

suspect this section of the book will provide little nuggets like this for most readers who, like me, have followed the space programme in an offhand way, but never thought about it very deeply. This section also provides a useful (and sobering) update on various space industry enthusiasts of the late 1970s. Solar power satellites (a victim of the oil glut), the purification of drugs in space (now facing competition from the new technology of genetic engineering) and microgravity manufacturing are all dealt with in a realistic way. The bottom line is that it is only communications technology that seems truly to be flourishing in space.

In the second section of the book — by far the longest — Shipman attempts a survey of all the science that can be learned from space. Here the broad nature of the subject matter causes problems. There simply isn't enough attention devoted to any single topic to cover it adequately, and the result is an unsatisfactory potpourri of planetary science and astrophysics, with snatches of other subject matter thrown in for good measure. The brevity of the discussion of complex points will make it very difficult for someone not already familiar with a subject to understand what is going on. To take just one example, the development of life on Earth is passed over in just three pages — hardly enough to instruct the neophyte, but too much for the *cognoscenti*.

In the final section Shipman returns to his strong suit with a discussion of the future of the space programme. He presents a well thought out survey of the role of man in space, mercifully free from the kind of either/or rhetoric that has characterized the debate between NASA and some members of the space science community. For Shipman, the question is not whether humans will be involved in future space missions, but where the contributions of human beings make the extra cost of providing a livable environment worthwhile. He points out that it was only after an oceanographer flew on a Shuttle mission in 1984 that it was appreciated that detailed eddy and current structures in the oceans could be seen from orbit. Finally, in a chapter frankly labelled as speculation, the "far out" aspects of the space programme are mentioned. Moon bases, communications and materials technology, and the various strategies for a Mars mission make a fitting ending to the book.

The canvas of *Space 2000* is painted with a broad brush, taking in technological, scientific and political issues, past and future. The book has all the strengths and weaknesses of that approach. □

James Trefil is Clarence Robinson Professor of Physics at George Mason University, 4400 University Drive, Fairfax, Virginia 22030, USA. His latest book is *Meditations at Sunset* (Scribners, 1987).

## Living in the past

J.N. Graham Ritchie

**The Stonehenge People.** By Aubrey Burl. Dent: 1987. Pp.249. £16.

**The Stonehenge People: An Exploration of Life in Neolithic Britain 4700–2000 BC.** By Rodney Castleden. Routledge & Kegan Paul/Methuen: 1987. Pp.282. £14.95, \$25.

THE message of these volumes is of an overworked seam of archaeological writing. Surely not all popular books about prehistoric Britain need have Stonehenge in the title, nor the added inducement that they are describing 'real' people rather than the potsherds and pot-holes of the archaeological evidence?

Of the two, the Burl volume is less populist. After setting the scene amid the earthen long barrows and causewayed enclosures of the Wessex downland, Burl uses the sequence of construction and reconstruction at Stonehenge as the basis for a wide-ranging discussion of prehistoric society from around 3200 BC into the first millennium BC. By concentrating primarily, though by no means exclusively, on the Stonehenge region, Burl places in perspective the surviving artefacts, monuments and graves, and creates a series of vignettes of downland society and the wider geographical contacts on which it drew. His valuable interweaving of the historical aspects of the archaeological activities in the area, from the Duke of Buckingham in 1620, who appears to have dug into the centre of Stonehenge, helps to place our own attitudes into a wider context.

Burl is particularly level-headed about the possibilities of astronomical observation in prehistoric times. On the one hand he stresses the likely influence that movements of the celestial bodies may have had within non-literate societies, on the other he affirms that "Stonehenge was never used for scientific observations. It was never inhabited by astronomer-priests searching for explanations of eclipses or detecting tiny lunar oscillations". In general there is too much detail and insufficient illustration, but I much enjoyed those sections where Burl recreates the bustle and organization during the construction of Stonehenge, with assessments of such time-consuming operations as the dressing of the sarsen blocks.

Castleden's volume is more general and, although covering the same chronological span, uses broader brush-strokes and fewer detailed examples. The author is a geographer and geomorphologist by training, and among the most interesting sections are those on crops and livestock and flint mines. But overall he has successfully compressed a great deal of information into the text and illustrations,



Open door — Trethevy Quoit in Cornwall, a portal dolmen which was the entrance to an earth burial mound.

making a readable and useful book. Where a new or alternative idea is presented, it is clearly described; not all need be accepted, however attractive. The idea that there was large-scale trading of pottery vessels between Orkney and Wessex (in the style known as Grooved Ware) in the third millennium BC strains the imagination, though I am glad to see the early date of the Orcadian examples underlined.

Attempts to conjure up prehistoric societies in book form, as opposed to museum display or on-site explanation, have to strike a balance between a textual description of the scattered archaeological evidence and a graphic illustration of the material, so that the reader will readily grasp what is meant by a Grooved Ware vessel, mace-head, henge-monument and the like. Part of the appeal of the past is a visual one. In this respect Castleden's book is more successful, with some unusual and arresting images, although many of the photographs are far too dark.

Both volumes are well balanced in approach and style, taking the reader as far as the evidence is likely to allow and no further. Both seem to be designed for the book-club market and a large number of copies will perhaps be bought unseen. I suspect that the general reader will enjoy handling and reading the Castleden book more, though archaeologists will be disconcerted by such sentences as "Prehistorians have understandably been swept along by the ritual preoccupations of the neolithic people . . .". □

J.N. Graham Ritchie is an Archaeological Investigator with the Royal Commission on the Ancient and Historical Monuments of Scotland, 54 Melville Street, Edinburgh EH3 7HF, UK.