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The Justinian Plague in literary sources

Peter Bystrický

Abstract

BYSTRICKÝ, Peter. The Justinian Plague in literary sources.

The study looks into and compares three main contemporary sources describing the first pandemic in 542, also known as the Plague of Justinian—the secular historian Procopius and two church historians, John of Ephesus and Evagrius. The bubonic plague epidemic spreading from Egypt was the most destructive scourge of the Byzantine Empire during the reign of Emperor Justinian I. It had immense direct effects on demography, the economy, craft and agricultural production, construction work and foreign policy too, as large cities and coastal trade centres, including the capital where perhaps up to half of the population was lost to the disease, were the most afflicted. Although Procopius, John of Ephesus and Evagrius all came from different backgrounds and lived under different circumstances, their records and memories complement one another, helping to create a vivid and well-rounded image of the times. Procopius was measured and even impersonal, imitating Thucydides, and while he attempted to describe the symptoms, course of the disease and life in Constantinople as eaccurately as possible, the moralising John of Ephesus aimed to leave a warning for future generations and so was focused more on the emotional dimension of the tragedy he witnessed in the provinces he had passed through. Evagrius, who himself contracted the plague as a child and later lost his wife, relatives and some of his servants to it, left a brief account, but also precise and to the point. The sudden and unexpected arrival of the bubonic plague, its short incubation period, high fatality rate with no regard for gender, age or origin, as well as the lack of effective treatments and the impossibility determining the origin and/or causes of the disease, deeply shook the whole society, leaving scars on the human psyche and behaviour. A whole spectrum of feelings that are not completely unknown to us after our own experience with the recent pandemic—the initial hysteria and panic were replaced by fear for ourselves and our loved ones and the fear that funeral rites and burials would not be conducted—along with uncertainty, despair, mistrust, doubt, resignation, frustration and apathy can be identified in the work of these three authors, in their testimonies, experiences, varying examples and stories. The authors recorded not only ruthlessness, indifference, selfishness, a refusal to help or the desire to enrich oneself from the tragedy, but also left evidence of fellowship, cooperation and a selflessness among people.

In the first half of the sixth century, the Byzantine Empire was hit by several natural disasters—earthquakes, fires, hundred-year floods and droughts¹—some of which caused massive material damage, killed thousands and disrupted trade, crafts and agricul-

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For an overview of natural disasters, weather events, epidemics and famines in the first half of the sixth century, see: STATHAKOPOULOS, Dionysios. *Famine and Pestilence in the Late Roman and Early Byzantine Empire*. London; New York: Routledge, 2016, pp. 250–300.

tural production, though the effects were always short-term, local or regional. The most destructive catastrophe during the long reign of Emperor Justinian I (527 – 565), which no one expected nor could have prepared for in any way and which more or less affected all the provinces and cities of the empire, was the bubonic plague epidemic, today considered the first plague pandemic, the early medieval pandemic (EMP) or known simply as the Justinianic Plague (Plague of Justinian). The specific conditions, geography and climatic anomaly that occurred in the year 536, combined with the high level of urbanisation, population concentration and economic integration of the eastern Mediterranean, i.e. the dense network of sea and land routes, the lively trade and mobility all contributed to the fact that the plague not only broke out in this part of the world, but also afflicted it the most.

The plague, especially its first two waves (541 – 544 and 557 – 561), was not the only reason for the numerous crises (military defeats, population decline, economic depression, a decline in construction, lack of finances etc.) that the Byzantine Empire was forced to confront in the sixth and seventh centuries, but the direct impact was certainly considerable. The epidemic, returning roughly every 15 years or so, deepened and accelerated some of the economic and demographic issues already growing during Justinian's reign.² Justinian weathered the financial crisis, but it nearly bankrupted his successor, Justin II (565 – 578).³

Up to the middle of the 20th century, this first epidemic did not attract much attention from historians, particularly if we compare it with the Black Plague of the Middle Ages. It was seen as an episodic event, captured in passing by written sources or as just one of many catastrophes in the first half of the sixth century that led to the decline of the Byzantine Empire. A revival of scholarly interest in the second half of the 20th century came with the works of Josiah C. Russell, Jean-Noël Biraben, Jacques Le Goff, Pauline Allen and others.⁴

For more details on the impact of the plague epidemic on the economy, finance, society, demography and the military, see: LAIOU, Angeliki E. The Human Resources. In LAIOU, Angeliki E. (ed.) The Economic History of Byzantium from the Seventh through the Fifteenth Century I. Washington, D. C.: Dumbarton Oaks Research Library and Collection, 2002, pp. 49-50; MORRISON, Céccile - SODINI, Jean-Pierre. The Sixth-Century Economy. In LAIOU 2002, pp. 190-195; SARRIS, Peter. Economy and Society in the Age of Justinian. Cambridge: Cambridge University Press, 2006, pp. 217-219; LAIOU, Angeliki E. - MORRISSON, Cécile (eds.) The Byzantine Economy. Cambridge; New York; Melbourne: Cambridge University Press, 2007, pp. 38-42; CHARANIS, Peter. Studies on the Demography of the Byzantine Empire I. London: Variorum, 1972, pp. 10-13; TREADGOLD, Warren T. A History of the Byzantine State and Society. Stanford CA: Stanford University Press, 1997, pp. 196-207; TREADGOLD, Warren T. Byzantium and Its Army 284 -1081. Stanford CA: Stanford University Press, 1995, pp. 159-163, 194-198, 204-205; LITTLE, Lester K. Life and Afterlife of the First Plague Pandemic. In LITTLE, Lester K. (ed.) Plague and the End of Antiquity. The Pandemic of 541 - 750. Cambridge: Cambridge University Press, 2007, pp. 3-32; MEIER, Mischa. The "Justinianic Plague": the Economic Consequences of the Pandemic in the Eastern Roman Empire and Its Cultural and Religious Effects. In Early Medieval Europe, 2016, vol. 24, no. 3, pp. 282-292.

³ *Iustiniani Novellae*. Corpus iuris civilis III: Novellae. Edited by Rudolf Schoell and Wilhelm Kroll. Berolini: Weidmann, 1912, pp. 722–723, no. 148. See also: THEOPHANES, *Chronographia, Anno Mundi 6060*. Theophanis Chronographia I. Edited by Carl de Boor. Lipsiae: Teubner, 1883, pp. 242–243; SARRIS 2006, pp. 223, 229.

⁴ RUSSELL, Josiah C. Late Ancient and Medieval Population. In *Transactions of the American Philosophical Society, New Series*, 1958, vol. 48, no. 3, pp. 40–45; RUSSELL, Josiah C. That earlier Plague. In *Demography*, 1968, vol. 5, no. 1, pp. 174–184; BIRABEN, Jean-Noël – Le GOFF,

Technological advancement and the work of doctors and natural scientists, as well as microbiologists, paleogeneticists, paleobiochemists, paleoclimatologists and archaeozoologists have brought about a major shift, particularly in the last decade.⁵ Research of plague epidemics has recently taken on a wider interdisciplinary dimension,⁶ and the literature is now truly extensive.⁷ The rich scientific debate between two camps on the short- and long-term effects of the first plague epidemic on demography, society, finance, economy and overall further development of the Byzantine Empire is still ongoing.⁸

Jacques. La Peste dans le Haut Moyen Age. In Annales. Histoire, Sciences Sociales, 1969, vol. 24, no. 6, pp. 1484-1510; BIRABEN, Jean-Noël - Le GOFF, Jacques. The Plague in the Early Middle Ages. In FORSTER, Robert – RANUM, Orest (eds.) Biology of Man in History, Selections from the "Annales". Baltimore: Johns Hopkins University Press, 1975, pp. 48-80; BIRABEN, Jean-Noël. Les hommes et la peste en France et dans les pays europeens et mediteraneens I. Paris : Mouton, 1975, pp. 25–50; ALLEN, Pauline. The "Justinianic Plague". In Byzantion, 1979, vol. 49, pp. 5–20. BRATTON, Timothy L. The identity of the plague of Justinian. Parts I, II. In Transactions and Studies of the College of Physicians of Philadelphia, 1981, vol. 3, pp. 113–180; LEVEN, Karl-Heinz. Die "Justinianische" Pest. In KÜMMEL, Werner Friedrich (ed.) Jahrbuch des Instituts für Geschichte der Medizin der Robert Bosch Stiftung, 1987. Stuttgart : Hippokrates, 1989, pp. 137-161; ZIETZ, Björn P. - DUNKELBERG, Hartmut. The History of the Plague and the Research on the causative agent Yersinia pestis. In International Journal of Hygiene and Environmental Health, 2004, no. 207, pp. 165-178; DRANCOURT, Michel et al. Yersinia pestis Orientalis in Remains of Ancient Plague Patients. In Emerging Infectious Diseases, 2007, vol. 13, no. 2, pp. 332-333; WIECHMANN, Ingrid - GRUPE, Gisela. Detection of Yersinia pestis DNA in two early medieval skeletal finds from Aschheim (Upper Bavaria, 6th century A.D.). In American Journal of Physical Anthropology, 2005, vol. 126, no. 1, pp. 48-55; BENEDICTOW, Ole J. The Justinianic Plague Pandemic: Progress and Problems. In Early Science and Medicine, 2009, vol. 14, pp. 543-548; HARBECK, Michaela et al. Yersinia pestis DNA from Skeletal Remains from the 6th Century AD Reveals Insights into Justinianic Plague. In PLOS Pathogens, 2013, vol. 9, no. 5, pp. 1-8; WAGNER, David M. et al. Yersinia pestis and the plague of Justinian 541 - 543 AD: a genomic analysis. In The Lancet Infectious Diseases, 2014, vol. 14, no. 4, pp. 319-326; FELDMAN, Michal et al. A high-coverage Yersinia pestis Genome from a Sixth-century Justinianic Plague Victim. In Molecular Biology and Evolution, 2016, vol. 33, no. 11, pp. 2911-2923.

6 LITTLE, Lester K. Plague Historians in Lab Coats. In *Past and Present*, 2011, vol. 213, no. 1, pp. 267–290; STATHAKOPOULOS, Dionysios. Invisible Protagonists: the Justinianic Plague from a zoocentric point of view. In ANAGNOSTAKIS, Ilias – KOLLIAS, Taxiarchis G. – PAP-ADOPOULOU, Eftychia (eds.) *Animals and Environment in Byzantium (7th – 12th c.)*. Athens: The National Hellenic Research Foundation; Institute for Byzantine Research, 2011, pp. 87–95; EISENBERG, Merle – MORDECHAI, Lee. The Justinianic Plague: an interdisciplinary review. In *Byzantine and Modern Greek Studies*, 2019, vol. 43, no. 2, pp. 156–180.

STATHAKOPOULOS, Dionysios. Die Terminologie der Pest in byzantinischen Quellen. In JÖB, 1998, vol. 48, pp. 1-7; STATHAKOPOULOS, Dionysios. The Justinianic Plague Revisited. In Byzantine and Modern Greek Studies, 2000, vol. 24, pp. 256-276; KEYS, David. Catastrophe. An Investigation into the Origins of the Modern World. New York: Ballantine Books, 2000, 368 p; SARRIS, Peter. The Justinianic Plague: Origins and Effects. In Continuity and Change, 2002, vol. 17, no. 2, pp. 169-182; HORDEN, Peregrine. Mediterranean Plague in the Age of Justinian. In MAAS, Michael (ed.) The Cambridge Companion to the Age of Justinian. Cambridge; New York; Melbourne: Cambridge University Press, 2005, pp. 134-160; RETIEF, Francois Pieter - CILLIERS, Louise. The Epidemic of Justinian (AD 542): A Prelude to the Middle Ages. In Acta Theologica Supplementum, 2005, no. 7, pp. 115–127; LITTLE, Lester K. (ed.) Plague and the End of Antiquity. The Pandemic of 541 - 750. Cambridge: Cambridge University Press, 2007; GOGOLA, Matej. Infekčná pandémia moru v 6. storočí v Byzancii. Prvá vlna tzv. Justiniánskeho moru (541 - 544) v prameňoch Procopia a Evagria Scholastika. In KLOKNÉR, Tomáš – RYBÁR, Lukáš (eds.) Acta historica Posoniensia XXX. Historické štúdie k životnému jubileu Pavla Valachoviča. Bratislava : Stimul, 2016, pp. 61-88; HARPER, Kyle. The Fate of Rome. Climate, Disease, and the End of an Empire. Princeton; Oxford: Princeton University Press, 2017, pp. 206-245; WHITE, Lauren - MORDECHAI, Lee. Modeling the Justinianic Plague: Comparing hypothesized transmission routes. In PLOS ONE, 2020, vol. 15, no. 4, pp. 1-21.

DURLIAT, Jean. La peste du VIe siècle: pour un nouvel examen des sources byzantines. In ABA-DIE-REYNAL, Catherine – KRAVARI, Vassiliki (eds.) Hommes et richesses dans l'Empire byzantin I: IVe – VIIe siècle. Paris : Lethielleux, 1989, pp. 106–119; WHITTOW, Mark. The making of orthodox Byzantium, 600 – 1025. London : Macmillan, 1996, pp. 66–68; WICKHAM, Chris. Framing the Early Middle Ages. Europe and the Mediterranean 400 – 800. Oxford; New York : It is actually remarkable that no works by contemporary or later Byzantine physicians, if even written, have been preserved, including by such authorities as Aëtius of Amida (ca. 502 – 575), Alexander of Tralles (ca. 525 – ca. 605), and Paul of Aegina (625 – 690). This is particularly surprising in the case of Aëtius, who was the emperor's personal physician. Furthermore, the bubonic plague was not completely unknown to doctors in ancient times. The authors of the three most important written sources on the first plague epidemic are the lay historian Procopius of Caesarea (ca. 500 – ca. 560) and church historians John of Ephesus (ca. 507 – ca. 588) and Evagrius Scholasticus (ca. 536 – 594).

The most well-known and on-the-whole most valuable sources are two chapters in Procopius's History of the Wars, and several of his other but very general mentions in the Secret History of the Court of Justinian, which, is unduly critical and even hostile towards the emperor, however. Procopius, who in 543 was probably in the East with Belisarius, following the example of Thucydides, who described the typhus epidemic in Athens in 430 BCE, recorded the outbreak of the plague and its spread, symptoms and course of the disease in detail. Procopius saw that the symptoms of this plague were different than those he had read about in Thucydides. Evagrius also later confirmed that the sixth century plague resembled that of Athens in some ways but was very different in others. 11 Procopius further noticed the efforts of doctors to understand and treat the disease and the exhaustion of the relatives who cared for the ill, and he devoted himself to the issues of the number of unburied bodies and the supply of food to the city.¹² He mentioned that some people considered to be wise attempted to expound the cause using various theories, and although they did not arrive at any reasonable result, they supposedly wanted to make an impression on others and convince them. Procopius is unnecessarily

Oxford University Press, 2006, pp. 548–550; HEATHER, Peter. Rome Resurgent. War and Empire in the Age of Justinian. Oxford; New York: Oxford University Press, 2018, p. 307; HALDON, John et al. Plagues, climate change, and the end of an empire. A response to Kyle Harper's The Fate of Rome (3): Disease, agency and collapse. In History Compass, 2018, vol. 16, no. 12, pp. 1–10. For the latest, see: MEIER 2016, pp. 270–282; MORDECHAI, Lee – EISENBERG, Merle. Rejecting Catastrophe. The Case of the Justinianic Plague. In Past and Present, 2019, vol. 244, no. 1, pp. 3–50; MORDECHAI, Lee – EISENBERG, Merle – NEWFIELD, Timothy P. The Justinianic Plague: An inconsequential pandemic? In PNAS, 2019, vol. 116, no. 51, pp. 25546–25554; MEIER, Mischa. The 'Justinianic Plague': An "Inconsequential Pandemic"? A Reply. In Medizinhistorisches Journal, 2020, vol. 55, no. 2, pp. 172–199; EISENBERG, Merle – MORDECHAI, Lee. The Justinianic Plague and Global Pandemics: The Making of the Plague Concept. In The American Historical Review, 2020, vol. 125, no. 5, pp. 1632–1667.

- 9 HORDEN 2005, p. 139; GOGOLA 2016, p. 72.
- MULHALL, John. Plague before the Pandemics: The Greek Medical Evidence for Bubonic Plague before the Sixth Century. In *Bulletin of the History of Medicine*, 2019, vol. 93, no. 2, pp. 151–179.
- EUAGRIUS, *Historia ecclesiastica*. The Ecclesiastical history of Evagrius with the scholia. Edited by Joseph Bidez and Léon Parmentier. London: Methuen & Co, 1898, p. 177, IV. 29; *The Ecclesiastical History of Evagrius Scholasticus*. Translated by Michael Whitby. Liverpool: Liverpool University Press, 2000, p. 229.
- PROCOPIUS, *De bello Persico*. Procopii Caesarensis opera omnia I, De bellis libri I IV. Edited by Jakob Haury and Gerhard Wirth. Monachii et Lipsiae: K. G. Saur, 2001, pp. 249–260, II. 22–23, II. 24; PROCOPIUS, *Arcana*. Procopii Caesarensis opera omnia III, Historia quae dicitur arcana. Edited by Jakob Haury and Gerhard Wirth. Monachii et Lipsiae: K. G. Saur, 2001, pp. 12–145, cc. 2, 4, 6, 12, 18, 23; PROCOPIUS, *History of the Wars, Book I and II*. Procopius in six volumes, vol.1. Translated by Henry Bronson Dewing. London; New York: S. Heinemann/Mc-Millan, 1914.

strict here, however, because—aside from the charlatans—there were doctors and other scholars who certainly wanted to determine the origin of the disease with certainty. No one, however, linked the epidemic to the remarkable climatic anomaly that occurred in 536;13 a massive volcanic eruption14 that caused the earth to cool significantly. The years 536 and 541 were the coldest of the last 1500 years as a volcanic cloud covered a large part of the Mediterranean and was so huge and dense that it not only significantly reduced the intensity of solar radiation, but even eclipsed the Sun. For a time, it seemed to rise only for a few hours a day. The cooling over Italy resulted in a dust veil, drought and a serious lack of precipitation (a volcanic dry fog). Elsewhere—in the eastern Mediterranean for example—the anomaly was described by John the Lydian as a "moist fog" above sea and land. Rain would eventually fall more than usual in some regions and either destroy crops or in contrast, have positive effect. There are also written reports about fluctuations in the weather from Gaul, Ireland, Persia and even China. Similar information is lacking from Egypt, though reports have been confirmed by the dendrochronological research of oaks and pines, as well as archaeological and palynological research and samples of ice crust taken from glaciers in Greenland.¹⁵

See, above all: ARJAVA, Antti. The Mystery Cloud of 536 CE in the Mediterranean Sources. In Dumbarton Oaks Papers, 2005, vol. 59, pp. 73-94; GUNN, Joel D. (ed.) The Years without Summer: Tracing AD 536 and Its Aftermath. Oxford: Archaeopress, 2000; GRÄSLUND, Bo - PRICE, Neil. Twilight of the gods? The 'dust veil event' of AD 536 in critical perspective. In Antiquity, 2012, vol. 86, pp. 428-443; BONDESON, Lennart - BONDESSON, Tobias. On the mystery cloud of AD 536, a crisis in dispute and epidemic ergotism: a linking hypothesis. In Danish Journal of Archaeology, 2014, vol. 3, no. 1, pp. 61-67; BÜNTGEN, Ulf - MYGLAN, Vladimir S. - LJUNGQVIST, Fredrik Charpentier et al. Cooling and societal change during the Late Antique Little Ice Age from 536 to around 660 AD. In Nature Geoscience, 2016, vol. 9, pp. 231-236; KODER, Johannes. Climatic change in the 5th and 6th centuries. In ALLEN, Pauline – JEFFREYS, Elizabeth (eds.) The Sixth Century: End or Beginning? Leiden; Boston: Brill, 2017, pp. 276-278; FARQUHARSON, Paul. Byzantium, Planet Earth and the Solar System. In ALLEN - JEFFREYS 2017, pp. 266–267; NEWFIELD, Timothy P. The Climate Downturn of 536 – 50. In WHITE, Sam - PFISTER, Christian - MAUELSHAGEN, Franz (eds.) The Palgrave Handbook of Climate History. Basingstoke; Hampshire: Palgrave Macmillan, 2018, pp. 447-493; NEWFIELD, Timothy P. Mysterious and Mortiferous Clouds: The Climate Cooling and Disease Burden of Late Antiquity. In IZDEBSKI, Adam - MULRYAN, Michael (eds.) Environment and Society in the Long Late Antiquity. Leiden: Brill, 2018, pp. 94–98. See also: KEYS 2000, pp. 251–295; MEIER 2005, pp. 359-365, 602; SALLARES 2007, pp. 284-286; STATHAKOPOULOS 2011, pp. 92-93; STATHA-KOPOULOS 2016, pp. 265-268; SARRIS, Peter. Climate and Disease. In HERMANS, Erik (ed.) A Companion to the Global Early Middle Ages. Amsterdam: Amsterdam University Press, 2020, pp. 512-518.

STOTHERS, Richard B. – RAMPINO, Michael R. Volcanic eruptions in the Mediterranean before A.D. 630 from written and archaeological sources. In *Journal of Geophysical Research*, 1983, vol. 88, pp. 6357–6371; STOTHERS, Richard B. Mystery Cloud of AD 536. In *Nature*, 1984, no. 307, pp. 344–345; ANTONIOU, Ioannis – SINAKOS, Anastasios K. The Sixth-Century plague, its repeated appearance until 746 AD and the explosion of the Rabaul Volcano. In *Byzantinische Zeitschrift*, 2005, vol. 98, no. 1, pp. 1–4; DULL, Robert A. – SOUTHON, John R. – KUTTEROLF, Steffen. Radiocarbon and geologic evidence reveal Ilopango volcano as source of the colossal 'mystery' eruption of 539/40 CE. In *Quaternary Science Reviews*, 2019, no. 222, pp. 1–18.

Regarding dendrochronology, see in particular: BAILLIE, Mike G. L. Marking in marker dates: Towards an archaeology with historical precision. In *World Archaeology*, 1991, vol. 23, no. 2, pp. 233–243; BAILLIE, Mike G. L. Dendrochronology Raises Questions About the Nature of the AD 536 Dust-Veil Event. In *The Holocene*, 1994, vol. 4, no. 2, pp. 212–217; D'ARRIGO Rosanne – FRANK, David – JACOBY, Gordon et al. Spatial Response to Major Volcanic Events in or about AD 536, 934 and 1258: Frost Rings and Other Dendrochronological Evidence from Mongolia and Northern Siberia: Comment on R. B. Stothers, 'Volcanic Dry Fogs, Climate Cooling, and Plague Pandemics in Europe and the Middle East' (Climatic Change, 42, 1999). In *Climatic Change*, 2001, vol. 49, no. 1–2, pp. 240–246. Regarding palynological research, see: TVAURI,

The migration of the Slavs and Avars to the west and other events can also be seen as indirect evidence of climatic fluctuation. A sudden and short-term instability in temperature and humidity, which had an impact on vegetation, could have led to a disruption of the balance between insects and rodents. Poor harvests in Illyria and Thrace evidently caused the emperor to issue a Novel and an Edict in 538 (or 539) regarding imports from Egypt to Alexandria and Constantinople without delay, which unfortunately brought a number of infected rats as well.

John of Ephesus, who walked with his companions from Palestine to Constantinople during the epidemic, penned the longest text about the plague. Along the way he saw deserted villages and bodies left unburied, empty roads, guard stations without lights, fields from Syria to Thrace with no one to harvest them, unpicked fruit fallen from the trees, ripe grapes rotting on the vine, cattle wandering without shepherds, and sheep, goats, oxen and pigs living freely as wild animals. In his own words, he witnessed such horrors in the capital city that he hesitated for a long time about whether to describe the situation at all. Ultimately, he decided to preserve his memories as a warning to future generations, so that they could learn from the punishment and suffering. The section of his Ecclesiastical History related to the plague has been lost; however, excepting the introduction—and apparently without major interventions or modifications—it was preserved in the third part of the Syrian chronicle from the Zuqnin monastery from the eighth century.¹⁸ Patriarch Michael the Syrian (1126 – 1199) included a shortened version of John of Ephesus's text in his chronicle, but he preserved the entire introduction.¹⁹ Since John of Ephesus interspersed his narrative with moralising, hyperbole, cautionary tales, biblical references and appeals to the Old Testament prophets, his text does not relay as much informational value as that of Procopius. Behind the rhetorical style, however, he provides valuable data and details that the reticent

Andreas. The Impact of the Climate Catastrophe of 536 – 537 AD in Estonia and Neighbouring Areas. In *Estonian Journal of Archaeology*, 2014, vol. 18, no. 1, pp. 30–56. For research on the glacial crust, see: HAMMER, Conny U. – CLAUSEN, Henrik B. – DANSGAARD, Willi. Greenland ice sheet evidence of post-glacial volcanism and its climatic impact. In *Nature*, 1980, no. 288, pp. 230–235; LARSEN, Louise B. et al. New ice core evidence for a volcanic cause of the A.D. 536 dust veil. In *Geophysical Research Letters*, 2008, vol. 35, no. 4, pp. 1–5; FERRIS, Dave G. et al. South Pole ice core record of explosive volcanic eruptions in the first and second millennia A.D. and evidence of a large eruption in the tropics around 535 A.D. In *Journal of Geophysical Research*, 2011, vol. 116, no. D17, pp. 1–11.

FARQUHARSON, Paul. Byzantium, Planet Earth and the Solar System. In ALLEN – JEFFREYS 2017, p. 267; KEYS 2000, pp. 27–58. See also: HURBANIČ 2016, p. 69; SOŁTYSIAK, Arkadiusz. The plague pandemic and Slavic expansion in the 6th – 7th centuries. In *Archaeologia Polona*, 2006, vol. 44, pp. 339–364.

¹⁷ *Iustiniani Novellae*, pp. 239–240, no. 32, p. 241, no. 34, pp. 492–495, no. 102; *Edicta*. Corpus iuris civilis III: Novellae. Edited by Rudolf Schoell and Wilhelm Kroll. Berolini: Weidmann, 1912, pp. 780 – 795, no. XIII. In regard to the dating, see: ARJAVA 2005, p. 86.

PSEUDO-DIONYSIUS, *Chronicon*. Pseudo-Dionysius of Tel-Mahre, Chronicle (known also as the Chronicle of Zuqnin) III. Translated by Witold Witakowski. Liverpool: Liverpool University Press, 1996, pp. 74–98, A. 855.

MICHAEL SYRUS, *Chronicon*. Chronique de Michel le Syrien (1166 – 1199) II. Edited and translated by Jean-Baptiste Chabot. Paris: Ernest Leroux, 1901, pp. 235–240, IX. 28.

Procopius was not aware of or did not notice. What is particularly valuable is his humane view, which captures the emotional dimension of the tragedy that affected individuals, families, entire cities and all social strata.

Procopius and John of Ephesus wrote their testimonies independently of one another, but in many ways, support one another and although they themselves came from different backgrounds and lived in different environments, their texts seem to complement each other. The third eyewitness to the plague was the Syrian scholar Evagrius, who himself caught the plague as a child, sometime in the years 541 – 543. Later, the plague took his wife, daughter, grandson, other relatives and some of his servants. Compared to Procopius and John of Ephesus, his contribution is rather short and concise, though despite devastating personal losses, it is factual, sober and without unnecessary pathos. Further, he documented information that Procopius and John of Ephesus did not observe or did not consider important, and other details are verified. The second wave of the epidemic, which broke out in Constantinople in the early spring of 558, was captured by the historian Agathias (ca. 530 – after 582), who followed Procopius's history after 552 directly. A few biographies of saints can also be valuable sources.

Along with literary sources, there are archaeological,²³ epigraphic²⁴ and in part numismatic sources available, but their interpretation is disputable.²⁵ Only three inscriptions that clearly mention the bubonic plague have been preserved; one comes from Izra in Syria,²⁶ the second from Aphrodisias in Caria, what is today Turkey,²⁷ and the third from Malaga, Spain, which dates to the year 609.²⁸ The increased mortality can be documented indirectly by epitaphs on tombstones, whose number rose specifically in the 540s, though

EUAGRIUS, Historia ecclesiastica, p. 178, IV. 29.

AGATHIAS, *Historiae*. Historici Graeci minores II. Edited by Ludwig Dindorf. Lipsiae : Teubner, 1871, pp. 363–364, V. 10.

For biographies of Eastern saints by location and year, see: STATHAKOPOULOS 2016, pp. 280, 282, 284–285, 289, 295.

See: McCORMICK, Michael. Tracking mass death during the fall of Rome's empire (I). In *Journal of Roman Archaeology*, 2015, vol. 28, pp. 325–357; McCORMICK, Michael. Tracking mass death during the fall of Rome's empire (II): a first inventory of mass graves. In *Journal of Roman Archaeology*, 2016, vol. 29, pp. 1004–1009; KENNEDY, Hugh N. Justinianic Plague in Syria and the Archaeological Evidence. In LITTLE 2007, pp. 87–99.

²⁴ Regarding epigraphic sources in general, see: DURLIAT 1989, p. 108; STATHAKOPOULOS, Dionysios. Travelling with the plague. In MACRIDES, Ruth (ed.) *Travel in the Byzantine World*. Aldershot: Ashgate, 2002, pp. 100–101; STATHAKOPOULOS, Crime and Punishment. The Plague in the Byzantine Empire, 541 – 749. In LITTLE 2007, p. 101; STATHAKOPOULOS 2016, pp. 278–282; MEIER 2016, pp. 267–269; BENOVITZ, Nancy. The Justinianic plague: evidence from the dated Greek epitaphs of Byzantine Palestine and Arabia. In *Journal of Roman Archaeology*, 2014, vol. 27, p. 491; McCORMICK 2015, p. 327.

SARRIS, Peter. Bubonic Plague in Byzantium: The Evidence of Non-Literary Sources. In LIT-TLE 2007, pp. 119–132. In contrast: MORDECHAI, Lee – EISENBERG, Merle – NEWFIELD, Timothy P. The Justinianic Plague: An inconsequential pandemic? In *PNAS*, 2019, vol. 116, no. 51, pp. 25546–25554. The shortfall in the minting of coins should not be considered proof of a strong epidemic.

KODER, Johannes. Ein inschriftlicher Beleg zur "justinianischen" Pest in Zora (Azra'a). In *Byz-antinoslavica*, 1995, vol. 56, no. 1, pp. 13–18.

²⁷ ROUECHÉ, Charlotte – REYNOLDS, Joyce M. (eds.) Aphrodisias in late antiquity the late Roman and Byzantine inscriptions including texts from the excavations at Aphrodisias conducted by Kenan T. Erim. London: Society for the Promotion of Roman Studies in London, 1989, p. 137, no. 86.

²⁸ KULIKOWSKI, Michael. Plague in Spanish Late Antiquity. In LITTLE 2007, p. 156.

the cause of death is not listed.²⁹ An explanation for why fewer stones were preserved than would be expected in such a large epidemic is provided in a general way by John of Ephesus and specifically by Procopius, both of whom mentioned that the sudden rise in deaths and large number of unburied bodies, particularly in large cities, meant that funeral rites and customs, which included the making of tombstones where the tradition persisted in the sixth century, were abandoned. This lack of similar findings is the best proof of the tragic dimension of the epidemic.

From indirect evidence, a decline in construction can be identified during the 540s and 550s due to a lack of labour and financing. In the uncompleted work *The Buildings*, evidently written at the request of Justinian between 550 and 554, Procopius mentioned the start of construction on a stone bridge over the Sangarius River (Sakarya River in modern Turkey) which still stands today. "The work is begun, and he has already expended much labour upon it," he wrote, adding that he is certain: "that before long he will accomplish it."30 The bridge was not completed until sometime before the year 562. 31 Further indirect evidence is the about-face of the war in Italy. The emperor was able to raise enough money and men only in the early 550s, ten years after the plague, and was still very dependent on barbarian mercenaries.³² General Narses eventually defeated the Goths in 552, but the empire's financial situation did not improve. Nevertheless, in that same year the emperor launched a war against the Visigoths in Hispania, but was unable to find the money to finish it and the conflict came to a standstill. Problems with money and labour are also evidenced by Procopius's report on the collection of taxes, which were imposed at the same rate and were also demanded from deceased residents. The 122nd Novel from the year 544, through which the emperor ordered a return to prices to pre-epidemic levels, shows proof of a food shortage.³³

According to John of Ephesus, the plague began among the peoples of south-eastern "India," "that is, in Kush and the Homerite Kingdom" in the southern part of the Arabian Peninsula, while Evagrius says that the plague also first appeared in Ethiopia. In the telling of Pseudo-Zacharias, the plague entered Egypt from Kush,³⁴ more or less identical to ancient Ethiopia.³⁵ It is possible

DURLIAT 1989, p. 109; SARRIS 2007, pp. 125–126; BENOVITZ 2014, pp. 487–498. She examined 282 Greek epitaphs on tombstones from Palestine and Arabia and concluded that a sharp increase occurred in the 540s and 590s compared to other years, which she said was related to the plague waves.

PROCOPIUS, *De aedificiis*. Procopii Caesariensis opera omnia IV, De aedificiis libri VI. Edited by Jakob Haury and Gerhard Wirth. Monachii; Lipsiae : K. G. Saur, 2001, p. 155, V. 3.10.

PAULUS SILENTIARIUS, *Descriptio Sanctae Sophiae*. Paulus Silentiarius, Descriptio Sanctae Sophiae – Descriptio Ambonis. Edited by Claudio De Stefani. Berlin; New York: Teubner, 2011, p. 64, vers. 928–933.

TEALL, John L. The Barbarians in Justinian's Armies. In *Speculum*, 1965, vol. 40, no. 2, pp. 296, 305–309, 316–322.

³³ *Iustiniani Novellae*, pp. 592–593, no. 122.

³⁴ MICHAEL SYRUS, *Chronicon*, p. 235, IX. 28; PSEUDO-ZACHARIAS, *Chronicon*. The Chronicle of Pseudo-Zachariah Rhetor, Church and War in Late Antiquity. Edited by Geoffrey Greatrex and translated by Robert R. Phenix and Cornelia B. Horn. Liverpool: Liverpool University Press, 2011, p. 414, X. 9.

ALLEN 1979, p. 6. She doubted that Ethiopia was the source of the contagion and saw these claims as a manifestation of traditional Roman prejudice, see: SARRIS 2007, p. 121. He further pointed

that three organisms from different areas of the world—the bacterium Yersinia pestis from Central Asia, the black rat (*Rattus rattus*) from Southern Asia and the African flea (*Xenopsylla cheopis*) parasitizing rodents—came together for the first time in East Africa or Egypt.³⁶ This means that the bacterium and the rats came to the territory of the Byzantine Empire through long-distance trade from India.³⁷ Yersinia pestis, however, could have been present among wild rodents throughout the entire region for decades ³⁸ and without the right combination of circumstances, the epidemic would never have occurred on such a scale.

Procopius stated that the plague first broke out in the port city of Pelusium,³⁹ which lay in the Nile Delta near Clysma, the last Roman port on the Red Sea, and based on his chronology, the plague appeared in Pelusium in 541. From there, it moved to nearby Alexandria in one direction, from which it continued to spread along the North African coast (Libya and Africa)⁴⁰ as well as to Palestine where it is documented in Gaza, Ashkelon, the Negev Desert, Jerusalem and other cities⁴¹ where, as told by John of Ephesus, it was even worse than in Alexandria. From Palestine, Procopius tells us, it then spread throughout the whole world. Pseudo-Zacharias provided the same avenues but in more detail; from Kush the plague went to Egypt and from there to Alexandria and Libya; a second route went to Palestine, Phoenicia and Arabia. In the spring of 542, it was already in Antioch and other cities of Syria and Lycia, and at the same time, it moved from Alexandria to Constantinople, entering into Galatia in the interior of Asia Minor in the summer of 542. John of Ephesus and Pseudo-Zacharias both recorded the plague in the Asia Minor provinces of Cilicia, Mysia, Armenia, Cappadocia, Bithynia and Asia. ⁴² In 543, the plague broke out in Italy and Illyria, but its course in these locations is not known.⁴³ Italy it seems, with the exception of Rome, was spared the first wave,

out that geographical ideas about the world, especially the distant one, were very vague and even in the sixth century, Byzantine sources commonly confused Ethiopia with India.

³⁶ SALLARES, Robert. Ecology, Evolution, and Epidemiology of Plague. In LITTLE 2007, p. 251.

TSIAMIS, Costas – POULAKU-REBELAKOU, Effie – PETRIDOU, Eleni. The Red Sea and the Port of Clysma. A Possible Gate of Justinian's Plague. In *Gesnerus*, 2009, vol. 66, no. 2, pp. 209–217; SARRIS 2006, p. 171; SARRIS, Peter. Climate and Disease. In HERMANS, Erik (ed.) *A Companion to the Global Early Middle Ages*. Amsterdam: Amsterdam University Press, 2020, p. 522.

STATHAKOPOULOS, Dionysios. Reconstructing the climate of the Byzantine world: state of the problem and case studies. In LASZLOVSZKY, József – SZABÓ, Péter (eds.) *People and Nature in Historical Perspective*. Budapest: CEU Medievalia & Archaeolingua, 2003, p. 250; SALLARES 2007, pp. 251, 285–286.

³⁹ PROCOPIUS, De bello Persico, p. 250, II. 22.6.

CORIPPUS, Flavius Cresconius. *Corippi Africani grammatici Libri qui supersunt*. Monumenta Germaniae Historica (MGH), Auctores antiquissimi 3,2 (Auct. ant.). Edited by Josephus Partsch. Berolini: Weidmann, 1878, pp. 35–37, III. vers. 343–400. Regarding the four tomb epitaphs of children, probably siblings, from Sufetula dated from January to February 543, see: DUVAL, Noël. Nouvelles recherches d'archéologie et d'épigraphie chrétiennes à Sufetula (Byzacène). In *Mélanges de l'école française de Rome*, 1956, vol. 68, pp. 277–280; STATHAKOPOULOS 2016, pp. 292–293.

KISLINĞER, Ewald – STATHAKOPOULOS, Dionysios. Pest und Perserkriege bei Prokop. Chronologische Überlegungen zum Geschenen 540 – 545. In *Byzantion*, 1999, vol. 69, pp. 76–98; STATHAKOPOULOS 2002, pp. 99–102; STATHAKOPOULOS 2007, pp. 100–104.

⁴² MICHAEL SYRUS, *Chronicon*, p. 240, IX. 28; PSEUDO-DIONYSIUS, *Chronicon*, p. 80, A. 855.2; PSEUDO-ZACHARIAS, *Chronicon*, pp. 414–415, X. 9.

⁴³ MARCELLINI, v. c. comitis. Additamentum ad a. DXLVIII. Chronicon ad a. DXVIII continuatum

paradoxically because Constantinople failed to restore control over it until the arrival of the plague. The epidemic in Rome during the winter of 543/544 is documented by preserved gravestones, whose occurrence increased noticeably compared to other years. In the fall of 543, the plague broke out among the Persians and the "nations of the northeast." In Persia (*Media Atropatene*) it decimated the Persian army and compelled the Persian king Khosrow I. to make peace with the emperor in 545. The disease is also documented in written or epigraphic sources in Sicily, Gaul⁴⁸ and Hispania, and in the Italian Liguria, it was recorded by Lombardian historian Paul the Deacon as late as 566, but it reportedly never reached the Alamanni or the Bavarians. Irish chronicles mention a plague (*bléfed*) in 545, apparently the bubonic plague, though there is no certainty that the plague actually reached the shores of Ireland three years after the epidemic in Constantinople.

- ad a. DXXXIV. Chronica minora saec. IV. V. VI. VII., vol. II (Chronica minora). MGH, Auct. ant. 11. Edited by Theodor Mommsen. Berolini: Weidmann, 1894, p. 107, A. 543.2. See: GRMEK, Mirko. Les conséquences de la peste de Justinien dans l'Illyricum. In CAMBI, Nenad MARIN, Emilio (eds.) Acta XIII Congressus Internationalis Archaeologiae Christianae. Split: Arheoloski muzej; Città del Vaticano; Pontificio Istituto di Archeologia Cristiana, 1998, pp. 787–794.
- 44 *Inscriptiones Christianae Urbis Romae I X.* Edited by Giovanni Battista de Rossi et al. Roma: Ex Officina Libraria Pontificia, 1922–1991, pp. 114, 202, 211, 214, 216, 232, 237, 495, 496, 497, 507, 553, 577, 597, 612; STATHAKOPOULOS 2002, pp. 105–106; STATHAKOPOULOS 2016, pp. 293–294.
- 45 MICHAEL SYRUS, Chronicon, p. 240, IX. 28; PSEUDO-ZACHARIAS, Chronicon, p. 415, X. 9.
- PROCOPIUS, *De bello Persico*, pp. 256–262, II. 23.21, II. 24.5, II. 24.8, II. 24.12; PROCOPIUS, *Arcana*, p. 17, 2.26–27; KISLINGER, Ewald STATHAKOPOULOS, Dionysios. Pest und Perserkriege bei Prokop. Chronologische Überlegungen zum Geschenen 540 545. In *Byzantion*, 1999, vol. 69, pp. 76–98.
- MICHAEL SYRUS, *Chronicon*, p. 240, IX. 28; PSEUDO-ZACHARIAS, *Chronicon*, p. 414, X. 9; MANGANARO, Giacomo. Bizantina Siciliae. In *Minima epigraphica et papyrologica*, 2001, vol. 4, no. 5, pp. 131–178; STATHAKOPOULOS 2016, pp. 290–291.
- MICHAEL SYRUS, Chronicon, p. 240, IX. 28; PSEUDO-ZACHARIAS, Chronicon, p. 414, X. 9; GREGORIUS TURONENSIS. Historiae. Gregorii episcopi Turonensis Libri historiarum X. MGH Scriptores rerum Merovingicarum 1,1 (SS rer. Merov.). Edited by Bruno Krusch and Wilhelm Levison. Hannoverae: Hahnian, 1951, pp. 1–537, IV. 5, IV. 31, VI. 14, VI. 33, VII. 1, IX. 21–22, X. 23, X. 25, X. 30; GREGORIUS TURONENSIS. Liber in Gloria martyrum. MGH SS rer. Merov. 1,2. Edited by Wilhelm Arndt and Bruno Krusch. Hannoverae: Hahnian, 1885, pp. 73–74, c. 50; GREGORIUS TURONENSIS. Liber vitae patrum. Gregorii episcopi Turonensis Miracula et opera minora. MGH SS rer. Merov. 1,2. Edited by Wilhelm Arndt and Bruno Krusch. Hannoverae: Hahnian, 1885, p. 234, VI. 6; BIRABEN Le GOFF 1969, pp. 1494–1497; MacARTHUR, William P. The Identification of Some Pestilences recorded in the Irish Annals. In Irish Historical Studies, 1949, vol. 6, no. 23, p. 173.
- 49 *Chronicorum Caesaraugustanorum reliqiae a. CCCL DLXVIII.* Chronica minora II. MGH, Auct. ant. 11. Edited by Theodor Mommsen. Berolini: Weidmann, 1894, p. 223, A. 542. Regarding the plague in Hispania and later sources, see: KULIKOWSKI 2007, pp. 150–170.
- PAULUS DIACONUS, *Historia Langobardorum*. MGH Scriptores rerum Langobardicarum et Italicarum saec. VI IX. Edited by Georg Waitz. Hannoverae: Hahnian, 1878, p. 74, II. 4, pp. 104–105, III. 24, p. 117, IV. 4, p. 121, IV. 14; GREGORIUS TURONENSIS, *Historiae*, p. 481, X. 1, p. 515, X. 23.
- Annala Uladh Annals of Ulster. Otherwise, Annala Senait Annals of Senat. A chronicle of Irish affairs from A. D. 431 to A. D. 1540, vol. 1. Edited and translated by William M. Hennessy. Dublin: Alex Thom & Co., 1887, pp. 48–51, A. 544 (545); Annala Rioghachta Eireann. Annals of the kingdom of Ireland by the Four Masters, from the earliest period to the year 1616, vol. 1. Edited and translated by John O' Donovan. Dublin: Hodges, Smith, and Co., 1856, pp. 182–183, A. 543.2; Annales Cambriae. Rerum Brittanicarum Medii aevi scriptores. Edited by John Williams. London: Longman, Green, Longman, and Roberts, 1860, p. 4, A. 547.2. Regarding the bléfed, see: MacARTHUR 1949, pp. 172–173. The early arrival of plague to the British Isles is also seen by: MADDICOTT, John. Plague in Seventh-Century England. In LITTLE 2007, pp. 173–175. Nor is it ruled out by: HORDEN 2005, p. 138. Regarding the plague in Ireland, see also: DOOLEY, Ann. The Plague and Its Consequences in Ireland. In LITTLE 2007, pp. 215–230.

It is no surprise then that contemporaries of the epidemic and later authors thought that the plague had affected the whole world. Procopius says that the plague spread over "the whole world," embraced "the entire world" and the Roman Empire in particular, and "the whole human race came near to being annihilated." John of Ephesus wrote that this plague had never and will never have an equivalent, and like a "cruel scourge, struck the whole world" and advanced without stopping, cutting down countless people "like a sickle." According to Evagrius, the disease struck and spread over "the whole earth;" it "overran the whole universe leaving none among men without some experience of the disease." John Malalas wrote that the plague: "caused the overthrow of man on the earth, leading to his destruction in all cities and lands," and a record by Victor of Tunnuna regarding 543 also states that the plague hit "the world" and with the disease of the loins "consumed a rather large part of the nations." Even Irish chronicles state that the *bléfed* exterminated the "noblest third" of humanity.

Authors of the time could only describe what they saw, and it should be appreciated how much they did actually notice. However, they lacked today's knowledge of infectious diseases to complete their observations. Procopius, for example, very correctly noted that the plague always started from a coast and spread from there at its own pace, and in every season. The contagion spared no region, city or island. He does not seem to have noticed that the plague was spread by ship from port to port, and from there inland. Gregory of Tours was a mere step away from realising that the plague came with the cargo of ships. Namely, by 558 he noted that a merchant ship from Hispania unknowingly brought the "seed of this disease" to Marseille along with its goods, and after claiming the first victims from one house, the epidemic did not fully break out in the city until sometime later.⁵⁶ John of Ephesus likewise described the slow and gradual spread of the plague which reminded him of a king planning a military attack on a city, even noting that when the plague broke out in one city, it did not spread to others until it had ended in one. He is also the only author to mention that the plague affected areas around cities up to several kilometres away, carried to the countryside by villagers returning home from the cities but also by the townspeople themselves, who sought safety in the countryside from the plague in the city. Neither Procopius nor John of Ephesus mentioned the flight of people from Constantinople or other cities to the nearby countryside. Evagrius, however, generally documented

⁵² PROCOPIUS, *De bello Persico*, p. 250, II. 22.7; PROCOPIUS, *Arcana*, p. 42, c. 6.22-24, p. 144, 23 19

⁵³ MICHAEL SYRUS, Chronicon, p. 235, IX. 28; PSEUDO-DIONYSIUS, Chronicon, p. 74, A. 855.1.

IOANNES MALALAS. *Chronographia*. Corpus Fontium Historiae Byzantinae 35. Edited by Hans Thurn. Berolini; Novi Eboraci: Walter de Gruyter, 2000, p. 407, XVIII. 92; *The Chronicle of John Malalas*. Translated by Elizabeth Jeffreys, Michael Jeffreys and Roger Scott. Leiden; Boston: Brill, 2017, pp. 286–287.

VICTOR TONNENNSIS. *Chronica a. CCCXLIV – DLXVII*. Chronica minora II. MGH, Auct. ant. 11. Edited by Theodor Mommsen. Berolini: Weidmann, 1894, p. 201, A. 542.2; *Arians and Vandals of the 4th – 6th Centuries*. Translated by John R. C. Martyn. Newcastle upon Tyne: Cambridge Scholars Publishing, 2008, p. XX.

⁵⁶ GREGORIUS TURONENSIS, Historiae, p. 442, IX. 22.

that people left the cities in an effort to save themselves or their relatives. He also mentioned, in a very remarkable observation, that some of those who had fled from affected places before the contagion had remained unharmed but had transmitted the disease to those who were not sick,⁵⁷ though he could not say how. During an epidemic in Caesarea in Palestine, the monk John Moschus (ca. 550 – 619) reported that a certain Procopius, in fear of the lives of his sons, considered whether they should return home.⁵⁸ In an emotional description of the plague in Liguria, Lombardian historian Paul the Deacon wrote that people left their homes out of fear, which were guarded only by dogs, that cattle were left alone in the pastures, children ran away from the unburied bodies of their parents, and that parents left feverish children behind them.⁵⁹

People then linked the arrival of the plague in their city with otherwise ordinary but exaggerated events. John of Ephesus wrote that shortly before the arrival of the pestilence "many people" in Gaza, Ashkelon and Palestine saw boats "of bronze" at sea, especially at night, in which sat black figures resembling men without heads and with bronze staffs. These ships travelled quickly and wherever they wanted. 60 According to Procopius, people in Constantinople saw apparitions in the form of human beings, and those who met them soon fell ill. They tried to save themselves by invoking the most holy names through prayers and by seeking refuge in churches. Though the disease broke out there as well, and they died there too. Others began to shut themselves in at home and would not even open their doors to friends for fear that the demons carrying the disease had taken their form. Others said they saw figures above them, or heard voices telling them they were going to die, or had visions in a dream. The sceptical Procopius added that the majority of the sick caught the plague without any warning.⁶¹ Obviously, there were no bronze boats, headless beings, demons, mysterious figures or voices anywhere in reality, but these testimonies are revealing because they demonstrate the degree of panic, hysteria and genuine fear for one's safety and that of relatives, and the feeling of complete helplessness in the first days and weeks of the epidemic. Gregory of Tours stated that the arrival of the plague in Clermont was ushered in by strange signs throughout the region, for example, three or four glowing auras around the sun, a partial eclipse of the sun in October 563, a comet seen in the sky, while others saw the sky on fire and still other signs that were not named.⁶² Gregory also recorded how, prior to the arrival of the plague, signs in the form of the Greek letter tau began to appear on houses, walls and churches.⁶³ Similarly, Paul the Deacon wrote that a year before the outbreak of the plague in Liguria, certain signs appeared on houses, gates,

⁵⁷ EUAGRIUS, Historia ecclesiastica, p. 179, IV. 29.

⁵⁸ MOSCHUS. *Pratum spirituale. Procopii Gazei Opera quae reperiri potuerunt omnia 3.* Patrologia Graeca 87/3. Edited by Jacques Paul Migne. Parisii : J. P. Migne, 1863, pp. 2995–2996, c. 131.

⁵⁹ PAULUS DIACONUS, Historia Langobardorum, p. 74, II. 4.

⁶⁰ MICHAEL SYRUS, Chronicon, p. 238, IX. 28; PSEUDO-DIONYSIUS, Chronicon, p. 77, A. 855.1.

⁶¹ PROCOPIUS, *De bello Persico*, p. 251, II. 22.10–11.

⁶² GREGORIUS TURONENSIS, Historiae, pp. 163–165, IV. 31.

⁶³ GREGORIUS TURONENSIS, Gloria martyrum, pp. 73–74, c. 50.

vessels and even clothing, which, if someone tried to wash them, became even more obvious.⁶⁴ Whether these were rumours, malice or something else completely will never be known.

Procopius described only some of the initial and predominant symptoms, including fever, delirium, hallucinations that occurred as a result of the intoxication of the central nervous system by bacteria, painful swelling of the lymph nodes, putrescence, sudden changes in behaviour and the so-called "hunger for air," coma, temporary or permanent difficulties with walking and talking, etc. Procopius was not a doctor, but he evidently had a rather good knowledge of medicine, particularly military medicine, since as Belisarius's secretary he took part in several of his expeditions and was witness to some very curious injuries in battle. It is also not known whether these were his own observations or if the information was obtained second-hand. As a layman, however, he lacked professional medical terminology, like the other authors. He endeavoured to present a clear, detached, even austere record of everything he considered important, like his literary model Thucydides, and recorded the symptoms and course of the disease with care. Though his descriptions are condensed and not always chronological, his consistency and precision are admirable, and the whole part is remarkably similar to modern pathology.⁶⁵ His testimonies about the helplessness of doctors, the exhaustion of those taking care of their relatives and the like are also invaluable.

Other authors described the symptoms of the disease, but none so thoroughly or in such detail as Procopius. John of Ephesus mentioned swelling on one or both sides of the groin that kept growing larger, but also pains in the throat or vomiting of pus "like streams,"66 and Pseudo-Zacharias noted festering ulcers and swelling on the thighs, groin and armpits.⁶⁷ Evagrius comments that the disease started with a headache in some people, which then passed to the throat. Some had bloodshot eyes and swollen faces, some indigestion and vomiting, while others developed swelling followed by a high temperature and ultimately a sore throat. Like Procopius, Evagrius also identified a delirium phase and for some, apparently a "hunger for air," which was followed by death after complete collapse or trauma of the body. A noteworthy report is that some patients, evidently in different waves, were infected twice and survived, but did not make it through a third plague infection. Procopius recorded cases of pregnant women who became infected. Some died in miscarriage, others during childbirth together with the new-born. Three survived but their children did not, and one died in childbirth but gave birth to a healthy child who survived.⁶⁸ John of Ephesus wrote only very generally about children lying by their dead mothers.⁶⁹ Agathias placed emphasis on the high and unbreaking fever during the day and at night, which did not leave the patients

⁶⁴ PAULUS DIACONUS, Historia Langobardorum, p. 74, II. 4.

⁶⁵ POLLITZER, Robert. Plague. Geneva: WHO, 1954, pp. 409-482.

⁶⁶ PSEUDO-DIONYSIUS, Chronicon, p. 74, A. 855.1.

⁶⁷ PSEUDO-ZACHARIAS, Chronicon, p. 414, X. 9; MICHAEL SYRUS, Chronicon, p. 240, IX. 28.

⁶⁸ PROCOPIUS, *De bello Persico*, p. 255, II. 22.35–36.

⁶⁹ PSEUDO-DIONYSIUS, Chronicon, p. 91, A. 855.4.

until they died, and he did not miss the swelling of the glands in the groin.⁷⁰ Gregory of Tours also noted the swelling in the groin,⁷¹ as did Paul the Deacon who mentioned swelling of the glands followed by an "unbearable" temperature. He was also the only period author to mention the specific size of the buboes, comparing them to a walnut and a woodpecker.⁷²

Neither Procopius nor any other authors mentioned a cough, difficulty breathing, chest pain or tightness. Such symptoms would suggest the highly infectious and fatal pneumonic plague that could be expected after such a severe bubonic plague epidemic, although it is possible that this strain of Yersinia pestis did not cause it. This phase of the epidemic can only be inferred from the vague and ambiguous references to strange rapid deaths. For example, John of Ephesus described how people died out of nowhere at home, on the street, in the market, in the harbour, in the church, in the baths, simply everywhere, and did so while working, when shopping, in conversation, while eating, and especially when counting money and robbing and stealing.⁷³ Evagrius, on the other hand, mentioned that some were infected simply by living with the sick or by touching them, but he did not mention any coughing. Writing in 558, Agathias similarly noted that some people had no fever or any other symptoms but "simply dropped dead" during their normal activities, at home or in the street, "the heaviest toll was among the young and vigorous and especially among the men."74 Although the three epidemics were caused by three different strains, the plague in the sixth century killed equally as fast as the Black Death in the Middle Ages and the third plague epidemic at the turn of the 20th century. According to Procopius, death came within a few days after the first symptoms appeared, but sometimes immediately, within a day, particularly among those who developed black spots under the skin or began to vomit blood.⁷⁵ John of Ephesus also stated that those who had three black spots on the palm of their hand died immediately, within an hour or two, though they could last up to the next day.⁷⁶

According to Agathias, infected people were able to withstand the disease for five days at most,⁷⁷ and according to Evagrius, they survived for just two or three days.⁷⁸ Gregory of Tours mentioned two or three days too⁷⁹ and Paul the Deacon wrote of three days, noting that if someone survived the third day, then there was hope of recovery.⁸⁰ Procopius was more detailed. If the inflamed nodule (bubo) maturated through the skin—which is of course also very painful—and then shrunk, the person was cured of the disease, had

⁷⁰ AGATHIAS, Historiae, pp. 363-364, V. 10.3.

⁷¹ GREGORIUS TURONENSIS, Historiae, p. 165, IV. 31.

⁷² PAULUS DIACONUS, Historia Langobardorum, p. 74, II. 4.

⁷³ MICHAEL SYRUS, *Chronicon*, pp. 238–239, IX. 28; PSEUDO-DIONYSIUS, *Chronicon*, p. 88, A. 855.4, pp. 93–95, A. 855.5.

⁷⁴ AGATHIAS, *Historiae*, p. 364, V. 10.4.

⁷⁵ PROCOPIUS, De bello Persico, p. 254, II. 22.30.

⁷⁶ MICHAEL SYRUS, Chronicon, p. 236, IX. 28; PSEUDO-DIONYSIUS, Chronicon, p. 88, A. 855.4.

⁷⁷ AGATHIAS, *Historiae*, p. 363, V. 10.3.

⁷⁸ EUAGRIUS, Historia ecclesiastica, p. 178, IV. 29.

⁷⁹ GREGORIUS TURONENSIS, Historiae, p. 165, IV. 31.

⁸⁰ PAULUS DIACONUS, Historia Langobardorum, p. 74, II. 4.

survived and saw a chance at recovery. If, however, the bubo did not change size, then blood poisoning (sepsis), internal bleeding and organ failure had occurred. In the majority of cases of bubonic plague, the primary cause of death was heart failure. However, neither laymen nor scholars were able to determine the cause of the disease. Even then, infectious diseases such as cholera and typhus were known to accompany wars or to arise from so-called "bad air," and although the empire was at war with both the Goths and Persia, Alexandria in 541 and Constantinople in 542 were enjoying a peaceful and carefree life. When news of the plague arriving in Egypt and the eastern provinces reached the capital, they were considered, in John of Ephesus's telling, only echoes of a bad omen.

John also writes that some towns on the borders of Egypt and Palestine were left without inhabitants and only a few individuals survived. In Alexandria, just as later in the capital, no one went out without a tablet around their neck or arm with their name, address and a note to notify their family of their death, should it occur.81 It is possible they were not even worried about dying but more that their bodies would end up in unmarked mass graves. The author described depopulated regions that he passed through and the poet Corippus wrote of cities emptied of their Libyan inhabitants. Gregory of Tours claimed that the plague in 571 at Clermont killed so many people that it was supposedly impossible to count them. The number of victims allegedly climbed into the thousands, with three hundred bodies counted in St. Peter's Basilica on one Sunday alone. Since boards for building coffins were quickly exhausted, the dead were placed in common graves by ten or more.⁸² Paul the Deacon also mentioned a depopulated Liguria and Rome in 591, where few people were said to remain after the epidemic. Evagrius noted that the plague did not kill equally everywhere. While some cities remained completely devoid of inhabitants, it touched others only slightly and then moved on. There were even cities where the plague struck one area of the city or only one or two households, which it completely wiped out. Though when it returned a year later, the disease infected the households it had previously passed over. 83 The best reports on mortality come from Alexandria, which John of Ephesus wrote about and Constantinople, where mortality was especially high due to multiple factors. The population of Constantinople in the mid-sixth century is estimated to have been 375 to 500 thousand inhabitants, but lower estimates can be found as well.84 Additionally, thousands of people from near and far

⁸¹ MICHAEL SYRUS, Chronicon, p. 237, IX. 28; PSEUDO-DIONYSIUS, Chronicon, p. 93, A. 855.5.

⁸² GREGORIUS TURONENSIS, Historiae, p. 165, IV. 31.

⁸³ EUAGRIUS, Historia ecclesiastica, p. 177, IV. 29.

BURY, John B. *History of the Later Roman Empire I*. London: MacMillan and Co, 1923, pp. 87–88; STEIN, Ernest. *Histoire du Bas-Empire II*. Paris; Brussels; Amsterdam: Desclée de Brouwer, 1949, pp. 759, 842; TEALL, John L. The Grain Supply of the Byzantine Empire, 330 – 1025. In *Dumbarton Oaks Papers*, 1959, vol. 13, p. 92; RUSSELL 1958, pp. 66, 93, 99; RUSSELL, Josiah C. Recent Advances in Mediaeval Demography. In *Speculum*, 1965, vol. 40, no. 1, p. 91; MANGO, Cyril. The Development of Constantinople as an Urban Centre. In CARATZAS, Aristide D. (ed.) *The Seventeenth International Byzantine Congress, Major Papers*. New Rochelle NY: A. D. Caratzas, 1986, p. 120; STATHAKOPOULOS 2016, p. 140; ALLEN 1979, p. 11; HURBANIČ, Martin. *Konstantinopol 626*. Praha: Academia, 2016, p. 70.

came to the city daily for work, business, official, religious or other reasons. For example, John of Ephesus noticed that many cargo ships remained in the harbour because the plague had literally annihilated their crews.

The epidemic lasted four months in the capital, the last three being the deadliest. Initially the amount of sick and dead only increased slightly, but the numbers began to rise rapidly until ultimately, as told by Procopius, it reached up to 5000 people a day, and even up to 10 000 or more at the peak. John of Ephesus gives the same or higher numbers. There were days when they were said to have counted 5000, 7000, 12 000 or even 16 000 dead.85 These high numbers are questionable and almost certainly exaggerated. They cannot be taken as statistical figures in the modern sense because the aim of both authors was to express the severity and horror of the disaster that befell the capital.86 Though these figures are not necessarily completely exaggerated, because they do not actually say how many people died per day at the height of the epidemic but only how many bodies were taken out of the city on an unspecified day, that is, at a time when victims were identified and removed from the city in an organised and systematic manner. Thanks to our sources, we know that many bodies were buried in a state of advanced decomposition, which means that they must have lain in houses and on the streets for several days or even weeks. Since the numbers from Procopius and John of Ephesus are very similar, it is likely that they both took the data from official sources or from stories circulating in the city. John of Ephesus confirmed that bodies removed from the city were initially counted at the gates and harbours but stopped at 230 thousand, which means some statistics must have been kept. He himself eventually estimated that there may have been as many as 300 thousand victims. Procopius in the Secret History stated on two occasions that nearly half of the people—the population of Constantinople—succumbed to the plague.87 Both authors also concur that the city was depopulated to such an extent that it was difficult to meet anyone in it, because even those who survived ceased going out and remained at home. Only those who gathered and hauled away bodies could be seen in the streets. Life in the city came to a stop. No one worked, workshops were closed, and ships were anchored in the harbour without sailors. They stopped importing food, which became much more expensive as a result,88 and hunger became an equal threat to the plague The city fell silent as only dogs and the smell of corpses lingered in the empty streets. As a devout and religious man, John of Ephesus was troubled not only by the countless ruined lives, particularly of young people and children, but also by the insensitive and disrespectful treatment of the bodies of the dead, which were quickly buried without proper rites, gathered in huge piles along

PROCOPIUS, De bello Persico, p. 256, II. 23.2; MICHAEL SYRUS, Chronicon, p. 235, IX. 28; PSEUDO-DIONYSIUS, Chronicon, pp. 87, 89, A. 855.4.

⁸⁶ MEIER 2106, p. 277.

⁸⁷ PROCOPIUS, Arcana, p. 42, c. 6.22, p. 119, c. 18.44.

PROCOPIUS, *De bello Persico*, p. 259, II. 23.17–19; MICHAEL SYRUS, *Chronicon*, pp. 236, 238, IX. 28; PSEUDO-DIONYSIUS, *Chronicon*, p. 88, A. 855.4.

the coast and thrown into the sea or pushed one on top of another into mass graves. Through expressive descriptions and comparisons, he sought to help his readers feel exactly what he felt, and it must be said that he succeeded.

John of Ephesus was the only author to document that the poorest and most vulnerable people in Constantinople—and therefore other cities—were the first to be infected by the plague, although his explanation was incorrect.89 He thought that God's mercy was first expressed towards the poor, so that the pious could bury them, because if it happened the other way around, the poor would have no way to "remove their rotting corpses and bare bones from the public places." The plague hit the urban poor in Constantinople the hardest, and they all but disappeared. The reason for the rapid spread of the disease and the huge number of victims in the capital was also the high population density and its unique architecture. The lower social classes lived in apartment buildings (insulae), the same as they did in Rome, on whose model Constantinople was built. These were only a few metres apart from each other. Shops, workshops or warehouses were located on the ground floor and dozens of people lived in the small spaces of the upper floors. 90 A large number of people, food and other goods passed through the environment, which was also ideal for rats. All this together allowed the epidemic to spread quickly and mercilessly.

The plague affected and killed people of all ages, regardless of gender, birth, social status, property or occupation, as both Procopius and John of Ephesus noted. Although wealthier people generally had a better chance of survival due to a better diet and overall immunity, it is known that the plague wiped out entire families from the upper classes as well. Procopius and John of Ephesus both confirmed that houses of the wealthy were left empty too. In some locations, owners survived without servants, elsewhere only servants without masters. The plague did not avoid the palaces of the richest either. Ultimately, in the words of John of Ephesus: "the [imperial] palace was overwhelmed and overcome by sorrow. The emperor the empress, to whom myriads and thousands of commanders and the whole great senate had bowed and paid honour every day, [now] were miserable and like everybody sank into grief, being served only by few." Even Justinian was stricken with the plague and many were preparing for his death, but he was either lucky or saved by the steps taken by his personal physician, which remained a medical secret.

Procopius tells us that physicians in Constantinople tried several procedures with mixed results in different patients, but he did not describe any of them.

MICHAEL SYRUS, Chronicon, p. 236, IX. 28; PSEUDO-DIONYSIUS, Chronicon, p. 86, A. 855.4.

⁸⁰ KRIESIS, Anthony. Über die Wohnhaustyp des frühen Konstantinopel. In *Byzantinische Zeitschrift*, 1960, vol. 53, pp. 322–327; MAGDALINO, Paul. Medieval Constantinople: built environment and urban development. In LAIOU 2002, p. 534; DARK, Ken R. Houses, streets and shops in Byzantine Constantinople from the fifth to the twelfth centuries. In *Journal of Medieval History*, 2004, vol. 30, no. 2, pp. 85–86, 99.

⁹¹ PROCOPIUS, *De bello Persico*, pp. 256, 259, II. 23.4–5, II. 23.20; PSEUDO-DIONYSIUS, *Chronicon*, pp. 74–75, A. 855.1, p. 92, A. 855.5.

⁹² PSEUDO-DIONYSIUS, Chronicon, p. 92, A. 855.5.

⁹³ PROCOPIUS, De bello Persico, p. 263, II. 24.20; PROCOPIUS, Arcana, p. 24, c. 4.1-4.

Baths are all that are mentioned, which allegedly helped some but not others. Today, we now know that this procedure had no effect on the course of the disease. Not even the level of care provided by relatives led to healing and survival. Procopius states that patients who received a lot of continuous care often died, while others who were not cared for at all survived. All of this baffled physicians, who were unable to find any way to protect people from the infection nor any treatment or medicine that would help the sick. The illness came as if without warning, and healing likewise occurred without any evident or known reason. Although doctors identified swollen lymph nodes as the source of the disease and examined them on the bodies of the dead, they were unable to proceed any further. Putrid deposits were discovered in them, "a strange sort of carbuncle," but not even this led to determination of the cause.94 Perhaps they tried to treat buboes somehow, possibly even surgically, but without success because swollen and suppurating lymph nodes are in fact a symptom and not the source of the disease. Since doctors were unable to help patients, ordinary people—but certainly the wealthy too—looked for help in magic and folk healing, talismans and amulets.⁹⁵ There are no reports from period sources on prevention or hygiene measures that were meant to restrict the spread of the plague, or any instructions on how to protect people from it. The only concern, particularly in large cities like Constantinople or Alexandria, for the authorities and residents was the number of dead, which was constantly increasing, and created the threat of outbreak of other infectious diseases. The numbers of dead increased gradually at first, and Procopius documents that initially burials were still held with all the ceremonies.

Of great interest is the data on how the ever-increasing numbers of bodies overwhelmed the capabilities of priests and gravediggers. Initially, relatives still took part in the funerals of their loved ones, but soon the dead were being buried wherever possible, even thrown into other people's graves or tombs, secretly or with violence, while the existing remains were discarded. Confusion and chaos soon ruled everywhere 96 and bodies ended up in the sea and in mass graves in the suburbs, even in the towers of the fortress of Sycae (today Galata) on the northern side of the Golden Horn. 97 Gravestones could only be made at the beginning or end of the epidemic, or during more moderate periods of its course. Afterwards, there was no longer anyone to assign to the work because the plague infected and decimated entire households, including servants, and others refrained from going out if they did not have to. Because of the rising prices of food and other necessities, many people could not afford to have a tombstone made for themselves or their relatives, and often there was no one left who could even order a tombstone. Stonemasons were not immune to the plague of course, and in places there was no one able to carve stones and inscriptions. As John of Ephesus put it, fewer and fewer people

⁹⁴ PROCOPIUS, *De bello Persico*, pp. 254–255, II. 22.29–34.

⁹⁵ GOGOLA 2016, pp. 72-73.

⁹⁶ PROCOPIUS, *De bello Persico*, pp. 257–258, II. 23.2–3, II. 23.12.

⁹⁷ PROCOPIUS, *De bello Persico*, p. 257, II. 23.10. John of Ephesus also mentions *Sycae*, but only mass graves. PSEUDO-DIONYSIUS, *Chronicon*, p. 91, A. 855.

had to bury more and more bodies, and not just because so many had died or were sick or weak from illness, but also because the living could not go outside or were too terrified to do so. The situation rapidly became critical and every day there were more dead bodies in the city that volunteers could not remove. The emperor assigned the task of ridding the city of corpses at state expense to his referendarius Theodorus, who fulfilled it very thoroughly and prevented the further spread of other infectious diseases or the occurrence of an even greater catastrophe. Soldiers dug graves, searched from house to house for bodies and took corpses off the streets and dwellings. The spectre of great earnings also attracted volunteers, despite the risk involved. Still, John of Ephesus documents that there were also people who did not accept such a large reward, the amount of which depended on the number of bodies, or even refused to take money.98 The plague shook convictions and the social order, and even property ceased to have value. John of Ephesus described that there was no one who could talk about wills and inheritance, and if someone claimed or assigned one's heirs by secular law, there was no certainty that the designated heirs would not die first. There were those who gave their property away, but according to the moralising John of Ephesus, to those who laid their hands on other people's property: "immediately the angel of death would appear, as if standing behind the man," and they would immediately fall dead. From then on: "nobody relied on either gold or other riches, but the faces of all were turned toward and prepared for the grave."99

The epidemic understandably had a huge effect on people's psyche. The speed at which the plague spread and devastated the population must have been shocking. It was not then in their power to determine what caused the plague, and they were unable to find any treatment. They simply did not understand the origin of the disease, could not determine the method of its spread, saw no rules and found no protection against it. The inability to find answers led to people to make connections where there were none or succumb to mass hysteria and panic. The loss of everything, personal tragedies and the loss of all loved ones led to depression, a sense of futility and pointlessness, perhaps even guilt as well as a desire to die or, on the contrary, to apathy, resignation and fatalism. In the words of John of Ephesus, people lost hope in life and with the increasing number of dead, they became indifferent or callous, numbed as if by wine; they stopped grieving and came to terms with their own death. It was supposedly hard to find anyone who still maintained a strong mind. 100 According to Evagrius, who perhaps was writing about himself, many simply wished to die because they had lost their children and loved ones. Therefore, they purposefully remained close to the sick or dead hoping to catch the infection from them, but the disease seemed to deliberately act against their will and let them live.101

⁹⁸ PROCOPIUS, *De bello Persico*, pp. 255–256, II. 23.5–11; MICHAEL SYRUS, *Chronicon*, pp. 237–239, IX. 28; PSEUDO-DIONYSIUS, *Chronicon*, pp. 91–94, A. 855.4.

⁹⁹ PSEUDO-DIONYSIUS, Chronicon, p. 94, A. 855.5.

¹⁰⁰ PSEUDO-DIONYSIUS, Chronicon, pp. 92–93, A. 855.5.

¹⁰¹ EUAGRIUS, Historia ecclesiastica, p. 179, IV. 29.

Many sought salvation in sincere faith or formal godliness and observed all religious obligations, which they left aside after the epidemic. In contrast, others lost faith in God, the Church and the clergy and, particularly in Palestine and deserted them for pre-Christian cults, which they tried to restore. 102 Still others lost their fear of the law and death so they abused the situation, enriched themselves, robbed the dead or robbed empty houses. Some also certainly sought comfort and/or oblivion in alcohol and we can only guess how many lives the epidemic claimed or destroyed indirectly. The only logical justification for the epidemic that affected nearly the whole empire and everyone without distinction was a punishment from God for sins, or the work of Satan, or perhaps alternating favourable and unfavourable cycles, and they were currently in the latter. 103 Even the otherwise temperate Procopius himself simply could not help but admit that the explanation for such a terrible disaster, which could not be expressed in words or understood, could only be found in God because the contagion was not limited to just a certain part of the world, certain people or certain seasons. It affected the whole world completely without distinguishing between position, property, social status, gender or age, way of life or occupation.¹⁰⁴ John of Ephesus and Evagrius also pointed out that the plague spread regardless of the season and weather. This means that people even then associated known infectious diseases with a particular season of the year, cold and wet, and knew that as the weather changed, the diseases would subside. The plague, however, completely eluded such behaviours. Evagrius also noticed a roughly fifteen-year cycle of waves of disease, with the deadliest being the first or first two years of each cycle (542 – 543, 558, 573 – 574 and 590), when "an almost complete extermination struck mankind."105 During the first epidemic in the Byzantine Empire, no one blamed any ethnic group or religion for bringing on the disease. However, after the second wave of the plague in Constantinople in 558, Justinian issued a law punishing "debauchery against nature," i.e. homosexuality, which was allegedly one of the causes of God's justified rage and collective punishment, similar to that in Sodom. 106

What we would describe today as the spread of hoaxes also occurred. John of Ephesus recorded a desperate attempt to banish the disease from the capital using noise. Word rapidly spread from one neighbourhood to another that death would flee from the city by tossing pitchers from the windows of upper storeys on to the streets, so for three days, no one in the entire city was on the streets because everyone, individually or in groups, "succumbed to this foolishness" and was busy looking for and breaking jugs and since it did nothing to help, everyone then fell into even greater despair. Others believed that death comes in the likeness of the "shorn" ones, that is, monks and clergy;

¹⁰² MICHAEL SYRUS, Chronicon, p. 239, IX. 28; PSEUDO-DIONYSIUS, Chronicon, pp. 79–80, A. 855.1

¹⁰³ AGATHIAS, Historiae, p. 364, V. 10.5.

¹⁰⁴ PROCOPIUS, De bello Persico, pp. 249-250, II. 22.3.

¹⁰⁵ EUAGRIUS, Historia ecclesiastica, pp. 177-178, IV. 29.

¹⁰⁶ Iustiniani Novellae, pp. 703-704, no. 141.

¹⁰⁷ MICHAEL SYRUS, Chronicon, p. 239, IX. 28; PSEUDO-DIONYSIUS, Chronicon, p. 97, A. 855.5.

therefore, when people encountered them, they huddled together crying "We belong to God's Mother!," or to such-and-such martyr or to such-and-such apostle, or just fled out of fear that they brought death. As a result, monks stopped walking around the city, which was certainly reflected in the care for the sick and dying. A distrust towards monks reportedly continued for two years after the epidemic. 108

Conclusion

Research on the first plague epidemic usually focuses on the origin, spread, course and return, or the short- and long-term effects on the further political, economic and demographic development of the Byzantine Empire and outside of it. However, the world's own recent and ongoing experience with a pandemic, which has affected the lives of millions of people across the planet, enables us to empathise with the feelings, thoughts and fears of people affected by the sixth-century plague and to better understand their loss, suffering and pain. Each of us has directly or indirectly come across COVID-19, perhaps health complications or the loss of loved ones and friends. Society has become familiar with official ordered lockdowns and restrictions on personal freedoms within the general protection of public health, as well as forced and/ or voluntary isolation. We have witnessed genuine panic, the inability or even improvisation of state authorities, the fear of politicians to take the right steps at the right time, the collapse of the health care system and the helplessness and exhaustion of hygienists, doctors, nurses and other medical professionals. Remarkable examples of togetherness and cooperation were visible, but also selfishness and arrogance. It was especially surprising for the scientific community to loss of trust in science among a large part of the public and the search for answers and salvation lead to various charlatans, fraudsters and populists, including the irrational rejection of scientific knowledge and the spread of hoaxes and literal nonsense. It must be humbly acknowledged that despite great scientific progress, a high level of literacy and general education, the speed of information exchange and our ability to react in time, the world was, despite our convictions, not much better prepared for a real epidemic of a new virus and that as a society, we are still not much better off than our ancestors were.

¹⁰⁸ PSEUDO-DIONYSIUS, Chronicon, pp. 97–98, A. 855.5.