children (myself among them) until well into the twentieth century, these objects reinforced and perpetuated stereotypes of superiority and essential otherness. The problem of ancient attitudes towards blackness involves much more than the U.S. after 1776, and untold millions of lost or wasted lives.

To summarize, this is a hugely learned and provocative book. It is stronger perhaps in its assembling, reviewing and weighing of evidence than in its assumptions. Isaac is a classical scholar, and his experience of twentieth-century anti-Semitism has both made him uniquely alive to his topic, and led him to look for the 'roots' of one particular type of racism in classical antiquity. That type of racism, more prevalent or at least destructive in Europe, has left an indelible stain on modern history, but Greeks and Romans were not the only people in the ancient world, and (sad to say) there are other types of racism too.⁶

Christopher Jones

Harvard University

A. Mayor, *Greek Fire, Poison Arrows, and Scorpion Bombs. Biological and Chemical Warfare in the Ancient World.* Woodstock and New York: The Overlook Press, Peter Mayer Publishers, Inc., 2003. 319 pp. ISBN 1 58567 348 X.

The ancient world dealt with in this book, as explained in the introduction, includes Europe and the Mediterranean, North Africa, Mesopotamia, Asia Minor, the Asian steppes, India, and China, and extends from the 17th century BCE to the 14th century CE (25). According to Mayor, accounts gathered from fifty ancient authors provide evidence that 'biological and chemical weapons saw action in historical battles' that took place during that period of almost three thousand years. Chemical warfare is defined as 'the military use of poisonous gases and incendiary material, and includes blistering, blinding, asphyxiating agents and mineral poisons'. Biological weapons include infectious bacteria, viruses and parasites, as well as plant toxins and venomous substances derived from a variety of insects, animals, reptiles, amphibians and marine creatures. Both in modern times and in antiquity the creators of these weapons 'weaponize nature, according to the best understanding of the day'. The author admits that the examples presented do not all fit the strict definitions of modern biological or chemical weapons, 'but they do represent the earliest evidence of the intentions, principles, and practices that evolved into modern biological and chemical warfare' (28). Mayor specifically contests the view of those scholars who maintain that there is very little ancient evidence for biological and chemical strategies, claiming that the numerous cases and pieces of evidence she has collected and analyzed belie this view (24, 29, 260 n.1 etc.).

The first chapter surveys ancient Greek and Roman myths, as preserved in written literature and works of art, that testify to the mythic invention of poison weapons and to ancient attitudes towards their use. The various stories concerning the fight of Hercules with the venomous Hydra and the Trojan War (including such tales as Hercules, Nessus and Deianeira, the plague delivered by Apollo's bolts and the poisonous arrows of Philoctetes and Odysseus) are taken to provide the crucial information about the origins of biological warfare. The evidence presented in chapter two, culled mostly from Greek and Roman historiographical, medical and poetical works but also from ancient Indian writings, and examined in the light of modern botanical and zoological information, leads the author to conclude that poisoned arrows were the most popular and most used

I am grateful for the comments and advice of David Armitage, Glen Bowersock, Kathleen Coleman, and the Workshop on Religions and Cultures in Mediterranean Antiquity, Harvard University.

weapons of this type in the ancient world; in addition many other natural agents were utilized to achieve military victories. The Hittite, Babylonian, Biblical, Greek, Latin and Indian sources discussed in chapters three and four are meant to show that experience and observation helped people in antiquity to understand how diseases could be used as instruments of war and to acquire the capacity to spread plagues and epidemics. In the next two chapters evidence is presented for the use of toxin honey, tainted wine, and various alluring drugs, as well as scorpions, snakes, venomous insects, mice, dogs, pigs and other animals to incapacitate or annihilate the enemy. The story of how Medea took revenge on Jason by sending a gown containing a fiery substance to his new wife, thus causing her horrible death, is the starting point for the survey of chemical incendiaries used in antiquity to destroy enemies (chapter seven).

Mayor refers, in the epilogue, to Philoctetes' decision to dedicate his dreadful bow and arrows to a memorial of divine healing, commenting that his 'act anticipates modern efforts to forge treaties in which nations could agree to halt the proliferation and deployment of biochemical and nuclear arms' (258). The comment reflects the underlying concern with the dangers threatening mankind through the potential of modern bio-chemical warfare and the author's belief that the evidence she has collected substantiates her contention that the modern weapons have much in common with their ancient precursors. This theme recurs time and again in the book, e.g.: 'Today, many people think of biological and chemical weapons as inventions that depend on modern technology, toxicology, and epidemiology. Yet, the idea of treating projectiles with noxious substances originated long ago in pre-scientific cultures' (64). According to one report, the besiegers of Kirrha, during the First Sacred War in the early sixth century BCE, planned to use a certain drug, hellebore, in order to conquer the Kirrhans, which report Mayor associates with Winston Churchill's proposal in 1920, when he was serving as the British colonial secretary, to subdue the rebellious Kurds in Iraq by bombing them with chemical gas (102-4). A tale told by Polyaenus of how Clearchus the tyrant of Heraclea Pontica eliminated his fellow-citizens and soldiers by forcing them to endure a deadly environment, reminds Mayor of 'memories of welldocumented, clandestine U.S. government experiments with nuclear, bacterial, and chemical agents on its own citizens and soldiers during the Cold War of the twentieth century' (118); and so on and forth.

The long notes (259-93) and the bibliography reveal the wide reading of the author in the ancient sources and the modern literature relevant to her subject, which may be helpful to students of antiquity. However, the style of writing indicates non-specialists or the general public as the targeted readership of the book. This is borne out by the following three examples: 'hunters in Gaul (Celtic people of western Europe) used serpent venom' (66); 'Historians like Tacitus and Florus and their audiences greatly admired Virgil, the poet-propagandist commissioned by the emperor Augustus to write the epic saga of the glorious origins of Rome' (111); 'According to Livy (first century BC)...' (114). Another example is the description of the people of Syracuse as 'the Sicilians' (115). The trouble is that all too often the imprecise information is mingled with wrong statements and puzzling errors. Thus, for example, Mayor terms the poet Silius Italicus a historian (77), envisages Alexander's army as Greek (99-100), locates Isaura [sic!] in eastern Turkey (108), describes Polyaenus as a Macedonian lawyer from Bithynia (109), presents Xenophon as the leader and general of the Ten Thousand after the murder of their commanders by the Persians (146), defines Miletus as a wealthy Roman city (162), envisages Philip of Macedon as ruler of Acrocorinth in 243 BCE (191), describes Vegetius as a military engineer (213), and dates Cato in the first century CE (15), the rebuilding of Solomon's temple in the fifth century BCE (132) and the Persian siege of Dura-Europus in CE 265 (225). No less disturbing are the following examples: 'As the historian Plutarch remarked in the first century BC' (81); 'in western Greece in AD 189, during the long Roman siege of Ambracia' (224); 'In 86 BC...the historian Livy watched a religious ceremony' (227); 'in about 169 BC, Nehemiah gathered a thick liquid from Persia' (229-30); 'Alexander the Great was introduced to the wonders of petroleum "magic"

after he captured Babylon in 324 BC' (332). It is difficult to understand the reasons for such errors and many other inaccurate or faulty statements.

There are other flaws or deficiencies in Mayor's discussion of the ancient evidence. I give four examples. She accepts the authenticity of the reports of Polybius and Strabo about the ban of the use of missiles connected with the Lelantine War (35-6). That these reports are unreliable has been persuasively argued by E.L. Wheeler (TAPhA 117, 1987, 157-82), an article apparently unknown to Mayor. She discusses at some length the ancient stories concerning the siege of Kirrha (101-5), adding: 'A few scholars have suggested that the destruction of Kirrha may have been a legendary event, but the fact that it is mentioned in a recorded speech by the Athenian Isocrates and so many other credible writers has convinced most historians that it really took place' (105). Mayor does not even try to analyze the ancient reports and to deal with the arguments raised against their reliability, nor does she refer to the scholarly works dealing with the subject. For a thoroughly critical examination see N. Robertson, CQ 28, 1978, 38-73; cf. H. Bowden, SCI 22, 2003, 73-5, with the literature cited there. For a defense of the authenticity of the reports see V. Parker, Rh. Mus. 140, 1997, 17-37. Given the ongoing debate, Mayor's assertion that most historians accept the historicity of the First Sacred War is questionable, to say the least. My third example concerns Mayor's suggestion that the Athenian besiegers of Syracuse succumbed to a biological subterfuge on the part of the defenders of the city (115), following (275 n.13) in this matter the view of M. Grmek (REG 92, 1979, 151-4). Now it is true that Thucydides refers to the diseases the Athenians and their allies suffered at Syracuse (7.47, 1-2), but, pace Grmek, his account of the siege operations does not show that their adversaries purposely maneuvered them to camp in malarial swamps. In this case, too, Mayor does not discuss the Thucydidean account to substantiate her suggestion. My last example concerns the acceptance of Polyaenus' report (Strat. 7.9) that the Egyptians held off Cambyses and the Persians at Pelusium 'with batteries of artillery that shot stones, bolts and fire' (189-90). That this might be an anachronistic tale has not occurred to Mayor, notwithstanding Diodorus Siculus' well-known report that the catapult was invented under Dionysius I (14.41-2); the common scholarly view dates the invention and development of artillery in the fourth century (E.W. Marsden, Greek and Roman Artillery. Historical Developments, Oxford, 1969, 46-85). It is true that some finds of stones at Paphos and Phocaea give occasion for the suggestion that some kind of artillery was used by the Persians ca. 500 BC (e.g. P. Briant, REG 96, 1994, 111-14), but see the detailed discussion of I. Pimouguet-Pedarros, REG 102, 2000, 5-26, and cf. I. Shatzman, SCI 9, 2000, 188.

In sum, one should not assume that the ancient evidence presented in this book has been properly checked and analyzed; and the significance attributed to and the interpretation of the evidence — to fit Mayor's major thesis — quite often do not hold water or are questionable.

The book is equipped with three maps, unfortunately crudely executed, and forty-five figures, but the captions are sometimes speculative (e.g. fig. 15, 121; fig. 19, 137).

Israel Shatzman

The Hebrew University of Jerusalem

D. Erkelenz, Optimo praesidi. Untersuchungen zu den Ehrenmonumenten für Amtsträger der römischen Provinzen in Republik und Kaiserzeit. Antiquitas: Reihe 1, Abhandlungen zur alten Geschichte, Band 52. Bonn: Dr. Rudolf Habelt Gmbh, 2003. 395 pp. ISBN 3 7749 3221 2.

This admirable book is a revised version of a dissertation presented in 2000/2001 by the author Dirk Erkelenz, a pupil of Werner Eck, at the university of Cologne (Köln). Its subject is the monuments set up in honour of Roman provincial officials, the period considered being the Republic and the early Empire until the end of the third century (see 11f. for the reasons for the omission of Late Antiquity).