

balance between specialist studies and work that introduces these sorts of doctrines to the scholarly public in general—for example, to scholars interested in the history of the sciences. The borders between magic, science, and religion were much more blurred in antiquity than they are today, so this journal could be very useful for those interested in any of those interrelated spheres.

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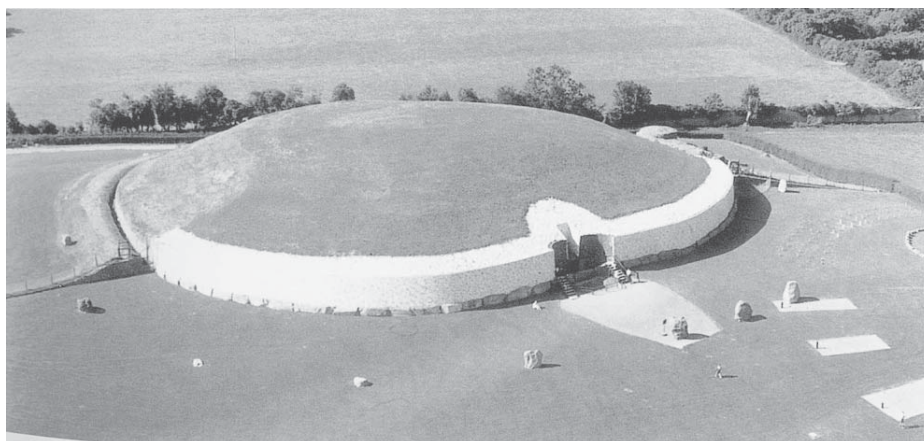
Clive Ruggles. *Astronomy in Prehistoric Britain and Ireland*. x + 285 pp., illus., figs., tables, apps., bibl., index. New Haven, Conn.: Yale University Press, 1999. \$65.

Archaeoastronomy, in essence, deals with the links between prehistoric peoples and astronomy. Over the past thirty years, this apparently simple and singular discipline has been addressed by researchers from a broad spectrum of fields, and their results have often been presented outside mainstream archaeological journals. Clive Ruggles notes that this has produced a communication divergence with mainstream archaeological researchers, which, he argues, has resulted in their lack of interest in and skepticism of the field. To a large degree, Ruggles's book aims to redress this communications gap, which has been exacerbated by the level of statistical analysis inherent in archaeoastronomy. The resulting book is not so much on the *topic* of "prehistoric astronomy of Britain and Ireland" as on its *study*.

This is very much a reference volume, and it

works very well at that level. Its chapter-by-chapter approach, and the detailed adjunct boxes spread throughout the book, allow it to function effectively as a student text. However, it works less well for a more general reader, who must spend time "to-ing and fro-ing" between boxes, endnotes, and texts. Absorbing many of the endnotes within the body of the text or into footnotes would have added elegance to this discursive and tightly woven reference work. Overall, the background boxes are useful and informative, although on occasion the nonspecialist will be left needing more explanation.

The book begins with an enjoyable, if disheartened, introduction. It then moves on to discuss the contributions of early giants in the field, Alexander Thom and his grandson. Their work is subject to tightly constructed critical analysis, which shows us that solar and lunar alignments accurate to within a small number of minutes of declination are not supported, while those of less accuracy (focusing on solstitial or lunar standstill limits) are significant. The concept of general social context, discussed in Chapter 4, makes for an attractive topic in itself. There is some concern regarding the very general nature of the archaeological background given, in relation to animal husbandry and cultivation. The nonspecialist might take the idea of "organised activity" in forest clearing, grain cultivation, and herding as an intensive and extensive farming phenomenon in the Neolithic, even though that is clearly not stated. Having said this, Archaeology Box 4, on monuments, is quite a good



Newgrange, Co. Meath, Newgrange passage tomb, as reconstructed, viewed from the south-east (from Clive, Astronomy in Prehistoric Britain and Ireland).

overview, capturing the associated myriad threads of the ongoing social developments in Britain and Ireland.

The topics of orientation and astronomy in stone circles and short stone rows, considered in Chapters 5 and 6, are engaging, although some ideas advocated here did not seem to be explicitly supported. Why is it uncomfortable to have “the idea of pre-planning over several years” in order for the builders of the recumbent stone circles to note the annual changes in the moon’s motions? Such behavior, if supported, might denote its importance or “specialness.”

Context, in terms of the landscape and the skyscape that surround archaeoastronomical sites, must be understood from the perspective of those who constructed ancient monuments. Addressed in Chapter 7, this topic makes most welcome reading. However, Chapters 7 and 8 highlight an urgent requirement for tying the archaeoastronomical data in with local archaeological interpretation in order to add specific social context.

The latter parts of the book aim to “examine some of the wider issues and look to the future.” However, these goals have already been largely achieved in the text at this stage, and any new points introduced here, such as those made on pages 154–155 and the discussion of equinoctial alignments, would have been better woven into previous chapters. The section “Beyond the Green and the Brown,” which discusses methodological possibilities for an encompassing and appropriate approach to archaeoastronomy, is rather out of place immediately before the closing of the work. The data provided by Ruggles in the appended reference lists will be very useful for firsthand examination and for any new research done by readers of this volume.

Many archaeologists, particularly the younger ones, today acknowledge the importance and relevance of archaeoastronomy. Ruggles’s investigative and reflective work will provide a thought-provoking summary of the field for them, for workers already contributing to the field, and for the more general student.

GAIL HIGGINBOTTOM

Liba Taub. *Ancient Meteorology.* (Sciences of Antiquity.) xiv + 271 pp., illus., bibl., index. London/New York: Routledge/Taylor & Francis Group, 2003. \$28.95 (paper).

Liba Taub’s *Ancient Meteorology* is a much-needed survey of this field; the last general book on this topic was published in 1907 and the last one in English even earlier, if one does indeed

exist. The lack of scholarly attention to this field is not indicative of its historical importance. As this book skillfully shows, meteorology, in one form or another, formed a part of the teaching and research of leading philosophical schools, such as those of the Peripatetics, Epicureans, and Stoics, was prominent in almanacs and municipal displays, and was present in a number of examples of didactic literature. While past commentators on this field have deemed ancient meteorology to be conservative and tradition bound, this book shows that the repeated attempts to give naturalistic accounts of meteorological phenomena were crucial to the desire to understand the relation between the earth and the cosmos as a whole.

This book will be of interest to specialists and is also accessible to those with only a limited knowledge of ancient science. The emphasis on genre, observational traditions, and philosophical explanation might be appropriate for introducing students to many important themes and ideas of the history of ancient science; and while specialists might not need to be reminded that didactic poetry was a common means of spreading philosophical knowledge in antiquity or that Aristotle used four kinds of causes to explain natural phenomena, they might do well to be reacquainted with less familiar texts, such as the works of Postumius Rufius Festus Avienus and the pseudo-Aristotelian *De mundo*.

This is not to say that the contents of this book are obscure. Taub shows that meteorology in antiquity, like meteorology today, was linked, and at times central, to key understandings of the earth and nature in general. Taub accurately divides ancient meteorology into two fields: the first attempted to predict the weather and the second was dedicated to explaining changes in the sublunary realm. The second field includes topics beyond atmospheric variations, including those concerning what we today would label seismic and hydrologic phenomena. For the science of prediction, Taub shows the use of observation and tradition evidenced in astro-meteorological texts and artifacts, thereby demonstrating meteorology’s relation to astronomy as well as its application to practical fields, such as agriculture, that relied on the accurate interpretation of weather signs. Major writings, including those by Hesiod, Ptolemy, Geminus, and Aratus, figure prominently in this discussion. While Taub’s attempt to describe these authors as participants in a diachronic community may not be fully convincing, the stress on the role of passing down and appropriating observations

Several species of humans have intermittently occupied Britain for almost a million years. The Roman conquest of Britain in 43 AD is regarded as the start of recorded history although some historical information is available from before then. The earliest evidence of human occupation around 900,000 years ago is at Happisburgh on the Norfolk coast, with stone tools and footprints probably made by Homo antecessor. The oldest human fossils, around 500,000 years old, are of Homo heidelbergensis at Do prehistoric stone monuments in Britain and Ireland incorporate deliberate astronomical alignments, and if so, what is their purpose and meaning? This work provides an account of megalithic astronomy debates and examines prehistoric man's concern with celestial bodies and events. Discover the world's research. 17+ million members. Astronomy in Prehistoric has been added to your Cart. Add a gift receipt for easy returns. New & Used (3) from \$95.00 + FREE Shipping. I love this book. It takes a skeptical, but positive approach to evidence that ancient monuments in Britain and Ireland were deliberately aligned to astronomical events. It presents very recent academic work with the point of view that astronomers and archeologists need to be more familiar with each other's work. To be clear: this is a textbook rather than a pop archeoastronomy book, but since it is written for astronomers who know nothing of archeology and archeologists who know nothing about astronomy, it provides all the background you need to understand the material presented. Read mo