THE ANNIHILATION OF SENNACHERIB'S ARMY: A CASE OF SEPTICEMIC PLAGUE?

STEPHEN W. CAESAR

Second Kings 19:35 recounts one of the most devastating and extraordinary incidents of divine intervention in biblical history: *That night an angel of the LORD went out and struck down one hundred and eighty-five thousand in the Assyrian camp, and the following morning they were all dead corpses*.[1] This account of God's delivery of Jerusalem as it was being besieged by Sennacherib's troops seems to have been remembered later, in a greatly modified form, by the Greek historian Herodotus (*Histories,* 2.141), who recounted that: "Sennacherib . . . led a large army against Egypt . . . Caught in a dreadful quandary, the priest [Sethos, who was also Pharaoh] entered the inner shrine [of his god], bewailing to the cult statue the great dangers that confronted him. He wept until at last sleep descended upon him, and in a dream he seemed to see the god standing over him and reassuring him that he would not suffer anything dreadful when he challenged the [Assyrian] army.[2] When he led his troops to face Sennacherib's force at Pelusium, the two armies waited until daybreak to begin fighting, but once night had fallen, an army of field mice swarmed through their [the Assyrians'] camp and chewed up their quivers, bowstrings, and even the handles of their shields, so that the next day, the enemy found themselves deprived of their weapons and defenseless; many fell as they tried to flee."[3]

Although Herodotus never mentions plague, the scholarly consensus is that this was what he was in fact referring to, due to the presence of mice in the story. In his commentary on this account, Robert B. Strassler, editor of *The Landmark Herodotus*, stated: "This is Herodotus' version of the Jewish story of the pestilence which destroyed the Assyrian army before Jerusalem. Mice are a Greek symbol of pestilence; it is Apollo Smintheus (the mouse god) who sends and then ends the plague in Homer, *Iliad* I."[4]

Cuneiform records indicate that the Babylonians were also aware of the connection of rats to the plague.[5] Moreover, Norman F. Cantor, a historian

Stephen Caesar is Senior Docent at the Semitic Museum at Harvard University, from where he received his MA in archaeology. He has participated in excavations at Ashkelon with Harvard and at Tel Rehov with the Hebrew University, and was formerly on staff at the headquarters of the Archaeological Exploration of Sardis, located at Harvard.

and sociologist at New York University, observed that the catastrophe that struck Sennacherib's army was a "biomedical event . . . recognized in the Bible, [and which] has some degree of historical plausibility."[6] Thus, the distinct possibility exists that the Jerusalem incident may have been caused by plague, of which mice and rats are known vectors.[7]

There are actually three forms of the plague: bubonic, pneumonic, and septicemic. Pneumonic plague can spread directly from person to person by coughing.[8] This "coughing plague" slays 95 to 100% of its victims, and in some cases death occurs only 16 hours after the onset of symptoms.[9] Byzantine historian Evagrius Scholasticus, an eyewitness to the Plague of Justinian when it struck his home city of Antioch in 542 CE, recorded that some victims "were destroyed merely by being and living together, others too merely by touching . . . "[10] He may have unwittingly been referring to pneumonic plague. Similarly, when the Black Death struck Sicily in 1347, Franciscan friar Michael Platiensis described what almost certainly was this second form of the plague: "Breath spread the infection among those speaking together…and it seemed as if the victim[s] were struck all at once by the affliction . . . Victims violently coughed up blood, and after three days…they died, and with them died not only everyone who talked with them but also anyone who had acquired or touched or laid hands on their belongings."[11] When the Black Death struck Syria a year later, Arab historian and contemporary eyewitness Ibn al-Wardi recorded, "It brings the entire family to their graves after two or three nights," a likely reference to pneumonic plague.[12]

The third and most lethal form is septicemic. Its death rate is 100%, and it kills its victims extremely quickly, usually in half a day.[13] In one outbreak in the early 20th century, the average time between onset of symptoms and the victim's death was only 14.5 hours.[14] Moreover, it can be transmitted by fleas and body lice.[15] Byzantine historian Procopius seems to have inadvertently chronicled examples of septicemic-plague victims. When physicians in Constantinople autopsied plague victims, they often found "a strange sort of carbuncle"; living victims broke out in black pustules "about as large as a lentil," and they "did not survive even one day, but all succumbed immediately." The black pustules, combined with the rapid demise of its victims and its 100% mortality rate, all suggest septicemic plague.[16]

It is certainly possible that what tore through Sennacherib's army as it lay crowded around the relatively small city of Jerusalem was septicemic plague. Living cheek to jowl for an extended period of time, the Assyrian soldiers would have been particularly vulnerable to the plague in any of its three forms. The fact that they were on a war footing would have increased the likelihood of the soldiers' succumbing to plague, since human remains and refuse attract rats, unwashed human bodies attract fleas, and the stress of war weakens the immune system.[17]

Moreover, the possibility that Assyrian forces would be ravaged by plague while on campaign in the Levant is entirely within the pale of history; at least twice, in 765 and 759 BCE, Assyrian troops brought plague home with them after campaigning in Syria.[18] Six hundred years earlier, when the Hittite king Suppiluliuma I attacked Egyptian forces in Syria, he brought back thousands of prisoners of war who were carrying a plague so virulent that it ravaged the Hittite Empire for over twenty years.[19]

One particularly difficult aspect of the biblical story from a purely historical perspective is the assertion that 185,000 soldiers were killed by the plague. However, this claim need not be dismissed out of hand. When the plague struck Constantinople beginning in 541 CE, John of Ephesus recorded that it killed 16,000 people per day.[20] Although some doubt this figure, modern historians admit the likelihood of a total of 200,000 dead, or 40% of the population of the Byzantine capital.[21] The fact that the catastrophe described in Second Kings involved an army lends further credence to the high death toll: as mentioned, large armies produced highly unsanitary conditions that attract large concentrations of rats and fleas. In other words, the larger the military force, the higher the death toll is likely to be.[22]

It is also not surprising that Sennacherib would exclude a disaster of this magnitude from the records of his military exploits. He makes no mention that Jerusalem never succumbed to his troops; instead, he gives a long list of booty that they took from Jerusalem back to Nineveh.[23] When his successor, Esarhaddon, suffered a defeat in Egypt, which was recorded in the Babylonian Chronicle, he omitted it from his records, substituting instead a minor campaign in Babylonia.[24] Later, the same king suffered a humiliating reversal, the capture of Sippar (the biblical Sepharvaim) by the Elamites; this

event was also recorded in the Babylonian Chronicle but is not mentioned in any Assyrian chronicles.[25]

It appears that Herodotus, however distorted his account of Sennacherib's army as it besieged Jerusalem may have been, retained the central fact that the plague, brought on by rats and mice infesting the Assyrian camp, afflicted the besieging troops. The particular form of the plague in question was most likely septicemic, given the colossally large number of deaths and the fact that such enormous casualties occurred in the span of only a single nighttime. Thousands of troops, huddled together around the small city of Jerusalem, living for an extended period of time in unsanitary conditions, created the perfect breeding ground for the fleas that brought the plague bacillus with them. Septicemic plague tore through the Assyrian camp, killing thousands of soldiers in only half a 24-hour period, scuttling any hopes of a successful conquest of Jerusalem. Sennacherib, whose predecessors' armies had been similarly struck while in nearby Syria, had no option but to slink back to Nineveh. The consummate propagandist, he omitted this humiliation from his annals.

The inhabitants of Jerusalem, and in particular the author of the Book of Kings, naturally attributed this sudden deliverance from an otherwise hopeless military situation to the direct intervention of God. Such a view was completely in keeping with the attitudes of that era. The outbreaks of plague in 765 and 759 BCE, mentioned earlier, were interpreted by the Assyrians as a sign that Nergal, the plague god, had punitively struck them.[26] Elsewhere in Assyrian military annals, plague was similarly viewed as the result of divine intervention, but in Assyria's favor; Sennacherib's grandson Ashurbanipal, for example, claimed that a divinely ordained plague aided him in achieving victory in Mesopotamia: "The corpses of the people whom Erra [another name for the plague god] caused to fall . . . I had their remains removed from Babylon, Kutha, and Sippar."[27] . . . In the 14th century BCE, as we have already seen, the Hittite Empire was devastated by a massive plague; the king himself perished, as did his son and countless other Hittites at all levels of society. A younger son ascended the throne, and he composed a series of "Plague Prayers," which acknowledged that the pestilence was the result of divine wrath kindled by three transgressions: the fact that Suppiluliuma's invasion of Syria had violated a peace treaty that had been held sacred by an

oath before the gods, Suppiluliuma's involvement in the murder of his predecessor, and the failure of the Hittites to propitiate the gods.[28] In the same century, the king of Cyprus sent a letter to Pharaoh apologizing for not sending the promised amount of copper as tribute, explaining that his island was unable to mine the ore because of a plague so severe that it "has killed all the men of my land, so that there is no one to produce copper."[29] As with the Hittite plague, this epidemic struck the king's immediate family and was attributed to divine wrath: "[T]he hand of the god Nergal is present in my land and in my house; my wife had a son who has died."[30]

That the God of Israel could have used a truly massive outbreak of septicemic plague to deliver the holy city is entirely in keeping with biblical tradition. There are well-known instances in which He used some of the most feared diseases in the ancient world to punish not only Israel's oppressors, but sometimes the Israelites themselves. In Exodus 9:9, God sent against Egypt a plague that *cause[d] an inflammation breaking out in boils on man and beast* . . . After the flight from Egypt, when Aaron and Miriam rebuked Moses for his marriage to a Cushite woman, God caused them to be *stricken with scales* (Numbers 12:10-11). And, of course, First Chronicles 21:14-15 recounts that the entire nation was struck by a pestilence when David angered God by numbering the people. Interestingly enough, this plague was delivered by an angel – exactly as was the affliction that destroyed Sennacherib's army. Given these incidents, combined with the scientific and historical facts enumerated previously, it is not altogether inappropriate to speculate that what God used, through one of his angels, to destroy the Assyrian army and save Jerusalem was an outbreak of septicemic plague, a disease so utterly virulent and lethal that its survival rate is zero and its victims perish in the span of a single night.

NOTES

1. All Bible citations are from *The New JPS Translation*, 2nd ed.

2. Robert B. Strassler, ed., *The Landmark Herodotus: The Histories*. Trans. Andrea L. Purvis (New York: Anchor Books, 2007), p. 182.

3. Strassler, *Herodotus*, p. 184.

4. Strassler, *Herodotus*, p. 184, note on 2.141.5a; cf. Geoffrey Marks and William K. Beatty, *Epidemics* (New York: Charles Scribner's Sons, 1976), pp. 7-8, 13.

5. Marks and Beatty, *Epidemics*, p. 6. Unfortunately, they do not cite a primary source.

6. Norman F. Cantor, *In the Wake of the Plague: The Black Death and the World It Made* (New York: Free Press, 2001), p. 187.

7. A. T. Olmstead, *History of Assyria* (University of Chicago Press, 1923), p. 309; John Kelly, *The Great Mortality: An Intimate History of the Black Death, the Most Devastating Plague of All Time* (New York: Harper Collins, 2005), p. 14. The ancient association between rats and the plague was well founded. It is now known that the plague is caused by the bacillus *Yersinia pestis*, and that its immediate vector is the black rat flea, *Xenopsylla cheopis*, which passes the disease to rodents such as mice and rats. Once these hosts have been killed off by the disease, the fleas, seeking a new food source, leap from the now-dead rodents to human beings (Donald Emmeluth, *Deadly Diseases and Epidemics: Plague*. Consulting ed., I. E. Alcamo [Philadelphia: Chelsea House, 2005], p. 35; Kelly, *Great Mortality*, pp. 11, 19; Marks and Beatty, *Epidemics*, p. 7). It is of particular importance to note that one of the regions to which *Y. pestis* is endemic is the Arabian Peninsula, a close neighbor to the Land of Israel (Robert S. Gottfried, *The Black Death: Natural and Human Disaster in Medieval Europe* [New York: The Free Press, 1983], p. 9).

8. Kelly, *Great Mortality*, pp. 21-22.

9. Kelly, *Great Mortality*, p. 22; Marks and Beatty, *Epidemics*, pp. 10-11; Emmeluth, *Deadly Diseases*, p. 39.

10. Wendy Orent, *Plague: The Mysterious Past and Terrifying Future of the World's Most Dangerous Disease* (New York: Free Press, 2004), p. 81, citing Michael Whitby, *The Ecclesiastical History of Evagrius Scholasticus* (Liverpool University Press, 2000), pp. 315-316.

11. Quoted in Kelly, *Great Mortality*, p. 22; cf. Orent, *Plague*, p. 115; Marks and Beatty, *Epidemics*, 76.

12. Quoted in Joseph P. Byrne, *Daily Life during the Black Death* (Westport, CT, and London: Greenwood Press, 2006), p. 261.

13. Gottfried, *Black Death*, p. 8; cf. Emmeluth, *Deadly Diseases*, p. 39.

14. Kelly, *Great Mortality*, p. 22.

15. Gottfried, *Black Death*, p. 8.

16. Orent, *Plague*, p. 79, citing Procopius, *History of the Wars*, vol. 2. H. B. Dewing, trans. Cambridge, MA: Loeb Classical Library, pp. 453-71. Some Medieval chroniclers seemed to have been aware of all three forms of the plague. Louis Heyligen, a priest who visited Avignon in 1348 at the height of the Black Death, wrote: "It is said the disease takes three forms. In the first people suffer an infection of the lungs, which leads to breathing difficulties. Whoever has this corruption or contamination to any extent cannot escape but will die within two days…There is another form which exists alongside the first one in which boils erupt suddenly in the armpits, and men are killed without delay. And there is also a third form, which again co-exists with the other two, but takes its own course, and in this people of both sexes are attacked in the groin and killed suddenly" (Quoted in Joseph P. Byrne, *The Black Death* [Westport, CT, and London: Greenwood Press, 2004], p. 21). In 1382, physician Chalmelli de Vivario similarly listed in his *Three Books on the Plague* the three types of the pestilence that closely mirror its bubonic, pneumonic, and septicemic forms (Byrne, *Black Death*, p. 50).

17. Kelly, *Great Mortality*, pp. 15, 74. Later outbreaks of the plague in the Middle East induced besieging armies to retreat. For example, as the Black Death ravaged the area in 1346, Malik Ashraf was forced to end his siege of Tabriz when the plague assailed his troops (Byrne, *Daily*

Life, pp. 261-2). In 1799, Napoleon was obliged to call off his siege of Saint-Jean-d'Acre (Biblical Acco) when bubonic plague struck his army (Gérard Gengembre. *Napoléon: La Vie, La Légende* [Paris: LaRousse, 2001], p. 25; Jean Tulard, *Les Révolutions*, vol. 4 of *Histoire de France*, Jean Favier, ed. [Libraire Arthème Fayard, 1985], p. 143).

18. Olmstead, *Assyria*, pp. 163-4, 169.

19. Kathleen Mineck et al., "Hittite Historical Texts II," in Mark Chavalas, ed., *The Ancient Near East: Historical Sources in Translation*, (Oxford, England: Blackwell, 2006), p. 259; cf. H. W. F. Saggs, *Civilization before Greece and Rome* (New Haven & London: Yale University Press, 1989), pp. 124-5, 188.

20. Byrne, *Black Death*, p. 3.

21. Byrne, *Black Death*, p. 3; Gottfried, *Black Death*, p. 11.

22. In 1920, when septicemic plague broke out in Manchuria, one medical observer attributed its rapid spread to the "huddling together" of Chinese soldiers (Quoted in Orent, *Plague*, p. 200). Even in the late 20th century, unsanitary conditions among the Soviet army during its occupation of Afghanistan were so severe that 75% of all Soviet troops taking part in the occupation had to be hospitalized for disease (Kelly, *Great Mortality*, p. 15, 75). Although these examples do not compare to the enormous death toll claimed in Second Kings, they do provide a realistic picture of the overcrowding and lack of hygiene among large armies that could have resulted in such a gargantuan death toll, particularly in the pre-modern era.

23. A. K. Grayson, "Assyria: Sennacherib and Esarhaddon (704-669 B.C.)," in John Boardman et al., eds., *The Assyrian and Babylonian Empires and Other States of the Near East, from the Eighth to the Sixth Centuries B.C.*, vol. 3, no. 2 of *The Cambridge Ancient History*, 2nd ed. (Cambridge University Press, 1991), p. 110.

24. Grayson, "Assyria," p. 124.

25. Grayson, "Assyria," p. 131.

26. Olmstead, *Assyria*, pp. 171-2.

27. Brent Strawn et al., "Neo-Assyrian and Syro-Palestinian Texts II," in Chavalas, p. 366.

28. Kathleen Mineck et al., "Hittite Historical Texts II"; cf. H. W. F. Saggs, *Civilization before Greece and Rome* (New Haven & London: Yale University Press, 1989), pp. 124-5, 188.

29. Quoted in Saggs, *Civilization*, pp. 147-8.

30. Quoted in Saggs, *Civilization*, p. 183. This view of the plague as the result of divine wrath lasted for millennia. As we have already seen, Herodotus in the 6th century BCE attributed the plague that thwarted the Assyrian invasion of Egypt to divine intervention. In the 6th century CE, two Byzantine eyewitnesses to the Plague of Justinian, John of Ephesus and John of Palestine, both explicitly tied the pandemic to God's judgment, as did Gregory of Tours regarding the plague's second wave later in the same century when it struck southern France (Orent, *Plague*, pp. 82-85). Later still, when the Black Death struck Syria in 1348, Ibn al-Wardi in his chronicle of the pandemic lamented, "Oh God, it is acting by Your command" (Byrne, *Daily Life*, p. 261).