirty Years' War* (London, 1984).

⁷¹ Watts, 23-24.

⁷² For a general overview of the rise and implications of absolutism in Europe and related political theories see, for example, R. Bonney, *The European Dynastic States 1494-1660* (Oxford University Press, 1991), 305-416.

⁷³ Christensen, 433.

started changing and a society less conditioned by abject credulity and superstition, and more reliant on scientific observation and benefits, started slowly emerging. The Church itself, ironically through its most dreaded institution, the Inquisition, was questioning the approach it usually adopted in witchcraft trials and started discarding testimonies which blatantly defied common sense and the natural laws. Cartesian philosophy, championing the powers of reason, contributed decisively in paving the way for the Enlightenment. A secular western world which segregated religious belief from politics and spared science from the shackles of the literal interpretation of sacred texts was thus taking shape.⁷⁴

In the early modern era this same western society, although still deeply embedded in Christian fundamentalism, augmented in no mean measure by the Protestant ethos⁷⁵ in the north and post-Tridentine Catholic rigour in the south – in 1630 Florentine health authorities were excommunicated by Rome for cancelling street processions during the Franco-Spanish conflict on Italian soil –⁷⁶ started tackling the plague problem with greater rationality. Very much aware of the limitations of medicine and science and their centenary impotence to come up with a definite solution against the epidemic, considerable efforts were effused in prevention, pre-industrial society's one, true, and sole answer against the scourge.

V

Preventive measures were varied in nature and application, as seen above. Administrations were capable of draconian and prodigious efforts in an attempt to avoid contact with suspected vehicles of pestilence. In the beginning of the eighteenth century the Habsburg Empire went so far as to employ thousands of troops to set up a barrier of checkpoints in order to filter contacts with the Ottoman world which was still periodically visited by plague when Western Europe was finally coming to terms with it.⁷⁷ Similar measures had been adopted in the summer of 1679 on a more restricted territorial expanse, that of Andalusia, whose land routes leading north to Madrid were barred by troops to cut off the capital from the southern region where plague was raving. The measure apparently was a staggering success as Madrid never again fell victim of the pestilence.⁷⁸

Fresh and reliable information on the spread of the contagion elsewhere was vital for states to prepare themselves while still unscathed. A close eye was kept on any visitors from the Muslim half of the Mediterranean, widely considered in Europe as the source of most epidemics. Western agents in North Africa and the Levant kept their masters on the European mainland updated on any hint or rumour of contagion and its whereabouts.⁷⁹ City-ports forged diplomatic ties for mutual collaboration in an attempt to improve early warning mechanisms. Genoa and

⁷⁴ Bonney, 509 – 523; For a readable overview of the history of western philosophy see, for example, J. Cottingham, *The Rationalists* (Oxford University Press, 1988). For a more recent, less mainstream, and somehow more controversial analytical approach to the complex issues involving reason and faith throughout history see S. Harris, *The End of Faith. Religion, Terror, and the Future of Reason* (London, 2006).

⁷⁵ An example from Scandinavia: 'In times of plague, Danish clergy dutifully shortened sermons, closed schools, carried out the prescribed funeral ceremonies, and in general behaved like good civil servants', Christensen, 448.

⁷⁶ Watts, 12.

⁷⁷ Watts, 25.

⁷⁸ Ibid., 24.

⁷⁹ Ibid., 24.

Dubrovnik, for example, made specific agreements to alert each other in case they were informed of plague threats from any part of the Mediterranean.⁸⁰

VI

Islands, and small islands in particular, had distinct agendas in matters pertinent to plague prevention. Fernand Braudel's elaboration on the sea's dual function as connector and divider is most apposite in the case of waterlocked geographical deposits and their struggle against contagion.⁸¹ The sea was a double-edged sword. It was a natural *cordon sanitaire*, a dividing expanse which, if supplemented with efficient patrol and warning regimes, and the strict application of quarantine, could provide enhanced effectiveness in keeping at bay the most dreaded of epidemiological intruders. Yet it could shun islands from the rest of civilization with devastating consequences for their dwellers, especially in cases when dependency on the importation of victuals due to insufficient natural resources was the norm.

Hospitaller Malta (1530-1798) was notorious for its strict quarantine procedures to which it subjected visiting vessels. When they settled on the island in 1530 after centuries of fighting the Infidel in the Levant, the Knights of the religious and military Order of St John started transposing to their new base the medical and hospitaller expertise and rigour which they had accumulated and honed since the origin of their institution in eleventh-century Syria.⁸² The Order was perfectly aware of the conditioning potential of plague and the distorting effects that the disease could have on Hospitaller life, even well beyond its Mediterranean headquarters. In 1613 the provincial chapter in the priory of Bohemia had to be called off and months went by before news from Prague and its whereabouts arrived to Malta due to plague-related disruptions in that part of Europe.⁸³ At times the effects were paradoxically and conveniently benign, as in 1603 when the habitual belligerent sortie of the Turkish fleet from the Levant had to be cancelled due to the plague raving in the East, and Constantinople in particular, thus sparing Hospitaller Malta the seasonal angst of a possible Muslim attack against its bastions.⁸⁴

The Knights Hospitallers were also conscious of the epidemic's collateral of physical and social horrors described earlier in this essay. Contemporary chronicles of the Order testify to Hospitaller awareness not only of the occurrence of contagion but also of its demographic consequences, such as the alleged 40,000 deaths in Messina alone during the epidemic which hit

⁸⁰ D. Živojinović, 'Genoa and the Ragusan Merchant Marine during the Eighteenth Century', *Atti del IV Congresso Internazionale di studi storici. Rapporti Genova – Mediterraneo – Atlantico nell'età moderna*, ed. R. Belvederi (Genoa, 1990), 65. See also Ivan Grech, 'Struggling Against Isolation. Communication Lines and the Circulation of News in the Mediterranean: The Case of Seventeenth-Century Malta', *Journal of Mediterranean Studies*, vol.16, 1/2 (Malta, 2006), 169.

⁸¹ Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II*. Trans S. Reynolds, (London, Fontana Press, 1986), i, 148-160; 276.

⁸² For a brief overview of the Order's welfare and medical efforts for Malta's population see Paul Cassar, 'Malta's Medical and Social Services under the Knights Hospitallers', in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of St John of Jerusalem*, V. Mallia-Milanes (ed.) Malta, Mireva Publications, 1993, 475-82.

⁸³ AOM 1393 A, Alof de Wignacourt to Ambassador La Marra (Rome), f. 510, 8 December 1614.

⁸⁴ Bartolomeo Dal Pozzo, *Historia della S. Religione Militare di S. Giovanni Gerosolimitano detta di Malta*, (Verona 1703), i, 481. On the anticipation of Turkish attacks by Hospitaller Malta see Grech, 'Struggling Against Isolation', 163-74.

Sicily and other parts of Italy in 1577.⁸⁵ Such cataclysms help us comprehend, if not approve or condone, the ruthlessness applied by preindustrial administrations in their enforcement of anti-plague measures, and the Religion was no exception. Leniency was barred from the ethos of the Order when challenging plague. In 1607 six merchants who apparently defied quarantine and unloaded merchandise from the Levant in Malta were unceremoniously sentenced to death simply because they were suspected of being carriers of contagion. The sentence was subsequently commuted to a term of compulsory rowing service on the galleys, a fate potentially worse than death and a decision which conveniently helped alleviate the chronic manpower shortages which distressed the Order.⁸⁶

The geographical vulnerability of islands outlined above pronounced the dread of plague among their administrators and populations. Apart from killing directly through infection, plague was also a catalyst of isolation. States, provinces, and towns usually cut off communication lines with suspect territories as the very first preventive measure and islands were among the first casualties in similar situations. The severance of communication with and between islands was, in fact, a favourite early modern practice in cases of occurrence or menace of plague. In 1575 pestilence in Sicily induced the Kingdom of Naples to interrupt all commerce with the island.⁸⁷ In Scandinavia, ferry communication between the various islands and coasts of the region were immediately interrupted with the first hints of contagion.⁸⁸ In the case of small islands with insufficient subsistence resources like preindustrial Malta, the interruption of links with nearby lands could prove very costly. In the autumn of 1655, when the harbour town of Birgu was suspected to be infected by the contagion, the grandmaster of the island, anticipating trouble, insisted with an agent of his in Sicily that some sort of contact between the islands had to be kept.⁸⁹ The grandmaster's fears were founded and justified as evidenced by a contemporary chronicle which reports that trade between Malta and Sicily ended up being interrupted for six whole months.⁹⁰ In 1676, when Hospitaller Malta was hit by a plague which practically claimed one sixth of its population, the Viceroy of Sicily ordered all contacts with the tiny island to the south to be interrupted. Even mail was to be rejected. Thus the Maltese archipelago had the arduous task of looking for provisions elsewhere, once it was denied access to the abundant Sicilian granaries, so vital for its livelihood.⁹¹ The whole ordeal was so traumatic for the islanders that the plague visitation was still commemorated in religious ceremonies well into the following century with a feast dedicated to Saint Angelo the Carmelite whose intercession was prayed for during the sufferings of 1676.⁹² Such deep and lasting scars on the collective psyche inflicted by bouts of pestilence helped to stave off complacency in treating any kind of incoming information on the disease. Early modern states were glad to receive and, when possible, verify any kind of whisper of plague incidence elsewhere and to promptly communicate it to their neighbours.

⁸⁵ Dal Pozzo, i, 145-6.

⁸⁶ AOM 1386, Alof de Wignacourt to Ambassador Lomellino (Rome), ff. 281v-282r, 14 November 1607. For some considerations on manpower shortages and the Order's labourforce problems see below.

⁸⁷ Dal Pozzo, i, 111.

⁸⁸ Christensen, 435; 437.

⁸⁹ AOM 1432, Lascaris Castellar to Procurator Fardella (Sicily), f.159, 15 October 1655.

⁹⁰ Dal Pozzo, ii, 230-1.

⁹¹ Grech, 170; On the plague which hit Malta in 1676 see J. Micallef, *The Plague of 1676: 11,300 Deaths* (Malta, 1985).

⁹² AOM 1468, Perellos y Rocaful to Ambassador Sacchetti (Rome), ff. 26v-27r, 23 January 1707.

Hospitaller Malta, exploiting its bearing on the Christian-Muslim frontier of the Mediterranean, was no exception to this norm and could prove itself a valid sentinel to Christendom.⁹³ Yet the same states loathed being on the receiving end of malicious gossip. The stigma of contagion was shunned as plague itself due to the predictable repercussions on communication lines if similar news reached foreign courts. Hospitaller Malta's uncomfortable condition of dependence on Sicily and other territories rendered the Order hypersensitive to news or rumours, whether founded or not, which could tarnish the sanitary reputation of the archipelago. In 1662 urgent letters of reassurance about the healthy condition of the Maltese population were dispatched to courts in southern Italy after it became known that talk of a plague-ridden Malta was rife in Naples.⁹⁴

The dreaded dual scenario of possible contagion and ensuing isolation forced governments of early modern Malta not only to apply quarantine on incoming vessels with severity, but also to keep as updated as humanly possible on the plague thermometer in the surrounding Mediterranean world. Thus contacts, open communication lines, and the receipt of occasional information from the crews of incoming vessels were vital in sustaining attempts to prevent contagion. The Order used its network of agents deployed throughout the main ports and cities in the Mediterranean and Western and Central Europe to keep itself as updated as possible on any sniff of plague epidemics in its whereabouts. Hospitaller documents abound with plague-related information and warnings sent to the Order's hierarchy in Malta. In January 1599 Genoa sent news that the plague in Marseilles was over while that in Piedmont and Turin was still raving.⁹⁵ In October of the same year Malta was informed that the situation in Piedmont was better.⁹⁶ In 1605 Trapani, in the north-western tip of Sicily, warned of plague in Barbary.⁹⁷ Two years later Syracuse, on the opposite side of Sicily, alerted on a ship from Alexandria suspected of infection which had harboured in Messina.⁹⁸ In the spring of 1658 the Order was informed that the Naples-Messina trade route had been interrupted due to suspicions of pestilence in southern Italy.⁹⁹ The following year news via Calabria aroused suspicions of plague on the outskirts of the Venetian *terraferma*, although it was reported that Venice itself was still unscathed and that it was not not sure if the Venetian colonies close to Dalmatia were also infected.¹⁰⁰ In autumn of 1664 Malta was informed of suspicions of plague in Toulon but that Marseilles enjoyed perfect health, although Hospitaller officials still applied caution and subjected the crew of a *tartana* which landed in Malta from the French port to a term in quarantine.¹⁰¹ A year later the Order was informed of plague in Smirne¹⁰² and a dispatch dated 8 November 1666 warned about strong suspicions of contagion in Leghorn.¹⁰³ Days later, however, a vessel from Leghorn harboured in Malta and supplied reassurance that rumours of contagion in the Tuscan port were unfounded

⁹³ On plague rumours and Hospitaller Malta's role as a sentinel of Christendom see Grech, 167-70.

⁹⁴ AOM 1438 *passim* and particularly the letter by Grandmaster Raphael Cotoner to Procuratore Balsamo (Naples), ff.23v – 24r, 8 March 1662.

⁹⁵ AOM 1379, Martin Garzes to Torriglia (Genoa), f.8r, 22 January 1599.

⁹⁶ *Ibid.*, ff.201v – 202r, 6 October 1599.

⁹⁷ AOM 1384, Alof de Wignacourt to Parisi (Trapani), f.49v, 7 February 1605.

⁹⁸ AOM 1386, Alof de Wignacourt to Settimo (Syracuse), f.126v, 2 June 1607.

⁹⁹ AOM 1434, Martin de Redin to Agent Resa, f.83v, 10 May 1658.

¹⁰⁰ AOM 1435, Martin de Redin, to procuratore Gregori, ff.144v-145r, 22 October 1659.

¹⁰¹ AOM 1440, Nicholas Cotoner to Procuratore Barone, f.91r, 12 November 1664.

¹⁰² AOM 1441, Nicholas Cotoner to Procuratore Barone, f.71e, 1 September 1665.

¹⁰³ AOM 1442, Nicholas Cotoner to Procuratore Barone, f.72v, 8 November 1666.

since a few cases of summer fever had apparently been mistaken for plague.¹⁰⁴ In 1676, when plague was making headway in Malta itself, the Order received news that Tunis was ravaged by the disease.¹⁰⁵ In the summer of 1696 the Hospitaller agent in Venice sent news to Malta about the plague that had hit several islands of the Greek archipelago, warning the Order to take precautions in case the Hospitaller squadron was to roam the Levant.¹⁰⁶ In 1699, a Hospitaller agent in Sicily sent news of plague victims being discovered in Dalmatia and Albania.¹⁰⁷

The Hospitaller squadron of galleys which every sailing season roamed the Mediterranean on patrol, anti-corsair, and amphibious missions against Muslim settlements was another information-provider for the Order's hierarchy in Malta. Each time the squadron returned to its island base the first duty of the crew's captains was to report to the Convent (the Order's headquarters) on their mission, on any engagements with the enemy, and on the health situation of the city-ports in which they had harboured, apart from delivering any scrap of information about each one of these mentioned themes that the crew members would have gathered from their meetings with foreigners, both on land and occasionally at sea.¹⁰⁸ Yet the squadron was also a source of constant worry. During their seasonal travels which could last for months, the galleys called in various ports, touched several coasts, took refuge in inlets, sought shelter behind islands, and crossed swords with enemy ships and corsair vessels whose crews, on their own part, would have roamed and touched several corners of the Middle Sea. The risk of a crew member ending up infected was terribly high. It was doubly worrying for the Convent. First because of the possibility of losing crew members in times when recruitment in the Mediterranean was rather problematic due to want of human numbers. Faruk Tabak, for example, underlines the demographic slowdown of the seventeenth century which created labourforce problems,¹⁰⁹ and Salvatore Bono states clearly that manning any navy in the early modern Mediterranean was not simple.¹¹⁰ Second, because the landing of crews in Malta after each mission could spell contagion. The utmost caution had to be applied each time the squadron returned from a mission and the first thing harbour officials had to verify was the lack of plague evidence on board the galleys, starting with making certain that the ships had avoided contact with places suspected of being infected.¹¹¹ In the summer of 1705, the squadron was denied entry into Maltese harbours after the Convent had been warned weeks before of suspicions of contagion in the island of Sardinia from where the Hospitaller galleys were returning.¹¹²

Consequently, the Order sought to prevent the contagion of its squadron through Hospitaller Malta's own early warning mechanisms. In July 1656, news was sent to a Hospitaller in the island of Cerigo, between the Peloponnese and Crete, to alert the general of the Order's squadron, in case he happened to be in the whereabouts, to avoid contact with the Papal galleys

¹⁰⁴ Ibid, Nicholas Cotoner to the Receivers of Palermo and Messina, f.74, 13 November 1666.

¹⁰⁵ AOM 1445, Nicholas Cotoner to General Collowrat, f.135r, 6 April 1676.

¹⁰⁶ AOM 1460, Adrian de Wignacourt to Receiver Marino (Venice), f.175r, 8 August 1696.

¹⁰⁷ AOM 1461, Ramon Perellos y Rocaful to Riggio (Palermo), f.26r, 30 April 1699.

¹⁰⁸ For example, see AOM 1439, Raphael Cotoner to Procuratore Barone, f.84r, 22 September 1663.

¹⁰⁹ Faruk Tabak, *The Waning of the Mediterranean 1550 – 1870. A Geographical Approach* (Baltimore, John Hopkins University Press, 2008), 18.

¹¹⁰ Salvatore Bono, 'Naval Exploits and Privateering', in *Hospitaller Malta 1530-1798. Studies on Early Modern Malta and the Order of St John of Jerusalem V*. Mallia-Milanes (ed.) Mireva Publications, Malta, 1993, 356.

¹¹¹ See again 1439, Raphael Cotoner to Procuratore Barone, f.84r, 22 September 1663.

¹¹² AOM 1466, Ramon Perellos y Rocaful to Receiver Riggio (Palermo), ff.127-128, 31 August 1705.

which were suspected of carrying plague.¹¹³ In the meantime a *feluca* was sent out in an attempt to intercept the squadron and admonish it to avoid the coast of Calabria in southern Italy due to suspicions that the region had been infected through Naples where plague was raving.¹¹⁴ In April 1676, during plague in Malta, the Order expressed its relief that the squadron was harbouring in the island of Lampedusa, at a safe distance both from Malta and Tunis, as information had reached Malta that the African town was also infected.¹¹⁵ The Order also necessitated information updates on the whereabouts and the health situation of its squadron in order to reassure foreign powers and guarantee unhindered access of its ships to strategic ports. In 1706, for example, the Order's agent in Palermo was to report on the healthy state of Hospitaller crews to the Sicilian Viceroy in an attempt to obtain official clearance for the Order's squadron to enter in Sicilian ports.¹¹⁶

VII

Stricter control mechanisms, the more urgent circulation of plague-related information, and preventive measures adopted by more centralized territorial states started bearing their fruit in Western Europe by the second half of the seventeenth century. The recurrence of the pestilence started diminishing in frequency as the eighteenth century approached. One of the last appearances of the plague in Western Europe was in France in 1720, and then it was only introduced because a ship on its return from the Levant bribed itself through quarantine in the port of Marseilles.¹¹⁷

The Muslim world, on the other hand, continued to suffer from plague well into the nineteenth century, mostly due to the lack of adequate controls and sufficiently strict quarantine procedures. Western historiography has given a lot of responsibility to the persistence of plague in non-European Mediterranean to the so-called 'passive' approach to epidemics in that part of the world.¹¹⁸ The widespread, contemporary idea in the West was that those living in the Muslim world adopted a 'fatalist' approach to epidemics in general.¹¹⁹ There was a measure of truth in this. The Copts, for example, were convinced that plague was the making of divine intervention and that no human endeavour would suffice to control it.¹²⁰ According to Muslim theology, death by plague, inevitable if it was God's will, was a certain vehicle to heaven.¹²¹

¹¹³ AOM 1646, Jean Paul Lascaris Castellar to Hospitaller Vincenzo Morso, f.350v, 15 July 1656.

¹¹⁴ Ibid, Lascaris Castellar to Gregorio Caraffa, General of the Squadron, f.355, 17 July 1656.

¹¹⁵ AOM 1445, Nicholas Cotoner to General Colloprat, f. 135r, 6 April 1676.

¹¹⁶ AOM 1467, Secretary Cacherani to Receiver Riggio (Palermo), f.115r, 2 September 1706.

¹¹⁷ Watts, 24.

¹¹⁸ Ibid., 26-27; S. Speziale, 'Epidemics and Quarantine in Mediterranean Africa from the Eighteenth to the mid-Nineteenth Century', *Journal of Mediterranean Studies*, vol.16, 1/2 (Malta 2006), 250.

¹¹⁹ Ibid.

¹²⁰ Watts, 32.

¹²¹ Ibid., 33; For a scholarly overview of the perceptions of plague in pre-Islamic and Islamic society, and further elaborations on the theme that in Islamic culture the plague was considered to be God's scourge, see L. I. Conrad, 'Epidemic Disease in Formal and Popular Thought in Early Islamic Society', *Epidemics and Ideas. Essays on the Historical Perception of Pestilence*, eds. T. Ranges and P. Slack (Cambridge University Press, 1992), 77-99.

However, fresh documentary material, mostly from North African archives and related consular correspondence, has shown that during the eighteenth century at least, there were attempts to impose quarantine controls in the main North African ports such as Alexandria, Tripoli, Tunis, Algiers, and Tangiers in order to lower the risk of contagion from maritime sources. Contact with western medical expertise also helped to increase the awareness on the necessity of prevention and control. The set-up of Health Boards, lazarettos, and quarantine facilities became a common occurrence in eighteenth-century North Africa.¹²² By the end of the eighteenth-century, important anti-plague measures had been adopted in Morocco, Tunisia, and Tripoli. The whole preventive system was mostly 'rationalized' from the 1830s onwards, after the outbreak of cholera and the colonization of Algeria by the French.¹²³

In Egypt, for example, it took the despotic leadership of Muhammad Ali for proper quarantine measures to be introduced, as he did in 1812 when Turkish ships visiting Egypt were subjected to quarantine after plague broke out in Istanbul. He built pesthouses in Damietta and set up a statal health scheme to cater for rural areas, a novelty for the Mediterranean world in those times. During the plague which visited Egyptian ports in 1834 he adopted ruthless measures, such as the imprisonment of victims and cremation of their belongings, up to then known only to European cities. The last reported plague outbreak in Egypt was the one in 1844, practically a century after the last appearance of the epidemic in Western Europe.¹²⁴

VIII

The nature of the plague, the deadly cycle linking rat fleas, rodents, and humans was revealed by modern science only towards the end of the nineteenth century, when the third plague pandemic¹²⁵ was wrecking havoc mostly in the eastern hemisphere of the planet: Russia in 1878-79, some districts of India and China in the same century, and various parts of the world between 1894 and 1922, starting from the ports of China.¹²⁶ Newfound knowledge on the bacillus *Yersinia pestis* and the discovery of its presence in rat and human corpses scientifically analysed during the plague which hit Hong Kong in 1894¹²⁷ has led history and epidemiology to review, reconsider, and doubt consolidated theories formulated to explain the disappearance of plague. Whether the measures adopted in the early modern period are to be held solely responsible for reaping the desired fruit and curbing the systematic advance and recurrence of the epidemic, therefore, is now more difficult to assess and the debate on what ultimately defeated plague is still open among historians. Biraben and Christensen, for example, support the view that centralized administrations which imposed quarantine and other related preventive measures over entire territorial states between the seventeenth and early eighteenth centuries ultimately checked the advance of plague not only throughout Western Europe, with the exception of Poland, but also in the Levant, thus underlining the importance of systematic human endeavour in containing the

¹²² Speziale, 250-54.

¹²³ Ibid., 254-5.

¹²⁴ Watts, 34-39.

¹²⁵ Ibid., 4-5.

¹²⁶ *Encyclopaedia Britannica*, vol. 17, 1142-3.

¹²⁷ Watts, 5.

epidemic.¹²⁸ A.B. Appleby, on the other hand, although acknowledging the merits of properly-enforced quarantine in containing the spread of the epidemic, fosters doubts whether its role in curbing plague was as paramount as professed by other historians. Drawing with conviction on epidemiologically-based theories, Appleby dwells on the role that immunity among the rat population might have played and concludes by stating that possibly ‘the sudden disappearance of plague in Western Europe was not caused by human action but by changes in the relationship between the parasitic micro-organism and its primary host, the rat’.¹²⁹ Sheldon Watts, particularly when discussing the dying out of plague in nineteenth-century Egypt, seems to favour the theory that the epidemic was brought to an end by a combination of factors which included human intervention in the form of preventive measures and aspects related to the ‘germ theory’, according to which the contagion slowly disappeared when the disease took its course.¹³⁰ In the absence of definitive answers on the subject, other scholars, such as Alex Mercer, encompass in their analysis a whole array of explanations: from the importance of quarantine to immunity theories regarding rats and humans; from changes effecting the ‘transmission patterns’ to those conditioning rodent populations; from climatic factors – in very cold temperature rat fleas survive with difficulty – to the impact of changes in trade patterns which could have effected the frequency of east-west contacts.¹³¹

Of course, when all is said and done, what the historian cannot assess with precision, but can easily imagine and, at least, attempt to empathise with, is the devastation on a psychological scale wrought by such an epidemic. Cold statistical data and sober analysis of documentary material can in no way render the human suffering that they imply and conceal, and chronicles of the age go only a short way in depicting personal agony. The plague claimed precious life on a biblical scale, yet arguably was even more cruel to many that it left behind. Entire families were wiped out overnight, widows mourned dead husbands, parents wept for their perished offspring, deceased friends created agonizing existential voids, and newly-created orphans had their lives irrevocably shattered or scarred by a sudden exposure to a cruel and insecure world deprived of adult shelter. Whether or not plague was won through the triumph of science, reason, and empirical observation is still debatable, yet totally irrelevant to the millions that perished throughout history.

¹²⁸ Christensen, 449-50 and footnote 194. Christensen, a firm assenter of the theory that plague was transmitted through direct contact, also dismisses the notion that the plague’s nature and various cycles in pre-industrial Europe could be understood through the analysis of data relating to twentieth-century plague outbreaks in India and China. Christensen, 416-17.

¹²⁹ Appleby, 165-173.

¹³⁰ Watts, 5; 39.

¹³¹ A. Mercer, *Disease, Mortality and Population in Transition* (Leicester University Press, 1990), 26-30.

Abbreviations

AOM	Archives of the Order, Malta
BCE	Before the Christian Era
CE	Christian Era
f	folio
r	recto
v	verso