**Kyle Harper,** *The Fate of Rome: Climate, Disease and the End of an Empire.* Princeton University Press 2017. Pp. 417, 26 maps. ISBN 978-0-691-16683-4, \$35.00 hardback

A great empire that has bestridden the world reels under the impact of a rising power in the east and of powerful new confederations in Europe, with beyond them expansionism out of the steppes. To these human factors must be added uncontrollable and aleatory Nature in the form of changing climate and spasms of pandemic disease. As so often the study of the ancient world may be used as a proxy for contemporary concerns. Whilst this agenda is discernible in the background, Kyle Harper's provocative book is too smart to draw direct parallels, but the reader may draw their own conclusions as to the resonances of the two topics foregrounded here: climate and disease.

Disease, particularly the 'Antonine' and 'Justinianic' plagues of the second and sixth centuries, has long been a reliable mount in discussions of the causes of the Decline and Fall of the Roman Empire; climate is a new runner in the catastrophe stakes. That climate can now be a serious contender and that disease can be given a new outing testify to the enormous advances in the scientific study and analysis of both subjects, most of it rooted in the modern world but necessarily operating over the long term to see how we have got where we are today. So the time depth of such studies can profitably be exploited as they are here in Harper's analysis of the role of both phenomena in the loss by Rome of most of its territories and power from their peak around CE 150 through to 650. Harper, like this reviewer, is not a specialist in either climatology or epidemiology so has to depend on the work of others. It looks as though he has read widely and well so as to report on the current state of understanding in these disciplines. Not surprisingly much of this reads as reportage but it introduces us to data types and approaches largely unfamiliar to the ancient historian. We learn about the Roman Climatic Optimum (RCO), the Late Antique Little Ice Age, the aetiology of Yersinia Pestis, and their proxies in the climatic and archaeological records. This is fascinating stuff and very well put over, even if on occasion there is a sense that the interpretations more injurious to humankind are being emphasised. Sometimes it seems that the evidence is being stretched to breaking-point, as on p.134 where a single record from Ecuador is linked via El Niño to favourable conditions in the Nile valley under the RCO: the flapping of the butterfly's wings.

Ancient history is Harper's trade, one in which he already has a well-merited reputation. The textual sources remain at the heart of his arguments, especially texts written within the Roman Empire. Considerable tracts of the book read as synthesising descriptions of the changing fortunes of the Empire from the happy and prosperous age of the Antonines (an encomium that would bring a blush to the cheek of Aelius Aristides) to the devastated, plague-ridden, colder, wetter world of Justinian. In counterpoint to the ground-bass of the longer term are the individual authors and their contingent accounts of their changing world. Of course, ancient authors were not

intellectually equipped to understand disease or the climate in the ways we now can: no germ theory, no ice cores. This means that Harper has to use an essentially anecdotal approach, taking statements by the ancient authors to buttress his overall thesis about the importance of climate and disease. The temptation here is, of course, to prefer statements which, as with the scientific analyses, give an impression of developments injurious to humankind. Too often quotes favourable to the desired impression are taken out of context: out of the context of the work of which they form part and out of the context of the writer, who will have had his own agendas. This is a particular problem with Christian writers, preachers of the End Times, whose works often betray their eschatological concerns in their rapturous rhetoric of doom. Harper knows this perfectly well but downplays it in favour of the striking image. Thus on p.228 we are told in a direct quote that Alexandria during the Plague of Justinian was "ruined and deserted", thus John of Ephesus. Thirty-one pages later we are told Alexandria only half a century later was '...a center of robust commercial and cultural vitality', thus John the Almsgiver. Neither author is critiqued: the story is all. My own parish pump, Britain. The Plague of Justinian arrived there in 544 according to the map on p.228. Three pages later another map uses the laudable labours of Michael McCormick to produce a Geography of Mass Mortality, 'an overwhelming case that a sudden upsurge in mass graves is to be connected with the bubonic plague.' (p.230). Is the 544 date for Britain derived from Gildas? Gildas gives no precise date and mentions only pestis and lues with no details of their presentation or epidemiology; they may be tropes of divine punishment for sin, on which he was rather keen. The two McCormick sites in Britain are Heronbridge, a mass burial of combat casualties, often linked with the Battle of Chester in the 610s (the <sup>14</sup>C determinations indicate a date in the earlier seventh century). The other is Wookey Cave where a variety of disturbed human remains associated with third- and fourth- century Roman material has been found at various times. Evidence has been used in a partial fashion to give the required answer. This sort of suppressio veri suggestio falsi is unworthy of a serious historian and risks giving the impression of playing fast and loose with the evidence. By the end I was reading with one finger firmly in the Notes to assess the reliability of the evidence for what I was being told. Caveat lector! But few readers, especially once the paperback appears, will be curmudgeonly specialists; to them this will be a book by a professor and garlanded with the auctoritas of Princeton. (Talking of Princeton, can I just say that the maps are the pits, crude, un-nuanced and often over-reduced).

Paradoxically, one of the problems with climate and disease as motors of the Fate of Rome is Harper's concentration on the Empire. Though he rightly ranges widely across Eurasia, Africa and beyond in his scientific discussions, his historical ones are more tightly circumscribed. But presumably neighbouring peoples and states were as liable to these influences as was Rome? The fourteenth-century Black Death did not just smite Christendom. Was Sassanid Persia as ravaged as Rome? What of the peoples beyond the Danube? There are hints here and there that these areas may also have suffered. No-one would argue that the Plague of Justinian did not mark a huge reversal in the

absolute power of the Roman Empire, but did it mark a commensurate decline in the relative power of the Empire vis-à-vis its neighbours? And of course at the end of the period under consideration here, western Eurasia saw the emergence of a major new empire, the Umayyad Caliphate, encompassing all the Sassanid lands and much of the Eastern Roman. If heir not only to the lands but also to the climatic decline and disease regimes of its predecessor empires, then these do not seem to have had an observably malign effect on the Caliphate. This calls to mind Joseph Tainter's arguments in *The Collapse of Complex Societies* (1988) that what often happens is that the fate of an empire is not to 'fall' but to transmogrify into something else. Harper quarries Chris Wickham's monumental and well-received *Framing the Early Middle Ages* (2005) whilst glossing over the fact that this massive book analyses the same period in very different terms, one where plague is mentioned little and climate not at all, posing serious questions about the influence of climate and disease.

Of course, Harper does not argue that climate and/or disease caused the 'Decline and Fall of the Roman Empire' in some simple, linear, cause-and-effect manner, he is far too sensible to do that. What he does do is argue that these factors have been underestimated and need to be brought more into play. Just as shifts in climatic patterns or the emergence of a new disease are the result of the interplay of a number of variables, so also in human affairs with climate and disease acting upon a host of economic, political and social variables within human polities. I would agree, though this is going to require long discussions across a range of specialisms to identify just what the variables are and how they interact and influence each other. Harper has made a brave start at setting up these dialogues. It is just a pity that in his enthusiasm for the subject (and haste?) he has allowed himself to undermine his own arguments by the ways in which he makes them.

At least in the modern world we have the climatological and medical abilities to identify and understand such changes in a way the ancient world simply could not and to attempt to combat them. Does the ancient world then teach us lessons? And if so, are we prepared to learn them? Or have so many other variables changed that we are in a new game, one where the ancient world teaches us little?

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