Life and Afterlife of the First Plague Pandemic

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In the summer of 541 AD a deadly infectious disease broke out in the Egyptian port city of Pelusium, located on the eastern edge of the Nile delta. It quickly spread eastward along the coast to Gaza and westward to Alexandria. By the following spring it had found its way to Constantinople, capital of the Roman Empire. Syria, Anatolia, Greece, Italy, Gaul, Iberia, and North Africa: none of the lands bordering the Mediterranean escaped it. Here and there, it followed river valleys or overland routes and thus penetrated far into the interior, reaching, for example, as far east as Persia or as far north, after another sea-crossing, as the British Isles.¹

The disease remained virulent in these lands for slighty more than two centuries, although it never settled anywhere for long. Instead, it came and went, and as is frequently the case with unwelcome visitors, its appearances were unannounced. Overall, there was not a decade in the course of those two centuries when it was not inflicting death somewhere in the Mediterranean region. In those places where it appeared several times, the intervals between recurrences ranged from about six to twenty years. And then, in the middle of the eighth century, it vanished with as little ceremony as when it first arrived.²

Thus did bubonic plague make its first appearance on the world historical scene. Diagnosis of historical illnesses on the basis of descriptions in ancient texts can rarely be made with compelling certainty because all infectious diseases involve fever and the other symptoms tend not to be exclusive to particular diseases. Plague, however, is a major exception

¹ Scarborough and Kazhdan, "Plague."

² Biraben, Les Hommes et la peste, 1:27-32.

because of the unmistakable appearance of buboes on most of its victims, those painful swellings of the lymph nodes that appear in the groin, in the armpit, or on the neck just below the ear. Taken together, the dozens of epidemics of this disease that broke out throughout the Mediterranean basin and its hinterlands between the mid-sixth and mid-eighth centuries constitute the first historically documented pandemic of plague, the first of three.³

THE THREE PANDEMICS

What came before were lethal epidemics to be sure, but of diseases that still lack generally agreed-upon diagnoses. The most notable of these were the 'plague' at Athens in 430 BC described by Thucydides, in which Pericles died, the Antonine Plague in Galen's time that stretched over much of the Roman Empire between 169 and 194, in which Marcus Aurelius died, and that of a century later, between 250 and 270, in which another emperor, Claudius Gothicus, died. Smallpox, typhus, and measles were most likely the diseases involved in those epidemics.⁴ Meanwhile Greek and Roman medical writers, who commented on and anthologized the works of Hippocrates, apparently knew of plague, if only as an endemic disease. In the works compiled by such writers as Aretaeus of Cappadocia (mid-first century AD), Rufus of Ephesus (late first century AD), and Oribasius (late fourth century AD), plague appears not as a disease experienced or observed, but as one heard about from the far side of the Mediterranean.⁵ They made frequent reference to cases in Egypt and Libya, less often in Syria, in which the sick and deceased had malignant buboes. Thus the presence of endemic plague in the ancient Near East centuries before the outbreak at Pelusium appears reasonably well attested. Then, when the disease did appear in full view of literate observers beginning in 541, some of these individuals gave convincingly precise descriptions of plague symptoms. And as this debut took place during the reign of the Emperor Justinian, Byzantinists especially refer to this outbreak as the "Plague of Justinian" or the "Justinianic Plague."⁶

³ Brothwell and Sandison, Diseases in Antiquity, 238-46; Cockburn, "Infectious Diseases."

⁴ Thucydides, *Peloponnesian War* 2.47–54, vol. 1:340–57; Gilliam, "Plague under Marcus Aurelius"; Duncan-Jones, "Impact of the Antonine Plague"; Zosimus, *New History* 1:26, 37, 46, pp. 8, 12, 14. On epidemics in the Roman Empire: Rijkels, *Agnosis en Diagnosis*.

⁵ Conrad, "Plague in the Early Medieval Near East," 73.

⁶ Allen, "Justinianic' Plague." Michael McCormick suggests "Justinianic Pandemic" in the title of his essay in this volume.

The second pandemic, well known to all readers of history as the "Black Death," erupted in Central Asia in the 1330s, reached the Crimea by 1346, and then moved on the following year to Constantinople and thence to ports all around the Mediterranean. It spread more widely and moved further inland than it had eight hundred years before, for example, by reaching Scandinavia and also far into the Arabian peninsula for the first time. For more than a century and a half it continued to recur with notable regularity, but then became sporadic, though still deadly, vanishing from Europe in 1772, but lingering in the Near East until the 1830s.⁷

The third pandemic broke out in China in the second half of the nineteenth century. It reached massive proportions and gained world attention in 1894 when it struck Canton and Hong Kong. While Europe, which so suffered from the Black Death, has barely ever been touched by this third, nameless pandemic, the disease has found its way to much of the rest of the world, excluding the polar regions but including the United States. Where sailing ships of the Age of Exploration, which fell within the time period of the second pandemic, failed to export plague to the New World, the speedier steamship succeeded. Plague crossed the Pacific to Honolulu and from there to San Francisco in 1899, and a gigantic disease pool has since developed among the wild rodent and small ground-mammal populations of the western, especially the southwestern, states. Modern medicine has for the most part successfully isolated the occasional outbreaks of plague, and yet the disease shows no signs of going away.⁸

Besides reaching the Western Hemisphere, the third pandemic gave occasion for the identification of the pathogen. In the years preceding its outbreak, the new science of microbiology had taken hold, most famously in the rival French and German schools of Louis Pasteur in Paris and of Robert Koch in Berlin. When word of the outbreak of plague in 1894 at Hong Kong spread, Shibasaburo Kitasato of Tokyo, a student of Koch, rushed to the scene, as did Alexandre Yersin, a Pasteur student who was then working in French Indochina. An intensely competitive race ensued. Although Kitasato was the first to claim victory, the scientific community eventually awarded that claim to Yersin. The bacillus he isolated and described was duly named *Yersinia pestis*. Between 1894 and 1897 Yersin developed the first anti-plague serum for vaccinations, and

⁷ Horrox, Black Death; Biraben, Les Hommes et la peste; Dols, Black Death in the Middle East.

⁸ Benedict, Bubonic Plague in Nineteenth-Century China; Link, History of Plague in the United States.

by 1898 his colleague Paul-Louis Simond had unraveled the nexus of bacilli, fleas, and rats while doing research in Bombay.⁹ He found the chief vector of *Yersinia* to be a flea, *Xenopsylla cheopis*, whose preferred hosts in turn were rats, either *Rattus rattus*, the common stay-at-home black rat, or *Rattus norvegicus*, the sea-going brown wharf rat. Contrary to the long-held assumption that plague is a contagious disease, it is most commonly by the bite of a rat flea that the highly toxic substance gets injected into a human being and drains into a lymph node. Multiplying rapidly, it there forms the painful swelling known as a bubo. Once fatal to slightly more than half the people who contracted it, plague in recent decades has become routinely curable, if timely diagnosis and medical supplies permit, preferably by streptomycin, gentamycin, cloramphenicol, or tetracycline.¹⁰

Can we be certain that the same disease was at play in all three pandemics? Or, to be more precise, can we be certain that Y. pestis was the causal agent of either or both of the first two, pre-microbiology pandemics? This question rarely came up at all during most of the twentieth century. Medical experts in the years around 1900, starting with Yersin himself in the very paper of 1894 in which he announced his discovery, declared that both the Black Death and the earlier pandemic were caused by the same plague bacillus as the one they could see under their microscopes. To make such historical assertions, they had not scrambled to become historians overnight. Instead, they were merely drawing on their secondary-school learning in ancient and medieval history, which had included some of the major descriptions of those earlier pandemics. Thus the authority they gained from using the new science to identify the pathogen during the third pandemic carried over sufficiently to validate as well their readings of historical texts concerning the first two. Only in recent years have some historians criticized those judgments and their unquestioning perpetuation by other historians throughout the intervening century.¹¹ Yet also very recently, a completely new approach to these issues has been developing. It is the work not of historians but, as in 1894, of microbiologists, the heirs of Yersin and Kitasato, who now, redefined as molecular biologists, are extending their use of DNA analysis from the present and immediate past to the very remote past. Paleopathology is

⁹ Brocke, Robert Koch; Debré, Louis Pasteur; Mollaret and Brossollet, Alexandre Yersin.

¹⁰ Dennis et al., Plague Manual, 11-41.

¹¹ Twigg, Black Death: A Biological Reappraisal; Herlihy, Black Death and the Transformation of the West; and Cohn, Black Death Transformed; for the historical judgments made by both Yersin and Kitasato, ibid., 8.

becoming an increasingly viable tool of research, a point to which we shall return. $^{\scriptscriptstyle 12}$

THE EVIDENCE

Notwithstanding these promising laboratory developments, written sources remain the preeminent tool of historians. The principal sources available for studying the Plague of Justinian are written in four languages: Syriac, Arabic, Greek, and Latin. The lengthiest account in any language, found in the Ecclesiastical History of John of Ephesus, was written in Syriac. By an astonishing set of circumstances, he was completing a mission from Constantinople to Alexandria at the time the plague arrived in Egypt. Upon his return trip overland through Palestine, Syria, and Asia Minor, he found himself keeping abreast of the parallel movement of the disease as he traveled. In Palestine he saw entire town populations wiped out. "During the tumult and intensity of the pestilence," he wrote, "we journeyed from Syria to the capital. Day after day we, too, used to knock at the door of the grave along with everyone else. We used to think that if there would be evening, death would come upon us suddenly in the night. Although the next morning would come, we used to face the grave during the whole day as we looked at the devastated and moaning villages in these regions, and at corpses lying on the ground with no one to gather them." According to John, some people carried corpses all day, while others spent the day digging graves. Houses and farms were abandoned. Animals forgot their domestication. "Crops of wheat in fertile fields located in all the regions through which we passed from Syria up through Thrace, were white and standing but there was no one to reap them and store the wheat. Vineyards, whose picking season came and went, shed their leaves, since winter was severe, but kept their fruits hanging on their vines, and there was no one to pick them or press them." In his Lives of the Eastern Saints, John reported on one monastery that buried eighty-four of its members who had died of the plague. Other Syriac writings contain details of later outbreaks in Iraq, Egypt, Syria, and Palestine, including the Chronicle of Zuqnin, whose monastic author, in recounting the epidemic of 743-745, specified that the victims had swellings in the groin, the armpit, or the neck.¹³

¹² Drancourt et al., "Detection of 400-year-old Yersinia pestis."

¹³ John of Ephesus, *Lives of the Eastern Saints* 17.1, p. 261; CZ, pp. 95, 174. Most of John's *Ecclesiastical History* is incorporated in the CZ.

The situation with Arabic sources is altogether different. To begin with, written Arabic was still very rare in the sixth century. Moreover, the Arabian Peninsula itself seems to have escaped this plague pandemic. But already in the sixth year of the Islamic era, corresponding to 627– 628 AD, Arabic sources do contain a number of references to an outbreak of plague that devastated Sasanian Iraq; they call it the Plague of Sharawaygh for the Sasanian ruler it killed along with many inhabitants of Ctesiphon, the capital city. Then, after the death of Mohammed in 632 and the consolidation of power within Arabia under the first caliph, the Arabs went on the offensive in Syria, Palestine, and Iraq. With the conquest of Syria virtually complete by 638, the Arabs were beset for the first time with a major epidemic, this one named the Plague of Anwas (for a village where they first encountered it).

These earliest Arabic testimonies concerning plague have not come to us directly from the seventh century. Later scholars, especially some located in Basra, refashioned them and incorporated them into larger, more systematic works, including plague chronologies and consolation treatises. The first of these included al-Asmai (died 862), a lexicographer who compiled a list of plague epidemics with their dates and their assigned names. Another was the historian al-Madaini (died 840), who worked independently of al-Asmai, although probably with common sources, and who provided considerable detail on the effects of the epidemics that struck Basra. And to mention just one more Basran scholar, al-Mubarrad (died in 899 or 900) wrote one of the earliest books of consolation, a type of work that told of the terrible encounters of Muslims with past epidemics, whether victims or survivors, to bolster the courage of present-day and future believers in confronting this dreadful scourge. But in the case of this writer and his book, we encounter another level of the complexity in untangling the Arabic sources dealing with the first plague pandemic, for this work is mainly known from those portions of it incorporated into the plague treatises that began to appear in the 1360s in the wake of the Black Death. Thus the earliest extant writings on the plague in Arabic, whether lists of epidemics or treatises, date from the ninth and later centuries, while of course referring back to works - now lost - of the seventh and eighth centuries.¹⁴

The principal Greek source is the work of the historian Procopius of Caesarea, who was present at the court of Justinian in Constantinople in the early 540s. In his *Persian War*, Procopius says with reference to this time, "there was a pestilence by which the whole human race came

¹⁴ Conrad, "Arabic Plague Chronologies and Treatises," 52-70.

near to being annihilated....It started among the Egyptians. Then it moved to Palestine and from there spread over the whole world....In the second year it reached Byzantium in the middle of the spring." He says that for the majority of those stricken the onset of fever was the first sign, and then there developed after a few days a bubonic swelling, either in the groin, in the armpit, or beside the ears. He reports that the mortality rose alarmingly, eventually reaching more than ten thousand each day. Procopius also mentions that the emperor himself was taken ill, but only in his *Secret History* did he go on to reveal that there were rumors at court that Justinian had died and that speculation about the succession flourished. Justinian, however, recovered and reigned for two more decades.¹⁵

The lawyer Agathias undertook to continue the history of Procopius. He says that after 544 when plague ceased in Constantinople, it had never really stopped but simply moved on from place to place, until it returned to the city almost as though it had been cheated on the first occasion into a needlessly hasty departure. This was the spring of 558, when "a second outbreak of plague swept the capital, destroying a vast number of people." The form the epidemic took was not unlike that of the earlier outbreak. A swelling in the glands in the groin was accompanied by a high fever that raged night and day with unabated intensity and never left its victim until the moment of death.¹⁶

Another testimony in Greek came from the Antiochene lawyer Evagrius "Scholasticus." Plague broke out in 594 while he was at work on his *Ecclesiastical History*, and in a passage of that book he notes that this was the fourth episode of the plague in his experience, going back to 542 when the disease first arrived in Antioch and he himself, then six years old, suffered from its fevers and swellings. In each of the later outbreaks he lost servants and family members, including most recently a daughter and a grandson.¹⁷ We need emphasize that all three of these leading Greek sources, Procopius, Agathias, and Evagrius, were knowledgeable about earlier epidemics, yet clearly stressed the dreadful newness of the epidemics that started in 542.¹⁸

Of the Latin writers on this pandemic, Gregory of Tours (539– 594) had the most to say. A native of Clermont and descendant of a Gallo-Roman family proud of its senatorial rank, he served as bishop of

¹⁵ Procopius, PW 2.22-23, pp. 451-73; SH 4.1, 18.44, pp. 42-43, 226-27.

¹⁶ Agathias, *The Histories* 5.3, 10, pp. 37–41, 145–46.

¹⁷ Evagrius, "Evagre, *Histoire ecclésiastique*" 4.29, pp. 389–92; Allen, *Evagrius Scholasticus*, 190–94.

¹⁸ Patlagean, Pauvreté économique, 87.

Tours from 573 to 594. In his *History of the Franks* and also in his *Lives of the Fathers*, he gives testimony to the first appearance of the plague in Gaul, which took place in the Rhone Valley in 543. The context was his telling of the saintly life of his uncle, Bishop Gallus of Clermont, in whose time, he says, "that illness called inguinal raged in many regions and most notably it depopulated the province of Arles." Gallus prayed that his diocese be spared and the Angel of the Lord came to him in a vision to assure him that his prayers would protect his people. Thus assured, Gallus led his people in various forms of devotion and indeed not a single one of them at Clermont died of the plague.¹⁹

Things went differently at Clermont in 571 under Bishop Cautinus, who scurried from one place to another to avoid the plague. "So many people were killed off in the whole region and the dead bodies were so numerous that it was not even possible to count them. There was such a shortage of coffins and tombstones that ten or more bodies were buried in the same grave. In St. Peter's church alone on a single Sunday three hundred dead bodies were counted." Gregory describes the sore "like a snake's bite" that appeared in a victim's groin or armpit, leading to death a few days later. He finishes off the paragraph by saying that Bishop Cautinus came back to Clermont, got the infection, and died on Good Friday, "on the same day and at the same hour as his cousin Tetradus. Lyons, Bourges, Chalon-sur-Saône, and Dijon were decimated by this plague."²⁰

Gregory's references to plague in northern Gaul extend to Reims, which was protected miraculously by a relic of St. Rémi, and Trier, which was protected by the saintliness of Bishop Nicetius, but no further, while in the South these extend to Narbonne and Albi. His reference to the bishop of Nantes contracting plague suggests that the disease reached westward to the mouth of the Loire where it flows into the Atlantic. This in turn suggests that the probable route for the plague between Gaul and both Cornwall and Ireland was through Nantes, the port used in some instances by Irish monks in their travels to and from the Continent in the years around 600.²¹

¹⁹ Gregory of Tours, Historia Francorum 4.5, pp. 144–45 and History of the Franks, 199–200; idem, Liber vitae patrum 6.6, pp. 684–85 and Life of the Fathers, 39–40.

²⁰ Gregory of Tours, Historia Francorum 4.31, pp. 166–68 and History of the Franks, 224–27.

²¹ Gregory of Tours, Liber in Gloria confessorum 78, pp. 795–96 and Glory of the Confessors, 82–83; idem, Liber vitae patrum 17.4, p. 731 and Life of the Fathers, 110–11; idem, Historia Francorum 6.33, 6.15, pp. 274, 258–59 and History of the Franks, 364, 346–47. For the connection between Gaul and Ireland, see Wooding, Communication and Commerce, 64– 68, 93–104. My thanks to Prof. Lisa Bitel for this reference.

The port of entry for the disease into Gaul in the first place, we can assume, was Marseilles, since the earliest report we have of it in Gaul was in the Rhone Valley. While Gregory did not mention Marseilles in his passage on the outbreak of 543, he has an astonishing tale to tell of the one there in 588, astonishing for the bits of etiological insights it contains. "A ship from Spain put into port with the usual kind of cargo, unfortunately also with it the source of this infection. Quite a few of the townsfolk purchased objects from the cargo and in less than no time a house in which eight people lived was completely deserted, all the inhabitants having caught the disease. The infection did not spread through the residential quarter immediately. Some time passed and then, like a wheat field set on fire, the entire town was suddenly ablaze with the pestilence...At the end of two months the plague burned itself out. The population returned to Marseilles, thinking to be safe. Then the disease started again and all who had come back died. On several occasions later on Marseilles suffered from an epidemic of this sort."22

The final epidemic written up by Gregory was that of the year 590 in Rome, as reported to him by a cleric named Agiulf whom he had sent to Rome to get saints' relics for the church of Tours. In the closing months of 589, continuous rains caused the Tiber to flood much of the city, destroying many churches and, notably, the papal granaries. Agiulf told of countless serpents that came down the river, especially a giant dragon, and of how they all drowned. "As a result there followed an epidemic, which caused swellings in the groin. This started in January." One of the first victims was Pope Pelagius II, and many others followed. The people of Rome turned to a deacon from one of the great senatorial families, who took the name of Gregory, the first pope to do so, and thus was born one of the most influential reigns in papal history, that of Gregory I, saint, Father of the Church, and surnamed "the Great" (590-604). Agiulf's report contains what purports to be the text of a sermon given by the new pope about the plague, which he saw, not surprisingly, as divine punishment. Pope Gregory stressed the need for all to reflect upon and repent of their own sins because the deaths they were seeing about them every day were so sudden that they left no time for victims to put their lives in order. The Romans were being carried off not one by one but in droves. "Homes are left empty, parents are forced to attend the funerals of their children, their heirs march before them to the grave." The sermon concludes with a plan for acts of penance and litanies and processions of supplication.

²² Gregory of Tours, Historia Francorum 9.22, p. 380 and History of the Franks, 510-11.

The passage itself concludes with an account of how these devotions were carried out, the account made dramatic by Agiulf's testimony that on one day as he saw the solemn procession passing through the streets, eighty people fell dead on the ground.²³

The major indigenous Latin source on the plague for Italy is Paul the Deacon, a Lombard scholar who lived and wrote two full centuries later than Gregory of Tours. His History of the Lombards includes mention of four separate outbreaks. The first of these occurred in Liguria in 565, when there began to appear "in the groins of men and in other delicate places a swelling of the glands accompanied by intense fever." The victim either died on the third day or, once having survived beyond that day, had some hope of recovering. Paul does not tell us anything more specific about this particular outbreak, but he follows with a dramatic description of its effects upon individuals, families, and whole communities. "The dwellings were left deserted by their inhabitants, and the dogs only kept house. The flocks remained alone in the pastures with no shepherd at hand. You might see villas or fortified places lately filled with crowds of men, and on the next day, all had departed and everything was in utter silence. Sons fled, leaving the corpses of their parents unburied; parents forgetful of their duty abandoned their children in raging fever. If by chance long-standing affection constrained anyone to bury his near relative, he remained himself unburied, and while he was performing the funeral rites he perished; while he offered obsequies to the dead, his own corpse remained without obsequies." The common perception that plague has little impact on the countryside is contradicted by his comments: "You might see the world brought back to its ancient silence: no voice in the field; no whistling of shepherds; no lying in wait of wild beasts among the cattle; no harm to domestic fowls. The crops, outliving the time of the harvest, awaited the reaper untouched; the vineyard with its fallen leaves and its shining grapes remained undisturbed while winter came on; ... pastoral places had been turned into sepulchers for men, and human habitations had become places of refuge for wild beasts."24

Paul gives a report many times shorter than that by Gregory of Tours of the outbreak in Rome in 590. He begins it as Gregory did with the flooding of the Tiber, the huge dragon heading downstream, and the connection between this flooding and the inguinal pestilence that followed right away, "wasting the people with such destruction that out of a

²³ Gregory of Tours, Historia Francorum 10.1, pp. 406-9 and History of the Franks, 543-47.

²⁴ Paul the Deacon, *Historia Longobardorum* 2.4, p. 74 and *History of the Lombards*, 56–58.

countless multitude, barely a few remained." There followed the death of Pope Pelagius and the advent of Gregory the Great. Of the third outbreak of inguinal plague, he merely says that it took place in 593 in Ravenna, Grado, and Istria.²⁵

The fourth and final outbreak reported by Paul was that of 680, a very severe pestilence that raged through July, August, and September. In Rome, so many people were dying that bodies were placed two by two on biers for transport to the tombs outside the city. To this point, his account follows almost identically the entry under Pope Agatone (678–681) in the *Liber pontificalis*. But then Paul added information about Pavia, the Lombard capital, where the combination of people either dying or fleeing left the city so empty that grass and bushes grew in the streets and marketplaces.²⁶

The sixth century had begun with high promise for Italy. Following upon a century that had brought population decline, de-urbanization, widespread destruction, and gravely weakened institutions, the Gothic king of Italy Theodoric set out on a course of revival. The long career of his secretary Cassiodorus reflects the changing fortunes of the peninsula. The letters that this wealthy, well-educated Roman aristocrat prepared for the king tell us, in refined classical Latin, of plans to restore order, reform institutions, and repair such damaged parts of the infrastructure as aqueducts, roads, and bridges. He wrote a history of the Goths that justifies to Roman readers the passing of dominance to a people whom the Romans had thought of and treated as barbarians. But all this came to naught in the reigns of Theodoric's successors when in 533 the Emperor Justinian, who never for a moment accepted that the original heartland of the Roman Empire remain forever in Germanic hands, sent an army westward to reconquer North Africa from the Vandals and then Italy from the Goths. In this latter war, recounted to us by Procopius and thus known from the Byzantine point of view as the "Gothic War," Italy suffered far greater damage than at any earlier time in imperial history. The war dragged on for nearly two decades and some parts of Italian territory passed back and forth from one side to the other several times. Cassiodorus withdrew from public life to set up a monastery on his estate overlooking the Ionian Sea. He gave his monks the charge of copying

²⁵ Paul the Deacon, *Historia Longobardorum* 3.24, 4.4, pp. 104–5, 117 and *History of the Lombards*, 127–28, 152–53.

²⁶ Paul the Deacon, *Historia Longobardorum* 6.5, p. 166 and *History of the Lombards*, 254–55. *Liber pontificalis*, 193–94.

down the great writings of Christian and pagan antiquity alike, lest these be lost. A Gothic writer named Jordanes rewrote Cassiodorus' *History of the Goths* so as to justify to a Gothic audience the Roman, that is, Byzantine, reconquest. And it was in the 530s and 540s that Benedict of Nursia, after fleeing from the disorders of Rome, founded his monasteries at Subiaco and at Montecassino.

These are just some of the indications that fundamental change was underway throughout Italy when, in 543, the first epidemic of plague struck. The next one that we know about, from Paul the Deacon, hit in 565, and it was in 568 that the Lombards began their migration into the Italian peninsula. Two centuries later, in the final years of the Lombard kingdom, it was in Italy that the pandemic struck for the last time, in Naples and Sicily in 749–750.²⁷

For North Africa, we have the testimony of the Latin poet Corippus. In 549 he recited at Carthage his epic poem, the *Johannis*, on the recently concluded war between the Byzantine army (under a general named John Troglita) and Berber tribes. In the midst of the war a terrible pestilence arrived by sea. Death was so widespread that people became desensitized to it, no longer shedding tears even for their loved ones or observing those rites traditionally due the deceased. Social breakdown was further evident in the scramble among survivors to take possession of the properties and belongings of the victims. Wealthy widows were more sought after than young maidens. References to a later plague epidemic in North Africa, in 599 and 600, are found in the correspondence of Pope Gregory the Great.²⁸

The writings under discussion here have in common that for the most part they are artfully contrived historical narratives, in which the choices and style and point of view of the author are present in every paragraph. They differ markedly from archival material, which is supposed to contain data entered on a regular basis over a long period of time. Such archival material abounds from the time of the second pandemic, not to mention the third, and yet is nearly completely absent from that of the first, rendering these narratives all the more precious.

To fold into the historical narratives of the first plague pandemic, we need to search out evidence of the material remains produced by

²⁷ For the dates of this final round, see the essay in this volume of Michael McCormick.

²⁸ Corippus, *Iohannidos* 3.343–89, pp. 60–62. Gregory the Great, *Letters* 9.32, 10.20, pp. 706, 729.

archaeological investigation. These include such constructions as domestic and public buildings, markets and transport infrastructures, and systems of water supply and waste disposal. For the archaeology of pandemics, however, one is often confronted with little more than negative evidence – not the best sort for establishing proof – evidence such as the abandonment of structures and indeed of entire communities, or a marked break in a long-range pattern of building and expansion.²⁹ Still, such investigations often yield our best evidence of depopulation. Thus while the sources, of whatever sort, are not nearly so numerous for the first pandemic as they are for the second, evidence there is nonetheless, even if not easy to come by or to interpret.

MODERN SCHOLARSHIP

What, then, of modern scholarship? Its beginning is found in two bibliographical studies, one on the Greek and Latin sources by Valentin Seibel, a German, in 1857, and the other on Arabic sources by Alfred von Kremer, an Austrian, in 1880.³⁰ Unfortunately, this promising start did not lead to productive results. There has never been a book on the subject and only a very few articles.³¹ Although some historical subjects can boast of traditions of scholarship that have been both innovative and stimulating, this one instead has been not just sparse but notably unimaginative.

Not only is there no comprehensive study of the entire first pandemic, there are no comprehensive studies of this plague in the major geopolitical and cultural–linguistic subdivisions of the Mediterranean world, such as the Latin West or the Near East.³² Given such a record, it is not astonishing that this first plague pandemic, which lasted for more than two hundred years, has not entered the historical canon. Yet, these same two hundred years witnessed among other significant things the Lombard takeover in Italy, the breaching of the Balkan frontier by the Slavs, the transformation of the eastern Roman Empire into the Byzantine Empire, the Christian missions from Rome to England and thence to Germany as

²⁹ Hodges and Whitehouse, *Mohammed, Charlemagne and the Origins of Europe*, 52–53. See also the essay in this volume by Hugh Kennedy.

³⁰ Seibel, *Die grosse Pest*; von Kremer, "Über die grossen Seuchen."

³¹ Several of the articles are discussed in Stathakopoulos, "Justinianic Plague Revisited."

³² Several of the essays in this volume are intended to remedy this problem. See as well the dissertation of Conrad, "Plague in the Early Medieval Near East" and Stathakopoulos, *Famine and Pestilence.*

well as those from Ireland to Scotland and Frankish Gaul, and, perhaps most significantly, the beginnings of Islam and the Arab conquests.³³

What is utterly astonishing is the lack of attention shown to the first pandemic by the numerous experts on the second one. The Black Death, as solid a part of the historical canon, or master narrative, as the Norman Conquest or the Protestant Reformation, has long continued to attract historical investigators, and yet those most interested in it have shown little curiosity about whether it had any precedent. For them, its history begins in the fourteenth century. The exception is a medical historian, Jean-Noel Biraben, who teamed up with the medieval cultural historian Jacques Le Goff to produce an article on the Justinianic Plague in 1969. This article in turn became the first chapter of Biraben's substantial history of the Black Death, but Biraben made no attempt to link the two pandemics, as if no memory of the first still lingered at the time of the second. Textbooks, too, which presumably define or at least enshrine what is canonical, routinely devote space to the Black Death, often indeed including a map, but leave out mention of the earlier pandemic.³⁴

In a remarkable study of how six major epidemics affected different parts of the modern world, Sheldon Watts begins with the human response to plague in western Europe and the Middle East between 1347 and 1844. At one point he interrupts his narrative to refer to the account of the epidemic at Athens by Thucydides and then resumes his narrative by saying, "When plague re-emerged in 1347 (an earlier, all but forgotten, pandemic had raged from 541 to 755 CE),...." In a book that is both learned in its details and rich in thoughtful interpretations, Watts is not unusual in giving nothing more than this passing nod to the Justinianic Plague. Scholars have for the most part left the first plague

³³ The point was made many years ago by Peter Brown when he suggested "that the hushed generations following the great visitation of the plague after 543, which saw the saddened old age of Justinian, the maturity of Pope Gregory I, and the youth of Mohammed, might repay more close consideration as a possible turning point in the history of the Mediterranean." Brown, *Society and the Holy*, 67.

³⁴ Biraben and Le Goff, "La Peste dans le Haut Moyen Age," and Biraben, *Les Hommes et la peste*, 1:25–48. The lack of attention to the earlier pandemic in a textbook, while common, is particularly puzzling in the case of one very distinguished historian of the Black Death who was also a very influential textbook author. In the course of his general account, he rightfully asserted the prerogative of such authors to give special weight to his particular interest; thus the Black Death, as he told it, had major social, economic, and political consequences. But he devoted just one sentence to the outbreak of plague during the reign of Emperor Justinian. See Chambers, *Western Experience*, 259, 421–26, 465–66.

pandemic unacknowledged, or where they have mentioned it, they have treated it as forgotten or, as in this case, worthy at most of a parenthetical interjection.³⁵

We need to ask why this scholarship has been so unsatisfactory. Part of the answer has to do with academic and cultural divides, and part with adherence to the canons of positivist rules of evidence. The area over which the pandemic spread was phenomenally rich in cultural and linguistic diversity, a condition that remains undiminished in our time. Thus, few scholars in the world have the necessary skills for reading sources from all the areas covered. Moreover, the academic divisions among disciplines, areas, and chronological eras maintain both their unity and their identity largely by rewarding only achievement within their conventionally fixed boundaries.

In 1989 the French Byzantinist Jean Durliat issued a challenge to fellow scholars to study the plague. Best known as a protagonist of the school that stresses continuity instead of decline and fall from Roman imperial to Carolingian times, Durliat seemed to have made up his mind from the start. He surveyed separately each discipline and subdiscipline to see what evidence it had supplied concerning the plague pandemic: art history, archaeology, epigraphy, numismatics, paleography, and so on. Both individually and even all together, he concluded, these had supplied very little. Narrative sources, on the other hand, Durliat granted were relatively abundant, but he hastened to minimize the significance of these for their derivative quality (for example, by asking whether Procopius did not borrow heavily from Thucydides) and for their rhetorical exaggerations (for example, by asking whether there really were ten thousand deaths per day at Constantinople). His answer was to send his colleagues, the art historians, the archaeologists, the epigraphers, and so on, back to their respective sources to try to squeeze more evidence from them. There is nothing inherently wrong with asking specialists to try to glean more from their sources, but it is clearly not enough.³⁶

What is called for is scientific cooperation. This subject requires the expertise of specialists with different disciplinary approaches, minimally those of history, archaeology, and molecular biology. In addition, it requires the expertise of specialists on all of the geographical areas where

³⁵ Watts, Epidemics and History, 4.

³⁶ Durliat, "La peste du VIe siècle," 1:107–19. See also the response by Biraben, ibid., 121–25.

the pandemic is known to have penetrated. Not only is there a need for comparative studies of different plague outbreaks within the vast geographical and chronological parameters of this pandemic, but also a need for comparative studies of different pandemics.³⁷

THE FIRST TWO PANDEMICS COMPARED

The second plague pandemic, which is so much more thoroughly documented than its Justinianic predecessor, can perhaps for that very reason shed light on our subject. Historical comparisons should not be expected to establish rules for what ought to have or must have happened; instead they serve the more modest role of raising questions that can in turn become hypotheses. We have extensive material on the pattern of the disease's returns or recurrences in the fourteenth and fifteenth centuries. If one could overlay this pattern upon the much more sketchy information on recurrences in the earlier pandemic, useful hypotheses about some of the latter's "missing" information could perhaps follow.

The unresolved issue of the nature of the immunity conferred upon plague survivors, for example how strong and how long lasting it is, if it exists at all, is insistently raised by some of the descriptions of fourteenthcentury recurrences. To cite just the first four English instances: "In 1361 a general mortality oppressed the people. It was called the second pestilence and both rich and poor died, but especially young people and children." "In 1369 there was a third pestilence in England and in several other countries. It was great beyond measure, lasted a long time, and was particularly fatal to children." "The fourth pestilence arrived in York and was particularly fatal to children." And finally, "In 1300 a great plague ravaged the country. It especially attacked adolescents and boys." Had the plague become a children's disease, meaning that it found victims mostly among those born since its previous visitation? It is enough to make us consider carefully Agathias' observation that in the epidemic of 558 "people of all ages were struck down indiscriminately, but the heaviest toll was among the young and vigorous," or the meaning of the name given an outbreak at Basra in 706 as the "Plague of the Maidens." The value of

³⁷ There is a developing body of work by paleoecologists interested in establishing connections among major natural phenomena such as volcanos, asteroids, climate change, and pandemics. While very promising, such work to date has failed to establish convincing instances of causal connections having to do with the Justinianic Pandemic. For references and summaries, see Keys, *Catastrophe*, and Antoniou and Anastasios, "Sixth-Century Plague."

such comparisons can only increase to the extent that the biomedical community can offer more convincing evidence that the pathogens in the different pandemics were the same.³⁸

A major step in this direction, alluded to briefly above, was taken in 1998 with the publication of a study claiming that human remains of the early modern period yielded evidence of Y. pestis. A team of molecular biologists at Marseilles led by Michel Drancourt, Olivier Dutour, and Didier Raoult, working together with archaeologists and historians, obtained human remains that could be reasonably supposed to come from epidemics that struck the Marseilles region in 1590 and 1720, since burials from quarantine hospitals are well documented in those years. They "hypothesized that the dental pulp of unerupted teeth would be a lasting refuge of Y. pestis and would be a suitable material on which to base molecular detection of the bacterium for reasons including durability, good taphonomic [fossilizing] conservation, and encapsulation." The skulls were x-rayed and then the teeth were extracted and fractured longitudinally. "Powdery remnants [of blood] were scraped from the dental pulp cavities into sterile tubes for further DNA extraction" and the final result of this investigation was a positive identification of Y. pestis. The same group published in 2000 similar results from research they conducted on remains from the middle of the fourteenth century, thus pushing their discovery right back to the very beginning of the Black Death.39

While it is ironic that Yersin and Kitasato, who were the first to exploit a new scientific understanding to expose the causative agent of plague in their time, based their diagnoses of past epidemics purely upon their reading of historical texts, it is now for the first time becoming possible for some of our contemporaries to make diagnoses of past epidemics as scientifically precise as those that Yersin and the others made of the epidemic they observed in 1894. To be sure, the Marseilles scholars have had both detractors and competitors.⁴⁰ Among these, some have published negative results, but in 2005 scholars at Munich following the methods used by the Marseilles group reported the presence of *Y. pestis* DNA in skeletal remains from Aschheim in Upper Bavaria, remains we need note

³⁸ Horrox, *Black Death*, pp. 85, 88, 91; Agathias, *The Histories* 5.10, p. 145; Conrad, "Arabic Plague Chronicles and Treatises," 55.

³⁹ Drancourt et al., "Detection of 400-Year-Old Yersinia pestis DNA"; Raoult et al., "Molecular Identification."

⁴⁰ Cooper and Polnar, "Ancient DNA"; Cohn, *Black Death Transformed*, 248; Gilbert et al., "Absence of *Yersinia pestis*-Specific DNA."

found at a site whose date archaeologists place in the second half of the sixth century. Thus, rapid progress on the biomedical front is lending crucial support to the work of historians and archaeologists. Moreover, the Munich group accomplished something quite other than confirm what historians knew or suspected all along. Because there are no known extant texts indicating that the Justinianic Plague reached Bavaria, this collaboration of archaeologists and molecular biologists produced the first such indication. And because plague is attested more than once in late sixth-century northern Italy, including Verona in particular, it is not unreasonable to imagine the disease reaching southern Bavaria from Verona via the Brenner Pass.⁴¹

Such collaboration may eventually prove valuable for the history of plague in East Asia. There surely were epidemics in that vast area of the world, including some that fall within the dates of the first plague pandemic, such as the series of epidemics reported in the first half of the seventh century in China, or the epidemic that ravaged Japan between 735 and 737, but the lack of specificity about symptoms in the written sources there make scholars wary of being able to identify the particular diseases involved.42 This question is relevant to the history of the first plague pandemic. To date, the original outbreak of the second pandemic is believed to have taken place in the Central Asian steppes, and it was the unification of much of the Eurasian landmass by the Mongols that facilitated not just the eastward travels of Marco Polo to China but also the westward progress of plague to the Black Sea and from there to the Mediterranean. But no such certainty pertains to the route taken by plague prior to its arrival at Pelusium in 541.43 The problem with waiting for DNA analysis of human remains is that in most places researchers would be at the mercy of luck. While the scholars at Marseilles knew a great deal about the history of plague in their region and thus had every reason to think they could locate remains of plague victims, the archaeologists at Munich had good reason for choosing the site of their dig, but finding plague victims was not their main purpose. They found human

⁴¹ Gutsmiedl, "Die justinianische Pest nördlich der Alpen?"; Wiechmann and Grupe, "Detection of *Yersinia pestis* DNA"; Reimann et al., "Vereint in den Tod." Paul the Deacon, *Historia Longobardorum* 3.23, p. 104 and *History of the Lombards*, 126–27.

⁴² Twitchett, "Population and Pestilence in T'ang China," 42–47; Farris, *Population, Disease, and Land*, 53–73. I am very grateful for helpful advice from two experts on the history of disease and medicine in China, Prof. Nathan Siven of the University of Pennsylvania and Prof. Carol Benedict of Georgetown University.

⁴³ But see the argument on this point in the essay in this volume by Peter Sarris.

remains and submitted some of them (many more await study) to the latest developments in paleopathology. Thus, in China and elsewhere where there is no expectation of finding remains with traces of *Y. pestis* from the first pandemic, archaeologists will have to wait for those occasions when they encounter human remains from the appropriate era, especially if these are found in mass graves that are suggestive of epidemics, to call upon their colleagues in the paleopathology lab.

EFFECTS

Less directly dependent upon the identity of the disease but in no way less important is the study of its effects: economic, social, military, political, and religious. Massive mortality in traditional societies, even if it reaches all social levels, usually leads to an increase in the value of labor. The standard response of survivors from among the controlling classes is to complain about the difficulties of finding servants and laborers, and then to complain about what they see as the exorbitant demands for higher wages by those survivors whom they do find to work for them. Once again, the evidence from the time of the Black Death is abundant and thus helpful in understanding the significance of the bits and pieces of evidence remaining from seven and eight centuries earlier. In what is probably the most widely read description of the Black Death, namely the preface to the Decameron, Boccaccio reports sadly that, "the countless numbers of people who fell ill, both male and female, were entirely dependent either upon the charity of friends (who were few and far between) or the greed of servants, who remained in short supply despite the attraction of high wages out of all proportion to the services they performed."44 But listen also to the archbishop of Canterbury, Simon Sudbury, sounding off in 1378 about the survivors within the severely depleted ranks of his clergy, describing them as "so infected with the sin of greed that, not satisfied with reasonable wages, they hire themselves out for vastly inflated salaries."45 It is in the light of such complaints that we can see the significance of the lament of John of Ephesus concerning the "scandalous profits" being taken by those who carried away the dead and the greatly increased cost of getting laundry done in Constantinople in 544. Indeed, court dress there became much simplified at that time as a result.⁴⁶

⁴⁴ Horrox, Black Death, 30.

⁴⁵ Ibid., 311.

⁴⁶ Patlagean, *Pauvreté économique*, 172.

Governments typically reacted by attempting to roll back the changes wrought by market forces. The Ordinance of Laborers, promulgated in England in 1349, captures the problem in a single sentence: "Since a great part of the population, and especially workers and servants, has now died in this pestilence, many people, observing the needs of masters and the shortage of employees, are refusing to work unless they are paid an excessive salary." A related but separate problem was that some workers preferred "to beg in idleness rather than to work for their living." As for what the ordinance has to say about wages, landlords were admonished not to pay workers any more than the rates that prevailed back in 1346, that is, before the plague's arrival. As for the lack of workers, all ablebodied workers who were offered employment had to accept, while lords were admonished to retain the service of only as many of their tenants as they really needed.⁴⁷ To this ordinance we can compare an edict issued by Justinian in 544 in which he announced the end of the pestilence and ordered that current prices and wages be set back to their pre-plague levels.48

The relationship between the wealthy and those who served them was based upon far more than mere wages, above all familiarity. This familiarity had great advantages for both sides of the relationship, but it also allowed for the possibility of intimidation. Thus, an accompaniment of the increased value of work is the new mobility of workers. Apparently it was better for workers to wander and ask for higher wages from strangers with whom they had no ties or memories or obligations. Furthermore, at the time of the Black Death, many peasants still had servile obligations (roughly half of all European peasants in 1348 were still serfs), so mobility was necessarily tied to their quest for better remuneration. The English Statute of Laborers of 1351 goes beyond the earlier ordinance by spelling out in great detail the maximum allowable wages for a ploughman, a shepherd, a dairymaid, a swineherd, and so on, and then turns to the issue of mobility by ordering sheriffs to arrest laborers, craftsmen, and servants who have fled from one county to another and to restore them to their home territories.⁴⁹ In like fashion, slavery persisted in many areas well into Late Antiquity. Slaves obviously did not have the option of asking their owners for higher compensation, so they had to escape in

⁴⁷ Horrox, Black Death, 287.

⁴⁸ Novella 122 in *CIC*, 3.592–93.

⁴⁹ Horrox, Black Death, 316; see the works of Hatcher on this and related points: Plague, Population and the English Economy and "Aftermath of the Black Death."

order to make their way as wage earners. The law codes of the Germanic kingdoms that succeeded the western provinces of the Roman Empire provided punishments for runaway slaves and all those who assisted them. In the latter half of the sixth century and through the seventh, there took place in both Visigothic Spain and Lombard Italy an escalation of repressive measures (a nearly certain sign of a failed policy) having to do with runaways. According to one leading Iberian historian, the population of the Visigothic kingdom had by 700 come to constitute one vast social police force for hunting down slaves; punishments were now provided for any who failed to cooperate with this operation. Thus, to material remuneration we must add the legal and social status of workers to appreciate the economic and social impact of a plague pandemic, whether that of the fourteenth and fifteenth centuries, in which serfdom virtually disappeared from western Europe, or that of the sixth and seventh centuries, which saw the end of ancient slavery, at least in Italy and Spain.⁵⁰

The very concept of work also underwent a significant change at this time, even though attitudes do not change in the same way or, especially, at the same speed that law codes or battles or political fortunes do. In Roman culture there was a fundamental opposition between leisure (otium) and work (negotium). The first referred not to laziness or aimlessness but to an honorable and agreeable search for wisdom through intellectual or artistic pursuits; the second meant literally the negation of leisure (neatly captured in the English word busi-ness). Work could also be expressed by the word labor, which was considered to be painful and sad. One way of expressing the change that came about in the Latin West in the sixth century was the simultaneous rise of work to respectability and the descent of leisure to its connotation of aimless passing of time. The key text is the Rule for Monks composed by Benedict of Nursia in the middle years of the sixth century, wherein spiritual reading is work, not leisure, and the younger monks need supervision so that they will not fall into laziness but will read. Much of what Benedict set down is a distillation of a much longer rule, the so-called *Rule of the Master*, dating from a few decades earlier, but what he had to say about work flatly contradicted this forerunner, and can therefore be considered new. In his chapter on manual labor, Benedict used the word *labor* instead of *negotium* and he gave it a positive value. Benedict's influence might never have reached beyond his community at Montecassino, but Pope Gregory the Great rescued his reputation and his rule from obscurity by writing a life of Benedict; by the early ninth

⁵⁰ Blum, "Rise of Serfdom," 810-12; Bonnassie, From Slavery to Feudalism, 48-49, 94-96.

century, Benedict's rule became the exclusive rule for monks in the Latin church.⁵¹

The mortality resulting from the plague had military and political effects that are difficult to measure but no less important because of that. Study of the countryside, for example, including some of the empire's most productive regions, has shown that plague was quite as active there as in the cities. And as peasants formed the backbone of the Byzantine army, it comes as no surprise to learn that the army faced severe manpower shortages in the later sixth and seventh centuries. The ever-greater induction of barbarians into the army indicates a policy of resorting to searches beyond the usual sources for fresh recruits. Moreover, this was an army that had to be paid, and as fewer workers on the soil had to produce larger shares of tax revenue, the imperial government was perennially on the verge of fiscal collapse and unpaid soldiers had frequent resort to mutiny. One major question concerning military matters is how to evaluate the role of plague mortality among the various factors that contributed to the weakness of the Byzantine army in the face of the Arab advances.⁵²

The decimation of rural populations did not go unnoticed by the living. The Byzantine imperial government resettled peasants in Thrace to regain some of the resources and revenues lost there from depopulation; it had also to transfer people to Constantinople. The extensive demographic losses in the Balkans, caused by barbarian raids as well as plague, left much of the region open to settlement by Slavs.⁵³ In the view of Paul the Deacon, the relative emptiness of Italy from the combined effects of the Byzantine reconquest and the plague made the advent of the Lombards into the peninsula, which started in 568, practically unopposed.⁵⁴ A large migration of Arabs into Syria was similarly facilitated by the high plague mortality in that land.⁵⁵ In all these matters, most of the evidence is circumstantial and thus wide open to interpretation, which in some cases was spun into political propaganda. After a lengthy and all-out war against Umayyad rule resulted in a complete Abbasid victory in 750,

⁵¹ Rouche, "Une révolution mentale"; Ovitt, "Manual Labor"; Freedman, *Images of the Medieval Peasant*, 15–39; I am grateful to Paul Freedman for allowing me to read the first chapter of his book prior to its publication.

⁵² Kaplan, Les hommes et la terre, 459–60; Treadgold, History of the Byzantine State, 236–41, 246–48; Evans, Age of Justinian, 164; Whitby, "Recruitment in Roman Armies," 63.

⁵³ Patlagean, *Pauvreté économique*, 302; Conrad, "Plague in the Early Medieval Near East," 485–86; Duby, *Early Growth*, 71: "The voids created by the disasters of the sixth century invited reconquest."

⁵⁴ Paul the Deacon, Historia Longobardorum 2.26, pp. 86-87; History of the Lombards, 80.

⁵⁵ Conrad, "Plague in the Early Medieval Near East," pp. 239-40.

and then it appeared that plague was not coming back after that date, the new regime's leaders claimed that God put an end to the plague pandemic because of their overthrow of the Umayyads.⁵⁶ And in what seems an echo of a similar claim, namely that the Carolingian overthrow of the Merovingians in 751 (when a new Christian rite of anointment replaced descent from the Germanic gods as the source of legitimacy) explains why God ended the pandemic, a twelfth-century writer linked ecclesiastical anointment with the royal capacity to cure victims of the "inguinal plague."⁵⁷

The first plague pandemic was hardly the first natural disaster to confront Christians. One particularly apt precedent is the pestilence that raged in the Roman Empire between 250 and 270. Christians suffered not only sickness and death from it, but accusations as well that that they had caused it by their unwillingness to participate in the state religion. Bishop Cyprian of Carthage wrote a vigorous refutation of these accusations but then also wrote a tract, On Mortality, to rally the faithful to be steadfast in their Christian commitment. He taught them that death is to be welcomed rather than feared; that reluctance to die shows too great an attachment to worldly joys; and that suffering and dying from the disease would free them from the world and move them along earlier than anticipated to eternal glory. Besides encouraging those who were wavering, Cyprian had to console those who felt deprived of the martyrdom they longed for. He assures the servants of God "among whom confession is contemplated and martyrdom is conceived in the mind, the intention dedicated to good is crowned, with God as judge. It is one thing for the intention to be lacking for martyrdom; it is another thing for martyrdom to have been lacking for the intention."58

Earthquakes in the Rhone Valley in the 470s led the bishop of Vienne to institute a series of pious actions called rogations, for which the faithful prepared by fasting for three days and then which involved processions, Psalm-singing, and prayers for deliverance from the natural calamity.⁵⁹ Also in the Greek East, earthquake in the fifth century called for a response, which was expressed by the parading of icons in what Peter

⁵⁶ Dols, "Plague in Early Islamic History," p. 380.

⁵⁷ Bloch, *Les Rois thaumaturges*, 41–42 and the preface by Jacques Le Goff, xiii–xiv; see in this volume the essay by Alain Stoclet, who first called my attention to this matter.

⁵⁸ Cyprian, *De mortalitate* 1–17, pp. 20–37.

⁵⁹ Leclercq, "Rogations"; Cabrol, "Litanies"; Gregory of Tours, *Historia Francorum* 2.34, pp. 97–98 and *History of the Franks*, 149–50.

Brown has referred to as "great intercessory processions and solemn junkets." $^{6\mathrm{o}}$

Thus when the plague arrived, prelates were not entirely lacking in tried and tested responses. During an epidemic in Mesopotamia in 573, the Nestorian patriarchs confronted plague with a complex of devotions very similar to rogations. Gregory of Tours tells us that his uncle, Bishop Gallus, saved Clermont by instituting rogations and by leading many from his flock on a forty-mile walk to the shrine of Saint-Julien of Brioude. They sang Psalms as they went and he prayed fervently that his city and its people be saved. We have already seen Gregory's cautionary tale contrasting the behavior of Bishop Cautinus, who tried unsuccessfully to escape from the plague, with that of his conscientious uncle.⁶¹

The Frankish King Guntran was a figure whom Gregory of Tours knew very well and who appears frequently in the pages of his history. When plague had been reported at Marseilles in 588, the king was staying in a village further up the Rhone Valley. He ordered the people to eat only barley bread and drink only water, and then he had them assemble for rogations. "He seemed so anxious about all his people that he might well have been taken for one of our Lord's bishops rather than a king." And so it was that at Rome in 590, the new pope, Gregory I, called for three days of fasting and prayer, and processions from seven major churches all directed towards Santa Maria Maggiore, "that there we may at great length make our supplication to the Lord with tears and groans, and thus be held worthy to win pardon for our sins."⁶²

The frequent retellings of how saintly bishops, a good king, and a great pope dealt with plague meant that their humble successors had authoritative models to follow when disaster struck. These same models were immediately re-activated in the fourteenth century when the Black Death appeared, although of course they were often put to use in the interim.⁶³ During the two-century span of the first pandemic there were other indications of intensified piety, particularly characterized by humility, contrition, and supplication. The spectacular growth of monasticism is one such indication. A second is the continuation of church construction

⁶³ Horrox, Black Death, 111–57.

⁶⁰ Brown, Society and the Holy, p. 277; Dagron, "Quand la terre tremble."

⁶¹ Ebied and Young, "Treatise in Arabic," 96; *De patriarchis nestorianorum*, 2:25–26; Gregory of Tours, *Historia Francorum* 4.5 and 4.31, pp. 144–45, 167–68 and *History of the Franks*, 199–200, 226–27.

⁶² Gregory of Tours, *Historia Francorum* 9.21, 10.1, pp. 379–80, 408–9 and *History of the Franks*, 509–10, 546.

even in those places where the archaeological evidence, such as the lack of new buildings, abandonment of existing ones, and the shrinking of communities, suggests population decline. Churches built in such an environment were not responding to a need to serve a larger number of worshippers but to the spiritual needs of patrons. Still another indication is the rise of the votive mass, a variant form of the mass for use on a particular occasion, such as war, plague, or bad weather, that had its origin in the sixth century. By the middle of the eighth century there were about sixty such variants on the liturgical books.⁶⁴

The intensification of devotion had its obverse in backsliding or what the orthodox could only see as reversions to "paganism." Gregory of Tours mixes up his stories about good models with others about colorful eccentrics such as the bogus Christ of Bourges, who misled simple folk into erroneous belief and meaningless acts of devotion. Scripture had prepared Gregory for such imposters, for he introduced his account of the one at Bourges by citing the Gospels where Jesus said that famine and pestilence and earthquakes would take place and that false Christs and false prophets would accordingly appear. Bede makes a similar connection in his account of the plague epidemic in England in 664, when St. Cuthbert was still preaching to the uninitiated but then in addition had to deal with setbacks among people converted quite recently. "For many of them profaned the faith they held by wicked deeds, and some of them also at the time of the plague, forgetting the sacred mystery of the faith into which they had been initiated, took to the illusive cures of idolatry, as though by incantations or amulets or any other mysteries of devilish art, they could ward off a plague sent by God the Creator."65

The loss of faith was but a part of the unraveling of community and the abandonment of social norms that apparently accompanied the plague wherever it went. The challenge for leaders everywhere was to keep communities together. St. Boniface, the Anglo-Saxon monk who headed the mission to evangelize the Germans, asked Pope Gregory II about this matter in 726 and received the following answer: "You ask whether, in the case of a contagious disease or plague in a church or monastery, those who are not yet attacked may escape danger by flight. We declare this to be the height of folly, for no one can escape from the hand of God."⁶⁶ For

⁶⁴ Hughes and Hamlin, *Celtic Monasticism*, 5. Reference is again made to the chapter in this volume by Hugh Kennedy; Amiet, "Votive Masses."

⁶⁵ Matthew 24.7 and Mark 13:22; Gregory of Tours, *Historia Francorum* 10.25, pp. 437–38 and *History of the Franks*, 584–86; *Two Lives of Saint Cuthbert*, 180–87.

⁶⁶ Boniface, Letters of Saint Boniface, 55.

the Arabs, the same problem engendered much discussion. Because they encountered it only outside of their homeland, this was at least at first mainly a problem for their armies. The main response to emerge was that when plague struck a place where they happened to be, a phenomenon to be explained only as a willful act of Allah, they should not flee for fear of violating their obligation to accept Allah's will. But because at the very time in 638 when Arab troops first encountered plague, the caliph was on his way from Medina to Syria with a large retinue, and news of the epidemic came to him, he chose to follow Bedouin tradition and avoid the danger by turning back to Medina. This act became the model for what Muslims should do if they approached an area that was disease-ridden.⁶⁷

Practice was of course another matter, as in the case of the commanders of the army in Syria as well as, later on, the califs, who had their mountain retreats for quick escapes, even though the troops were ordered to stay put, at least in the early years of the conquests, in the garrison towns.⁶⁸ Perhaps they had a slight advantage because these towns were segregated from the communities of the conquered peoples. Still, the problem of flight cannot have been easily dispensed with, for death by plague came to be accepted as one of the ways to gain martyrdom.⁶⁹ This solution seems at first glance the very antithesis of the view of Cyprian of Carthage, who had to console those Christians who lamented that dying of a disease was robbing them of the opportunity to become martyrs. And yet Cyprian's argument that God's sending of the epidemic offered the faithful an opportunity to die and go sooner than expected to heaven was perhaps not so essentially different from the Islamic consolation of martyrdom.⁷⁰

EXPIATION AND MEMORY

No study of the impact of the plague pandemic on religion, in particular western Christianity, would be complete without reference to the creation of a new saintly cult specifically intended to deal with plague, namely that of St. Sebastian. The most familiar of all plague saints thanks to the paintings by virtually every Renaissance artist of note, Sebastian was

⁷⁰ Cyprian, *De mortalitate* 17, pp. 36–37.

⁶⁷ Dols, "Comparative Communal Responses," 276; Conrad, "Plague in the Early Medieval Near East," 199.

⁶⁸ Conrad, "Plague in the Early Medieval Near East," 170–75, 449–65; idem, "Historical Evidence," 269–74.

⁶⁹ Lewinstein, "Revaluation of Martyrdom," 82, 89; Dols, "Plague in Early Islamic History," 377; Sublet, "La peste prise aux rêts de la jurisprudence," 144–45.

the Justinianic Plague's gift to the Black Death. The connection between Sebastian and plague was made, at the latest, in the year 680. Following his report of the plague outbreaks of that year in Rome and in Pavia, Paul the Deacon goes on to say that a certain man at Pavia had a revelation in which he was informed that the epidemic would not cease there until an altar of St. Sebastian the Martyr was set up in the church of St. Peter in Chains. Accordingly the Pavesi had relics brought from Rome and an appropriate altar set up just as the miraculous voice had instructed; sure enough, the pestilence ended. At about the same time a mosaic depicting Sebastian in Roman court dress and carrying a martyr's crown was placed on a wall of the more famous church of St. Peter in Chains, the one in Rome.⁷¹ We need to inquire how the connection of this saint with this epidemic came about.

According to the pious legend that serves as the earliest extant account of his life, Sebastian was a closet Christian who served in the imperial guard of Diocletian, a risky position to occupy given the intensity of the persecution of Christians just then. Of course Sebastian's faith was eventually discovered, and the emperor reacted by ordering that he be shot and killed with arrows. His would-be executioners so filled his body with arrows that he "looked like a porcupine"; thinking him dead, they threw out his body. Some Christians who were hoping to give him a proper burial found him, and what is more, found him alive, so the pious widow Irene nursed him back to health. Once he was strong again, instead of hiding or fleeing Sebastian boldly reappeared before the emperor, who ordered his men to beat him until they were really sure he was dead. They completed their task this time and threw the remains into the great sewer (cloaca maxima). Even so, Sebastian appeared to the pious matron Lucina in a vision and directed her to recover his remains and have them put to rest in the catacombs on the Via Appia.72

Because the common practice for depicting a martyr in Christian iconography is to show the saint either undergoing fatal torture or else posing with the instruments of his or her torture, viewers of those many paintings of St. Sebastian could understandably deduce that he died of multiple arrow wounds. Yet for all that follows, at least from the year 680 on, the main point of the story is that Sebastian suffered that terrible, first attempt on his life – and recovered. To be sure, shortly after he regained

72 Acta S. Sebastiani 23, cols. 1148-50.

⁷¹ Paul the Deacon, Historia Longobardorum 6.5, p. 166 and History of the Lombards, 255; Liber pontificalis, 193–94.

his health he gained martyrdom by being beaten to death, but still, he had triumphed over the arrow wounds inflicted by the emperor's henchmen.

What do the arrows signify? Both the Judeo-Christian and the Greco-Roman traditions had something to say on this question. In Psalm 7:13 arrows are instruments of divine punishment: "If one does not repent, God will sharpen his sword; he has bent and strung his bow; he has prepared his deadly weapon, making his arrows fiery shafts." And in the very first lines of the Iliad, because of the terrible wrongs committed by Agamemnon and the entreaties of those whom he wronged, Apollo, son of Zeus, "distant, deadly archer," and "god of plague," "came down like night" and let fly his pestilence-laden arrows from his silver bow. "He cut them down in droves and the corpse fires burned on, night and day, no end in sight. Nine days the arrows of the god swept through the army."73 We are not left to guess whether Roman aristocrats of later times had read their Homer. With reference to the epidemic at Rome in 590, Gregory the Great mentioned the pestilence "that depopulated this city" (quae hanc urbem depopulavit) and in which "one could see with one's physical eyes the arrows pouring out of the sky striking down individuals."74 And thus by a remarkable inversion, the Greek god who sent down pestilence upon people by shooting arrows at them re-emerged in the seventh century as a Christian hero who, having suffered numerous arrow wounds and survived, now took upon himself in Christ-like fashion the arrow wounds (read: plague infections) of those who petitioned him for relief from the plague. Over the next few centuries the cult of Sebastian grew in Rome and spread elsewhere in Europe. The few surviving images of Sebastian from these times show him in the traditional manner with his martyr's crown or else as a soldier with a spear, whereas the familiar scene of his body penetrated by arrows did not come into fashion until the fourteenth century.75

The first plague pandemic left little in the way of visual representation, but the principal exception, composed of various elements that coalesced only over a long stretch of time, is a unique and dramatic monument. The initial elements were the theme of divine punishment preached by Pope Gregory the Great in 590 – "I see my entire flock being struck down by the sword of God's wrath" – and the penitential processions he

⁷³ Homer, The Iliad 1.10-68, pp. 77-79.

⁷⁴ Gregory the Great, *Dialogues* 4.37.7, in vol. 3:128-31.

⁷⁵ Marshall, "Manipulating the Sacred."

then organized.⁷⁶ The second element is the mausoleum of the Emperor Hadrian, a massive drum-shaped cylinder poised on the right bank of the Tiber, roughly opposite its predecessor and model, the mausoleum of Augustus. Thanks to the Gothic War, it had been incorporated into the city's defensive walls by the middle of the sixth century.⁷⁷ The third element is the cult of St. Michael the Archangel, which began with his miraculous appearance in the late fifth century atop Mount Gargano, located on a peninsula in Apulia that juts out into the Adriatic Sea. In most places where the cult spread subsequently, its propagators sought sites at high elevations, appropriate for a messenger from heaven. The cult was active in Rome perhaps as early as the seventh century, but in any case in 852, after a destructive raid by Saracens, Pope Leo IV topped off his rebuilding of the walls by dedicating a chapel to St. Michael on top of Hadrian's Tomb. By that time at the latest, the building was known as the Castle of the Holy Angel (*castellum sancti angeli*).⁷⁸

The key element that then wove together all these others was the account of the events of the year 500 as related by James of Voragine in his Golden Legend, which was completed in the 1260s. James' version adds an important detail to the oft-repeated story of the pope's organizing of penitential processions and supplications, namely, a miraculous sign of divine approval. One day the air began to clear, and, as James tells it, Gregory looked up and "saw, above the castle that in the past was called the Tomb of Hadrian, the angel of the Lord wiping a bloody sword and sheathing it. He understood thereby that his prayers had been answered and that the plague was over."79 This triumphant conclusion to the story about Gregory brought the added authority of the Hebrew Bible, for it was a recasting of the story of God's displeasure with David, when God sent the angel to inflict a pestilence that killed 70,000 Israelites. Still not satisfied, God then sent the angel to destroy Jerusalem, but David made an altar and made offerings and supplications that persuaded God to relent and order the angel to stay his hand. Here we arrive at the relevant moment: David looked up and saw the angel of the Lord standing between heaven and earth, at first with his sword drawn and stretched over Jerusalem, but then at the Lord's command, the angel sheathed his

⁷⁶ Gregory of Tours, Historia Francorum 10.1, p. 407 and History of the Franks, p. 545.

⁷⁷ Castel Sant'Angelo, 20-33.

⁷⁸ Culte et pèlerinages à saint Michel; Krautheimer, Rome, 75, 117-20.

⁷⁹ James of Voragine, Golden Legend, 2:202.

sword.⁸⁰ This Old Testament prototype for the story of Pope Gregory is now largely forgotten, but the huge eighteenth-century bronze statue of an angel sheathing his sword that now stands atop the castle, visible from vantage points all over Rome, serves as a reminder of divine mercy and of Gregory's crucial role in securing it at the close of the sixth century.⁸¹ This dramatic figure is also a reminder that the pandemic of 541 to 750 is a chapter of human history that deserves far better than a parenthetical phrase.

⁸⁰ 1 Chronicles 21:14–27. I am very grateful to Prof. Malcolm Bell III of the University of Virginia for bringing this biblical text to my attention.

⁸¹ Castel Sant'Angelo, 91–97, 146–52. The present statue, made in 1752 by the Flemish sculptor P. A. von Verschaffelt, replaced a marble statue made in 1554 by Raffaele da Montelupo. There are indications of still earlier versions dating back to the thirteenth century. See D'Onofrio, Castel S. Angelo, 162–72.