NOTE

A SOLSTITAL SITE NEAR PETERBOROUGH?

Acting upon a suggestion from Mr Gordon King of Peterborough Astronomical Society, Earl Fitzwilliam wrote to ask if we would be interested in surveying the two stones called Robin Hood and Little John on the north bank of the river Nene near Milton, Peterborough. Mr King had taken photographs of the midwinter Sun setting over the horizon some two miles away.

In latitude 52° 34' 16" N, longitude 0° 19' 03" W, the two stones, still standing about 3ft high but not vertical, indicate an azimuth of about 229° 56' ± 20'. About a dozen paces apart, they can only act as a direction indicator, but were they perhaps used as a backsight for a horizon foresight?

Clearly visible from the site is the lowest point of a hollow or low saddle on the horizon. With lowest point at an azimuth of 229° 12' 54" and observed altitude 12° 22', the col subtends an arc of azimuth of about 40'. Trees obscure the ground on either side of the saddle in the agricultural fields.

For an estimated temperature of 44°F the correction for refraction at the sunset is about 32°-6 and for solar semi-diameter and parallax of respectively 16°2 and 0°1, the "observed" declination is found to be −23° 54'9, which indicates a date of about 1860 b.c. No presently obvious horizon marker was evident upon inspection of the open fields forming the horizon, but this does not mean that a foresight was never erected. Without the evidence of a foresight it cannot be claimed that the two stones were placed for accurate calendrical reasons but undoubtedly they indicate by themselves the winter solstice.

A. S. THOM

BOOK REVIEWS


Archaeoastronomy, where once angels feared to tread, has seen heavy traffic in recent years, if we judge by the number of new books and popular articles written about it. When Gerald Hawkins first stepped into the field, but fifteen years ago, there was little indeed to read on the subject, and, apparently, few who cared: Lockyer’s Dawn of astronomy and other Victorian speculations on
Egypt’s pyramids and Britain’s megaliths had languished long before and were out of print, out of style, and out of favour with the archaeologists. Then came the splash and countersplash of *Stonehenge decoded*, the important work of C. A. Newham, and two impressive books by Alexander Thom. There followed a succession of dramatic events, including a bold recognition of this field by Michael Hoskin of this *Journal*, the entrance of Fred Hoyle, an Old World archaeological capitulation, and a New World renaissance of interest in puzzles of American archaeoastronomy. In a dozen years came a dozen books, written or edited by the principals involved.

Now we find on sellers’ shelves a second wave of new archaeoastronomy titles, endeavouring to interpret and explain the original work to interested archaeologists, astronomers, and the public in general.

This well-written and well-illustrated book is one of the latter set, and surely one of the best yet to appear. The author, a scientific official of the Admiralty Surface Weapons Establishment, seems equally able to explain both archaeology and astronomy. His review is restricted to megalithic sites in Britain and Brittany; to the possible astronomical and geometrical significance of the passage graves, circles, and standing stones that were built by unknown hands in the late Neolithic and Early Bronze Age—from about 3500 to 1500 B.C. Included are Stonehenge and New Grange, Kintraw and Callanish, and Carnac, and all the other sites studied by Alexander Thom. In this sense Wood’s book is much like Evan Hadingham’s fine volume of several years ago, which was also chiefly aimed at fleshing out the dry-as-dust site reports of the now-legendary Oxford engineering professor.

Throughout the book the author is careful to identify areas of controversy and to present both the claims and the criticisms of them. He shows an excellent appreciation for the history of British studies of megalithic astronomy, and puts in proper sequence and perspective the accomplishments of the various Stonehenge decoders, from Aubrey and Stukeley through Lockyer, Newham, Hawkins, Thom, and Hoyle, as well as other work published as late as 1977.

Dr. Wood appears to believe most claims for advanced megalithic astronomy, geometry, and mensuration in stone age Britain, and in chapters entitled “Megalithic mathematics” and “Early Bronze Age calculators” he endeavours to explain some of Thom’s advanced interpretations to non-mathematical readers. More will be confused than are converted. With simplicity gone, few, I suspect, will stay around to slog through a field that on the cover looked so enticing. It is not easy to maintain reader interest in the geometrical methods of constructing Type B Flattened Circles, or the mathematical reasons for laying out the complicated fans of stones at Le Petit Menec. Nor is it easy to entice resisters to swallow the megalithic yard. That has been the problem all along.

How do you make a compelling case for something so difficult to explain? How do you convince others that solutions this complex are also unique, or even reasonable? Some will accept them for the wrong reason: because the field work has been done so carefully, so well, and for so long. No sceptic has ever questioned the accuracy of Thom’s exhaustive surveys or doubted whether he is able to fit the remains of stone patterns with classes of compound curves. Nor does anyone seriously question whether Fred Hoyle, armed with a circle of Aubrey holes, could predict lunar eclipses at Stonehenge. Where doubt creeps
in is in accepting with any degree of certainty that the builders did these things intentionally, over 4000 years ago.

Dr Wood is quick to acknowledge that statistical arguments, as so often the case, seem now incapable of proving or disproving the reality of distant foresights, the deliberate planning of imperfect circles, or the existence of standard units of measure. Wood treats these doubts openly and frankly, and repeatedly asserts his hope that with more work, and more time, the case will at last become clear. But archaeology, however aided by new information, seems seldom able to answer questions by yes or no. Thom’s greatest service has surely been to document, for all time, the plans of these intriguing structures and to offer a reasoned theory for their construction. Others will step in with different readings of the same set of facts. We shall probably always have to settle, as now, not for answers, but for probabilities of answers, and to make up our minds not so much on facts as on feelings, and on our willingness to take bold leaps of faith.

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This book describes the first ten years of modern research in the field of prehistoric astronomy from the original article in Nature up to the emergence of scholarly journals bearing the title “Archaeoastronomy”. There are chapters on the astronomical interpretation of Megalithic structures in Britain, France, Ireland and North America, and there are discussions of the remains of the literate civilizations of the Maya and ancient Egyptians. Myths, legends and other anthropological aspects are also well covered. The book presents a balanced account of the debate and arguments for and against the acceptance of the new discoveries, and the author has a clear insight into the difficulties that arise when one discipline—astronomy—suddenly impinges on another—prehistory.

Peter Lancaster Brown accepts as proven the pattern of Sun and Moon extrema, or standstills, found first at Stonehenge, but he expresses doubts about the super-accuracy claimed later for other sites, and for the existence of a “Megalithic yard” when claimed as a precise, fixed unit of measure.

The early debate is fully covered and my own experience confirms the story as Lancaster Brown unfolds it. Professor R. J. C. Atkinson criticized the Stonehenge alignments on the basis that they were not accurate enough, saying that the fit could be dismissed as due to chance. Sir Fred Hoyle defended the research, noting that the errors in the monument were reasonable, and noting that, significantly, it was the key architectural features that matched the sky targets. Lancaster Brown himself is convinced of the astronomical hypothesis because, he says, the “total” pattern of targets was accounted for. (Actually, midsummer moonset is missing, or at least not yet identified at the site.) The book’s biblio-