Reviews

ARCTIC TRAVEL COLLECTION

A VICTORIAN EARL IN THE ARCTIC. THE TRAVELS AND COLLECTIONS OF THE FIFTH EARL OF LONSDALE 1888–9. Krech, Shepard III (editor). 1989. London: British Museum Publications Ltd. 207 pp, Illustrated, hard cover. ISBN 0-7141-1588-6. £19.95.

The name of Hugh Cecil Lowther, Fifth Earl of Lonsdale (1857-1944), (popularly called 'The Yellow Earl' because of his preference for the main colour in the family coat of arms) is probably best known for his passion for and support of horse racing, fox hunting, yachting and boxing; Lonsdale belts are perhaps his best-remembered contribution to sport. Dr Krech's book pays belated though well-deserved tribute to the Earl's important contributions to Arctic geography and anthropology.

In 1886-87 one of the juiciest scandals in England concerned the Earl's affair with the actress Miss Violet Cameron. Within a week of the denouement, allegedly at the prompting of Queen Victoria, on 23 February 1888 the Earl left England for a protracted trip to the Arctic. After spending some time in Winnipeg, where he sought the advice and practical support of Hudson's Bay Company officials, he left the train at Qu'Appelle station (near Regina) and, accompanied by one servant, travelled north via horse sleigh and dog sledge to Fort Chipewyan on Great Slave Lake. Descending the Mackenzie River by canoe and steamer he reached Fort McPherson on 23 July. In total he spent six weeks in the area of the Mackenzie Delta, 12 days of that period being devoted to a trip to Liverpool Bay where he spent time with the Inuvialuit. This was the Earl's farthest north; later press reports that he reached Banks Island are unfounded. Leaving Fort McPherson on 7 September he hiked over Rat Portage to La Pierre House, then descended the Porcupine and Yukon rivers to Russian Mission. There he waited for freeze-up, then travelled by sledge and snowshoe to Katmai, from where he crossed to Kodiak. He reached San Francisco by steamer on 23 April 1889. During this impressive journey the Earl encountered a diverse range of indigenous peoples: Cree, Chipewyan, Slavey, Mountain, Hare and Kutchin on the journey down the Mackenzie, Inuvialuit in the Delta and in Liverpool Bay, Kutchin, Koyukon and Ingalik Indians on the trip down the Yukon, and Yupik Eskimos on the final winter trip to Kodiak. Throughout his journey he was collecting ethnographic material: weapons, clothing, hunting and fishing equipment, domestic utensils, personal ornaments, even an Inuvialuit kayak. He kept a detailed diary and also wrote long, detailed letters to his wife.

With the permission of the present Earl, Dr Krech has used these diaries and letters to weave a fascinating narrative. Preceded by a biographical sketch by J. V. Beckett,

this forms the first half of the book. It is illustrated by contemporary photographs by the Earl and others. The result is an extremely valuable account of some littleknown indigenous groups, the Inuvialuit being a prime example. The latter half of the book consists of a superbly illustrated and detailed commentary on the collection of artifacts which Lonsdale presented to the British Museum in 1890. An exhibit featuring many of these artifacts was opened at the National Museum of Mankind in summer 1989 to mark the centennial of the Earl's trip. The book is superbly illustrated and handsomely produced. It represents unequivocally an important addition to the literature which does full justice to a collection and to a journal and diaries which have lain in obscurity for a century. Dr Krech is to be congratulated. (William Barr, Department of Geography, University of Saskatchewan, Saskatoon, Saskatchewan, Canada SN7 OWO.)

PERMAFROST

THE FROZEN EARTH: FUNDAMENTALS OF GEO-CRYOLOGY. Williams, Peter J. and Smith, Michael W. 1989. Cambridge, Cambridge University Press. 306 p, illustrated, hard cover. ISBN 0-521-36534-1. £37.50 or US\$65.00.

Permafrost is widespread at high latitudes and in many mountain ranges. Frozen ground can also be found in submarine locations on polar continental shelves. A number of these areas have, particularly since World War II, become important for strategic and economic reasons. Mineral exploitation and engineering construction both require a detailed knowledge of the physical behaviour of frozen ground. The subtitle to The Frozen Earth, by Peter Williams and Michael Smith, is well chosen in that the authors provide considerable detail on the rheology and thermodynamics of permafrost. Their book, more than any existing text, provides us with an account of fundamental physical principles. There are four key chapters in this context. The first considers heat flow and thermal properties of the soil, detailing the basic equations governing these parameters. A second chapter deals with the thermodynamic behaviour of frozen soils. Two others consider the hydrology and mechanics of frozen ground. In the latter, the creep rate and strength of frozen soils is illustrated through a number of well-illustrated laboratory

That the book also deals with the geological consequences of these mechanisms is a useful bonus. Discussion of the morphology of the permafrost surface is divided into chapters on slopes and level ground. Concepts of slope stability and failure are introduced in the first. The second considers 'classical' features of the periglacial environment, for example pingos, palsas and stone polygons. A further strength of the volume is the discussion of

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 understanding 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 threeyear 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