

Section three contains a remarkably concise and cogently argued contribution by Bruce Davis, the second editor of the book. Raising the complex issue of the nexus between science, environment, and development in the Antarctic, he rightly points out the paucity of sufficiently detailed research about the quality or contribution of Asian science in Antarctica. Some of his conclusions are extremely significant and bode well for the future of Antarctic science and politics. Davis points out the predominance of the English-language text and Eurocentric orientation of most Antarctic literature and rightly emphasises the need within the ATS to ensure that Asian viewpoints and achievements are more fully documented and understood. No less interesting is his conclusion that even though the Asian countries have received the Madrid Protocol enthusiastically, they do not wish to forego forever the option of resource exploitation if a 'genuine' need arises in the future; this is where lies a nexus between conservation and longer-term global and regional economic development prospects. In the context of science, politics, and conservation, we have an interesting contribution by Peter Gill, a campaigner with Greenpeace, on the issue of whaling. Examining Japanese Antarctic whaling, he concludes by saying that 'there is a failure with Japan to see whaling as an environmental issue' (page 137) and that on this issue a gulf of perception exists between western environmentalists and whalers, who perceive whales as virtually no different from fish, to be exploited in the same way.

In the fourth and concluding section, there are two excellent contributions from Marie Jacobsson, a legal advisor on international law for the Swedish Ministry for Foreign Affairs, and Keith Suter, a well-known peace activist from Australia. According to Jacobsson, since an area having the status of 'common heritage of mankind' is neither appropriable nor subject to territorial sovereignty or to the exercise of sovereign rights, application of this principle to Antarctica is problematic for the claimant states in particular. But the rest of the basic, compulsory (*sine qua non*) elements in the common heritage, such as non-exclusive use, mankind as a beneficiary, international regulation, and peaceful use, are of such a nature that they could co-exist with the way Antarctica is administered under the ATS, at least as long as the prohibition on mining is maintained. Most interesting is her question whether a state that considers Antarctica the common heritage of mankind can accede to the Treaty without violating it. In answer she states that, from the point of view of the acceding state, an accession would not prejudice a position that Antarctica is or should be declared a common heritage. If the Antarctic Treaty were to be terminated, the acceding state could well maintain that Antarctica is the common heritage of mankind. She argues, however, that if a state that considers Antarctica to be the common heritage of mankind accedes to the Treaty with the intention of undermining it, such behaviour would run counter to the bona fide principle of international law and would therefore not be legally acceptable. The contribution by

Suter comes out strongly in favour of greater co-operation between scientists and non-governmental organisations in Antarctic affairs and concludes that Antarctica's legal and political future will be different from that of the past.

To sum up, the volume offers the reader access to a wide-ranging and critical assessment of Asian interests in Antarctica by a formidable group of experts, both academics and practitioners, at a time when both Antarctica and the wider global system are experiencing profound change. Yet another reason why *Asia in Antarctica* is a must on the shelves of students of Antarctic law and politics is that by celebrating diversity and dissent among Antarctic-related perspectives, it sets the stage for further trans-national and cross-cultural dialogue. One wishes, however, that there were a concluding chapter by its editors. The reader will certainly appreciate that texts of the Antarctic Treaty as well as the Madrid Protocol are provided in the appendices for ready reference, but he is likely to miss the critical assessment, by the editors themselves, of this highly commendable effort. (Sanjay Chaturvedi, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

GLACIAL ENVIRONMENTS. Michael J. Hambrey. 1994. London: University of London Press. viii + 296 p, illustrated, soft cover. ISBN 1-85728-004-0. £14.95.

Before the publication of this book, those wishing to study the sedimentary processes of glacier action and the associated geological environments would have been prescribed texts detailing semi-quantitative aspects of glacial geology, such as *Glacial geologic processes* (Drewry 1986). Although it is important that students should appreciate the physical basis of glacial sedimentary processes, many undergraduates initially have little mathematical knowledge, and may not, therefore, be in an ideal position to deal with a quantitative approach. Hambrey, in attempting to provide a more qualitative view of glacial sedimentation, has produced a well-written and informed introduction to glacial sedimentary geology that will appeal to students of Earth sciences who have knowledge of the general concepts of geology.

The content structure of *Glacial environments* is similar to *Glacial geologic processes* and, because of this, may be considered a compatible supplement to Drewry's book. However, one should not underestimate the value of this new text. The book begins with two background chapters on the recognition, analysis, and interpretation of glacial sediments and the glacial-geological record (chapter 1) and glacier dynamics (chapter 2). Chapter 1 is of particular interest because it also deals with terminology and the description of glacial sediments, a topic that remains largely unresolved within the geological community. Each subsequent chapter is carefully arranged so as to deal with sedimentation within an explicit glaciological environment. Once the information provided in the first two chapters has been digested, each following chapter can be read and understood as a discrete account.

The various glacial sedimentary environments are examined in order of increasing distance of the particular geological setting from the sediment source; that is, from those features formed in contact with glacier ice, to proglacial and lake sedimentation, and on to sediments deposited far from glaciers in fjord, sea, and ocean systems. What results is an extremely ordered, comprehensive summary of the current understanding of glacial sedimentology. For a more detailed treatment of the subject, Hambrey continually refers to additional literature and, in so doing, produces an impressive bibliography of more than 300 recent key publications.

Throughout the book, the author tackles the explanation of glacial sedimentation, by first summarizing theoretical aspects of a particular sedimentary process (for example, methods of deposition, and descriptions of landforms and sedimentary facies) and afterwards detailing superb field examples. In this manner, the book is able to provide an understanding of modern glacial geology, which the reader can appreciate and comprehend through dozens of illustrations and photographs (many of which have been taken from Hambrey's own extensive fieldwork, and often from well-known locations within the British Isles).

In summary, *Glacial environments* represents a fine review of contemporary knowledge in glacial geology and, through its descriptive approach, may prove to be an essential and popular undergraduate text. (Martin Siegert, Centre for Glaciology, Institute of Earth Studies, University of Wales, Aberystwyth, Dyfed SY23 3DB.)

Reference

Drewry, D.J. 1986. *Glacial geologic processes*. London: Edward Arnold.

GENDER ON ICE: AMERICAN MYTHOLOGIES OF POLAR EXPEDITIONS. Lisa Bloom. 1993. Minneapolis and London: University of Minnesota Press. xii + 163p, illustrated, soft cover. ISBN 0-8166-2093-8. US\$14.95.

Current anthropology lends itself well to the historical dialogue. Consideration of the myriad and often complex underlying cultural issues embedded within a particular cultural milieu and its historical writing — issues of gender, class and race, concepts of nationhood, attitudes toward nature and the wilderness, and the social relations of science and knowledge — is indispensable for establishing both a fluency with the historical texts themselves and a comprehensive understanding of any particular historical episode. Seen in this light, history itself is deconstructed into a series of culturally conditioned and ritualised scenes, and the historical text, as part of the dominant media in a literate society, is best understood as a piece of cultural and national discourse. In short, historical discourse is more than the mere elucidation of events past, but rather both a cultural exposé of a particular people and their time, and of the commentator who writes about it.

In *Gender on ice*, Lisa Bloom has found such a cultural chronicle in the American era of heroic polar exploration. Based upon a feminist analysis of the history of US nationalism and colonialism, this book offers an alternative account of the history of polar exploration through a textual exegesis of gender, race and class, and nationalism. Bloom follows the already-established argument that American involvement in the conquest of the North Pole was, among other things, a chapter of nineteenth and early-twentieth-century western colonialism during which science and the omnipotence of unyielding human will were perceived as absolute and infallible categories. She agrees that the late-Victorian era bore witness to the autumn of imperial conquest that followed centuries of aggressive and enthusiastic exploration, leaving only the polar regions as uncharted and unknown. Thus, as abstract categories in the late- and post-Victorian mind, the series of particular images that developed of the Arctic regions as blank and quite literally empty places were transformed into aesthetically engaging icons, attractive to the American and European middle class, which in turn rendered them engaging to explorers and scientists alike. As both barren and dangerous places, yet paradoxically home to the Inuit, they provided concepts of 'Nature' and 'the other' that simply ceased to exist elsewhere. In other words, there was a glorious and exotic splendour to be found in the 'Arctic sublime' that presented a strikingly illustrative contrast to the cultured, mundane, and confident west. As such, the Arctic, like the austral regions, remained the ultimate Spartan proving ground for the supremacy of human will over a foreboding adversary.

The author's point of departure from other accounts of this era is the inclusion of one important caveat: that those dispatched by the society were white, middle-class, and, most importantly for Bloom, male. She identifies 'masculinism' (the social construction of masculinity to the exclusion of women from the public domain) and models of intrinsic white superiority as the dominant underlying ideologies of American polar exploration. Thus, in conquering the Pole, Robert Peary was both an aesthetically pleasing model for Americans and a metaphor for how they perceived the world and, perhaps more importantly, themselves. Despite the lack of potential commercial gain, it was ultimately the colonial and scientific treasures that could be realised that would transform polar exploration into a unique imperial pageant. As quite literally the last places on Earth 'which still remained invisible and therefore inscrutable, [they] excited a consuming passion on the part of white men of various Western Countries to "conquer" and make "visible" these sites' (page 3). The North Pole, then, was where America would create an imperial self-image, heralding its entry into the twentieth century. It was also the ultimate popular theatre for the exhibition of American masculinism, racism, and overt nationalism.

It is Bloom's thesis that the ideology of the period was flawed, corrupted by supercilious issues of gender, class, and racial and nationalistic dogma. Evidence, she claims,