

BOOK REVIEW

The Science of Roman History: Biology, Climate, and the Future of the Past. Edited by WALTER SCHEIDEL. Princeton, NJ: Princeton University Press, 2018. Pp. xiii + 258. Hardback, \$35.00. ISBN: 978-0-691-16256-0.

In a 2013 New York Times article on waning undergraduate interest in the humanities, Franco Moretti, the director of the Stanford Literary Lab, offered the following perspective: “You look at [Stanford’s] extraordinary science and technology achievements, and if you wonder what will happen to the humanities, you can be threatened [or] invigorated... I’m choosing to be invigorated.”¹ So too Walter Scheidel, Moretti’s colleague at Stanford, whose three decades of scholarship evince a commitment to the interdisciplinary study of the past. While Scheidel is perhaps best known for his use of tools from the social sciences, *The Science of Roman History*, a collected volume that Scheidel edits, emphasizes the potential and realized contributions (and pitfalls) offered by bioscientific approaches. It is, then, both a continuation and an expansion of Scheidel’s prolific interdisciplinary efforts thus far.

The book aims in part to educate non-initiates on bioscientific methodologies. In accomplishing this much-needed task, it represents a unique contribution to the field at a pivotal moment in its history. For bioscience can uniquely unlock the lives of the 99% of Romans overlooked by existing source records, and it is to these 99% that the field is increasingly turning its attention.

Some chapters offer a clearer path forward than others, both in the methods they cover and in their ability to clarify those methods. But given the lay audience the book aims to reach, the success of the overall project hinges largely upon its accessibility. There are distinct moments of failure, then, when overuse of jargon and difficulties in prose obstruct the reader’s engagement. A single and singular example from the final chapter on modern DNA illustrates this point: “While the recent progress made in understanding the Neolithic transition in Europe starting

¹ <https://www.nytimes.com/2013/10/31/education/as-interest-fades-in-the-humanities-colleges-worry.html>

about 7000 BCE as well as Bronze Age demography in the steppes north of the Black and Caspian Seas by leveraging the hierarchy of time-calibrated nested modern haplogroups and glimpses of ancient uniparental and autosomal DNA is undeniable, the discussion in the following sections associating DNA patterns with more recent complex post-Neolithic transitions including the seafaring Minoan, Greek, Phoenician, and Roman cultures, while plausible, is still not as yet clear-cut” (238). This is an object lesson in how to lose even a dedicated audience, and it complicates an otherwise excellent work. Still, moments like these are rare, and thus the overall work is a considerable achievement.

The book begins with Scheidel’s introduction, which outlines the work’s aims and overall structure. For Scheidel, human and natural history are intertwined. History has much to learn, then, from archaeology, where scientific approaches have long been the norm. In characteristic fashion, Scheidel is cautious in evaluating bioscience’s offerings; where there are gains there may also be dangers, and the rapid pace of technological change threatens to outmode the book soon after its publication. But the book contributes much nevertheless by laying out the state of the field and equipping historians – both as researchers and instructors – with new investigatory paths and frameworks for analysis.

Harper and McCormick’s survey of climate takes pride of place because of climate’s profound influence on agrarian societies. The chapter lists the diverse sources of climate proxy information, examines their explanatory potential, and employs them to construct a plausible narrative of Roman history within a climatic framework. There is great heuristic value here, particularly in the study of Rome’s decline.

Van der Veen’s chapter on archaeobotany offers a range of contributions. This field can aid modern understanding of the movement of plants and foodstuffs across Rome’s empire, consumption trends reflecting Romanization, degrees of social cohesion based on cultivation and ritual use of plants and the daily lives of Romans.

MacKinnon surveys zooarchaeology and centers the chapter on potential future studies. Here, for instance, MacKinnon points to shrines where specific animal parts were offered, though this aspect of ritual is otherwise undocumented. Zooarchaeology, then, can supplement texts and material remains and facilitate comparative studies, as also in the interesting work that correlates urbanization and the introduction of rats and mice.

The chapter on bones and teeth by Sperduti et al. exemplifies the often-cautious tone of the volume’s contributors. They acknowledge issues in past

osteological studies and the difficulties moving forward, particularly the use of stable isotopes in bone to reconstruct diet. But they also highlight contributions including the use of isotopes to illuminate the cosmopolitan nature of Rome's empire through cemetery studies, thus aiding studies of migration and connectivity in the Roman world.

Gowland and Walther's survey of human growth and stature reasserts the previous chapter's suggestion to focus on subgroups in order to make significant claims, emphasizing here the study of children. They make excellent points on cycles of health inequality and the reduction in Gallic height under Roman rule, both of which offer excellent paths for progress on Roman imperialism and comparative studies of epigenetics.

Tuross and Campana's concise synopsis of ancient DNA lays out the field's methodologies as well as its signal contribution to epidemiological studies. But King and Underhill's concluding chapter on modern DNA is unfortunately the volume's least intelligible, and almost demands a concluding chapter to refocus the reader.

What makes this book exciting are the many moments where bioscience makes no claims to supersede historical analysis. On the contrary, it often asks historians and archaeologists to take the lead once moments of change or continuity are identified. Historians, then, need not feel threatened, but invigorated, by the possibilities this volume opens.

CARY BARBER

California State University – San Bernardino, carybarber@gmail.com