

Preface

This book explores ancient Graeco-Roman attitudes to time, its perception, measurement and daily management, and does so with a particular focus on medical approaches and medical sources.

I aim to address such questions as: How did people in the Graeco-Roman world divide organize or divide their days? How did they understand the aging process, or the successive phases of their lives? What was the significance of the changes in the seasons to their daily regimes? What was the relevance of these and other 'cycles' to the understanding of health and disease? What was the role of measurement, and of various technologies of measurement, in these contexts? How did they conceive of their own lives within a broader time span, in relation to – real or imagined – previous ages?

There has been much recent work on time in the ancient world, which has focussed on a number of different topics, especially: calendars and techniques of time measurement; socio-cultural constructions of the lived day, and of different ages or stages of life; attitudes to the past; philosophical speculations, definitions and analyses.¹ But these areas of study have remained to a large extent separate; there is no introductory study offering an overview taking account of them all.

This book aims to fill that gap. At the same time, and while exploring the above questions and offering a synoptic account on the basis of a wide range of sources, it has a particular focus medical writing, and an even more particular one on the work of Galen.

Let me offer a few words by way of explanation of the rationale, first for the focus on medical sources, and secondly for the especial focus on Galen.

Medical writing and medical conceptions constitute a major source of evidence for ancient approaches to and experiences of time, as well as its division and measurement, and the context of this evidence is one of major salience for everyday lives. Medical texts pay closer attention to time than any other literary

¹ On time measurement and calendars, as well as on the social and political significance of the latter, see for example: Rüpke (1995), (2011); Schaldach (2001); Hannah (2005), (2008), (2009), (2020); Lehoux (2007); Wolkenhauer (2011); Winter (2013); Bonnin (2015); Graßhoff et al. (2015); Ben-Dov and Doering (2017); Talbert (2017); Bultrighini (2018), (2021a), (2021b); Jones (2020); on daily lives: Ker (2020); Wolkenhauer (2020); on stages of life: Wiedemann (1989); Kleijwegt (1991); Parkin (1999); Laurence (2000); Harlow and Laurence (2002); Scheidel (2001); Cokayne (2003); on attitudes to the past: Csapo and Miller (1998); Darbo-Peschanski (2000); Falkner (1990); Goldhill (2001); de Jong and Nünlist (2007); Richter and Johnson (2017); on philosophical theories: Sorabji (1983) and, on Aristotle, Coope (2005).

sources, on at least three temporal levels: that of precise times within the day (in the context of both health prescriptions and diagnostic observation); that of the seasons of the year (in the context of their relative impact upon health); and that of the human life cycle, from infancy to old age, understood in biological terms. They are thus a very rich – but also a comparatively neglected – source for both theoretical speculation and technological innovation regarding time, and for its experience and management in the ancient world. Amongst other things, they help us to chronicle the growing importance of numbered hours in the Graeco-Roman world and, relatedly, the possible relevance of the growing use of time-telling technologies for everyday time management. A clearer understanding of these developments must at least provide some corrective to the historiographical view which still enjoys considerable currency, that precise time measurement only became important in the conditioning and structuring of everyday lives from the early modern period – still more so to the view that it only achieved real social significance as a function of the modern industrialized workplace.²

Moreover, medical texts relating to time offer a distinctive perspective not found in other texts. This is partly a function of the highly contingent, personalized, observation-based, even anecdotal nature of much of the material, which vividly highlights – for example – aspects of individual exercise regimes, diets, sleep patterns and recurrent ailments; details of the daily care of infants or children; or individual experiences and perceptions of the aging process. But the perspective is distinctive in another way too. The medical discourse in some respects offers an alternative model, even a counterblast, to those discourses or traditions which privilege a sacred, social or political calendar. The ambition of medical theory and practice, by contrast, is tendentially to abolish all artificial (or god-given) distinctions between periods of time, acknowledging only those with a biological, environmental or cosmic basis. Thus, while much important recent scholarly work has focused on the calendar, and on the notion of ‘festive time’, medical perspectives may provide a corrective, or at least a countervailing set of views and experiences. Against a history which tends to privilege tradition and ritual practice, medical sources suggest a view of human experience and human behaviour where differences from one hour, day or month to the next are understood in terms purely of seasonal and biological changes, of environment, diet and daily activity.

² The point is made strongly by Miller (forthcoming), who mentions as classic statements of such views Thompson (1967); Landes (1983); and, in a similar vein Jenzen and Glasmann (1989); Dohrn-van Rossum (1996).

The rationale for the focus on the second-century-CE doctor and philosopher Galen is partly covered by the above considerations; but it is also the case that his writings happen to include a range of discussions which, taken together, in themselves offer a significant overview of ancient attitudes to time, both within and beyond the medical context. Let me give a brief account of four examples of the unique value of the Galenic material. First, Galen gives the fullest account extant in a literary source of the construction of a sundial, and also of the relationship between sundials and water-clocks. Secondly, he offers by far the richest material for ancient conceptions of different ages, or times of life, and their medical and lifestyle implications. Thirdly, he gives by far the fullest account in our sources of the nature of diagnostic and clinical practice, and how this relates to close temporal observation. Fourthly – and in a more theoretical vein – he presents an original account of our perception of time in relation to motion, and relatedly also of speed and rhythm, which both draws both on existing philosophical accounts and theoretical conceptions and on his clinical experience. This latter discussion – in conjunction with evidence from other medical sources – illuminates ancient views of the extent and limitations of human perception, of the role of quantification, and of rhythm, in both clinical and everyday contexts.

The choice of texts, and the main temporal focus on the second century CE, are partly determined also by considerations of the nature and interrelationship of our surviving sources; and these considerations should be mentioned here too, as they may help to explain what may otherwise seem an unbalanced or eccentric chronological approach. The overwhelming majority of medical sources from the Graeco-Roman world belongs to one of two groups: the so-called ‘Hippocratic corpus’ on the one hand and the (far more voluminous) works of Galen on the other. The former texts, though spanning a range of dates and authors, were mainly written somewhere in the Greek-speaking world in the fourth or late fifth century BCE,³ the latter mainly in the second half of the second century CE at Rome. There is a gap of several centuries between these two textual islands, from which period we have very few independently surviving texts, often themselves of uncertain date. Moreover, much of what we *do* know of the medical authors or developments between these two periods – for example, of the important Hellenistic doctors Herophilus and Erasistratus – is from the testimony either of Galen or of authors of even later periods. Galen thus looms very large in our ancient medical evidence, both as an author in his own right and as a source for earlier developments. Moreover (as we shall see especially

³ On the problems of the ‘Hippocratic corpus’ see below, p. 36 with n. 3.

in chapter 3), his works have a close theoretical and ideological relationship with those of the earlier periods, with certain of the ‘Hippocratic’ works in particular.

For all these reasons, it is difficult to tell anything like a diachronic story of developments in any area related to medical history. I have chosen rather – partly because of this consideration and partly as a function of my own research interests, which have focussed more closely on Galen – to paint a synchronic picture, based mainly in second-century Rome, but at the same time to contextualize this picture with the help of various other texts, some from much earlier periods, but all informing the same intellectual and experiential tradition. In the process, there is inevitably some jumping backwards and forwards, for example between Galen and ‘Hippocrates’, but it is hoped that such leaps are informative and enriching of that central synchronic picture.

The book thus offers at once a synoptic view of the current state of knowledge of Graeco-Roman thought and practice, in such areas as time measurement and management, approaches to aging, and the perception of time in relation to motion, and also the results of my own and others’ latest researches in the specific field of ancient medicine, for example in relation to disease diagnosis or to health prescriptions, which substantially enrich our understanding of these questions.

I should mention a few areas that I do not attempt to address, even synoptically. I give no account here of the relationship of festive to everyday time, or of the extent to which the festive calendar conditioned perceptions of or management of time. The role of both political and religious calendars, and the dedicating of days within the calendar to specific purposes (festive, commercial, juridical, etc.), as well as the related development of a division into either seven-day weeks or eight-day *nundinae*, constitutes a hugely important aspect of the ancient experience and management of time, which has received a comparatively high level of attention in recent literature.⁴ These areas have been beyond my scope; moreover, as already suggested, the medical discourse in some ways offers a countervailing historiographical perspective.

Nor, while examining a number of other crucial cycles, do I consider conceptions of cycles of years, arising in either a religious or a philosophical context.⁵ Such consideration of the measurement of longer periods of time would poten-

⁴ See especially Hannah (2005), chapters 3 and 5; Rüpke (1995); for further perspectives Beard (1987) and, on the development of the weekly time division in Roman imperial and later times, Bultrighini (2018), (2021a), (2021b).

⁵ On the ancient Jewish concept of the Sabbatical year, for example, see Carmichael (1999); Casperson (2003); and, for later ramifications, Krinis (2016). Cyclical philosophical notions, meanwhile, would prominently include the Stoic theory of the periodic conflagration of the universe.

tially lead also to analysis of the complex history of the development of the solar calendar and its division into months, and relatedly of the relationship of solar and lunar calendars – again questions not addressed here.⁶

There is much recent work, both within classical studies and within social anthropology, which approaches the question of attitudes to and experience of time from a range of anthropologically-informed theoretical perspectives.⁷ The present study does not aim to engage with such theoretical approaches head-on, let alone to advance a new theoretical framework of its own; it does, however, seek to take account of discussions arising in such work where they seem of particular relevance to the specific topics under investigation.

The book is structured in five chapters, each of which takes one large thematic area and aims to consider it from both a broader textual or social perspective and in relation to a more narrowly medical (or in some cases Galenic) perspective. In the first chapter I consider the ‘horological scene’ of imperial Rome, the importance and the varieties of time measurement and management in daily life, and in particular the division into hours, on the basis of a wide range of sources. This broadly-based account is then followed by a more detailed investigation of the Galenic evidence, both for daily health prescriptions and for the role (and interrelationship) of sundials and water-clocks. In the second chapter, I consider two closely related ‘cycles’, that of the human lifespan and that of seasons, and the ways that these were conceptualized, experienced or negotiated, both in Graeco-Roman societies more generally and in the medical – especially Hippocratic and Galenic – discourse in particular. Thirdly, and with a main focus on Galen, I consider the two related questions of the (self-)perception or construction of a life or personal biography in the ancient intellectual world and of the attitude to, and nascent periodization of, the past. The fourth chapter investigates the importance of both day and time divisions in ancient diagnostic and clinical practice; it focuses on the crucial medical concepts of *krisis* and *kairos*, also attempting to place these in a broader intellectual and literary context. Finally, I examine Galen’s theoretical-philosophical contribution to the discussion of time, both placing this in the broader Greek philosophical tradition and considering its relevance to important clinical and practical questions, in

⁶ See again Hannah (2005), chapter 3, for an intricate account of Greek solutions to the problem, how to divide the year into a regular number of regular months, and of the related question of calculation of dates for periodic festivals such as the Olympics; *ibid.*, chapter 5 for similar issues in Roman calendar-making.

⁷ Prominent contributions in the former category include van Groningen (1953); de Romilly (1968); Loraux (1986); Bettini (1991); Csapo and Miller (1998); Darbo-Peschanski (2000); Rosen (2004); in the latter, Good (1968); Gell (1992); Turetzky (1998).

particular the nature of our assessment of time, speed or motion, and the role of qualitative and quantitative elements in this.

As a function of this particular thematic approach, my focus in the book is neither entirely on ‘long’ nor on ‘short’ time, to use the terminology adopted in recent literature.⁸ While most of the present study is related to a variety of ‘short’ time units – from hour divisions down to the microscopic divisions theoretically involved in the measurement of the speed of the pulse – I also explore the measurement and conception of time in two ‘longer’ contexts, that of the ages or phases of life, and that of attitudes to and self-positioning in relation to the past. Moreover, the thematic organization just outlined entails that I do not move neatly either from shorter to longer time units or vice versa, as the various units arise in different ways in relation to the themes successively addressed.

Through its particular focus, the book aims to open a window into some of the most significant questions regarding the ancient awareness, measurement, management, perception and conceptualization of time, and the salience of these to both medical theory and practice and everyday experience.

⁸ See especially the essential work of Miller and Symons (2020).