each discussed by a different author. Inevitably, perhaps, they do not adopt a consistent approach. Some contributions are stimulating reviews which concentrate on major developments and prospects: W. R. Mead on the essence of the regional ideal, A. G. Wilson on the position of theory in human geography and Emrys Jones on the scope of social geography consider three aspects of the subject that have been prominent and partly sequential in geographical thinking during the past two decades. Other authors give a chronological summary of development in a particular branch of geography geomorphology, land use survey, leisure and recreation, and medical geography with passing reference to the role of the RGS. A third type of contribution provides a state-of-the-art summary of the approaches adopted by contemporary research schools; this is very effective in discussions on climate and on biogeography, tends to be somewhat compressed for historical geography, and embraces trends beyond the subject for surveying and mapping and in the chapter "Water as a Geographical Issue". Not all geographers will agree that this range completely portrays the current academic spectrum. In particular, one might have expected a consideration of philosophical approaches to the subject, and of urban geography which has been responsible for a very substantial proportion of the research output in human geography since 1960.

The overall impression of geography given by the book is that it is a subject not as disintegrated as the titles of the chapters might indicate. It is evident that more energy has been devoted to some branches, such as geomorphology, than to others, climatology for example. It is artificial to erect a barrier around a subdiscipline, and it is shown how the development of theory and of surveying and mapping, and of branches such as historical geography and medical geography, have flourished by contact with and exposure to proximal disciplines.

The debate as to whether the physical could, and should, separate from the human part of the subject appears in at least one incisive discussion, but it is apparent from a number of branches that contributions to practical problems associated with earth hazards, and social, recreation and leisure, and medical geography arise because the subject spans the interface between human activity and environment. The geographer thus has to be conversant with some techniques from the pure and applied sciences and others from the humanities and social sciences. This is at once part of the characteristic skill of the geographer. Also clearly emerging as a recurrent theme is the importance of spatial analysis - perhaps geography is really about maps, although the map may today be in the form of an equation, a satellite image or a data bank.

In the final thought-provoking chapter,

W. R. Mead, a former Honorary Secretary of the RGS, epitomizes geography as a synthetic subject in which the regionalists are closer to the heart of the subject than most. Whereas the regional ideal used to be the only crumb of integration that was offered, we now have further applicable links offered by the study of water, biogeography, land use, leisure and recreation, and medical geography. Perhaps geography tomorrow will find its integrity not solely dependent upon the classic regional approach and a book produced for the 200th anniversary could promulgate even closer liaison between the branches of the subject.

The editor introduces the volume as

being designed to do many things, among them to explain what is geography, what do geographers do and what use is geography. In answering these questions, particularly the second, the book is a great success. It is enjoyable to read and is extremely stimulating. Students and others should be encouraged to buy this book, but having read it they may find, like me, that an index would have been invaluable because the volume certainly deserves to become a standard work of reference.

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## To boldly go. . . Sarah Bunney

To the Farthest Ends of the Earth: 150 Years of World Exploration. (The History of the Royal Geographical Society 1830–1980.) By Ian Cameron. Pp.288. (Macdonald/E.P. Dutton: 1980.) £10.95, \$29.95.

I ASSUME it was primarily the shape rather than the subject matter that determined the prominent position of this vignette on a preliminary page of Ian Cameron's book in honour of the Royal Geographical Society, but it was an apt choice nonetheless. The engraving represents two important aspects of Victorian exploration — the appalling hardships endured by the explorers as they strove to satisfy their curiosity, and the disappointments and controversies that accompanied many nineteenth-century expeditions. In particular the picture draws attention to the sadly misguided preference of British Polar

explorers for man-hauling their equipment instead of using dogs. It was this policy, which received the Society's support for some 50 years, that contributed to repeated disappointments on Arctic expeditions and eventually to Captain Scott's defeat in the race for the South Pole in the early 1900s.

Ian Cameron, who had access to the Society's records while writing his book, is scrupulously fair in his treatment of this unhappy story and of the other difficulties that beset many of the expeditions in the Society's first 75 years. Personalities, warts and all, are vividly brought to life. Mr Cameron also gives a balanced account of the Society's more recent — and somewhat insensitive - handling of the choice of leader for the Everest expedition. In the event this expedition was a glorious success and it is, of course, achievement and not failure that this book is mostly about. There is plenty of solid, but never heavy description of the most important expeditions of the past 150 years, accompanied by excerpts from notebooks, dispatches and contemporary accounts in the Society's Journal.



All this makes for such fascinating reading that I would have preferred more of the highly readable text and fewer illustrations - even though many of the latter are delightful, particularly the polished sketches by Baines and the early photographs. My one serious complaint concerns the maps. It is ironic that, in this of all books, these are heavily drawn, inadequate and, in at least one case (the Musandam map on p.224), inaccurate. Furthermore the two contemporary maps included are almost illegible, they lack captions and it was only on reading the acknowledgements that I learnt of their source and date.

This book cannot be a comprehensive history of the RGS, and Mr Cameron has wisely concentrated on the expeditions to areas that have long been the favourites of armchair travellers - the Arctic and Antarctic, the Himalayas and Africa. New to me were most of the early explorers of Australia and the brave Pundits who secretly and at great hazard to themselves surveyed on foot almost the whole of the Eastern Himalayas in the 1850s to 1870s. Childhood heroes — Burton, Speke, Livingstone, Stanley, Nansen, Shackleton, Scott, Hunt, Hillary and Tenzing (but only one heroine, Florence Baker) are included. Mr Cameron also gives credit to many other explorers, less well known but equally deserving of fame, who doggedly helped fill in the blanks on the maps. I am only sorry that room could not be found in this catalogue of illustrious names for some



After the summit of achievement: Hillary and Tenzing after the first ascent of Everest, May 1953.

mention of the Arabian travels of Wilfred Thesiger and Freya Stark.

Mr Cameron brings readers up to date with accounts of some of the recent, increasingly scientific, expeditions that the RGS has supported — to the Mato Grosso (1967–1969), the Musandam Peninsula (1971) and the Mulu rain forest in Sarawak

(1977-1978), for example. The book ends with a chapter on the role of the Society today as it continues to advance geographical knowledge. It is a quieter role, without the glamour and heroics of the past, but no less important for that.

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## Stonehenge and its times: a layman's and a scholar's view

R.J.C. Atkinson

The Enigma of Stonehenge. By John Fowles and Barry Brukoff. Pp.128. (Cape/Summit: 1980.) £6.95, \$19.95. The Age of Stonehenge. By Colin Burgess. Pp.402. (Dent/Biblio: 1980.) £12, \$25.

THESE are two very different books, which have in common only the name of Stonehenge in their titles. The first is the result of a most happy collaboration between an English novelist and an American photographer, both of genius, to give a unique picture of Stonehenge itself. The second is a sober and most scholarly interpretation (John Fowles would call it clinical) of the prehistory of the British Isles during the *floruit* of Stonehenge.

Fowles's short account begins with his own first happy visit to Stonehenge as a child, and with his last, less happy because the stones are now closed to the public. His summaries of the archaeological background and of the sequence of building can be faulted in detail by the pedantic specialist; but they are based on a wide and critical reading, and they are written with a delusive ease and with an informed humanity which puts to shame the earnest

but pedestrian locutions of most other recent writers about Stonehenge, myself included.

He asks: "What is Stonehenge for?". For me this is an unanswerable question, because I do not think that the mute material evidence of prehistory can tell us, except in a quite trivial sense, what people thought in the remote past, but only, up to a point, what they did. This is not to say, as Fowles hints, "a pox on all speculation"; but speculation and valid inference are two very different things, and must be distinguished, perhaps better than Fowles does.

In his longest chapter, "The Moon-Mirror", he perhaps accepts too easily some of the astronomical uses ascribed to Stonehenge by Hawkins, Hoyle, Newham and Thom. Moreover, he confuses the Metonic Cycle with the period of rotation of the lunar nodes, and falsely explains the position of the Heel Stone, as a possible marker for the mid-point of the azimuthal limits of most northerly moonrise, in terms of the latitude of Stonehenge. He also infers, quite incorrectly, that the absence of any discussion of astronomical theories from my own book *Stonehenge* (Hamish

Hamilton, 1956) was intended as a "monumental snub" to Hawkins, Hoyle and Thom. Far from it. My book was written in 1955, before any of these theories were published, and has since been reprinted only with appendices to bring the results of later excavation up to date.

Fowles's luminous text ends with an historical and personal appreciation of Stonehenge-in-the-mind, and not least in the mind of that eerie and disturbing seer, William Blake. He protests throughout against "a quite unnecessary polarity in twentieth-century society between pure science and impure speculation". This echoes what I wrote in Nature (265, 11; 1977). The science is far from pure, because much of the basic data are at best uncertain, and at worst corrupt. The speculation is likewise not impure, merely because it is speculation; but it is not inference compelled by the evidence of Stonehenge-on-the-ground.

Barry Brukoff's photographs, unnumbered and uncaptioned, match John Fowles's text in their sensitivity and imagination. No one has better frozen in print an image of Stonehenge. His