tive of the League of Nations, ultimately receiving a Nobel Peace Prize for his work in repatriating prisoners of war from World War I, his efforts to alleviate the misery caused by famine in post-revolution Russia, and his successful guidance on the exchange of refugees between Turkey and Greece after redivisions of their territory.

Huntford deals with all of these stages of Nansen's life with elegant writing backed up by his usual impeccable research. This book took the author more than a dozen years to produce, and that extreme care shows. Huntford spent a vast amount of time mastering all of those areas in which Nansen had been expert, including neurobiology, design of skis and sledges, a full comprehension of ice, and the political, social, and cultural dynamics of Edwardian England, Leninişt Russia, and pre- and post-independence Norway. The result is a book of enormous scholarship, taken from an almost incomprehensible number of original sources, numbering among them official documents from such varied sources as the League of Nations, the International Red Cross, and the governments of Norway, Sweden, and Britain; diaries, journals, and correspondence of hundreds of individuals; and newspaper reports. Huntford also lists hundreds of articles and books in his references section, many of them serving as background on a wide variety of cultural and social issues — such as the Norwegian fascination with skiing or the background of appointing personnel to the Paris Peace Conference of 1919 — so that no nuance of events in which Nansen played a part or by which he was influenced could be missed.

The personal side of Nansen is also developed in the book. Although to the outside world, he was brilliant, talented, and the epitomy of the modern Viking — tall, blond, handsome, and in marvellous physical condition – he was, in fact, restless, 'ever seeking satisfaction, whether in science, exploration, or politics, he was trapped by the illusory search for happiness' (page 1). Thus, Huntford reveals Nansen's own weaknesses as a leader; his difficulty in making close friends with men; his disappointing relationships with those who sought his guidance and help, such as Otto Sverdrup, Roald Amundsen, and Robert Falcon Scott; his indecisiveness about continuing his career of exploration, and his naiveté in his interplay with political figures such as Philip Noel-Baker of the League of Nations (himself carefully portrayed) and V.I. Lenin, who used Nansen to further the motives of the new Bolshevik regime. The book also explores Nansen's altogether different relationships with women — with whom he felt much more companionable, but whom he always seemed to relate to better at a distance. This was particularly true about his long-suffering wife Eva, with whom he could always most easily communicate by letter, rather than in person.

Ultimately, what is so striking about *Nansen* is that it combines what an academic would desire of a scholarly book with a lively, fast-paced portrait of an intriguingly complex man. It is not necessarily easy to feel a close

affinity for Nansen himself; he was truly, as Huntford proclaims, a 'Renaissance ideal of the universal man,' but he was also a man who was a remote and, at times, tyrannical husband and father, and who was so reserved that, only after three-quarters of a year sharing a sleeping bag with Johansen after they had left *Fram*, did he allow Johansen to address him with his surname and the familiar 'you' rather than the polite form of address; even then, there was no use of Christian names. But one can certainly warm to Huntford's biography, with the author's mastery of his subject, as well as his time and culture, with Huntford's remarkable verbal portraits of the Arctic, his subtle humour, and his ability to entertain, even thrill, while at the same time educating.

Huntford has previously written two superbly researched and crafted biographies of polar explorers (1979, 1985). This effort, which Huntford thinks of as the completion of his 'cycle of modern polar exploration' (page ix), stands tall, even next to his own previous works. For those of us who have been eagerly anticipating this book for more than a decade, it has been well worth the wait. (Beau Riffenburgh, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

References

Huntford, R. 1979. *Scott and Amundsen*. London: Hodder & Stoughton.

Huntford, R. 1985. Shackleton. London: Hodder & Stoughton.

MacKenzie, J.M. 1994. The bad, the indifferent and the excellent: a crop of imperial biographies. *The Journal of Imperial and Commonwealth History* 23 (2): 317–324.

AN ALIEN IN ANTARCTICA: REFLECTIONS UPON FORTY YEARS OF EXPLORATION AND RESEARCH ON THE FROZEN CONTINENT. Charles Swithinbank. 1997. Blacksburg, VA: McDonald & Woodward Publishing. xviii + 214 p, illustrated, hard cover. ISBN 0-939923-43-2. \$US49.95.

Lest anyone should think that the author of this book is a visitor from outer space, he is in fact the well-known glaciologist who was head of the Earth Sciences Division, British Antarctic Survey, until his retirement in 1986, and who is noted for his down-to-Earth approach to life in general and field research in particular. His wealth of experience — mainly in the Antarctic but also in the Arctic, on land (or ice), on or under the sea, and in the air - is unsurpassed. The book covers only a fraction of his 40 years' experience, namely the periods he spent on United States Antarctic operations. The title of the book reflects the American term for a foreign national, however friendly and companionable, on an American enterprise. The reader is allowed only brief glimpses — in a few sentences — of Swithinbank's time successively with the Norwegian-British-Swedish Antarctic Expedition, the Defence Research Board of Canada, the Soviet Antarctic operation, the Royal Navy, the Scott Polar Research Institute, and the British Antarctic Survey. By his own account, he has his mother to thank for his adventurous life — a remarkable woman indeed, adept with an elephant rifle in Burma, and insistent that her son should spend the maximum time away from an office chair.

By 1959, Swithinbank had been engaged in both Antarctic and Arctic research for 10 years, spent partly in the field but mainly in the office compiling reports. He was determined — against the odds at that time — to make his living as a glaciologist, and accepted an invitation to join Dr Jim Zumberge's group at the University of Michigan, Ann Arbor, with funds made available by the National Science Foundation under the United States Antarctic Research Program. In the 1959/60 Antarctic season, he was a member of Zumberge's party studying the movement and mass balance of the Ross Ice Shelf on a Sno-Cat traverse from Little America to McMurdo Station. Swithinbank returned to the region in the following two seasons in charge of a small field party travelling by motor toboggan, airlifted to the field areas from McMurdo Station; the machines were novel to the Antarctic at that time. The objective was to measure the movement of a number of glaciers feeding the Ross Ice Shelf on its western and southern sides. Such measurements form important components in the calculation of the mass balance of the ice shelf, and were successfully accomplished. They travelled safely who travelled with Swithinbank, and his precautions against every eventuality became well-known. Against the danger of crevasses, he devised a method for a skier to drive motor toboggans by remote control from the rear of the machine. One may suspect that he never boarded an aircraft in the Antarctic without first checking that it carried full survival gear and provisions! Although the United States Navy and Air Force have a remarkable Antarctic flying safety record, yet Swithinbank records the crash of a US Neptune aircraft, in which he had flown only two weeks earlier, and writes movingly of the loss of the brilliant American geophysicist Dr Ed Thiel in that aircraft.

From 1963, Swithinbank based himself at the Scott Polar Research Institute for another interlude in his career - a year and a half with the Ninth Soviet Antarctic Expedition — for he 'wanted to learn Russian the easy way.' He returned to the Institute at an exciting time because of the development there of an ice-penetrating radar. He rightly credits Amory Waite of the United States Army Signal Corps as the first to recognize the potential of radar for such a purpose, but it was left to the Institute to optimize the frequency used and to build the equipment. After successful airborne tests in the Canadian Arctic in the spring of 1966, the system was ready for deployment further afield, and American support was sought. Thanks to the vision and stature of the National Science Foundation's chief scientist, Dr Albert Crary, generous support was promptly provided in the Antarctic. In the 1967/68 season, an Institute team, which included Swithinbank, undertook many hours of radio echo-sounding flights from McMurdo Station. The resulting under-ice map of a vast

area was a prelude to similar mapping in succeeding years of most of Antarctica.

Eleven years elapsed before Swithinbank was again with the Americans in the Antarctic, by which time he held his senior position in the British Antarctic Survey. Again the main objective was to measure the movement of glaciers flowing into the Ross Ice Shelf, supported in the field by 'helicopters unlimited.' There was also the chance to pay an impromptu visit to Amundsen–Scott Station at the South Pole.

Immediately after his retirement from the British Antarctic Survey, Swithinbank spent the 1986/87 season with the Canadian company Adventure Network International, intent on testing the feasibility of landing heavy aircraft on natural ice runways in the Antarctic. The so-called 'blue icefields,' which Swithinbank and others had previously observed, might provide the answer. The result of the season's work was the test proving of a runway on blue ice in the Patriot Hills, Ellsworth Mountains, in the face of scepticism if not of hostility, from United States authorities. The Americans soon cast aside their reservations, and, in the 1988/89 season, deployed a team to search for suitable 'blue icefields' on or near glaciers flowing into the Ross Ice Shelf. Swithinbank was leader of this team. which found two suitable icefields and, as an unexpected bonus, recovered an iron-rich meteorite weighing 2.5 kg.

These natural runways would later be used to deploy scientists to their field areas, and also greatly to extend the range of tourists and those latter-day adventurers, usually self-styled or press-styled as explorers, whose derring-do is associated by an ill-informed public with exploring in the classic sense. Swithinbank sees the overall human impact on Antarctica as minimal, and is happy with the extended use of the word 'explorer,' for, as he writes: 'we are all explorers.'

This book is extremely well illustrated with very adequate maps and with numerous colour and black-and-white photographs. Swithinbank's detailed knowledge of Antarctic history is appropriately deployed for the areas made famous in the 'Heroic Age,' and he has contributed footnotes to that history by finding caches or cairns left by such as Roald Amundsen and Dr Laurence Gould. He is to be warmly congratulated in describing so readably one man's experience on very wide-ranging American operations spanning three decades. A second volume of his memoirs, covering omissions in the present book, has recently been published. (Geoffrey Hattersley-Smith, The Crossways, Cranbrook, Kent TN17 2AG.)

GOVERNING THE ANTARCTIC: THE EFFECTIVENESS AND LEGITIMACY OF THE ANTARCTIC TREATY SYSTEM. Olav Schram Stokke and Davor Vidas (Editors). 1996. Cambridge: Cambridge University Press. xxii + 464 p, hard cover. ISBN 0-521-57237-1. £55.00; \$US85.00.

Governing the Antarctic is a significant contribution to the investigation of the international politics of the Antarctic and the Southern Ocean. This edited collection represents