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Anthropology Book Forum

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Historical Forensics: The use of Medicine and Forensic principles in Bioarchaeological and Historic Research.

Review by Amy L. Hair

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Charlier, Philippe, 2017, *When Science Sheds Light on History*, Gainesville: University Press of Florida, 175 pp., ISBN 978-0813056548

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When Science Sheds Light on History by Philippe Charlier is an excellent example of interdisciplinary research in biological anthropology, medicine, and history. The book, while in no way intended for specialists, provides readers with case studies spanning from Mesolithic Morocco (9,000 BC) through nineteenth century colonial encounters while simultaneously exposing the audience to a range of relevant ethical considerations. The book is divided into four parts that explore health and disease chronologically with a variety of materials ranging from physical human remains, autopsy reports, to death masks, and more. The book opens with an introduction by Charlier and Bernard Proust who argue in support of interdisciplinary approaches to forensic and paleopathological research to both inform on health and disease throughout the human experience and to advance methodologies in forensic anthropology, bioarchaeology, and the history of medicine.

In part one, “Prehistory,” Charlier discusses the social context of disability and care in the human past. Consisting of two chapters, this section describes numerous cases of disability in the past, including the bioarcheological analysis of toothless elderly individuals and those with healed cases of severe trauma (6). An entire chapter is dedicated to an amputation case in Neolithic France. In this case, the left, distal humerus of this individual was amputated with no evidence of other trauma, infection, or hemorrhage (9). This case lends the greatest support to Charlier’s argument about the role of care in human antiquity and provides readers with a short glimpse into social bioarchaeological theory used in contemporary research by scholars like Tilley (2015) or Agarwal and Glencross (2011). Part one is an excellent introduction to social theory in biological anthropology for non-specialists, while simultaneously beginning their medico-legal explorations into the human experience.

Part two, entitled “Antiquity,” contains 19 case studies from roughly 5,000 BC in Proto-Dynastic Egypt through roughly 300 CE in the Roman Empire. This section describes numerous cases of ailments in the past, and throughout each the author emphasizes an interdisciplinary and social

approach that accounts for both medical and social contexts. For example, in Chapter 6 Charlier describes a child excavated underneath a statue of Emperor Domitian (19). This individual displayed several interesting characteristics including skeletal anomalies often associated with down syndrome and perimortem cranial ax trauma, factors that the author believes could be representative of religious sacrifice (20). The author ends this section with Chapter 21 that describes a case of a large sternal teratoma, that is, a twin who died in utero and was subsequently consumed by the other, in a 2nd to 3rd century Roman enslaved cemetery (63). A large, well-developed teratoma with dentition was excavated in the sternal region of a 25–35-year-old female (63). Teratomas are large tumors that develop tissues and organs including teeth, muscle, or bone. The author reassures readers by stating that it likely caused no harm to the individual except possibly breathing difficulties (64). Part two provides numerous examples of interesting pathologies in the past, and while too brief for a specialist, introduces students and recreational readers to a range of diseases often invisible in the bioarchaeological record.

The third part entitled the “Middle Ages” discusses a range of case studies throughout the era. Of the twelve chapters in this section, Chapter 24 is particularly interesting as it combines bioarchaeological, mortuary, and social theory for readers to understand the necessity of a multidisciplinary approach. This study addressed the remains of an individual that had been disposed of in an ancient grain silo near modern-day Paris (72). Analysis of tartar recovered from the individual’s teeth showed remains of a parasite native to Asia or Africa, indicating that this individual was non-local and othured in death by the local population (72). Another chapter in Part Three discusses the portrayal of diseases in the Mount Athos medical library in texts and frescos (87). Throughout Chapter 29, the author recalls how some of the illnesses described in these 14th- 16th-century texts were quite realistic including the of edema, however; many ailments like paralysis and skin diseases were idealized (88). This chapter is refreshing as it takes a step away from traditional bioarchaeological research and incorporates literature and art in the study of ancient human health, a feature that is helpful to both understanding the occurrence of such diseases but also how they were perceived in antiquity.

The final section, entitled “Renaissance to Modern Times” contains 8 diverse case studies that reinforce the value of interdisciplinary research in bioarchaeological and historical research. Part four begins with a fascinating study of Diane de Poitiers’, a prominent French noble women and courtier in the 16th century, remains (111). This study in particular investigates atypical burial processes that ultimately resulted in her internment in 1577, eleven years followed her death (111). In addition, this case sheds light on the study of Medieval medicine, namely gold, and the limitations of modern methods in reconstructing historic narratives (113). Another interesting case is detailed in Chapter 37 where Charlier analyzes a strange autopsy report from the 18th century (129). The atypical autopsy raised several flags, as one of the two participating physicians treated the individual prior to death (130). This chapter is a welcomed addition to part as it highlights the diversity in evidence that can be used in archaeological and medicolegal investigations.

The author concludes with an epilogue and two additional chapters that address biological and ethical concerns that accompany the study of human remains. Charlier set out to explore disease and health in the past through a medical lens and provided everyday readers with insights into both the biological dimensions of human health in antiquity, but also the ethical and social

contexts that accompany many studies in bioarchaeology. At times the author is brief in his explanations of historical context, however, and the number of cases included in the book demanded such brevity. Regardless, Charlier has created an excellent addition to bioarchaeological literature, particularly for hobby readers and those new to forensic or archaeological literature. Further, the author highlights the value of a multidisciplinary approach by incorporating methods and theory of medicine and biological anthropology into investigations of the past.

References

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