466 REVIEWS

WHALING IN DAVIS STRAIT

ARCTIC WHALERS, ICE SEAS: NARRATIVES OF THE DAVIS STRAIT WHALE FISHERY. Ross, W. G. (editor). 1985. Toronto, Irwin Publishing. 263p, illustrated, hard cover. ISBN 0-7725-1524-7.

For over 15 years W. Gillies Ross has been providing us with a steady flow of scholarly and informative publications on the history of Arctic whaling, of which the most outstanding so far is perhaps his thorough study of the American period of whaling in Hudson Bay, Whaling and Eskimos: Hudson Bay 1860-1915 (Ottawa, 1975). When seen beside such learned works, this latest book may appear at first sight to be a much more lightweight effort: clearly aimed at a broader, more popular market, attractively produced and amply illustrated, Arctic whalers, icy seas seeks to entertain us as much as to inform. It consists of 15 extracts from 19th and early 20th century whaling literature, each carefully selected to show a different aspect of whaling life. The extracts, presented in chronological order from 1824 to about 1915, range from a surgeon's journal of a fairly routine voyage to Davis Strait to narratives of the sufferings of whalers forced to winter in the ice; from a whaleman's reflections on Eskimo life in Baffin Island to an Eskimo's experiences on a visit to the whaling port of Aberdeen. Ross provides each extract with his own commentary to highlight its significance in the history of whaling, and the whole is provided with an extensive glossary of whaling terms. All Ross's own contributions are written with his usual authority and occasional wit, but it is the thoughtfulness behind the selection of extracts, to offer as broad a cross-section as possible of whaling experiences, that stands out as one of the most impressive aspects of the book. Just over half of the extracts are taken from manuscript sources, the remainder from published works, and Ross must have seen and rejected some hundreds of journals, narratives and reminiscences before making his final selection: the book is clearly not the simple compilation that it may first appear.

We still wait from W. G. Ross a comprehensive history of Davis Strait whaling, which must surely come one day; in the meantime *Arctic whalers*, icy seas will us well as an illuminating insight into whaling in the 19th century. (Clive Holland, Scott Polar Research Institute, Lensfield Road, Cambridge CB2 1ER)

GLACIERS AND GEOLOGY

GLACIAL GEOLOGIC PROCESSES. Drewry, D. J. 1986. London, Arnold. 276 p, illustrated; hard cover ISBN 0-7131-6485-9, £29.95; soft cover ISBN 07131-6390-9, £12.50.

The main aim of this book is to bridge a gap between purely glaciological texts and the needs of geologists and geomorphologists who study glacial products. Two initial chapters dealing with the physical properties of ice, glacier dynamics and thermodynamics, and water in glaciers, are followed by four chapters on glacial erosion. The glaciological section provides an adequate foundation for the subglacial scenario in which processes such as bedrock failure by crushing and fracture, abrasional wear, and mechanical and chemical erosion by meltwater are considered. Highlights include a very informative discussion of rock strength, clast contact stresses and fracture propagation: exactly the gap-bridging information the book purports to contribute. The next four chapters consider sediment in ice and meltwater, and touch on topics such as entrainment characteristics, transport and modification, and processes of deposition and resedimentation. The important work of D. Lawson at Matanuska Glacier and of G. Boulton and

REVIEWS 467

co-workers is emphasized throughout these sections of the book. An outstanding contribution comes in the final four chapters of Drewry's book, which review glacilacustrine, glaci-estuarine and glaci-marine processes and sedimentation. This is the first comprehensive compilation of such material in a text on glacial geology and is long overdue, since many present-day glacier systems terminate in water, as did vast sections of the last great ice sheets in the northern hemisphere.

The book is well written and well illustrated, and provides an admirable review of primary physical processes operating in the glacial environment. It is an excellent foundation for scholars already familiar with glacial geology and geomorphology. The book's weakness is that it fails to grasp a major opportunity to apply the understanding of such processes to the interpretation of ancient sediments and landforms. After all, glacial landforms represent the former ice-bed interface where many of the processes discussed in the book operated. However, David Drewry has pointed the way ahead for future bridge builders and is to be congratulated on a fine effort. (Chalmers M. Clapperton, Department of Geography, University of Aberdeen.)

KAYAKS AND UMIAKS

SKINBOATS OF GREENLAND. Petersen, H. C. 1986. Roskilde, the Viking Museum. 215p, illustrated, hard cover. ISBN 87-85180. Dkr400.00

This magnificent book is the first in a series produced in collaboration between the Viking Ship Museum in Roskilde, the Institute of Maritime Archaeology at the National Museum of Denmark, and (for this volume) the Museum of Greenland. The author discusses the construction and use of the kayak and umiak (now defunct) in Greenland. Besides using written sources and studying old specimens in museums, Petersen draws most strongly on his experience as a native Greenlander. His father and his mother's father, noted hunters and kayakers, feature in an extensive gallery of informants consulted over many years of travelling around the country. The author himself learned to build kayaks in order to appreciate fully the problems and techniques involved.

The main contribution of the book lies in the meticulous documentation of construction techniques and materials. The first half, dealing with the kayak, observes that construction proceeds from the load-bearing sheer boards, as opposed to the keel of a wooden boat, and leads systematically through the shaping of the sheer boards, cross beams, rib and keel, the covering with skin and the manufacture of accessories and fittings such as paddles, floats, throwing boards and harpoon heads. The second half gives a comparable discussion of the umiak, a larger boat used for family transport and rowed largely by women; the account places more emphasis on the social background to its use. The author discusses properties of different types of wood and skin, and processes for drying them. The wealth of detail and thoroughness will give great satisfaction to any craftsman, kayaker or ethnographer. This very detail makes the reader keenly aware of the sophistication and ingenuity deployed in adapting a very limited range of raw materials for precise tasks. The constant call on the builder's and hunter's judgement is illustrated most fundamentally in the subjective units of measurements, whether of size or of muscle capacity, by which the kayak is constructed. An isanneq (armspan) or an eqinneq (the circle formed by touching fingertips and thumb when gripping a paddle) are precisely tailored to the individual user, just as the kayak's width is related to his need to use his legs to control balance: the kayak becomes almost an extension of the body itself.

Historical background is presented for the most part only in its direct bearing on design and performance. There is no sociological analysis, but there are vividly evocative sketches of the social life involved in umiak travel. Petersen mentions rowing games to