## The black death

**History** 



"The Black Death: Natural and Human Disaster in Medieval Europe" by Robert S. Gottfried is known as "A fascinating work of detective history, The Black Death traces the causes and far-reaching consequences of this infamous outbreak of plague that spread across the continent of Europe from 1347 to 1351. Drawing on sources as diverse as monastic manuscripts and dendrochronological studies (which measure growth rings in trees), historian Robert S. Gottfried demonstrates how a bacillus transmitted by rat fleas brought on an ecological reign of terror — killing one European in three, wiping out entire villages and towns, and rocking the foundation of medieval society and civilization. "The Black Death was an epidemic which spread across almost all of Europe in the years 1346 –1353; the plague killed over a third of the entire population. It has been described as the worst natural disaster in European history.

The Black Death discusses the causes and results of the plague that devastated medieval Europe. It focuses on the many effects it had on thecultureof medieval Europe and the possibility that it expedited cultural change. Robert S. Gottfried argued that rodent and insect life cycles, as well as the changing of weather systems affect plague. He claimed that the devastation plague causes is partly due to its perpetual recurrences. Plague ravaged Europe in cycles, devastated the people when they were recuperating.

As can be later discovered in the book, the cycles of plague consumed the European population. A second thesis, which he described in greater detail, was that the plagues expedited the process of cultural change. The plagues killed a large percentage of each generation, leaving room for change. Why

the name, Black Death? "The traditional belief is that it was so called because the putrefying flesh of the victims blackened in the final hours before death supervened. The trouble about this otherwise plausible theory is that no such phenomenon occurred.

It is true that, in cases of septicemic plague, small black or purple blotches formed on the bodies of the sick and this symptom must have made a vivid impression on beholders" (Ziegler) Coming out of the East, the Black Death reached the shores of Italy in the spring of 1348 unleashing a rampage of death across Europe unprecedented in recorded history. By the time the epidemic played itself out three years later, anywhere between 25% and 50% of Europe's population had fallen victim to the pestilence. The plague presented itself in three interrelated forms.

The symptoms were not the same as in the East, where a gush of blood from the nose was the plain sign of inevitable death; but it began both in men and women with certain swellings in the groin or under the armpit. They grew to the size of a small apple or an egg, more or less, and were vulgarly called tumors. In a short space of time these tumors spread from the two parts named all over the body. Soon after this the symptoms changed and black or purple spots appeared on the arms or thighs or any other part of the body, sometimes a few large ones, sometimes many little ones.

These spots were a certain sign of death, just as the original tumors had been and still remained. The bubonic variant (the most common) derives its name from the swellings or buboes that appeared on a victim's neck, armpits or groin. These tumors could range in size from that of an egg to that of an apple. Although some survived the painful ordeal, the manifestation of these

lesions usually signaled the victim had a life expectancy of up to a week.

Infected fleas that attached themselves to rats and then to humans spread
this bubonic type of the plague.

A second variation, pneumonic plague, attacked the respiratory system and was spread by merely breathing the exhaled air of a victim. It was much more virulent than its bubonic cousin - life expectancy was measured in one or two days. Finally, the septicemic version of the disease attacked the blood system. Having no defense and no understanding of the cause of the pestilence, the men, women and children caught in its onslaught were bewildered, panicked, and finally devastated. The Black Death covers the affects that numerous plagues had on the culture.

There appear to have been several separate introductions into Europe. It reached Sicily in October 1347 carried by twelve Genoese galleys where it rapidly spread all over the island. Galleys from Caffa reached Genoa and Venice in January 1348 but it was the outbreak in Pisa a few weeks later that was the entry point to northern Italy. Towards the end of January one of the galleys expelled from Italy arrived in Marseilles. From Italy the disease spread northwest across Europe, striking France, Spain, Portugal and England by June 1348, then turned and spread east through Germany and Scandinavia from 1348 to 1350.

It was introduced in Norway in 1349 when a ship landed at Askoy, then proceeded to spread to Bjorgvin but never reached Iceland. Finally it spread to north-western Russia in 1351; however, the plague largely spared some parts of Europe, including the Kingdom of Poland and isolated parts of Belgium and the Netherlands. The cycle of the plagues struck each

generation. After a plague ravaged Europe from 599-699, plague killed in 608, 618, 628, 640, 654, 684-686, 694-700, 718, and 740-750. In the early stages of the above series, intervals are apparent.

These intervals demonstrate the cycles of the rodent and insect life. Robert S. Gottfried also argues, rightfully so, that plague may have hastened cultural change. Along with plagues came the need for a cure. Plague destroyed the existing medical systems, and was replaced by a modern heir. Previous to the plague, scientists based their knowledge on early scientists such as Hippocrates and Galen. Scientists knew little about what they were doing. The medical community was divided into five parts. These divisions were physicians, surgeons, barber-surgeons, apothecaries, and unlicensed practitioners.

These divisions were adequate when Europe was without plague, but were obviously not prepared for plague. Doctors responded with a series of changes are to thank for the development of modernscience. Although the government had medical workers try to prevent the plague, the plague persisted. Most medical workers quit and journeyed away because they feared getting the plague themselves. There were methods that did work. Cities were hardest hit and tried to take measures to control an epidemic no one understood.

In Milan, to take one of the most successful examples, city officials immediately walled up houses found to have the plague, isolating the healthy in them along with the sick. Venice took sophisticated and stringent quarantine andhealthmeasures, including isolating all incoming ships on a separate island. But people died anyway, though fewer in Milan and Venice

than in cities that took no such measures. Pope Clement VI, living at Avignon, sat between two large fires to breath pure air. The plague bacillus actually is destroyed by heat, so this was one of the few truly effective measures taken.

Gottfried succeeded in convincing me that his thesis was truth. The opening chapters gave me a solid background of plague, explaining why he believes it had such an impact on medieval population and culture. Next, it delves into the affect that changing weather had on the plagues, explaining the Europeanenvironmentduring 1050-1347; the time of plagues greatest That complete, Gottfried describes the consequences destruction. immediately following the plague. It is said that the disease killed 25% to 40% of Eurasia and part of Africa. By this point, it is more than obvious hat plague had a tragic affect on Medieval Europe, The Consequences and effects of the Black Death plague were prices and wages rose, greater value was placed on labor, farming land was given over to pasturing, which was much less labor-intensive, this change in farming led to a boost in the cloth and woolen industry, peasants moved from the country to the towns, the Black Death was therefore also responsible for the decline of the Feudal system, people became disillusioned with the church and its power and influence went into decline, this resulted in the English reformation.

After giving a full background on plague and European culture and environment, Gottfried gives solid details to support his theses. According to Gottfried, the Medical structure of Medieval Europe, adopted from that of the Romans, was nearly eliminated in the search for ways to cure plague. The spread of plague, successfully stated by Gottfried, directly depends on

climate. Plague can only spread under certain climate conditions. In order for Y. Pestis, a series of complex bacterial strains, to survive, it mustn't be too hot nor too cold.

Too cold can kill the bacteria, and too hot can slow its progress. During the plague's most devastating times, the temperature was perfect for the spread of Y. Pestis. Gottfried also describes that spread of plague can also depend on the strength of animals. Humans are merely secondary hosts to the fleas carrying Y. Pestis. The fleas afflict their host with the plague when they regurgitate the bacteria. These fleas prefer an animal host, not humans. When their animal host dies, they move on to a secondary host, possibly humans, but not necessarily.

When the generation of bacteria-carrying fleas dies, or the temperatures prevent the plague from spreading, the cycle continues until all the variables once again allow for the plague to spread. Gottfried successfully conveys his point. Robert S. Gottfried achieved in getting his two theses across. His methods were to educate the reader on the topic, giving only the facts necessary to convey his point. After giving the reader information on plague and Medieval Europe, he argued his thesis, making frequent references to points he had made earlier in the book.

Gottfried also made it obvious that others supported his theories. At the end of each important point, he marked it with a number corresponding to the reference in the back of the book. "Neither physicians nor medicines were effective. Whether because these illnesses were previously unknown or because physicians had not previously studied them, there seemed to be no cure. There was such a fear that no one seemed to know what to do. When it

took hold in a house it often happened that no one remained who had not died. And it was not just that men and women died, but even sentient animals died.

Dogs, cats, chickens, oxen, donkeys sheep showed the same symptoms and died of the same disease. And almost none, or very few, who showed these symptoms, were cured. The symptoms were the following: a bubo in the groin, where the thigh meets the trunk; or a small swelling under the armpit; sudden fever; spitting blood and saliva (and no one who spit blood survived it). It was such a frightful thing that when it got into a house, as was said, no one remained. Frightened people abandoned the house and fled to another. - Marchione di Coppo Stefani In conclusion, The Black Death successfully proves that a great deal of tragedy in the 13th century had much to do with animals in the environment. Death was a habitual visitor to fourteenth century Europe. Never before had humanity seen such widespread dying. Famines, wars, and a host of deadly diseases all took millions of lives during the 1300s. But the worst single calamity to wrack this troubled century was the Black Death—a plague that killed anywhere from 24-25 million Europeans between 1347 and 1351.

As Frederick F. Cartwright and Michael D. Biddis, authors of Disease and History, observe, "The Black Death was not just another incident in the long list of epidemics which have smitten the world. It was probably the greatest European catastrophe in history. "Anywhere from 25 to 40 percent of the total population of Europe died from this plague. Similar death rates took place in Asia, the Mideast, the Mediterranean, Africa, and as far away as

Greenland and Iceland, thus making the Black Death the greatest ecological calamity in human history.

It also conveyed that plague accelerated the progress of culture, bringing the need for modern medicine. Gottfried makes it apparent that man did not understand enough about the environment to prevent plague, maybe a message to the world today. Dense population, as Gottfried suggested, breeds plague. Early plague has educated us, and we should focus on this, plague seems to be inevitable with certain circumstances and lack of knowledge. Not only did Gottfried educate us on the past, but may have prepared us for the future.

## Works Citied

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