

A HISTORY OF DISSECTION

BUBB (C.) *Dissection in Classical Antiquity. A Social and Medical History*. Pp. x+402, colour ill. Cambridge: Cambridge University Press, 2022. Cased, £34.99, US\$44.99. ISBN: 978-1-009-15947-0. doi:10.1017/S0009840X24000581

B.'s volume is the first comprehensive history of dissection in Graeco-Roman antiquity. It examines straightforward accounts of hands-on dissection (and vivisection) together with theoretical deliberations on the internal anatomy of both human and non-human animals. B.'s analysis deftly synthesises discussions of historical context, including the transmission and reception of texts, with close reading of textual sources (as well as some evidence from material culture and the archaeological record). While focusing on dissection and anatomy broadly construed, it illuminates many other aspects of the world of ancient medicine and related areas of social and intellectual history. For this book B. was deservedly awarded the Society of Classical Studies' 2023 Charles J. Goodwin Award of Merit, honouring outstanding contributions to classical scholarship.

Chapter 1 outlines B.'s methodology, which avoids the scholarly tendency to prioritise the Hellenistic period to the neglect of other historical contexts in which dissection and anatomical investigation were performed. From the outset B. emphasises the 'burgeoning of dissection, both private and performative' (p. 2) that occurred during the Roman period. B.'s approach also contrasts with previous trends in scholarship on dissection by affording significant attention to non-human animals as well as human beings. There are a few points, however, where it may not always be obvious – especially for readers less familiar with the immediate context of the passage or historical situation – whether B. is discussing the dissection of human beings or of non-human animals or of both. One such example occurs when B. comments that 'no sign of dissection between the mid-third century BC and the mid-first century AD survives' (p. 205). Although the preceding discussion focuses on instances of human dissection, it is not entirely clear whether B. is referring to dissection in general or only to the dissection of human subjects.

The rest of the monograph is divided into two major sections. Part 1, 'Practice' (Chapters 2–5), centres on the history and social contexts of dissection in Graeco-Roman antiquity, including practical dimensions involved in acts of dissection. Chapter 2 discusses evidence for dissection in the classical and Hellenistic periods, including the Presocratics, the Hippocratics, Aristotle, the Alexandrians Herophilus and Erisistratus, and the later Hellenistic period. Here B. underscores the largely theoretical nature of anatomical exploration in the Presocratics and Hippocratics, which is followed by the more direct, empirical approach of Aristotle, Herophilus and other Hellenistic sources.

Chapter 3 turns to evidence for dissection in the Roman period, especially the work of Galen. After commenting on the dissections Galen conducted privately for both practice and research, B. explicates his public performances of dissection and the various purposes they served (e.g. public display and entertainment, medical advertisement, public education, discrediting rivals and gaining a competitive advantage), while underlining the difficulty of ascertaining the composition of the audiences of such performances.

Chapter 4 pores over the sensory experiences and practical realities associated with dissection, considering the situation of both dissector and (in publicly conducted displays) 'audience'. Taking stock of often-overlooked facets of dissection such as physical setting, the role of assistants, the use of tools, the purchasing and treatment of anatomical subjects, the gruesome sights (including the visibility of particular organs) and attendant smells, and

attested or conjectured reactions to obvious suffering in situations of vivisection, this is perhaps the most vividly elucidating section of the book. This chapter also reviews the history and perceived legitimacy of human dissection and anatomical exploration, including the human vivisections reported to have occurred in Hellenistic Alexandria, as well as potential instances involving the examination of human corpses.

Chapter 5 places dissection in its broader social contexts, including its relationship to various other cultural spheres (e.g. veterinary medicine, magic, religious sacrifice and divination, anatomical votive offerings) and various types of 'performance' such as public oratory. Such contexts, as B. demonstrates, reveal attitudes towards human and non-human bodies (and human and non-human lives) that are largely consistent across sources and time periods within Graeco-Roman antiquity. It is not always entirely clear, however, where the line gets drawn between what 'counts' and does not count as dissection or anatomical investigation. For instance, B. brings haruspicy – and the famous Piacenza liver – into the conversation in this chapter (p. 153), but in Chapter 1 asserts that 'divinatory examination of animal entrails ... is not dissection because its practitioners are looking for divine, not anatomical data' (p. 4). Although the pursuit of 'anatomical data' may not have been their express purpose, it seems difficult to deny that acts of divination could yield informative data of this nature, thus constituting an instance where definitions of dissection may become more epistemologically complicated. Earlier, B. also disqualifies embryotomy as a form of dissection on the grounds that its motivations are 'medical rather than investigative', while acknowledging that this is an example where 'motivations might begin to multiply and boundaries to blur' (p. 22 n. 51). Similarly, B.'s reference to surgical texts as belonging to a genre 'adjacent' to anatomical study (p. 264) also raises further questions about the boundaries between what should be considered *bona fide* anatomical investigation and other acts that involve cutting into the body. The final section of Chapter 5, 'Anatomy in the Popular Imagination', surveys a handful of 'literary' sources (e.g. Homer, Lucan, Petronius, Aelius Aristides, Aulus Gellius). Their inclusion is a constructive complement to the material from the medical prose tradition, inviting further scholarly investigation of 'literary' sources featuring acts of dissection, anatomical description and/or bodily evisceration – and their relationship to scientific anatomical inquiry.

In Part 2, 'Text' (Chapters 6–10), B. traces the relationship between the practices and histories of dissection examined in Part 1 and the development, dissemination and reception of anatomical texts. Complementing Chapter 2, Chapter 6 investigates anatomical texts produced during the classical and Hellenistic periods, with frequent attention to their influence on and reception in sources from the Roman period, particularly the works of Galen. This approach furnishes many noteworthy observations, while leaving room for further attention to some of the classical and Hellenistic sources in their own right – especially since Galenic texts are also the focus of Chapters 8 and 9.

As the counterpart to Chapter 3, Chapter 7 delves into an assortment of anatomical texts from the Roman period. Saving Galen for the ensuing chapters, B. details the work of several lesser-known but influential sources from this period, including Rufus of Ephesus, Marinus, Quintus (along with his students) and the corpus of medical papyri. Elucidating the importance of such figures, this chapter is a particularly valuable contribution, which, as B. emphatically puts it, 'makes it hard to avoid the conclusion that Galen was not as exceptional as he would paint himself' (p. 256).

Chapter 8 brings together a variety of Galen's 'minor' anatomical works. B.'s knowledge and synthesis of such a range of sources from the immense Galenic corpus is one of the book's most impressive scholarly feats, laying bare the significant role that dissection plays in a considerable number of Galenic texts.

Chapter 9 shifts the attention to Galen's vast, fifteen-book *Anatomical Procedures*, which relates practical techniques utilised during Galen's extensive research involving dissection, and the observations he derived from those procedures. This text, as B. observes, differs from the texts discussed in Chapter 8 not only in length, but also in the detailed directions it provides 'on how to dissect every part of a monkey' (p. 316). After commenting on the style and framing of those directions, B. interrogates Galen's process of composing the text, its purposes and its potential audiences. These sections contain fascinating discussion of the possible roles that the reading of anatomical literature played in medical education, as opposed to – or perhaps in concert with – hands-on experience.

Chapter 10 concludes the study with a look at the late-antique and post-antique history of dissection up to the time of Vesalius. While the attested history is rather sparse, B.'s overview of the existing sources provides a valuable chronicle for scholars interested in this period.

The volume makes a landmark contribution to the study of dissection in Graeco-Roman antiquity. Truly comprehensive in scope, it includes not only Greek and Latin texts but also a number of sources from the Arabic anatomical tradition, which especially enrich the analysis of the Galenic texts. It is exceptionally well-edited, and its mode of engagement with Greek and Latin quotations (typically placed in the footnotes) bolsters its accessibility for audiences without knowledge of the languages. It will serve as an outstanding resource not only for scholars of ancient medicine and science, but also for those interested in many interrelated aspects of the ancient world.

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