been elaborated to complement it in relation to the environment (the 1964 Agreed Measures and the 1991 Protocol), seals (1972 Convention), marine living resources (1980 Convention), and mineral resources (1988 Convention).

The Arctic presents a very different picture. Although, as chapter 6 shows, the beginnings of cooperation between the states bordering the Arctic have emerged, nothing remotely resembling a comprehensive and coherent legal regime for the area is yet to be discerned. While geopolitical considerations play some part in the difference between the north and south polar regions, another reason and to lawyers a particularly significant one — is the difference between the two regions in terms of their territoriality (the Antarctic being largely an ice-covered land mass, and the Arctic being largely an ice-covered maritime space) and thus of the extent and nature of assertions of territorial sovereignty in the two regions. A comparison between pages 51-63 and 75-80 (regarding Antarctica) and pages 161-170 (regarding the Arctic) underlines this difference, as does the practical importance for the Arctic, but much less so for the Antarctic, of maritime questions, such as base lines, maritime boundaries, and rights of passage (pages 171–207 and chapter 7).

In turning to the reciprocal impact that international law and the polar regions have on each other, the author, in part III (pages 261-426), selects four topics for particular examination, devoting a chapter to each: the law of the sea, resource management, environmental law, and regime theory. The first three of these chapters inevitably involve some overlap with what has been said earlier. Yet even so, setting the relevant legal rules developed within each polar region against applicable general rules of international law in the same subject area produces interesting insights such as the inadequacy or uncertainty of the rules of international law regarding that quintessential polar commodity, ice (pages 262-271, 300-301), and the impact of polar (particularly Antarctic) agreements on modern systems of resource management (chapter 8), while chapter 9 demonstrates the leading part played by the polar regions in raising environmental protection high on the international agenda.

The relatively short (20 pages) examination in chapter 10 of regime theory (picking up an earlier consideration of the matter at pages 9–19) is of a somewhat different nature from the rest of the book — an excursion into international relations, rather than a study rooted in international law (and, in particular, not a study of either polar regime as an 'objective regime' of the kind known to international lawyers, a matter given only cursory consideration at page 455). The view is advanced that an understanding of regime theory leads to a greater understanding of international law. To a limited extent this may be so, which is all the author claims (page 426). In substance, however, regime theory has more to do with international systems than with international law.

The book concludes with a chapter on the relationship between the polar regions and international law (pages 429–457). This pulls together the main threads of what has gone before, and explores some of them a little further. Quoting with approval Richard Falk's comment that 'The governance of Antarctica...is the closest thing to a "world order miracle" that the world has known,' the author goes on to observe that while a similarly highly developed regime is not yet in place for the Arctic, a push in that direction has begun. As he puts it, the most important lesson provided by the two polar regions is that cooperative efforts in those areas demonstrate 'that it is possible...to develop successfully multilateral cooperative mechanisms through international law' (page 457).

Overall, this book is a sound and valuable (and wellwritten) contribution to a subject that has grown rapidly in importance in recent years and that is likely to continue to grow. As the author has shown, the growth of state activity in the polar regions has outstripped the development of general international law as a normative system capable of resolving many of the issues peculiar to them, while the evolution of regional regimes to fill the gap still has, particularly in the Arctic, a long way to go. Studies such as this, comparing the legal experience of the Arctic with that of the Antarctic, and comparing both with general international law in relevant areas, are of inestimable value in pointing the way ahead towards a systematic and coherent body of rules that is well-attuned to the special features and needs of the polar regions. (Sir Arthur Watts, 20 Essex Street, London WC2R 3AL.)

GEOGRAPHY AND IMPERIALISM 1820–1940. Morag Bell, Robin Butlin, and Michael Heffernan (Editors). 1995. Manchester: Manchester University Press. xiii + 338 p, illustrated, hard cover. ISBN 0-7190-3934-7. £45.00.

It has been widely acknowledged in recent years that European imperialism had far more complex cultural, ideological, and intellectual underpinnings than the traditional studies focusing mainly on economic forces and military action had assumed. Indeed, European expansionist and imperialist activities were facilitated and sustained by a broad range of individuals and agencies found in governmental, business, academic, and private life — with differing, and at times clashing, visions, values, ambitions, and levels of influence. The tangled interactions and the contested discourse of these different people and interest groups has been examined in a most productive manner by the 'Studies in Imperialism' series of the Manchester University Press, which has made major inter-disciplinary contributions to the understanding of imperialism and a number of its constituent parts as cultural phenomena.

Geography and imperialism, a worthy successor to the earlier volumes in the series, examines the ways in which European imperialism was related to the theory and practice of geography between 1820 and 1940. It has been clearly shown that European imperialism was facilitated and nourished by modern science and technology (for

example, Headrick 1981; Stafford 1989; Pyenson 1993): each was concerned with exhaustively understanding and controlling everything to do with the world, nature, and mankind. And no aspect of science had a more clearly symbiotic relationship with imperialism than geography, which was not only a central tool of the expansion of commercial and political influence, but was 'unquestionably the queen of imperial sciences...inseparable from the domain of official and unofficial state knowledge' (Richards 1992: 13).

In the late nineteenth century, many Europeans argued that geographical knowledge was the key to imperial power. Certainly geographers — both explorers and mapmakers in the field and university-based, armchair intellectuals - were an essential part of the development of empire. They provided, in the first case, the initial information about previously unexplored, unmapped areas that would be marked for conquest and colonisation, and, in the second instance, through elaborate geographical and geopolitical theories, the intellectual justification for imperial expansion. On the governmental front, geography was so highly prized that Sir Harry H. Johnston, the African explorer and colonial administrator, indicated that it should be a compulsory subject for all aspiring politicians, diplomats, and civil servants (page 5). And in time geography itself changed from a small, emergent intellectual discipline to a major aspect of popular culture that appealed to both men and women, fed geopolitical ambition and imperial chauvinism, made other sciences understandable, was the focus of numerous societies, and related to all classes via its 'popular' aspects, such as travel, exploration, and adventure.

Geography and imperialism touches upon many of these topics, and, although it does not directly address the polar regions, it is a valuable addition to understanding the background to the exploration of and fascination with the Arctic and the Antarctic. The far north and south were just two more white spaces on the map in the nineteenth and early twentieth centuries, and the forces that helped develop the popular mentality necessary to the expansion into these areas were not so totally different to those that lay beneath the exploration of Africa and Australia. In fact, many of the most significant individuals in the investigations of the polar regions — for instance, Roderick Murchison, James Gordon Bennett Jr, and Clements R. Markham — also played prominent roles in the exploration or exploitation of other regions that were just being opened to European knowledge.

Two chapters in this volume are particularly relevant to those interested in the polar regions. 'Agents and agencies in geography and empire: the case of George Grey,' by James M.R. Cameron, gives an enlightening look at the imperial vision of another of the major figures of polar exploration, Sir John Barrow. The Second Secretary of the Admiralty and the third president of the Royal Geographical Society, Barrow was the man generally credited as the driving force behind Britain's re-entry into the search for

the Northwest Passage following the Napoleonic Wars. But his belief in the honing of naval skills and preparing Britain's naval and military leaders for further foreign aggression, and his influence therefore in ways in which the Royal Navy was put to work, were felt in much wider arenas than just the Arctic. Barrow believed that Britain's survival compelled it to gather additional resources from an expanding maritime empire of trade, so he argued that Britain not only had to control the sea lanes but also key strategic naval points, such as Cape Town, Mauritius, and Jakarta. His interest in the control of major water routes was behind his sponsorship of James Kingston Tuckey's disastrous expedition up the Congo, and, as Cameron's article shows, it also led him to view northern Australia as an imperial beachhead, one that was particularly needed after the post-war return to the Dutch of their East Indian possessions seemed to repeat the mistakes of the surrender of the Cape colony in 1802. Thus, in the 1830s Barrow became involved in a proposed exploration of northwest Australia, which, if a major river were discovered, as Barrow believed it would be, would not only allow the penetration of the interior of the continent, but would give incalculable advantages towards the protection of shipping bound for India and China. The view of Barrow that comes from the chapter is one of an imperialist with aggressively territorial ambitions, and who was also concerned with exploration because it produced knowledge, and knowledge was power.

The second chapter in the book relevant to a polar audience is 'The provincial geographical societies in Britain, 1884-1914' by John M. MacKenzie. In this paper, MacKenzie examines why the British provincial geographical societies never made the impact of those of other European countries, such as France. The author's close examination of the history of the British provincial societies — the Scottish (with four branches), Manchester, Liverpool, Tyneside, Southampton, and Hull - shows that these were all expressions of the moment, formed primarily to feature information, discussion, and controversy about Africa. Later, public interest was maintained by shifting from the interior of Africa to the Arctic and the Antarctic, with Nansen, Scott, Shackleton, and Evans drawing vast crowds to their lectures in the final years of the last century or the first decade of the present one. Yet it was those societies most closely wedded to these 'Three As' that ultimately failed. The Royal Scottish society and the Manchester society, both of which established a firm base of scholarship, as opposed to viewing geography as a combination of popular adventure, entertainment, and commercial utility, were the only two to survive.

In summary, this volume helps make more understandable the complex and continually developing relationship between European imperialism and geography — both as a theoretical, scholarly study and as the exploration of new areas. It is to be recommended to all of those interested in the study of either exploration or imperial expansion, including those whose first regional area of interest is the

Arctic or the Antarctic. (Beau Riffenburgh, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

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BELOW THE CONVERGENCE: VOYAGES TO-WARD ANTARCTICA, 1688–1839. Alan Gurney. 1997. New York and London: W.W. Norton & Company. xii + 315 p, illustrated, hard cover. ISBN 0-393-03949-8.£18.95.

In *Below the convergence*, Alan Gurney has produced an interesting work on the history of Antarctic exploration before 1839. Although generally a work of value, it does have a number of weaknesses. Do read on, however; the book merits attention.

The book is intended for the general audience as a popular account of the early voyages to the far south. However, when an author assumes the role of historian, he should take on the obligations of that profession, and this duty has not been fulfilled throughout this work. Four weaknesses must be noted. Chapter one is a disaster—and I strongly urge readers to skip it so as not to mar an otherwise valuable book. Standard practice requires that when one writes about the past, the past tense is used. The use of the present tense — as in this book — frequently marks an account as sophomoric and barely even worth the general reader's time. The second problem concerns sources. Even in a popular — as opposed to a scholarly retelling, the historian has an obligation to provide sources. Mathematicians cannot be taken seriously without proof, historians without sources. Often while reading this volume, one feels that Gurney has a particularly interesting quote or reference, but the reader is left in a void because only rarely is a hint of authorship given. Third, Gurney falls into the trap of only rarely reminding the reader of the year. In a work that covers 150 years, written for the general public, the old rule regarding broadcasting a baseball game is best kept in mind — give the score every three minutes. Finally, Gurney was not well served by those that read the manuscript before publication — too many confusing antecedents, weak sentence constructions, and verbtense difficulties remain. Given the merits of the volume, Gurney deserved better.

On the other hand, if the reader begins the book with chapter two, the story of exploration in south polar waters is well told with an occasional flash of literary grace. Although the material in chapter two might have been placed to better advantage in chronological order, the discussion of the basics of navigation before the midnineteenth century will clarify some points to readers. Those people who have read Dava Sobel's *Longitude* will find little that is new in the discussion of the problem associated with the development of the chronometer and may gain an appreciation for why Sobel's book has been so well received. Strangely, although Sobel's book was published in 1995, was widely reviewed, and made several best-seller lists, Gurney does not include it in the bibliography for that chapter.

Gurney launches into a discussion of scurvy — or, as he terms it, the plague of the sea — taking the reader through the history of the fight to control the disease while also describing the standard diets aboard ships in the period. Readers who know the outline of this problem in Antarctic exploration will appreciate this succinct explanation

The departure into natural history to discuss the inhabitants of the regions — seals, flying birds, and penguins — will be welcomed by those whose knowledge of this subject is limited, as Gurney ably summarizes essential details to provide the reader with a good introduction to this part of the story.

The author provides a clear presentation of Edmond Halley's role in the period before the discovery of Antarctica. Halley's life and contributions to science are clearly and concisely presented, and many readers will gain a better appreciation of his contributions to the science of his day.

At last the story arrives at James Cook, a point that many would see as a viable opening for Antarctic history proper. Acknowledging the unparalleled value of the contributions of J.C. Beaglehole to this topic, the author provides a fine abbreviated account of Cook's life, and places his Antarctic work in the context of both Cook's activities and the scientific work of his times. The account of the southern voyage of *Resolution* and *Adventure* is an admirable short summary of this enterprise, often seen as the beginning of modern Antarctic exploration.

Building on this material, a lengthy chapter takes the reader through several interrelated stories. The sad story of the expansion of sealing into south polar waters and the decimation of the fur seal is recounted. Then, the lesser known but unquestionably great exploits of Thaddeus Bellingshausen are given fair and appropriate treatment. The question of who can claim credit for discovering Antarctica is even-handedly answered.

In turn, the story of James Weddell's fortuitous great southern voyage in which he reached 74° 15'S is related. Weddell's exploits and those of Matthew Brisbane, who commanded the second ship in Weddell's expedition, are discussed in two chapters. Gurney then takes up the rather less-well-known exploits of John Biscoe, who made the third circumnavigation of Antarctica while in the service of the firm of Enderby Brothers, one of the most famous companies involved in exploiting Antarctic waters. His