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978-0-521-84639-4 - Plague and the End of Antiquity: The Pandemic of 541-750

Edited by Lester K. Little

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## Plague and the End of Antiquity

Plague was a key factor in the waning of Antiquity and the beginning of the Middle Ages. Eight centuries before the Black Death, a pandemic of plague engulfed the lands surrounding the Mediterranean Sea and eventually extended as far east as Persia and as far north as the British Isles. It persisted sporadically from 541 to 750, the same period that witnessed the distinctive shaping of the Byzantine Empire, a new prominence of the Roman papacy and of monasticism, the beginnings of Islam and the meteoric expansion of the Arabic Empire, the ascent of the Carolingian dynasty in Frankish Gaul, and, not coincidentally, the beginnings of a positive work ethic in the Latin West.

In this volume, twelve scholars using history, archaeology, epidemiology, and molecular biology have produced a comprehensive account of the pandemic's origins, spread, and mortality, as well as its economic, social, political, and religious effects. The historians' sources are in Arabic, Syriac, Greek, Latin, and Old Irish. The archaeologists' sources include burial pits, abandoned villages, and aborted building projects. The epidemiologists use the written sources to track the disease's means and speed of transmission, the mix of vulnerability and resistance it encountered, and the patterns of reappearance over time. Finally, molecular biologists, newcomers to this kind of investigation, have become pioneers of paleopathology, seeking ways to identify pathogens in human remains from the remote past.

Lester K. Little is Dwight W. Morrow Professor Emeritus of History at Smith College and former Director of the American Academy in Rome. He is a past President of the Medieval Academy of America and also of the International Union of Institutes of Archaeology, Art History, and History in Rome. He is the author of *Benedictine Maledictions: Liturgical Cursing in Romanesque France* and *Religious Poverty and the Profit Economy in Medieval Europe*.

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# Plague and the End of Antiquity

*The Pandemic of 541–750*

Edited by

LESTER K. LITTLE

Cambridge University Press in association with  
The American Academy in Rome



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President of the Medieval Academy of America. His books include *Liberty, Charity, Fraternity: Lay Religious Confraternities at Bergamo in the Age of the Commune* (1988), *Benedictine Maledictions: Liturgical Cursing in Romanesque France* (1993), and, with Barbara H. Rosenwein, *Debating the Middle Ages: Issues and Readings* (1998).

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## Preface

Plague helped carry out Antiquity and usher in the Middle Ages. Eight centuries before the Black Death did its part to carry out the Middle Ages and usher in the Renaissance, a similar pandemic of plague engulfed the lands surrounding the Mediterranean Sea and eventually extended as far east as Persia and as far north as the British Isles. Its sporadic appearances persisted from 541 to 750, the same period that witnessed the distinctive shaping of the Byzantine Empire, a new prominence of monasticism and of the Roman papacy, the gradual Christianizing of the Celtic and Germanic peoples, the beginnings of Islam, the rapid accumulation of the Arabic Empire, the ascent of the Carolingian dynasty in Frankish Gaul, and, not coincidentally, the beginnings of a positive work ethic in the Latin West.

Twelve specialists have here combined history, archaeology, epidemiology, and molecular biology to produce a comprehensive account of the pandemic's origins, spread, and mortality, as well as its economic, social, political, and religious effects. The historians' sources are written in Arabic, Syriac, Greek, Latin, and Old Irish. The archaeologists' finds include burial pits, abandoned villages, and aborted building projects. The epidemiologists use the written sources to track the disease's means and speed of transmission, the mix of vulnerability and resistance it encountered, and the patterns of its comings and goings. And molecular biologists, newcomers to this kind of investigation, have become pioneers of paleo- or archeopathology, seeking ways to identify the pathogens in human remains from the remote past.

Given the vast scope and interdisciplinary demands of the subject, the time is not yet ripe for a lone author to undertake a continuous and fully

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integrated narrative of this 210-year pandemic, yet it is far clearer today than it was back in 1999 when a small group of colleagues assembled at the American Academy in Rome to plan a conference that would bring together the top specialists in various aspects of the pandemic's history. These colleagues were Lawrence I. Conrad, at the time a professor at the Wellcome Institute for the History of Medicine in London, an expert on disease and medicine in early Islam; Evelyne Patlagean, professor of Byzantine social and economic history at the University of Paris X – Nanterre; Barbara H. Rosenwein, professor of history at Loyola University of Chicago, a specialist in early medieval European social and religious history; and David Whitehouse, the director of the Corning Museum of Glass, a Roman archaeologist and glass specialist whose work has focused on the late antique–early medieval period. Our conversations over three days gave us a broad view – available nowhere in print – of the pandemic of 541–750 and laid the groundwork for a conference eventually held at the American Academy in Rome in December 2001. The guidelines set down for the conference specified that the disciplines of history, archaeology, and epidemiology be represented, and that the major linguistic-cultural groups in which the historical documentation was written be represented.

Three holdovers from the planning group, Lawrence Conrad, David Whitehouse, and I took part in the conference. Among the others who participated was a specialist in the role of epidemics in human history, Jo N. Hays of Loyola University of Chicago. For the archaeology and history of Syria, Hugh Kennedy of St. Andrews and Michael Morony of UCLA joined us. Two Byzantinists, Dionysios Stathakopoulos, then at the University of Vienna, and Peter Sarris from Cambridge, the former placing greater emphasis on the written sources, the latter on material remains, also took part. For the Latin West, we had the participation of Alain Stoclet of the University of Lyons II on Frankish Gaul, Michael Kulikowski of the University of Tennessee on Visigothic Spain, and John Maddicott of Oxford on Anglo-Saxon England.

Also present was Michel Drancourt, the lead author of a study published in 1998 by a team of scholars at Marseilles who succeeded in identifying the plague pathogen in human remains from burial pits dating from two well-documented plague epidemics in Provence, those of 1720 and 1590. M. Drancourt gave a detailed explanation of the procedures followed in that pioneering study. In addition, another experienced practitioner of paleopathology, Robert Sallares of the University of Manchester, participated. A classicist who became a microbiologist with a vast

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knowledge of epidemiology, he analyzed some human remains found in a dig at Lugnano, about sixty kilometers north of Rome. The director of that dig, David Soren of the University of Arizona, dated those burials to the middle of the fifth century AD, and Dr. Sallares identified the cause of death as malaria, the first such positive identification of malaria in remains from Antiquity. Lastly, Michael McCormick of Harvard, a historian equally at home in the Greek East and the Latin West, one moreover, like Hugh Kennedy, Michael Kulikowski, and John Maddicott, particularly well versed in archaeology, and whose major concern at the time was the totality of the means of communication in the Mediterranean Basin, rounded out the conference by indicating the way to a molecular history of the pandemic.

Apart from the conclusions of substance reached at that gathering, it became clear, with regard to method, that future study of this subject should be conducted with a full awareness, in even the most minute of local studies, of the pandemic's vast temporal and geographic range, and that historians and archaeologists need to keep abreast of the latest developments in epidemiology and molecular biology, precisely the areas that have made the most significant advances in recent years.

Eleven of the papers presented in Rome became essays in this book; the twelfth essay, that by Ann Dooley of the University of Toronto on Ireland, is a later addition. Lawrence Conrad, Michel Drancourt, and David Whitehouse chose not to have their papers included, which is unfortunate given the valuable contributions they made to the conference. Works by all three, though, are cited herein and are listed in the bibliography. Moreover, a brief section on the Arabic sources, culled mainly from earlier publications by Prof. Conrad, appears in the first of the introductory essays. Just one essay in this book is a reprint of a previous publication, that of John Maddicott on England, which appeared in *Past and Present* in 1997. That article was at once so fresh and so thorough that the fact of its prior publication not only did not disqualify it for inclusion here but rendered Dr. Maddicott's involvement in both the conference and this publication imperative. It is thus a pleasure to acknowledge with gratitude the permission to reprint it granted by the Past and Present Society.

Thanks are also owed to Jessie and Charles Price and the Howard Gilman Foundation for generous grants in support of this project, the latter facilitated by the foundation's former Director, Dr. James A. Smith, and one of its trustees, the late Hon. Marcello Guidi, as well as the Vice President for Development of the American Academy in Rome, Elizabeth

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Gray Kogen. The Academy's President, Adele Chatfield-Taylor, backed the project enthusiastically from start to finish. The conference benefited greatly from the organizing skills of Milena Sales, as did the notes and bibliography of this volume from the editorial skills of Maggie Hanson and Kristina Giannotta.

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## Presence of Plague between 541 and 750

This map shows only places specifically mentioned in the sources as having been struck by plague at least once during the pandemic, although many of them were, of course, struck several times. Overall, it bears the imprint of the Roman Empire, with two exceptions: one being Ireland, which was brought into frequent contact with Britain and the Continent by missionaries starting in the fifth century; and the other being Persia, which lay beyond a border that was frequently traversed in the sixth, seventh, and eighth centuries by Byzantine, Persian, and eventually Arab armies. The place names on the map refer either to regions (whether areas, provinces, whole countries, or the like) or to cities, except for those in the British Isles, where only monasteries are specifically cited as being hit by plague, and where the inclusion of Carlisle is meant to refer not to the city but to an unnamed monastery near it.



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