

submarine frozen ground. Most submarine permafrost probably formed subaerially during full-glacial low sea levels; that on the Siberian Shelf for example, is thus a relict of past climate and is now slowly thawing. Gas hydrates, solids in which molecules of gas are combined with water, are also dealt with, and the links between their stability and considerations of temperature and pressure are outlined.

In summary, books on periglacial environments and permafrost have been consistently strong in their emphasis on geomorphological topics, but rather less concerned with the physical properties, thermodynamics and rheology of frozen ground. *The Frozen Earth*, therefore, fills a considerable gap in the literature, and will be of importance to both academic and applied workers in the periglacial zone. It is the most significant contribution in this field for a number of years. (Julian Dowdeswell, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER, UK.)

THE HEROIC AGE

SAFE RETURN DOUBTFUL: THE HEROIC AGE OF POLAR EXPLORATION. Maxtone-Graham, John. 1988. Wellingborough, Patrick Stephens. 364 p, illustrated, hard cover. ISBN 1-85260-293-7. £16.95.

The book owes its title to an advertisement reputedly placed in *The Times* in early 1907 by Ernest Shackleton: 'Men wanted for hazardous journey. Low wages, bitter cold, long hours of complete darkness. Safe return doubtful, honour and recognition in the event of success'. Research over the years has failed to authenticate it, but its context neatly encapsulates the spirit and intent of this enjoyable and well-researched narrative.

Mr Maxtone-Graham has given us not just another popular polar history — he tells us little concerning geographical or scientific discoveries — but rather an imaginative insight into the human side of the heroic epoch. An acknowledged expert in maritime history, and one who writes with panache and *con brio*, he is well equipped for the task. In 14 chapters, the first of which is appropriately devoted to 'The Britannic example', the author traces the course of polar exploration through the 19th and into the first decade of the 20th centuries, highlighting the two main themes — the achievement of the Northwest Passage and subsequently the race for the North and South Poles. Tales of 'derring do' and high adventure are the order of the day, with the traits and idiosyncrasies of the heroes themselves given due prominence.

What gives this book its particular relish and interest is the author's very evident knowledge of the practical aspects of polar exploration — the problems of ice navigation, the evolution of sledging techniques and the use of dogs, polar rations, and the besetting problems of scurvy which defied solution until after Scott's day. Refreshing also is the lack of acrimony and partisan bias. It is especially welcome to find both Scott and Amundsen viewed in balanced perspective, and sympathetic under-

standing is shown for Sir Clements Markham, whose life, which embraced almost the entire 'heroic epoch', clearly intrigues the author. It is disappointing to find no mention of William Scoresby, true father of polar exploration and science (not perhaps a hero?), and the single map is inadequate for following the course of events. (H. G. R. King, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER UK.)

ALASKAN ESKIMO MASKS

AGAYUT: ESKIMO MASKS FROM THE 5th THULE EXPEDITION: KNUD RASMUSSENS SAMLINGER FRA NUNIVAK, ALASKA. Sonne, Birgitte. 1988. Copenhagen, Gyldendal. 375 p, drawings, photographs, soft cover. ISBN 87-00-32832-4. DKr 400.00.

Knud Rasmussen never visited Nunivak Island. This book arises from his chance encounter with a group of Nunivakers in Nome on 31 August 1924, at the end of his three-year long Fifth Thule Expedition (see profile of Rasmussen, this issue). In *Across Arctic America* he remarks 'I had reached Nome at a fortunate time for my work. Here were assembled Eskimos from all parts of Alaska ...'. Most had come from many distant villages to sell curios to the tourists, and among them were the group from Nunivak island. With the help of Alaskan trader Paul Ivanoff as interpreter, he made the most of his meeting. On Rasmussen's request, six of the Nunivakers made detailed pencil drawings of their island culture. They ranged from hunting scenes to artefacts and, in particular, shamans' masks. On the basis of these drawings, Rasmussen then asked several Nunivakers to carve some masks in wood. In all 28 masks were carved; together with the drawings, these have been in the National Museum in Copenhagen since 1925.

This volume presents the entire collection and, I am sure, will be welcomed not only by those interested in northern art, but by anthropologists concerned with ceremonialism and ritual. Birgitte Sonne has edited Rasmussen's notes and provided excellent accompanying text in English and Danish. In 1924, masks still played an important part in the ritual, belief and mythology of the Nunivak Islanders. Sonne describes the mask performances still to be found at the time, and places them in their social and religious context. Spirit systems and myth are discussed and a comprehensive picture of Nunivak cosmology is presented, a cosmology already influenced by Christianity, particularly the hierarchy of spirits. Such syncretism is not ignored; Sonne considers possible Orthodox and Catholic influence from the mainland. The text is short and precise, clear and easy to follow. There are one or two minor mistakes in the English translation, but otherwise it cannot be faulted. The photographs are beautiful and the text is very well complemented by the drawings given to Rasmussen. Rasmussen's notes appear at the end of the text. The nice thing about this volume is that it can be seen simply as a catalogue of the museum collection, or as an interpretation of Nunivak religious belief. Either way, it makes available some very exciting