

The Black Death

History's Most Effective Killer

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Introduction

The medieval world was ruthless, unforgiving and pestilential. This was perhaps most clearly demonstrated in the swift and vicious trajectory of a disease throughout the known world, then described as “the Black Death.” Considered to be history’s most devastating pandemic, the Black Death claimed anywhere between 75 to 200 million lives within four short years as it marched across Europe, Scandinavia, Northern Africa, the Middle East and Central Asia.

Between 30% - 60% of the population of Europe at the time was devastated, and estimates suggest that the Black Death reduced the world’s total population from 450 million people to approximately 350 million. Because accurate records were not kept at the time, firstly due to primitive administration and secondly (and

perhaps most tellingly) due to the sheer enormity of deaths occurring on a daily basis, it is not possible to come to more specific figures.

Even though the statistical records of the time were few and far between, contemporary accounts and artistic renderings provide details about the effects of the Black Death on medieval society. Given these details and accounts, we know that the Black Death was a plague, and is also referred to as The Plague, The Great Pestilence, and the Great Mortality. Plague by definition is a bacterial infection in either the lymph system, the respiratory system, or the cardiovascular system depending on the type of plague contracted. Plague still exists today, although it is considerably rarer than in medieval times.

The Black Death's effects were sweeping and consequential. Societal and economic upheavals were the natural products of such a devastating pandemic, and the ramifications of the Black Death were long-lasting and widespread. Population devastation of such a considerable level led to massive economic decline, an increase in criminal activity, and a general lack of consideration for the value of human life. Superstition reigned supreme and religious persecution claimed numerous lives along with the Black Death itself.

It was not a happy time to be alive.

Contemporary accounts and reflections in art show the despair and horror felt by the people living through this pandemic. The disease's quick and unrelenting march across the face of the known world left no room for romance and idealism, and catalyzed a shift in the art and literature of the day that paved the way for the Renaissance one hundred years later.

This book investigates the birth and dissemination of the Black Death across the known world, giving detail about the disease itself as well as the consequences of the pandemic on medieval society in general. It seeks to illuminate the reader with enough information to be well-informed, and perhaps to catalyze investigation further into other corners of the sweeping effects of The Plague.

Chapter 1

What was the Black Death?

The terrible thing about the Black Death is that no one at the time knew what it was. A current account describes it thus:

“In men and women alike it first betrayed itself by the emergence of certain tumors in the groin or armpits, some of which grew as large as a common apple, others as an egg... From the two said parts of the body this deadly gavocciolo soon began to propagate and spread itself in all directions indifferently; after which the form of the malady began to change, black spots or livid making their appearance in many cases on the arm or the thigh or elsewhere, now few and large, now minute and numerous. As the gavocciolo had been and still was an infallible token

of approaching death, such also were these spots on whomsoever they showed themselves.”

Terminology

The Black Death is a European term, used first in its Latin form *atra mors* by a French physician called Giles de Corbeil in the twelfth century, approximately one hundred years prior to the Black Death itself. In his treatise on the “Signs and Symptoms of Disease,” (translated from the Latin), he likens pestilential disease to *atra mors*. Belgian astronomer Simon Couvin also makes mention of the Black Death in his poem *De judicio Solis in convivio Saturni*, which translated means “On the judgment of the Sun at a Feast of Saturn.” In the poem, Couvin makes mention of the “*mors nigra*” (Black Death). His assessment was that the plague was caused by an unfavorable conjunction of the heavenly bodies Jupiter and Saturn, a theory supported by many of his contemporaries.

At the time, the word plague did not have the same connotation we give it today. In fact, it had no real meaning, and it is largely because of the Black Death that we associate the horrors of pestilential death with the word today. Contemporary writers referred to the series of events most commonly as a/the “Great Pestilence” or the “Great Mortality.” The term “Black Death” was appropriate for the sweeping rampages of the plague, due to the black, necrotic tissue that often accompanied the disease in humans. Though a common term now, the Black Death as a reference to the plague of 1348-1352 and its following waves was not used until at least one hundred years later, if not longer.

Chapter 2

A Short History of Pandemics

The first recorded account of a sweeping epidemic, known as a pandemic (the prefix *pan* referring to “everywhere” or “world-wide”) was in the sixth century in the Byzantine Empire while under the rule of the Emperor Justinian I. Most commonly known as the Plague of Justinian as the emperor himself contracted the disease but survived due to extensive treatment, the death toll in the first outbreak alone is thought to have reached upwards of 25 million people. As with most other recorded plagues, it recurred every few years after the first devastating wave, and over the course of two hundred years of plague and subsequent recurrence up to 50 million people are thought to have perished. As related by the contemporary historian Procopius, the plague first surfaced in Constantinople in 542 and spread via shipping routes throughout the Mediterranean, reaching Italy and Greece to the west and into Asia Minor to the east. Constantinople was an extremely important and possibly the biggest trading port in the world, and

because no one at the time understood how the disease was transmitted, trade did not cease and thus spread the disease through all the Byzantine Empire's vast trading routes. Interestingly, in his tell-all masterpiece *Secret History*, Procopius suggested that Justinian himself was solely responsible for the plague, either by creating and then subjecting it on to the people of the empire, or it was God's punishment on Justinian for leading a life of extreme cruelty and luxurious excess.

The second and largest outbreak was the medieval Black Death, the subject of this book. The Black Death was followed by the Second Pandemic which included all outbreaks of plague subsequent to the Black Death and prior to the great plague of nineteenth century India and China. This is referred to as the Third Pandemic and claimed over 10 million lives.

Chapter 3

Chronology & Trajectory

Historians and researchers postulate that the Black Death originated in Central Asia, specifically in Mongolia and western China. The rodents that carry the plague disease are indigenous to the central and western Asian areas of Kurdistan and Northern India. Graves found in Kyrgyzstan from 1338-9 make written mention of plague, and Chinese sources make mention of a large pestilential outbreak in or around Mongolia about a decade before the Black Death reached Europe. Many researchers believe that this was the inception of the Black Death and perhaps one of the first outbreaks. Contemporary Arab historians Al-Maqrizi and Al-Wardni confirmed that the Black Death first came from China. Kyrgyzstan was located directly on the Silk Road, and from here the disease could easily have spread east to China or west to the Middle East and Europe.

Mongol conquests had led to economic decline in China and northern India in the century before the outbreak of plague. However, in the decades leading up to the pandemic, trade had begun to recover but unfortunately was curbed by a series of natural disasters such as the Little Ice Age, which began at the beginning of the fourteenth century, and epidemics that included but were not limited to plague. The combination of these events led to famine and widespread population decline. It is possible that plagues of the severity of those causing the Black Death became a pandemic due to the weakened state of those that had originally suffered from it. Disease, likely including plague, killed upwards of a hypothesized 25 million Chinese and Central Asians in the first half of the fourteenth century.

Theories of plague had reached the trading seaports in the west as early as 1346, mentioning the extreme number of deaths and resultant depopulation in India, Tartary and the Middle East.

Spread to the West

The disease spread as merchants and goods travelled from Asia west on the Silk Road, the famous trading route linking Europe, the Middle East, and ultimately the Far East. It was also carried by Mongol raiders as they pushed west to gain control of more territory.

There is one specific documented incident in which The Golden Horde, the medieval Mongol khanate under the leadership of Jani Beg, attacked the Crimean city of Kaffa (first known as Theodosia and now known as Feodosia) in 1347 whilst under the scourge of the plague. A port city at the mouth of the Silk Road, Kaffa had been held as a strategic trading post by the Genoese for centuries. While attacking the city, Beg's army of raiders became infected with an unstoppable disease that killed hundreds, if not thousands. Surviving documentation describes the Mongol army catapulting the corpses of the deceased raiders over the city walls, a tactic presumably meant to infect the inhabitants of Kaffa but also likely a strategic move for the health of the remaining army. Effective disposal of dead bodies in the medieval world was crucial to maintain the health of survivors, as rotting corpses provided an ideal breeding ground for further disease and pestilential spread. The inhabiting Genoese fled Kaffa and sailed in the direction of home, carrying with them the rats that were infected with the very disease they were running from.

In October of 1347, twelve Genoese ships that had fled Kaffa arrived in Sicily. Current accounts describe the ships arriving with decks filled with dead bodies. Other ships fleeing Kaffa reached Genoa and Venice at the beginning of 1348.

The main point of the disease's introduction into northern Italy and the continent of Europe was in Pisa in January 1348. Port cities in Italy had begun to refuse entry into dock from any ship carrying presumably infected passengers, and thus the ships travelled north. Due to the lack of quick communication, a ship turned away by Italy was allowed to dock in Marseilles at the end of January 1348, thus marking the commencement of the Black Death in France.

The Plague spread rapidly from Italy and France, sweeping across Spain, Portugal and England by June 1348. It spread north and east through Germany and arrived in Norway in 1349 after a ship landed in Askøy. It spread north to Bergen and even reached Iceland. The Plague reached the northwestern part of Russia in 1351.

Parts of Europe that had little trade with their neighbors were for once extremely lucky. Fewer travelers meant less chance of contact with rodents that carried the disease. Areas in Poland, Belgium and the mountainous Basque region largely escaped the Black Death, as did many other isolated alpine locations throughout the Alps.

Spread to the South

The Plague swept across the Middle East, equaling the devastation recorded in Europe. While the Black Death ravaged the European mainland, it also descended

from southern Russia into the Middle East. It reached Alexandria in Egypt at approximately the same time it reached Sicily in 1347. Alexandria had significant trading relations with Constantinople and other ports, potentially including Kaffa in the Crimea. From Alexandria, plague spread into Gaza and then north through large cities including Jerusalem, Damascus, Aleppo, and even reaching Antioch in Asia Minor by 1349. It also seems to have spread south into Egypt, as the Black Death reached Yemen after its regent, King Mujahid, returned to the country after being imprisoned for a time in Cairo.

The holy city of Mecca played host to the disease starting in 1349. Mawsil (modern-day Mosul), suffered acutely from the epidemic, and Baghdad was subjected to a second round of the disease from the west (it had been hard hit when the disease first left the steppes of Central Asia on its way to the Crimea), causing further catastrophic population decline.

Chapter 4

Causes & Pathology

The Black Death, also known as The Plague, is generally thought to have been caused by a bacterium called *Yersinia pestis*, named after Alexandre Yersin, the scientist and bacteriologist who discovered it in the nineteenth century. These bacteria are commonly present in fleas which are carried by rodents found primarily in the Orient. The flea that lives on central Asian rodents, called the Oriental Rat Flea, is the primary vector for the *Y. pestis* bacteria.

Y. pestis causes a mutation in the gut of the flea. When the flea feeds on the rodent, a blockage caused by *Y. pestis* causes the flea to regurgitate the bacteria into the wound site, thus infecting the rodent host with the bacteria and causing infection. Because of the blockage, the flea gets no sustenance and therefore feeds aggressively in an effort to stave off starvation. Frantic feeding leads to further infection of the rat (or human), therefore contributing to the speed of infection and resultant death.

Interestingly, the spread of *Y. pestis* is dependent on two populations of rodents living side by side. One population must be resistant to the disease, therefore acting as the carrying hosts. The other population must not be resistant, in order to keep the bacteria alive.

Modern investigation of mass burial pits created during the Black Death indicate the possibility that there were actually two strains of *Y. pestis* that entered Europe during the time of the Black Death, one through Marseille in late 1347 to early 1348, and one that entered the Low Countries (Netherlands, Belgium, etc. so-called due to their low elevation, generally below sea-level) and spread throughout northern Europe and Scandinavia.

Theories of Detection, Symptoms & Incubation Period

As described by Boccaccio in his medieval masterpiece *The Decameron*, the precursors to plague-induced death were horrible and grotesque. Govocciolos were puss-filled tumors, also known as buboes, hence the term bubonic plague. Modern medicine has discovered that in many cases, if the pus from the tumors is able to be discharged, recovery is possible. Following the appearance of buboes, many sufferers were subjected to acute fever and vomiting, often of blood.

One of the most unsettling things about the disease was the swiftness with which it claimed its victims. Most people died within two to seven days after becoming ill. Rashes and small bites (today, we recognize that these were probably flea-bites, although this likely would not have been identified as such during the Black Death) were indicative of a person's infection.

The Three Types of Plague

Based on contemporary accounts of the Black Death and modern examination of mass Plague graves, most researchers agree that there are three types of plague, all of which were active and deadly during the Black Death.

The first and perhaps most commonly known type of plague is bubonic plague, so named because of the distinctive buboes (or gavocciolos) that arose on sufferers. Buboes are swollen lymph nodes infected with the *Y. pestis* bacteria. Bubonic plague is usually transmitted by fleas carrying the *Y. pestis* bacteria or from coming into contact with bodily fluids from a deceased plague-infected animal. Within a week of contraction, the victim begins to suffer flu-like symptoms, all of which are the same as are described in medieval accounts: extraordinarily high fever, vomiting, and headaches, as well as the possibility of the presence of pus-filled tumors. Today, bubonic plague still has a death rate of up to 75%. Without treatment, 80% of contemporary victims die within a week of contracting the disease. Some antibiotics work, although vaccines have not proven to work effectively to prevent the disease. Bubonic plague still occurs with some frequency in parts of Africa.

The second type is pneumonic plague, and as the name suggests this affects the respiratory system. Its mortality rate is higher than bubonic plague at upwards of 90%. Symptoms are coughing blood and high fever. At the end of the life of a person suffering from pneumonic plague, coughing will induce free-flowing blood expelled from the lungs.

The third, least common, and arguably the deadliest type of plague is septicemic plague, which is an infection of the blood. It is the rarest of all plagues because it requires actual infection to take place in the blood. In most cases, bubonic plague or pneumonic plague stays either in the lymph or respiratory systems respectively, but occasionally they do spread to the blood stream, and hence become septicemic plague. This causes disseminated intravascular coagulation, which causes clotting agents in the blood to activate unnecessarily. This results in the formation of multiple small blood clots throughout the body, which ends up starving tissue

within the body of oxygenated blood. The medical term for this is ischemic necrosis, which is essentially the death of tissue. Because the body's clotting resources are allocated to inappropriate sites, unclotted blood inside the body can seep into other tissues, and can result in vomiting blood. Left untreated, the death rate is very near 100%. However, septicemic plague very rarely occurs in the total of all plague cases due to the difficulty of infecting the blood stream directly.

Other Possibilities

Most historians and epidemiologists are in agreement that the plague theory is by far the most likely of all possible diseases behind the Black Death. However, there are certain unknowable facts and postulations that have drawn a few historians and scientists to examine the possibility of other options.

Firstly, there are absolutely no reliable statistics for the period in question. The range of possible deaths in the seven-year period known as the Black Death in Europe alone is anywhere between 75 – 200 million casualties. That is an enormous difference.

One argument is that it is unlikely that the rat population would even have been sufficient enough to cause mass casualties to the degree that the Black Death claimed. Furthermore, the cold climate in northern Europe does not cater to a flea population, as most fleas cannot survive below freezing temperatures. Also, the spread of bubonic plague today is much slower than the spread of the Black Death. This is a fairly damning point, especially considering the sophisticated and quick transportation systems we have today compared to what was available in the fourteenth century.

In addition, skeptics argue that the symptoms of bubonic plague are not unique to it, and that other epidemic-inducing diseases have similar symptoms. Finally, bubonic plague today is endemic to and still very dangerous in rural areas, while the Black Death struck mostly urban areas.

There are rebuttals for some of these, one of which is that the strain of *Y. pestis* that exists today is a descendant of the *Y. pestis* that has been identified from mass Black Death graves. It is possible that the bacteria changed over eight centuries and acts slightly differently today than it did in the fourteenth century. In addition, it can be argued that an urban area today is nothing like an urban area would have been in the medieval period, and that in terms of exposure to fleas, modern rural areas have much more in common with the urban areas of the fourteenth century.

One of the leading alternate explanations for the Black Death is anthrax, which was put forward as a possible explanation by Norman Cantor, the famed medieval historian. Anthrax is a highly infectious disease that certainly could have spread as rapidly as the Black Death. However, the symptoms, though similar, are slightly different. The skin does not develop tumors but rather black skin lesions at the infection site.

Another possibility that has been suggested is a different highly infectious hemorrhagic disease like Ebola. The doubts surrounding the possibility of rats as

the transmissible organism again lead to a hypothesis such as this, which is transmitted from human to human.

There are schools of thought that indicate the possibility that it was not one type of disease, but rather a combination of many different types of infections including but certainly not limited to bubonic plague, which became known as the Black Death. Typhus, smallpox, and other respiratory infections in conjunction with plague could have occurred together in a particularly gruesome form of overpopulation-induced crowd control.

How and Why Did It Stop?

Most historians and epidemiologists agree that the disease never became endemic to Europe, as the disease would have died out as quickly as it would have arisen. Because the rats that carry the fleas infected with *Y. pestis* are native to Central Asia, and a bacteria-resistant rat must exist alongside an infected rat for the disease to spread, it is likely that once the disease ran its course through the susceptible rat population, the bacteria died out. In order for the plague to be reintroduced, more Central Asian rats carrying the bacteria needed to travel back into Europe.

Each outbreak occurred approximately fifteen years after a period of temperate weather, which presumably provided an ideal incubator for *Y. pestis* inside the rat flea population.

Chapter 5

Medieval Theories & Disease Control

Understanding of medicine and the spread of disease was extremely limited in the medieval period. Much of the ancient world's knowledge and documented experimentation had been lost, and that which wasn't was often proclaimed heretical by the religious leadership of the time. The concept of hygiene during this period was drastically different than we see it today. Human and animal wastes were common inside the home and were disposed of in the streets, which more often than not weren't drained or washed until it rained. The smell must have been horrific. These circumstances would have been the ideal breeding ground for disease of all kinds, and thus provided a fantastic incubator for the Black Death to sweep through cities, towns and villages with unchecked force.

A report to the king of France on the Black Death postulated that the pestilence was due to a planetary alignment in 1345 that caused "bad air." This is the same alignment to which Simon Couvin made reference to when discussing the "mort nigra." This theory of poor air as the reason for the introduction and spread of the disease was perhaps the most popular during the period, and is formally known as

miasma theory. It is also referred to as “night air.” This theory first appeared in ancient times, and in fact was commonly accepted all over the known world, including India, China and Europe. The theory held that all vast and wide-reaching disease was the result of rotting organic matter of any kind, which led to a humidity of toxic air. Miasma theory is essentially the precursor to germ theory, which is the currently accepted theory of how diseases spread. Miasma theory survived until the late nineteenth century.

As the plague claimed more and more lives, one of the most challenging, morbid and unforeseen dilemmas the population had to face was how to dispose of the dead. Medieval Europeans knew that in some way, the corpses of the deceased could be harmful to living society’s health. Giovanni Boccaccio described the removal of corpses as such:

"The plight of the lower and most of the middle classes was even more pitiful to behold... almost all of them died. Many ended their lives in the streets both at night and during the day; and many others who died in their houses were only known to be dead because the neighbors smelled their decaying bodies. Dead bodies filled every corner ... [T]hey carried the bodies out of the houses and laid them at the door; where every morning quantities of the dead might be seen ... Such was the multitude of corpses brought to the churches every day and almost every hour that there was not enough consecrated ground to give them burial ... Although the cemeteries were full they were forced to dig huge trenches, where they buried the bodies by hundreds. Here they stowed them away like bales in the hold of a ship..."

The famous Monty Python skit entitled *Bring Out Your Dead!* is not terribly far off. There was so much mass death that carts were drawn about villages, towns and cities to collect corpses and take them to mass graves. Due to the staggering amount of death, it was not feasible in many places to dig individual graves for each deceased person before the corpse started to rot. Numerous mass burial pits dating to the Black Death era have been found all over Europe and Asia, confirming the contemporary effort to dispose of the bodies safely.

Interestingly, the best solution to eliminate the disease residing in corpses would have been to burn the bodies at a removed location. However, Catholic law prohibited this as burning bodies was considered desecration, as the Church believed the human soul would return to its body at the end of days.

Recommended Treatment

Medieval doctors subscribed heavily to the miasma theory, which stated that the illness was caused by exposure to “bad air.” To remedy this, they recommended that people retreat out of cities into places of “clean air.” For the poor and middle class, it was almost impossible to leave their homes, thus causing this portion of the population to suffer heavy casualties. Though the people that were able to remove themselves from infected areas often were exempted from contracting plague, this movement often did cause the spread of the Black Death into new and previously uncharted corners of Europe and the Middle East.

Other contemporary treatments were often religious or superstitious in nature. People were advised to hold flowers in or around their noses to ward off the bad air that surrounded them. A vast majority of medieval society genuinely believed that the Black Death was a curse sent from God to punish the world for its sins. One way to communicate one's repentance and hopeful exemption from the Black Death was to carve a cross onto the door of the house along with the words "Lord, have mercy on us."

Some cities, such as Pistoia in Italy, instituted regulations to govern the spread of plague. Individuals were not permitted to visit plague-infected areas or persons, and if they did, were not permitted to re-enter the city. The government also attempted to ban trade in fabrics, but unfortunately the rules were not enough to keep the Black Death at bay, as the city eventually fell victim to the disease.

Plague Doctors

One of the most infamous characters to come out of the Black Death was the Plague Doctor. Bearing in mind the fact that medical knowledge at the time was incredibly primitive compared to modern standards, and the overriding fear that overwhelmed Europe in the face of this unknowable killer, a special type of person was appointed to work with the sick. He was called the Plague Doctor.

A plague doctor was hired by a village, town or city to treat, count and generally deal with victims of the Black Death. Plague doctors, as municipal employees, treated all people, rich and poor alike. There were no qualifications necessary to become a plague doctor, and in many instances acting plague doctors had no medical knowledge whatsoever and often came from completely different professions. Though they were paid by the city, many were known to take advantage of suffering families by extracting exorbitant sums for supposed cures. Common "cures" used were bloodletting and attaching leeches to gavocciolos.

In spite of this, plague doctors were exceptionally important to their cities, and this was the direct result of the enormous economic impact an epidemic had on an urban area. With up to half of the population dead or ill, cities lost the ability to trade, which left those among the living starving or out of work. Hence the employment of a plague doctor was not a kindness; it was an economic necessity to keep as many people healthy and able-bodied as possible. Plague doctors were given special dispensation to act in ways that normal general practitioners were not. For example, they were allowed to do autopsies to identify potential ways the disease spread. Autopsies as a rule were not allowed as this was considered an act of desecration. There are even recorded incidents of plague doctors being held for ransom, such was their importance.

Plague doctors, in addition to attempting to cure victims of the Black Death, were also tasked with keeping death records. Because of their presence at the time of death for so many, plague doctors also acted as witnesses to wills.

The costume famously associated with a plague doctor of a long waxy trench coat, a full face mask and a beak-like nose, was actually only used in the seventeenth century and after, and therefore would not have been a part of the

Black Death but would have been prevalent during the time of the Second Pandemic. The beak held aromatic herbs and flowers to keep out the “bad air” and the waxen overcoat was meant to provide a bodily barrier from the putrid gases surrounding plague sufferers.

What was common was the use of a wooden pointing stick, so the doctor did not actually have to physically come into contact with the patient. The stick was also used to whip patients as penance and flagellation in accordance with the pervading belief that the plague was caused by unrepented sins.

Interestingly, Nostradamus was a plague doctor. Of all recovered information about cures and practices, his were by far the most practical compared with medical standards today. He recommended against blood-letting and advocated clean water, clean air, and the immediate removal of infected corpses.

Chapter 6

Black Death in Medieval Culture

The Black Death was such a cataclysmic event that it affected every inch of medieval life. History has passed down much of what we know today about the Black Death’s effect on society through prose, art, poetry and music. Writers such as Boccaccio, Petrarch and Chaucer documented not only the main events surrounding the plague, but also interesting tidbits about how the plague was handled on a daily basis by rich and poor alike. This gives us today a wonderfully well-rounded account of how contemporary society viewed The Plague and how it dealt with the consequences of the disease.

Black Death in Art

Quite a significant amount of art remains from the Black Death period and after. The devastation of The Plague would have been such an ever-present evil for medieval Europeans that it is only natural that this was expressed in paintings, tombs and illuminated manuscripts.

The common view of the cause of the Black Death in Europe was overwhelmingly that it was caused by God as punishment for sin—sins of society and sins of the individual. This belief led society to a constant consideration of heaven and hell, for contraction of plague was, for many, a painful exit of this world into hellfire and brimstone.

Illustration:

Danse Macabre,

found in the graveyard of St, Magnus, Madeburg.

Figure 1 is a depiction of the “dance of death,” and shows the macabre and almost taunting attitude that medieval Europeans would have felt from death. It was such a reality that death became not just an event, but a person. Medieval artists portrayed Death hooded and often with a scythe, exactly the same as we today perceive Death as an individual today.

The Danse Macabre was a common image plastered all over Europe during the Black Death. Meant to warn believers about the correlation between sudden death and sudden damnation, the image nearly always portrayed the dead luring the living into death, perhaps another comment on the weakness of humanity and certainty of descent into hell.

One can only imagine the kind of despair that would have overwhelmed society at the time. No families would have been left unaffected by the Black Death. Children would have become orphans within days, parents no doubt watched their children die a horrible and painful death. It is hard to understand the level of fear and devastation that the medieval person would have felt.

Burying all the victims would have required thousands of man hours and some sort of organization to ensure that all corpses were, as far as possible, given the most dignified burial they could in the circumstances.

The Black Death in some ways profoundly changed the landscape and motivations of art. Prior to the advent of The Plague, most of European art was a reflection of God and the righteous path to heaven for the faithful. It was idealized and splendid. The horrors of the Black Death forced realism into art. One can only imagine that after witnessing the death of loved ones and friends, no one was really interested in seeing ideals of heaven when they were so clearly living in hell. They would have wanted to reflect the pain and suffering they felt in art.

Warnings were everywhere in plague art. Because it was so firmly believed that the Black Death was punishment for sin, art became a way to show people how to be aware of potential sin, and why it should be avoided. Figure 3 shows a young, beautiful, bejeweled mother holding her child. She stares lustily at the viewer, clearly impressed with herself, her child, and her jewels. Little does she know that her own death is upon her, waiting just over her shoulder to punish her for her vanity and delight in worldly things.

Black Death in Literature

The Black Death was a striking part of the life of anyone that lived through it, and some of those that were lucky enough to survive its deadly grasp strove to record what they had experienced. Much of what we know today about the Black Death is due to the descriptions of the disaster written in contemporary chronicles. Some chronicles were written by famous authors such as Boccaccio and Petrarch, but others were written by run of the mill people like Geoffrey Chaucer who became famous in his old age for *The Canterbury Tales*, but certainly was not before.

Prior to the Black Death, most contemporary literature was about courtly love. Though this did continue to be popular throughout the period of the Black Death,

another style of writing began to emerge in which common folk writers began to chronicle their societal hardship in an accessible and realistic form. Much like the transition of art from idealized to realism, literature began to get a new face. That face was called reality. Agnolo di Tura, from Siena, Italy, recorded his experiences thus:

Father abandoned child, wife husband, one brother another; for this illness seemed to strike through the breath and sight. And so they died... Members of a household brought their dead to a ditch as best they could, without priest, without divine offices ... great pits were dug and piled deep with the multitude of dead. And they died by the hundreds both day and night... And as soon as those ditches were filled more were dug... And I, Agnolo di Tura, called the Fat, buried my five children with my own hands. And there were also those who were so sparsely covered with earth that the dogs dragged them forth and devoured many bodies throughout the city. There was no one who wept for any death, for all awaited death. And so many died that all believed it was the end of the world.

Another chronicle details how the Black Death entered Europe:

Alas! our ships enter the port, but of a thousand sailors hardly ten are spared. We reach our homes; our kindred... come from all parts to visit us. Woe to us for we cast at them the darts of death! ... Going back to their homes, they in turn soon infected their whole families, who in three days succumbed, and were buried in one common grave. Priests and doctors visiting... from their duties ill, and soon were... dead. O death! cruel, bitter, impious death! ... Lamenting our misery, we feared to fly, yet we dared not remain.

The literacy rate of the period was low, and because of this most of the readers were noblemen and women. Petrarch's work in particular was read mostly by the upper class in the Italian city-states during the Black Death.

One of the best known chronicles is the Florentine book called *The Decameron*, written from 1351 to 1353 by Giovanni Boccaccio. *The Decameron* is a collection of ten (deca-) novellas, within the fictitious parameter of ten courtiers (seven men and three women) who fled Florence during the Black Death by seeking refuge from the scourge in the nearby hill town of Fiesole. Each courtier told one story per night, except one day per week in which they did chores and the holy day each week. In the villa for two weeks, they told a total of 100 tales.

Interestingly, *The Decameron* was written entirely in the Florentine vernacular, one of the first pieces of literature to have been written in and distributed in the people's common language. While Boccaccio was a philosopher and thought his should be accessible to the common man, it is unlikely that it was read by common contemporaries.

Perhaps the most famous of all is *The Canterbury Tales*, written by Geoffrey Chaucer. Similar to *The Decameron* in that it is a collection of tales meant to amuse and divert the reader's attention from the horrors of the Black Death, *The*

Canterbury Tales were also written in the vernacular, which was Middle English. The original language can still be read by modern English speakers with a bit of difficulty, and it is well-worth a read as many of the descriptions and events are incredibly funny. Even a modern translation can give the reader a sense of a bit of a stiff upper lip: while trying to escape the sureness of death, people still found amusement in telling jokes and stories. It shows us that perhaps we have always been the same.

As depicted in Figure 1, *La Danse Macabre*, or the Dance of Death, was an allegory that presented in art, drama, and in prose and poetry of the time. Death personified led all mortals to the grave, as a permanent reminder of how fleeting life was and just how equal we all are in the face of death. A contemporary poem written by the Welsh poet Dafydd ap Gwilym entitled *The Rattle Bag* discusses how the plague affected him personally, and his belief that the Black Death was, in fact, the Apocalypse. Thomas Nash wrote the following sonnet, which aptly described the fear which pervaded the very essence of life at the time.

*Adieu, farewell earths blisse
This world uncertaine is
Fond are lifes lustful joys
Death proves them all but toys
Non from his darts can flye
I am sick, I must dye.
Lord, have mercy on us.*

From a literary perspective, the plague was actually quite fortuitous for women. Prior to the Black Death, literature and writing was compiled in Latin, and was restricted to men as dictated by the Church. Because of the advent of the acceptance of vernacular literature, women were suddenly given the opportunity to participate in the written word. Christine de Pizan, a French woman, is the first known woman to have supported herself solely with her writing. Christine was born just after the first devastating sweep of plague, and thus by the time she was an adult, the popularity of vernacular literature would have risen enough to allow her the ability to participate and publish. She wrote both prose and poetry, and aimed her literature at topics relevant to the common folk at the time. She famously wrote a rebuttal to Jean de Meun's incredibly sexist book *Romance of the Rose*, causing an inflammatory debate that lasted centuries. She was the first woman to publish a defense of the fairer sex in the face of nearly one thousand years of one-sided attacks from what were often very ignorant and misogynist religious men.

Black Death in Folklore

The Black Death became personified in many different ways throughout Europe. In the south, it was seen as a skeleton or a hooded figure, sometimes with or without a scythe. In the north, Death was an old woman, also hooded. The hood

more than likely was a symbol for fear of the unknown; unable to see Death's face, one was without knowledge of what was to come. In Scandinavia, Death as an old woman carried a broom and a rake. If she used the rake, some of society would survive through its teeth. However, if she used the broom, there was no hope for anyone. This personification of death became known as the Plague-hag (witch) or Pesta.

The children's nursery rhyme *Ring Around the Rosie* (or "Ring, a Ring of Roses") is, wildly, a possible product of the Black Death. The rhyme in full, as we all know is thus:

*Ring around the Rosie
Pocket full of posies,
Ashes, ashes
We all fall down.*

The first line refers to a ring of roses; this could be in reference to the rash the precipitated death from the plague. Sometimes it appeared on the body in a rose-like pattern. It could also be a reference to the rosary, which as the time of the Black Death would have been carried by every person as a constant reminder to repent of one's sins in the hope of escaping the disease.

The second line is also apt for the time. Because of the ubiquity of death, the smell of rotting corpses would have been pervasive. Flowers (or "posies") would have been carried by a person as much as possible and often held directly to the nose to escape the odor. The theory that the disease was caused by bad air would also have played a part in this; by holding flowers to one's nose, the bad air would be blocked thus effectively keeping the plague at bay.

"Ashes, ashes" could very likely refer to the drizzle of ashes that could have been a constant part of urban life especially during the Black Death. If and when bodies were burned in an effort to rid the population of the disease, ash would have been everywhere. Corpse disposal in this way does not seem to have been common, as it was not traditional to burn bodies at the time, especially considering it was an act of desecration according to religious interpretation at the time.

The final line, "we all fall down," is fairly straightforward. Everyone was dying, or "falling" in the face of the Black Death. What seems like an innocuous nursery rhyme is actually potentially quite morbid. Historians and folklorists are skeptical about whether the rhyme is actually about the Black Death, but it seems reasonable that if a hidden meaning is to be found in it, this certainly does not seem too far off.

Chapter 7

Consequences

The consequences of the plagues were vast and far-reaching. It resulted in massive population decline, which in turn resulted in extreme economic ramifications. It also spurred religious persecution, an increase in crime and war, and overall gave rise to the unfortunate belief that life was not as valuable as it had once been. The massive loss of life has been considered to have effectively marked a significant turning point in the economic system of Europe. Because of the severe decrease in the working population, the bargaining power of serfs increased as landowners and noblemen became more dependent on fewer people. Wages rose, and this increase in economic power led to the Peasant's Revolt in 1381.

Population Disintegration

Current research suggests that between 45-50% of the European population was devastated over a period of about 4 years (1348 – 1352). Over the course of the three waves of plague in the fourteenth century, it is estimated that anywhere from 75 million to 200 million people were killed. Though there are no exact figures due to the lack of record-keeping (even the plague doctors could not keep an accurate count due to the sheer enormity of loss of life), we are able to estimate the death toll in regional areas.

In the Mediterranean region, the Black Death was constant and unforgiving, never easing up during the entire period of 1348 – 1352 and killing upwards of 75% of the population in those areas. In the north, specifically England and Germany, there were waves of plague, possibly due to freezing winter temperatures resulting in lower seasonal rat and flea populations. Here the instances of death were lower, though still dramatic, at probably close to a fifth of the total population of the time. In England, the death toll was also close to 50%, and unlike in other areas of Europe, where major losses of life ceased around 1360 when the Black Death ended, the plague never actually left England but instead lingered for centuries longer than other places in Europe and the Middle East.

If the Black Death killed half of Europe's population, the situation in the Middle East was little better. It is estimated that approximately 40% of Egypt's population was lost. In the rest of the Middle East, figures are nearer one third. This seems almost a respite, except when you consider that this figure still means that one in every three people died. Look to your right, and then to your left: one of you would have died.

Urban areas were hit the hardest due to compact living quarters. The Black Death claimed over half of the population in Europe and the Middle East's largest cities: Paris, London, Florence, Hamburg, and Cairo as a whole all lost between 50% – 60% of their population from 1347 – 1351/2. Those that suffered the worst were in the Mediterranean region, specifically in cities like Florence, which could have lost in excess of 60%. In most cities, at least 50% of the population perished.

The death toll in England was likely closer to 40% as opposed to 50% in the rest of Europe. Horribly, over 60% of Norwegians were killed within two years of the first incident of the Black Death on the country's shores.

Certain societal groups were also hit harder than others. Any person in a caregiving role, such as a doctor or a nurse, were exposed more often and therefore were more likely to contract the disease and die. In addition, religious persons such as monks and priests were also much more likely to become infected as they came into contact with the sickest of the sick when giving last rights.

Persecution and Religious Fervor

The medieval period was one of superstition, disinformation and prejudice. Though the title “Dark Ages” is not entirely fair or appropriate, it certainly is accurate to say that the vast majority of the population had little to no knowledge of, or education about, anything outside of what they experienced on a daily basis. The one thing that bound most medieval Europeans together was their Christianity. Faith and the Catholic religion were the foundation on which almost every medieval community was built. The medieval person was exposed to the doctrine and policy of the Church at a minimum of every Sunday, and thus the most consistent information received was via one source. All individuals were bound by faith and religious doctrine to tithe to the Church, thus making their livelihood concurrent with contributing to the Church. The vast collections that made their way to Rome made the Church a superpower to rival any other in the history of the world.

All of these aspects gave the Church enormous power, and the average medieval person’s definition of themselves as a Christian first and foremost (the examples of speaking highly of someone as a “godly person” are too numerous to count) meant that any perceived difference from the righteous way of Christianity was highly mistrusted. Religious persecution was a reality in medieval Europe, spurred on by centuries of propagandizing the Crusades.

Jews and gypsies in particular were considered extremely untrustworthy and therefore bore the brunt of persecution throughout the entire medieval period in Europe. The Black Death made this mistrust significantly stronger and more crazed. Because Jewish ghettos were by design more isolated, Jews did not suffer casualties to the same degree as the rest of urban society. A bizarre theory that the Jews were poisoning Christian wells arose. This led to mass Jewish extermination via methods cruel in the extreme. People were murdered in their homes, and many Jews were burned at the stake. Jewish communities in Mainz and Cologne were completely wiped off the map, and in Strasbourg on Valentine’s Day over 2,000 Jews were reportedly murdered in 1349. The Black Death had not even reached Strasbourg at that time. There were also many reports of Jews committing suicide simply to avoid persecution.

In a true act of Christian charity, Pope Clement VI issued two papal bulls demonizing the persecution of Jews, and published research saying the Jews were not to blame for the Black Death. However, the Holy Roman Emperor Charles IV simultaneously declared that any property belonging to Jews killed as a result of the persecutions became forfeit, thus effectively incentivizing potential murders.

By the end of the Black Death, over one hundred Jewish communities were either attacked or destroyed in their entirety.

Recurrence

The first great, infamous wave of plague was known as the Black Death and lasted from the tail end of 1347 to 1352. However, widespread plague recurred often following the mass destruction of life during the Black Death, and are categorized into two main pandemics: the Second Pandemic and the Third Pandemic, with the Black Death being considered the First.

The Second Pandemic is classified as all plague incidents following the Black Death of 1347-1352 and prior to the Third Pandemic, which ravaged China and India in the nineteenth century. Thus, the Second Pandemic covers a span of approximately four hundred years. Outbreaks during this time were also incredibly severe, causing the deaths of multiple millions of people at a time. London suffered a great plague in 1665, and Paris seems to always have had the presence of plague, with at least tens of thousands of citizens dying each year. Russia also was not immune. Plague entered from the northwest and southwest in or around 1350 and remained somewhere in the country until at least 1490.

As they were during the Black Death, major cities and in particular major trading ports were hit the hardest during the recurrent episodes of plague. Amsterdam, Naples, and Venice were particularly ravaged during some of the outbreaks, as were London and Oslo. The disease followed military conflicts such as the Thirty Year's War, which resulted in the Italian Plague from 1629 to 1631. The Great Northern War, which involved Sweden and Russia in the first two decades of the eighteenth century, catalyzed a plague in which nearly half a million people were killed across the northern reaches of Europe and Scandinavia.

Spain had a horrible bout of plague in 1649, with over one million casualties in that year alone. Vienna suffered a Great Plague in 1679. The final significant outbreak in Europe occurred in the south of France in 1720, after which sweeping incidents of plague were relatively unknown on the continent.

The Middle East was not left alone either after the initial Black Death, and plague lurked in the urban corners of the Islamic world until as late as 1850. Baghdad probably suffered the most severe population loss of all urban centers, losing up to two thirds of its population at a time. North Africa was particularly hard hit, likely due to significant trade interaction. Istanbul was also constantly under threat of plague, and a tally of all accounts suggest that it was hit a whopping thirty-seven separate times with bouts of plague in the city.

The Third Pandemic began in 1855 and ended four years later in 1859. The initial outbreak surfaced in China and spread south into India, where over ten million people lost their lives. Due to the east's and the subcontinent's trading relations with Australia, the plague reached Sydney in or around the turn of the twentieth century where it continued for over twenty years. It claimed tens of thousands of lives in total.

Today, plague exists mostly in Africa and North America, due to the inhabiting rodent populations. The last known plague death in North America was in Larimer County, Colorado, in which a young man was killed after coming into contact with an infected rodent corpse on his family's rural farm.

Conclusion

In the end, the plague in general and the Black Death in particular remains one of history's most lethal events, if not the deadliest. In the Black Death of 1348-1352 alone, the body count was more than both World Wars and all recorded genocides in history combined, including the Holocaust, the Soviet Union under Stalin, and all African genocides. And that's just considering the low end of the hypothesized figures.

The consequences of the Black Death were far and wide-reaching. Not only did up to half of the known world's population perish, but the entire economic system on which Europe had been built was irrevocably changed. Fewer laborers in the population meant that those that were left had increased value and more bargaining power than previous centuries of generations of that socio-economic class. The world of serfdoms was coming to an end, and as a result medieval society was about to give way to a new era: The Renaissance. The direct translation of renaissance is "rebirth", and Europe in particular was on the cusp of being reborn into the ancient world's sophistication in science, art, philosophy, literature and rhetoric.

Debatably, the Black Death provided the ideal catalyst for a societal upheaval like the Renaissance. Because of the despair associated with the Black Death's unrelenting ferocity and unknown causation, it is possible, by stepping into the mind of a post-Black Death European, to look for answers outside of the known world or common education. Society would no longer accept blanket statements from religious leaders that sin caused all suffering; in the act of seeking reasons why this devastation occurred, it would reach back into the annals of the ancient world to find its answers. Less than one hundred years after the Black Death, the rebirth of Europe was already finding its feet.

But first the generations that experienced and would hear first-hand accounts of the Black Death needed to mourn and remember. It is hard for modern man to understand the fear and terror that the Black Death would have incited in the medieval person. Even more horrible to contemplate is the overwhelming sense of sadness, grief, and resulting hardship that was inflicted on individual people, families, and communities, all the way up to entire economic systems. It must truly have seemed like the end of the world.

The marvelous thing about humanity, though, is its capacity to survive, and to record its own history. And through that desire to keep track and tell the tales of hardship and woe through literature, art, municipal records and the like, today we know about the devastation that disease can wreak. Because of the desire to avoid that sort of pain and suffering, we now have modern medicine which helps us

avoid global pandemics and mass casualties like those seen during the Black Death.

And that is progress.
