

THE CAMBRIDGE COMPANION TO GALEN

Galen of Pergamum (AD 129-c.216) was the most influential doctor of later antiquity, whose work was to influence medical theory and practice for more than 1,500 years. He was a prolific writer on anatomy, physiology, diagnosis and prognosis, pulse-doctrine, pharmacology, therapeutics and the theory of medicine; but he also wrote extensively on philosophical topics, making original contributions to logic and the philosophy of science, and outlining a scientific epistemology which married a deep respect for empirical adequacy with a commitment to rigorous rational exposition and demonstration. He was also a vigorous polemicist, deeply involved in the doctrinal disputes among the medical schools of his day. This volume offers an introduction to and overview of Galen's achievement in all these fields, while seeking also to evaluate that achievement in the light of the advances made in Galen scholarship over the past thirty vears.

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PREFACE

Galen was one of the most successful men of Antiquity. Having grown up and studied in the provinces, he came to Rome at the age of thirty-three, at the height of the Empire's prosperity, and quickly made a name for himself as a theorist and practitioner of medicine, as a philosopher, and as a public controversialist. As a result of his meteoric rise, he gained an entrée into the Imperial circle, becoming one of the philosopher-emperor Marcus Aurelius' personal physicians, indeed the one entrusted with the medical care of the imperial prince Commodus in the emperor's absence. In the course of a long life, he wrote voluminously on an impressive variety of subjects, ranging from medicine through philosophy and linguistics to grammar and literary criticism; and although only a fraction of his vast output survives, it still constitutes, by some distance, the largest surviving oeuvre of any ancient author. His synthesis and systematization of medicine, which included a good deal of personal discovery and innovation, was to achieve canonical status already in antiquity; the great medical encyclopaedia of Oribasius in the fourth century was founded directly on Galen's work. With the rise of Arabic learning in Baghdad, and subsequently throughout the Islamic world, Galen's treatises were translated, first into Syriac and then into Arabic, where they also formed the basis of Arab medicine, and were extensively excerpted and commented upon in the succeeding centuries.

When the flame of learning was finally rekindled in the West, Galen was among the first of the classical authors to be translated into Latin, originally from the Arabic, and then later directly from Greek manuscripts. His *Ars Medica* was read in Paris and Oxford in the thirteenth century. By the fourteenth century he had become a canonical figure in Europe as well. Dante places him with the

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virtuous pagans in a relatively comfortable antechamber to the inferno; Chaucer mentions him along with Hippocrates as the model of the figure of the physician. For several centuries, European learned medicine was basically Galenic; medical students from Salerno to Salamanca, Padua to Paris, learned therapeutics at least indirectly from Galen's *On the Therapeutic Method*, diagnosis and prognosis from his works on the pulse, and anatomy from his anatomical texts, as faithfully demonstrated by professors in the theatres.

Although the first cracks in the façade of his pre-eminence date from 1543 and the publication of Vesalius' de Fabrica, his influence continued to be enormous. As late as the seventeenth century, avatars of the new science such as Descartes and Galileo still talk respectfully of Galen and Galenism, even if they sometimes take issue with it, and Galen's demonstration of the cerebral origin of the nerves is still being repeated in the anatomical schools. If Vesalius, and later Harvey, rendered Galen's account of human anatomy and physiology largely obsolescent, his influence continued to be felt in clinical medicine, even as a revival of Hippocratism sought to re-inject a certain empiricism and distrust of systematicity into medical practice. As late as the nineteenth century at the University of Würzburg, the medical student's oral exam consisted in being asked to comment on a passage of Galen chosen at random; the much-maligned edition of Kühn, comprising twenty-two large volumes appearing between 1819 and 1833, and still our best text for much of Galen, was produced with the interests of practising doctors rather than scholars in mind. And some typically Galenic forms of treatment, notably bloodletting, persisted even into the twentieth century. Ninety years ago the physician-scholar Arthur Brock, writing from a wartime military hospital in the introduction to his translation of Galen's On the Natural Faculties, could seriously, if somewhat forlornly, advocate a return to some aspects of Galenic practice. It is only in the last hundred years or so that Galen has suffered a final eclipse as a medical authority; although I am told that in parts of rural Spain a doctor may still be familiarly referred to as 'un galeno'.

But for a while at least that eclipse seemed total; and only a few scholars continued the slow and demanding work of producing proper critical editions of his works that had begun in Germany in the latter part of the nineteenth century. After the First World



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War, the stream dwindled and then virtually dried up. It was not until the 1970s that there began to appear signs of a revival of scholarly interest in the man who, along with Ptolemy, and arguably also Archimedes, has the right to claim to have been the most influential of all Greek scientists, and rivalling even Plato and Aristotle in the depth and continuity of his intellectual impact on succeeding centuries. At least now Galen is receiving renewed and vigorous attention from classicists and philosophers as well as historians of culture and medicine.

But of those five giants, Galen is nowadays by far the least well known, even among the generally educated, who will usually know at least the names of others as well as that of Hippocrates, Galen's acknowledged master in matters medical, as well. This Companion has been undertaken in the conviction that this state of affairs needs to be remedied, and in the hope of contributing something to that remedy. As such, contributors were asked to make their articles as accessible as possible to the non-specialist, at least the non-specialist in medical history; and they were also asked to make their contributions as representative as possible of Galen's importance in the wide variety of fields surveyed. For obvious reasons, they were not asked to aim at comprehensiveness of treatment; nor did I insist on respect for any orthodoxy (or for any unorthodoxy, for that matter). How far we have succeeded in this aim is obviously for others to decide. But I hope that this brief survey will at least have indicated the worthiness of the enterprise.

To present a rounded picture of Galen's importance and achievements, contributions were solicited from historians of philosophy as well as of medicine; and I have tried to strike a balance in the presentation of the various facets of Galen's intellectual persona. I had hoped to cover more areas, but at various stages four people who had originally agreed to participate in the project withdrew from it for various reasons (and none). In particular, it is a great loss not to have been able to publish the promised article concerning Galen's work on diagnostics and the theory of the pulse, one of his most important contributions to medical theory and practice; I have tried, inadequately, partially to remedy this deficiency in the introductory chapter on Galen's life and work. In addition, it will be apparent that different chapters sometimes range over the same territory, sometimes even quoting the same texts. In almost all cases, these are



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approached from different angles, and with the aim of illuminating distinct features of Galen's multi-faceted intellectual personality. But some reduplication has been inevitable, and here again I have not sought to intervene with too heavy an editorial hand; here, too, we would crave the reader's indulgence. These problems have also drawn out the gestation period of this volume to more than usually elephantine proportions; I would like to record my gratitude to the surviving contributors for their cheerfulness in the face of delay, and their conscientiousness in responding to my often hasty and frequently importunate questions.



NOTE ON CITATIONS AND ABBREVIATIONS

It is not easy to impose order and orthodoxy of citation on Galen's sprawling corpus; and within this Companion I have tolerated slight variations in referential style in line with the preferences of the various contributors. But I hope - and trust - that none of these variations will cause confusion. Ever since the late medieval period, when Galen's writings began to exercise their extraordinary, resurgent grip on Western medical theory and practice by way of Latin translations, it has been customary to refer to his multifarious texts by way of their Latin titles. For this book, I have insisted on their being assigned English titles, although the preferred abbreviations for them will usually reflect their Latin originals (this is to maintain some degree of consistency with the usual manner of citation elsewhere – although, as I noted above, this too is various). As an aid to cross-reference, two appendixes have been provided. Appendix I lists the texts, with their Latin names and abbreviations, as they appear in the massive Kühn edition of 1819-33, as well as listing other, later, critical editions where they exist. Appendix 2 relates the preferred English titles to the Latin abbreviations in the case of the bulk of the texts (and all of those cited in this Companion), as well as indicating where translations exist into modern languages. Every treatise will be cited on its first appearance in each chapter by way of English title followed by standard Latin abbreviation; thereafter it will (typically) be referred to by that abbreviation. In the case of reference to particular passages of text, I have also permitted some variability in citation convention. But I have insisted that every text which appears in Kühn [Galeni Opera Omnia, 20 vols. in 22, Leipzig, 1819–33) should be referred to by way of volume (in Roman) and page (in Arabic) number in that edition, even in cases where the Kühn text has been superseded by

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later critical editions, the reason for this being that such later texts generally (and translations usually) contain marginal references to it, and so Kühn references may be used to navigate other editions. Thus a typical minimal reference might read: 'Aff.Dig. V 40–1', indicating a reference to the text The Passions of the Soul located at pages 40-1 of Kühn volume V. On occasion, line numbers have been added for further precision, even though Kühn's text does not print marginal line-numbers. However, contributors have sometimes preferred to cite the later editions too, in particular when they appear either in the three-volume collection Galeni Scripta Minora which appeared in Leipzig in 1884, 1891 and 1893 (edited by Marquardt, Müller and Helmreich, respectively), abbreviated 'SM', or in the Corpus Medicorum Graecorum series begun by the Berlin Academy at the end of the nineteenth century, and which still continues its monumental task of producing proper critical editions of the entire Greek medical corpus, abbreviated 'CMG'. Thus, since Aff. Dig. is also edited in SM I, a fuller reference might read 'Aff. Dig. V 40-I, = SM I, 3I,9-14', further citing page 31, lines 9–14 of Galeni Scripta Minora 1. Finally, this text is also edited in the CMG (by de Boer, 1937), and consequently a complete reference would read 'Aff.Dig. V 40-1, = $SM_{1,31,9-14} = CMG_{1,1,1,27,21-3'}$, additionally citing page 27, lines 21-3 of CMG volume V (which is the Galen section), subvolume 4,1,1 (the 1937 edition of the text in question by Wilko de Boer). But in general, we have not thought it worthwhile to cite more than two different editions. Finally, Galen himself divided his longer works into books; later editors divided these into chapters (often arbitrarily, not to say perversely); and some modern editions break the text down into smaller sections still. Some have preferred on occasion also to cite using these further tools, and I have not stood in their way. Book (Roman) and chapter (Arabic) numbers appear immediately after the title abbreviation, and are separated from the remainder of the reference by a colon (in the case of single-book treatises, no book number will be cited: 'Aff.Dig. 8: V 40-I, = SM I, 31,9-14', a reference to chapter 8 of Aff.Dig.). Thus, On the Doctrines of Hippocrates and Plato (PHP), a major treatise in nine books, occupies the bulk of Kühn volume V; it has also been edited in recent times, with English translation and commentary, by Phillip De Lacy as CMG V 4,1,2 (3 vols., Berlin, 1978-83). So a (very) full reference to a particular passage might read as follows: 'PHP II 2:



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V 212–13, = CMG V 4,1,2, 102,18–24′. Here, the page and line numbers refer to the Greek text, and not to the facing English translation; and this convention has been adhered to in other similar cases. In addition, some contributors have preferred to indicate the later editions (SM, CMG, or others) by citing page number plus the name of the editor; in this manner the last reference would read 'PHP II 2: V 212–13, = 102,18–24 De Lacy'; in such cases, however, the edition will have been fully referenced at the first mention of the text in the chapter. All of this may seem excessively complex and unwieldy, and perhaps it is. But it should at least be relatively unambiguous.