Introduction

BARRY CUNLIFFE & COLIN RENFREW

THERE CAN BE LITTLE DOUBT that Stonehenge has always been a place of wonder and speculation. Yet for the 3000 years, after the monument took on its familiar form about 2000 BC, there is no record of people's attitudes to it. Indeed it is not until AD 1130 that Stonehenge is specifically named in literature, in the *Historia Anglorum* of Henry of Huntingdon, presented there as one of the four wonders of Britain. Henry displays admirable caution in his description, concluding 'nor can anyone guess by what means so many stones were raised so high, or why they were built there'. Subsequent writers have been less constrained.

In the quest to characterise and to understand Stonehenge there have been many milestones. In about 1620 King James I began the process by instructing the architect Inigo Jones to produce an accurate plan and description of the monument a version of which was published in 1655. Thereafter observation and speculation has continued. Famous antiquarians like Wallis (1730), Stukeley (1740), Douglas (1793), Colt Hoare (1812) and Petrie (1880), all made their contributions. The era of record and speculation ended dramatically on the last evening of the nineteenth century when one of the sarsen uprights fell and with it a lintel.

It was the unstable state of the monument which led, in the opening year of the century, to the first systematic excavation directed by William Gowland. Although Gowland's work was limited in scale the amount of new information gained about construction processes and date was dramatic. Since then there have been two major programmes of excavation first by William Hawley between 1919 and 1926 and later by Richard Atkinson, Stuart Piggott and J.F.S. Stone between 1950 and 1964. Other minor investigations have taken place since then. This century of scientific excavation has culminated, to everyone's satisfaction, with the definitive publication of the various interventions, all brought together in *Stonehenge in its Landscape: Twentieth Century Excavations* by R.M.J. Cleal, K.E. Walker and R. Montague, published by English Heritage in 1995.

The full and detailed publication of a century of archaeological endeavour, at what is surely one of the greatest prehistoric monuments in Europe, has been greeted with a deep sigh of relief from the archaeological world. With the data now freely available for

the first time it is possible to move forward to formulate new programmes of research. To mark the occasion, and to stimulate debate, the Royal Society and the British Academy, with the cooperation of English Heritage, organised a conference entitled *Science and Stonehenge* which was held at the Royal Society's premises on 20–21 March, 1996. The aim was to bring together archaeologists, environmentalists, engineers, astronomers and geologists in common endeavour to move forward our understanding of this remarkable monument. The results of that conference are presented here as a contribution to the continuing debate.