

PROBLEM-BASED LEARNING
IN THE SOCIAL SCIENCES
and PROBLEM STUDIES FOR ONE

Black Death / Plague!

Resource Book

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Overview

Works of art included as primary resources were selected to provide students with a visual sense of medieval life and how that life was changed with the arrival of the plague. Most of the pieces are from the late 1300s and 1400s; a few, such as *The Triumph of Death* by Pieter Breugel the Elder, are from later plague epidemics but are included because of their detailed representation.

Consistent with the unit, the resources in this book were selected to help students enter into the perspective of the day.

The series begins with two pre-plague paintings by Ambrogio Lorenzetti, one depicting city life and one depicting country life. Students may find these helpful as they try to imagine their own medieval town in the first activity of the *Black Death/Plague!* unit. Students should make note of the crowds in both paintings and the active life all people led, with women as well as men hard at work. The painting of city life is interesting not only for its depiction of outdoor markets and crowded streets, but also for the sense of a growing urban community, suggested by the laborers working in the upper right-hand corner of the painting.

The remaining artwork provides different perspectives on the plague. These paintings can be used to add “atmosphere” to the learning environment and also as a resource for student research.

Three pictures—*Lancing a Bubo*, the *Toggenburg Bible*, and the illumination of a priest blessing monks—provide images of people infected by the plague. In *Lancing a Bubo*, most of the people in the painting are infected, and students can see the man’s bubo under his arm, as well as the woman’s bubo being lanced. The child’s arm is raised also, suggesting that she, too, may be infected. Students also may notice that the physician wears no gloves or face mask. The drawing from the *Toggenburg Bible* shows a man and woman with chests and arms covered with buboes. It might be advisable to crop the woman out of this picture if nudity is a concern. These two images provide a springboard to conversation about the risk that doctors and priests faced while ministering to their communities during the epidemic.

The picture of the plague doctor from the 1600s suggests the state-of-the-art in disease prevention. The large beaks of the masks provided space for herbs that theoretically would protect the physician from the plague—or at least block the smell of ruptured buboes. The stick was used to examine patients without touching them. Even the long robes had a specific purpose—they were often dipped in wax to create a protective barrier against the disease. Ironically, this sometimes backfired, as the fleas that were the real source of the plague would nest in the waxed robes.

Public reaction to the plague is depicted in the two illuminations of the procession of Saint Gregory. These illuminations both show that the common response to the plague was to turn to the Church for answers and also that people died in the streets on their way there. Another two pictures show progressions of flagellants. These pictures are notable for their similarity: the bare-chested penitents led by people bearing flags of torn cloth. The fact that one of these paintings is from the Netherlands and the other from France suggests the widespread popularity of this movement. Readings in Inquiry and Investigation (A Visit from the Doctor and the Priest) on the social impact of the plague describe the flagellants and also the response of the Catholic Church to their activities.

Black Death at Tournai by Gilles le Muisit, *Triumph of Death* by Buonamico Buffalmacco, and *The Triumph of Death* by Pieter Breugel the Elder all provide graphic images of the mortality rate and the related devastation in the social fabric of communities.

The final two images are more symbolic. The Michael Wolgemut woodcut of *The Dance of Death*, or *Danse Macabre*, shows how death came to dominate the public consciousness while the plague was a prominent feature of daily life. The drawing from Giovanni Sercambi's book of stories from Lucca clearly represents the plague as a punishment sent from the heavens. While the picture is fairly straightforward, students may find it interesting to discuss why they think the artist included people in so many different forms of dress in the drawing.





Effects of Good Government on the City Life, Ambrogio Lorenzetti, 1338-1340



Effects of Good Government in the Countryside, Ambrogio Lorenzetti, 1338-1340

Primary Resource Texts for Black Death / Plague

The selections included in this book provide students with research information related to the outbreak of plague in 1348. The readings are separated into sections; however, entries often have information that applies across categories.

Explanations and Symptoms

This section begins with a graphic description of the plague in Constantinople. It was selected as a geographic precursor to the plague in Italy and could serve as a good reference point when students map the travel routes in the lesson *When Will the Pestilence Arrive?*

The *Report on the Cause of the Plague* by the University of Paris Medical Faculty and *On the Cause of This General Pestilence* present astrological “explanations” for the pestilence, with the primary reason being the alignment of the planets, moon, and sun in 1345. The two works lend themselves to a compare/contrast analysis, as there are many similarities but also some differences. Note, for example, that the University of Paris Medical Faculty reports the eclipse of the moon on March 20, but de Meaux reports it as being on March 18. In addition, the *Report on the Cause of the Plague* outlines “near” and “far” causes of the plague, which provides a good basis for a discussion of direct and indirect effects.

The Chronicle by Jean de Venette addresses causes of the plague, the significant death toll, and the impact that the high rate of mortality had on society. Students may find it interesting that de Venette raises many accurate ideas but always couches them in the context of inaccurate theories. For example, he suggests that infection came from imagination or through contact with others. de Venette also discusses one inaccurate and politically sensitive theory: He addresses the rumor that the plague was caused by Jewish people poisoning well water. While he quickly dismisses this as fallacious, his description of the treatment of Jews and their reaction to some aspects of their persecution is graphic. This passage should be used with discretion.

The final two entries in this section both provide descriptions of the onset of the plague in Italy, so they have high relevance to the problem presented in this unit. Together, all of the entries provide valuable background for the students as they enter into the medieval mindset, offering a vivid sense of the dramatic and deadly nature of the disease.

Treatments

One of the first things students may notice is that there are many texts describing the plague but few that offer a cure. Four treatments are included in this book. Working strictly by the timeline established in the unit, even these would not have been available, since they were all written after 1348, but they are included as examples of how physicians approached the treatment of disease. Students will likely find the approaches interesting and occasionally amusing. It will be important to make sure that they recognize how doctors relied on religious as well as medical approaches. Many of the herbs used in medieval times are available relatively inexpensively at health food stores today; these could provide students with a tactile sense of what the practice of medicine was like. The final entry in this section was written by Guy du Chauliac, the doctor who distinguished between bubonic plague and pneumonic plague. Chauliac also attempted to dispel the prejudiced-born belief that the plague was caused by Jewish people putting poison in water wells.

Staying Healthy

This section contains two readings that focus on prevention. First there is another entry from the seminal work of the Medical Faculty of Paris, the *Compendium de Epidemia*. This contains advice that is accepted as “state of the art” in prevention. Students will be stunned that the most educated doctors in Europe focused their recommendations on avoiding humid houses and bad smells. However, a close reading will help them also find elements of wisdom that are repeated today.

Social Impact

The primary focus of these readings is on how society changed as a result of the plague and the resulting decrease in population across Europe. In order to give students a sense of the magnitude of population decrease, readings are included not only from Italy, but also from the Middle East, France, England, and Ireland. The excerpt from Henry Knighton gives particularly vivid details about how life had to change when there were no longer enough people to tend the farms or maintain social order. The writing by Agnolo di Tura, *The Plague in Siena*, describes both shock and social chaos; di Tura intersperses his description with interesting details like the execution of wills and abandoned construction projects. Two letters written by the poet Petrarch give students a sense of the confusion, disorientation, and despair of those who survived the plague.

Bishop of Bath Ralph Shrewsbury wrote in *Confession* advocating that lay people—even women—should be allowed to hear confessions. He suggested that priests were either too few in number or in some cases simply unwilling to risk being exposed to the disease. *Chronicles*, by Jean Froissart, and *The Chronicle*, by Jean de Venette, discuss the activities of the flagellants, who went from town to town whipping themselves until they bled, although this practice was soon forbidden by the king of France and by the pope as “neither right nor lawful.” At the end of the section are several poignant entries. Giovanni Villani began a report of the plague in *Nuova Cronica* but died before he could finish it. His entry is followed by an account written by his brother Matteo, who eventually also succumbed to the disease. Perhaps most affecting is the entry by Brother John Clyn, who apparently died mid-sentence as he wrote his account of the plague in Ireland.

Fiction and Poetry about the 1348 Plague

The Decameron is most relevant to the unit, as it describes the plague in Italy; it also is challenging reading. However, following the introductory paragraph are sections that students will find engaging to interpret, full of description of the impact of the disease. Students are likely to have more fun with the anonymous poem *A Song about the Plague*, especially with its ironic ending. While not directly connected to the plague, the excerpt from “The Pardoner’s Tale” from Chaucer’s *Canterbury Tales* does include a segment that recounts the reaction of some to the presence of the pestilence. That segment is included both in Middle English and in contemporary language so that students can compare the two.



Explanations and Symptoms

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Description of the Plague
by Emperor Ioannes (John VI) Cantacuzenos
c. 1360

Upon arrival in Byzantium [the empress] found Andronikos, the youngest born, dead from the invading plague, which, starting first from the Hyperborean Scythians, attacked almost all the sea coasts of the world and killed most of their people. For it swept not only through Pontus, Thrace, and Macedonia, but even Greece, Italy and all the islands, Egypt, Libya, Judaea, and Syria and spread throughout almost the entire world.

So incurable was the evil that neither any regularity of life, nor any bodily strength could resist it. Strong and weak bodies were all similarly carried away, and those best cared for died in the same manner as the poor. No other [major] disease of any kind presented itself that year. If someone had a previous illness, he always succumbed to this disease, and no physician's art was sufficient; neither did the disease take the same course in all persons, but the others, unable to resist, died the same day, a few even within the hour. Those who could resist for two or three days had a very violent fever at first, the disease in such cases attacking the head; they suffered from speechlessness and insensibility to all happenings and then appeared as if sunken into a deep sleep.

Then, if from time to time they came to themselves, they wanted to speak, but the tongue was hard to move, and they uttered inarticulate sounds because the nerves around the occiput were dead, and they died suddenly. In others, the evil attacked not the head, but the lung, and forthwith there was inflammation inside which produced very sharp pains in the chest. Sputum suffused with blood was brought up and disgusting and stinking breath from within. The throat and tongue, parched from heat, were black and congested with blood. It made no difference if they drank much or little. Sleeplessness and weakness were established forever. Abscesses formed on the upper and lower arms, in a few also in the maxillae, and in others on other parts of the body. In some they were large and in others small. Black blisters appeared. Some people broke out with black spots all over their bodies; in some they were few and very manifest; in others they were obscure and dense. Everyone died the same death from these symptoms. In some people all the symptoms appeared, on others more or fewer of them, and in no small number [of cases] even one of these was sufficient to provoke death. Those few who were able to escape from among the many who died were no longer possessed by the same evil, but were safe. The disease did not attack twice in order to kill them.

Great abscesses were formed on the legs or the arms, from which, when cut, a large quantity of foul-smelling pus flowed, and the disease was differentiated as that which discharged much annoying matter. Even many who were seized by all the symptoms unexpectedly recovered. There was no help from anywhere; if someone brought to another a remedy useful to himself, this became poison to the other patient. Some, by treating others, became infected with the disease. It caused great destruction, and many homes were deserted by their inhabitants. Domestic animals died together with their masters. Most terrible was the discouragement. Whenever people felt sick, there was no hope left for recovery, but by turning to despair, adding to their prostration and severely aggravating their sickness, they died at once. No words could express the nature of the disease. All that can be pointed out is that it had nothing in common with the everyday evils to which the nature of man is subject but was something else sent by God to restore chastity. Many of the sick turned to better things in their minds, by being chastened, not only those who died, but also those who overcame the disease. They abstained from all vice during that time, and they lived virtuously; many divided their property among the poor, even before they were attacked by the disease. If he ever felt himself seized, no one was so ruthless as not to show repentance of his faults and to appear before the judgment seat of God with the best chance of salvation, not believing that his soul

was incurable or unhealed. Many died in Byzantium then, and the king's son, Andronikos, was attacked and died the third day.



Bartsocas, C. S. (1966). Two fourteenth century descriptions of the Black Death. *Journal of the History of Medicine*, Oct., 394-400. Retrieved from <http://jhmas.oxfordjournals.org>

Report on the Cause of the Plague
University of Paris Medical Faculty
October 1348

Seeing things which cannot be explained, even by the most gifted intellects, initially stirs the human mind to amazement, but after marvelling, the prudent soul next yields to its desire for understanding and, anxious for its own perfection, strives with all its might to discover the causes of the amazing events. For there is within the human mind an innate desire to seize on goodness and truth....

To attain this end we have listened to the opinions of many modern experts on astrology and medicine about the causes of the epidemic which has prevailed since 1345.... We, the masters of the faculty of medicine at Paris..., have decided to compile, with God's help, a brief compendium of the distant and immediate causes of the present universal epidemic...and of wholesome remedies, drawing on the opinions of the most brilliant ancient philosophers and modern experts, astronomers as well as doctors of medicine....

We say that the distant and first cause of this pestilence was and is the configuration of the heavens. In 1345, at one hour after noon on 20 March, there was a major conjunction of three planets in Aquarius. This conjunction, along with other earlier conjunctions and eclipses, by causing a deadly corruption of the air around us, signifies mortality and famine....

Aristotle testifies that this is the case in his book *Concerning the Causes of the Properties of the Elements*, in which he says that mortality of races and the depopulation of kingdoms occur at the conjunction of Saturn and Jupiter, for great events then arise, their nature depending on the trigon in which the conjunction occurs....

Albertus Magnus...says that the conjunction of Mars and Jupiter causes a great pestilence in the air, especially when they come together in a hot, wet sign, as was the case in 1345. For Jupiter, being wet and hot, draws up evil vapors from the earth, and Mars, because it is immoderately hot and dry, then ignites the vapors, and as a result there were lightnings, sparks, noxious vapors, and fires throughout the air.

These effects were intensified because Mars—a malevolent planet, breeding anger and war—was in the sign of Leo from 6 October 1347 until the end of May this year, along with the head of the dragon, and because all these things are hot, they attracted many vapors, which is why the winter was not as cold as it should have been. And Mars was also retrograde and therefore attracted many vapors from the earth and sea which, when mixed with the air, corrupted its substance.

Mars was also looking upon Jupiter with a hostile aspect, that is to say quartile, and that caused an evil disposition or quality in the air, harmful and hateful to our nature. This state of affairs generated strong winds...which gave rise to excess heat and moisture on the earth, although in fact it was the dampness which was most marked in our part of the world. And this is enough about the distant or universal cause for the moment.

Although major pestilential illnesses can be caused by the corruption of water or food, as happens at times of famine and infertility, yet we still regard illnesses proceeding from the corruption of the air as much more dangerous. This is because bad air is more noxious than food or drink in that it can penetrate quickly to the heart and lungs to do its damage. We believe that the present epidemic or plague has arisen from air corrupt in its substance and not changed in its attributes, by which we wish it be understood that air, being pure and clear by nature, can only become putrid or corrupt by being mixed with something else, that is to say, with evil vapors.

What happened was that the many vapors which had been corrupted at the time of the conjunction were drawn up from the earth and water and were then mixed with the air and spread abroad by frequent gusts of wind in the wild southerly gales, and because of these alien vapors which they carried, the winds corrupted the air in its substance, and are still doing so. And this corrupted air, when breathed in, necessarily penetrates to the heart and corrupts the substance of the spirit there and rots the surrounding moisture, and the heat thus caused destroys the life force, and this is the immediate cause of the present epidemic.

And moreover these winds, which have become so common here, have carried among us...bad, rotten, and poisonous vapors from elsewhere: from swamps, lakes, and chasms, for instance, and also (which is even more dangerous) from unburied or unburnt corpses—which might well have been a cause of the epidemic. Another possible cause of corruption, which needs to be borne in mind, is the escape of the rottenness trapped in the center of the earth as a result of earthquakes—something which has indeed recently occurred. But the conjunctions could have been the universal and distant cause of all these harmful things, by which air and water have been corrupted....

We must...emphasize that although, because everyone has to breathe, everyone will be at risk from the corrupted air, not everyone will be made ill by it but only those, who will no doubt be numerous, who have a susceptibility to it, and very few indeed of those who do succumb will escape.

The bodies most likely to take the stamp of this pestilence are those which are hot and moist, for they are the most susceptible to putrefaction. The following are also more at risk: bodies bunged up with evil humors, because the unconsumed waste matter is not being expelled as it should; those following a bad life style, with too much exercise, sex, and bathing; the thin and weak, and persistent worriers; babies, women, and young people; and corpulent people with a ruddy complexion. However, those with dry bodies, purged of waste matter, who adopt a sensible and suitable regimen, will succumb to the pestilence more slowly.