

glass plates. The benefits of Kodak equipment and new film technology were abundant. The smaller Kodaks (quicker to operate and with the fast frame advance of roll film) would have provided a greater range of photographic possibilities for the expedition's photographers: from static posed images to action and impromptu photography. In contrast, all expedition images demonstrate a high degree of control over subject matter. Expedition cameras actually created a need to pose material. Each exposure required advance planning as spontaneous photography was denied by the heavy, comparatively immobile, tripod-mounted cameras. Even if greater image detail was a powerful consideration in camera choice, one still has to ask why different camera types could not have been used in a complementary capacity.

The choice of expedition camera equipment needs to be firmly located in the contexts of expedition politics and encounters with native peoples. This reveals that at least four main issues of authority, professionalism, displays of power, and technological marvel/magic, may have dictated choice. First, the smaller, hand-held Kodak cameras were viewed as 'amateur' equipment, and thus the images produced lacked the authority of professional equipment. Second (and in the context of pre-expedition, inter-museum rivalry between the American Museum of Natural History and Chicago's Columbian Museum), use of amateur equipment would have exposed the Jesup North Pacific Expedition to the charge of a lack of anthropological professionalism. Third, one has to consider the process of technological display. Large, complicated cameras would impress native audiences with a greater sense of the importance of their operators than small, easy-to-use, equipment. Awesome equipment that evoked a state of wonder probably made native peoples more cooperative in the process of image-making. Finally, the effect of the camera as a form of magic ('the three-legged device that draws a man's shadow to stone') would doubtless be enhanced by large-scale equipment and the procedure for making an exposure. Unlike the simple Kodak box camera, the pre-focusing of plate cameras even required the photographer's head to disappear under a black cloth as in many a magic trick. In this context, it is also worth noting that native peoples explained expedition photographs by 'saying that a small man who imitated people's voices lived inside the box' (page 38).

Consideration of expedition technology reveals a representational process that can be understood as a series of multi-layered filters and magnifications through which the image travels. Although the authors do touch upon such a process (pages 38, 40), their account of how native images were created and manipulated by expedition photographers recognises only one or two transmutations in a complex of transformations. To complete the picture, it is crucial not only to discuss how native peoples were represented by anthropologists/expedition photographers, but also how the expedition created its own self-images. Only by taking into account how the expedition represented

itself can one begin to explore how those representations might have altered the natives' initial representations of themselves.

Overall, *Drawing shadows to stone* is a rewarding and important study. Its analyses of image representation unquestionably reinforces the significance of the Jesup North Pacific Expedition in the history of anthropology and as central to a cyclical process of cultural history that spans birth, growth, decay, and re-birth. At the end of the last century, the expedition members believed that they were 'salvaging' (pages 22, 24) the last remnants of the rapidly westernising indigenous cultures of the North Pacific. Now, nearing the conclusion of the millennium, the expedition's photographs and collections are the focal point and guide for a cultural re-birth among the Yukaghir people. It is an irony indeed that the western culture that, arguably, did so much to change the Yukaghir peoples' way of life, should now offer the key to recreating native traditions and the renewal of a traditional Yukaghir culture. (Ian N. Higginson, Centre for History and Cultural Studies of Science, School of History, University of Kent at Canterbury, Canterbury, Kent CT2 7NX.)

BRIEF REVIEWS

HUMAN ECOLOGY AND CLIMATE CHANGE: PEOPLE AND RESOURCES IN THE FAR NORTH. David L. Peterson and Darryll R. Johnson (Editors). 1995. London and Washington, DC: Taylor & Francis. xxiv + 337 p, hard cover. ISBN 1-56032-404-X. £39.95.

It has become a commonplace remark amongst natural and social scientists that the circumpolar north is a natural laboratory for studying global environmental issues. Although global environmental change is not a late-twentieth century phenomenon, current concern stems from our awareness of both its systemic and cumulative effects and its level and extent. As international concern grows over the effects of long-range transportation of atmospheric pollution, global warming, ozone depletion, and further industrial development, increasing numbers of researchers are investigating the human dimensions of environmental change. This collection of 22 papers addresses some of the challenges facing the environment and remote indigenous communities of the circumpolar north at a time when international effort is directed at designing and implementing workable environmental policies.

The various contributors are biologists, sociologists, anthropologists, and resource managers. The focus is on northern North America, although most chapters discuss connections between climate, ecosystems, and human populations in Alaska. Peterson and Johnson set the scene for subsequent discussion with a summary of the volume's overarching themes — the relationship between human ecology and climate change, and between human populations and resource management. While some papers discuss the potential impact of climate change on northern landscapes (Ferguson) and terrestrial and marine mammals (Gunn, Ono), others consider the likely conse-

quences for indigenous peoples and their ability to continue subsistence-based lifestyles in the face of global warming, environmental action, increased management of wildlife by government agencies, and wilderness preservation (Wenzel, Callaway, Langdon, West, Usher, Wiener, Bielawski, Schaaf, Bosworth). With most authors tackling provocative issues such as the conflict between protected areas and the rights of indigenous peoples to live off the land; the clash between Inuit environmental knowledge and western scientific knowledge; and the shortcomings of current co-management regimes for the exploitation of wildlife, it is curious that no one discusses any of this with reference to the Arctic Environmental Protection Strategy, which had been underway for two years when the papers were originally presented at a workshop in 1993. Despite the lack of reference to the AEPS, however, *Human ecology and climate change* is a useful addition to recent literature on global environmental change and provides a range of interesting case studies that contribute to current dialogue about the way forward for effective environmental management policy-making.

IN THE ARCTIC: TALES TOLD AT TEA-TIME. Frank Debenham (Edited by Barbara Debenham). 1997. Banham, Norfolk: The Erskine Press. xix + 124 p, illustrated, hard cover. ISBN 1-85297-049-9. £16.95.

Frank Debenham (1883–1965) was a geologist with the British (*Terra Nova*) Antarctic Expedition 1910–1913 under the leadership of Captain R.F. Scott. In 1920 he founded the Scott Polar Research Institute, and in 1926 became its first director. In 1931 he was appointed Cambridge's first professor of geography, and he continued in these dual roles until 1946.

In the Arctic brings together a fascinating series of tales written by Deb in his retirement. He was remembering some of the young people who had passed through the Polar Institute as explorers, members of staff, research students, or interested friends. These friends served as pegs on which to hang the tales.

The editor has retained her father's idiosyncratic pseudonyms, but reveals their proper names where known. Deb wrote: 'These are all make-believe stories. Like other writers of fiction, I have based them on a substratum of fact, though perhaps I use rather more facts than most.'

For anyone who knew Deb or recognizes the characters, some episodes are riotously funny. Others are an erudite mixture of history and fable, so cunningly interwo-

ven that the reader feels driven to seek out original sources in order to sort fact from fiction. The book is enhanced by the inclusion of a foreword by Ann Savours and a brief biography of Debenham. The book includes drawings, some by Deb himself, photographs, maps, and a bibliography of possible sources.

THE SAFEGUARD OF THE SEA: A NAVAL HISTORY OF GREAT BRITAIN. VOLUME I: 660–1649. N.A.M. Rodger. 1997. London: Harper Collins, in association with the National Maritime Museum. xxviii + 691 p, illustrated, hard cover. ISBN 0-00-255128-4.

In his introduction, Nicholas Rodger explains that this book 'is not an institutional history of the Royal Navy, but a history of naval warfare as an aspect of naval history. All and any methods of fighting at sea, or using the sea for warlike purposes, are its concern. It is interested in all connections between national and naval history, and seeks to make each known to the other' (page xxv). In practice, the author goes on to say, this means that 'the book is conceived as consisting of four main "layers": policy, strategy, and naval operations; finance, administration, and logistics, including all sorts of technical and industrial support; social history; and the material elements of sea power, ships, and weapons' (pages xxv–xxvi). The history is not merely English or British, since 'it is in the nature of the history of the sea that it links many nations,' making the work international, for 'the sea unites more than it divides' (page xxvii).

What then is the interest of such a multi-volume *magnum opus* to polar historians? It must be confessed that there is little here of direct relevance. The period of this first volume is from 660 to 1649, but no light is shed on the Arctic voyages of Frobisher, Davis, Baffin, Button, Willoughby, Chancellor, and the other seamen of long ago. In this respect, the present work is in contrast with the history of the Royal Navy published in seven volumes a century ago by William Laird Clowes, of which volume one was reprinted by Chatham Publishing in 1996, with later volumes to follow. Sir Clements Markham and H.W. Wilson contributed the chapters on 'voyages and discoveries' to this reprinted volume from 1066 to 1603.

However, since polar exploration was conducted very largely by sea or with the aid of ships until the advent of the aeroplane, Rodger's excellent book should become a work of reference for students of the history of the Arctic, and, no doubt, in due course, of the Antarctic.