companies were running just to keep up and shore stations were further hit by the development of the pelagic whale factories that were independent of land. Pesca's profitability was boosted by an annual harvest of elephant seals, but, in 1960, Grytviken was sold to a British company Albion Star Ltd. In 1962, the station closed but was then leased to the Japanese. Even their efficient operation, in which the main product was meat for human consumption, became unprofitable and whaling finally ceased at Grytviken in December 1964. Records show that 53,973 whales had been brought in since 1904.

However, the progress of Antarctic whaling over seven decades is only the backdrop to the story of Pesca. This book is more of a company history with an emphasis on the machinations of the board, the financial background, and upgrading of plant and vessels. The two main strands running through the book are management of the whaling operations at South Georgia and the financial manoeuvres in Buenos Aires. Larsen was the link between the two. He was often at loggerheads with the office in Buenos Aires because they did not understand conditions at South Georgia; for instance, whaling stations belonging to rival concerns had to help each other by lending equipment or by shipping personnel in each other's vessels. He worried that the company was being asset-stripped, that a heavy industry was being run by a merchant bank and profits were not reinvested, a situation not without parallels in present-day commerce. Larsen also much regretted that Norway had not fully benefited and that the profits were going to Argentina. He left Grytviken finally in early 1914, and thereby missed meeting South Georgia's other great hero, Sir Ernest Shackleton, by a few months.

Intermingled with the account of the commercial operation are the human sides of life at Grytviken. Senior officials were often accompanied by their families: in 1905–06 Larsen was accompanied by his wife and seven children. Contemporary photographs record strangely normal lives of babies, dogs, chickens, picnics, and billiards evenings amid the stench and squalour of the whaling station. For the workers, life was hard, with 12-hour shifts, seven days a week, and not much opportunity for recreation. Larsen, however, cared for his men and arranged for the building of an assembly room — 'the Teatersalen' — and commissioned a church (now restored) that was prefabricated in Norway and erected by factory personnel.

Ian Hart's lifetime interest in the history of whaling in the South Atlantic started when, as a boy, he read South latitude, F.D. Ommanney's delightful account of work as a whale biologist with the Discovery Investigations in the 1920s. You must already have an interest in South Georgia and whaling before you read this book. With 451 text pages, 25 pages of notes, and 28 pages of appendices, it is often difficult to see the wood for the trees. There are 269 illustrations, many too small and not well reproduced. A tough editor would have been an asset. Hart puts in every detail, even if not always relevant to the matter in hand. This does not make for easy reading but is very useful as a work of reference. Not surprisingly, considering the

encyclopaedic mass of information, there are minor errors, some of which have been corrected in the second edition, but they do not detract from the huge bulk of information. The book is a work of some scholarship and considerable devotion to a lifelong interest. There can be few companies the history of which has been so well researched.

The empty station at Grytviken, and the museum in the manager's house that Hart helped to establish, are monuments to man's building a heavy industry in a desolate, distant corner of the world, but also to his failure to rationalise and regulate that industry. It is perhaps ironic that the weather is now destroying the buildings as surely as the whalers destroyed the whales. (Robert Burton, 63 Common Lane, Hemingford Abbots, Huntingdon PE28 9AW.)

DISCOVERY ILLUSTRATED: PICTURES FROM CAPTAIN SCOTT'S FIRST ANTARCTIC EXPEDITION. J.V. Skelton and D.M. Wilson. 2001. Cheltenham: Reardon Publishing. 168 p, illustrated, hard cover. ISBN 1-873877-48-X.

As its sub-title suggests, this book is in no way intended to compete with the recent studies of *Discovery* by Ann Shirley and David Yelverton, but rather to complement them with what is essentially a pictorial scrapbook commemorating the centenary of the launching of the vessel on 21 March 1901 and Robert Falcon Scott's British National Antarctic Expedition (1901–04). Its inspiration is that of two scions of the expedition. Judy Skelton is the grand-daughter of Reginald Skelton, chief engineer on *Discovery* and expedition photographer. David Wilson is the greatnephew of Edward Wilson, surgeon, vertebrate zoologist, and artist. Both recall childhoods surrounded by expedition relics and doubtless much talk of their ancestors' exploits in the field; both are today actively researching the lives of their respective forebears.

From the preface to the book it would appear that the authors' initial impetus was the catalogue of an exhibition held at London's Bruton Gallery in the autumn of 1904. Enjoying the support of Sir Clements Markham, president of the Royal Geographical Society and 'father' of the Discovery expedition, the intention of the exhibition was to raise much needed funds as well as to familiarize the public with the geographical and scientific work accomplished. Antarctica, it should be remembered, was still very much 'Terra Incognita' at this time. There was no shortage of original material; Wilson's incomparable watercolours of Antarctic scenery and wildlife were revelatory, as were Skelton's photographs of Discovery and her crew, while his images of life in the hut and of field excursions to the inland ice could at times rival the work of Herbert Ponting on Scott's last expedition.

Among the items on display at the Bruton Gallery was the manuscript copy of the expedition magazine South Polar Times, profusely illustrated by Wilson and other aspiring artists, along with its less well-known supplement The Blizzard. Two notable supporters of the exhibition were Messrs John Dewar and Jaeger, whose full-page advertisements for their respective products adorn the

pages of this volume. Both firms are still in business and have contributed generously to the costs of publication.

Although essentially a volume to be savoured for the quality and originality of its illustrative content, the editors are to be congratulated on the accompanying text, intended primarily to remind the reader of the main events in the expedition's history. This is contained in 12 chapters, the first being an introduction outlining the events leading to the much-quoted declaration of the Sixth International Geographical Congress in London in 1895 that 'the exploration of the Antarctic regions is the greatest piece of geographical exploration still to be undertaken.' This was a clarion call that, in spite of prevailing international rivalries, was to lead to the first attempt at a concerted effort to resolve a number of outstanding questions relating to the south polar regions, perhaps the most immediate being the whereabouts of the South Magnetic Pole and whether or not an Antarctic continent actually existed. There follows a brief summary of Sir Clements Markham's efforts to sting a begrudging Board of Admiralty into providing the necessary support and an uncooperative Royal Society into playing its part in a joint venture. Chapters 2–11 follow the fortunes of the expedition from the launching of Discovery and her final departure from England to her triumphant return in September 1904. Each episode in the expedition's progress is briefly outlined, followed by relevant extracts from the published edition of Wilson's diaries and brief extracts from Skelton's personal diaries, many in print here for the first time.

Each page of the quarto-size book is liberally illustrated in colour and in black and white. In keeping with their declared dislike of 'revelations' the authors in their text take great pains to avoid controversy. Thus the suffering of the Southern Party is but lightly touched upon, as are the problems with the dogs and Shackleton's controversial return to England on the relief ship. A concluding chapter entitled 'One hundred years on' bridges a century by drawing a parallel between the NASA space shuttle Discovery and Scott's vessel, thereby associating both with a 'long and illustrious succession of vessels of scientific exploration.' In addition to a select bibliography, the volume concludes with a list of all the illustrations reproduced, quoting the artist's name, title, provenance, and document reference. Both authors therefore are to be congratulated on a joint venture that is not only a delightful book in which to browse but also, and more importantly, a valuable work of reference for the student of polar art. (H.G.R. King, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

THE ARCTIC: ENVIRONMENT, PEOPLE, POLICY. Mark Nuttall and Terry V. Callaghan (Editors). 2000. Amsterdam: Harwood Academic Publishers. xxxviii + 647 p, illustrated, hard cover. ISBN 90-5823-087-2. £78.00; US\$118.00; EUR 124.

What are the prospects, in an age of scientific specialization, for the cross-disciplinary regional reference book? In some respects it seems a nostalgic artifact. So far as the Arctic is concerned, it was not so long ago that the edited collection was a standard documentary form, offering an intellectual arcade stretching from polar lands and seas to fish and wildlife to social organizations, politics, and market economies. In other respects, however, the modern Arctic reference book points the way to the future and the possibility for a new level of insight through inter-disciplinary synthesis. Both attitudes can be posed squarely to this collection. It offers 22 chapters, all peer-reviewed, in a survey of current Arctic scientific knowledge.

It is, in the opinion of this reviewer, a reference tool that all Arctic research units will find useful to consult. At the same time, by its structure as much as its content, The Arctic offers some telling insights into the state of the field. This begins with the principles by which the volume is organized. There appear to be two schemas fighting for control of the same collection. The first, announced in the subtitle, suggests a predominant social-science perspective geared to contemporary politics and set in an environmental context. However this is at odds with the second schema, reflected in the four-part structure of the table of contents. Here the organizing categories are more sweeping, if traditional, domains: physical science, life science, social science, and anthropogenic impacts. Furthermore, the particular terminology suggests an incommensurability among the main parts, as geophysical processes contrast to biological and ecological science and social and political dimensions. It appears that interdisciplinary breadth is expected to emerge principally within the traditional cognate fields. Geology and glaciology fit with oceanography and meteorology; marine and terrestrial ecosystems with medicine and physical anthropology; social anthropology and demography with geopolitics and resource management. Some readers will be surprised by the short shrift accorded to economics. Yet one expects that the editors were drawn toward the ecumenical potential of hybrid frameworks like social anthropology, geopolitics, and political economy. For the most part, these fulfil the expectations, although more might have been made of the reasons behind these choices. The one unit that strains to break type is part four, which surveys anthropogenic impacts on the environment. Here the causal lines run both ways, as the science and politics of global change intersect frequently. The tensions between western and indigenous knowledge are probed, while both of these domains are captured in the vectors of Arctic environmental diplomacy.

Might there be other sub-disciplines that could further the integrative ambitions of the volume? Perhaps the art and science of impact assessment would serve well, as might the sustainable development paradigm, which is markedly understated in these pages. Despite the ambiguities of core terminology and the challenges of operationalizing the vision of sustainable development, it remains a paradigm of considerable creative potential. To conclude, there is much in this ambitious volume to tempt the student of the Arctic and to stimulate possibilities for cross-disciplinary work. If the presentation tends to follow familiar and traditional categories, it nonetheless provides a solid point of reference and departure for more adventurous synthesis. (Peter Clancy, Department of Political Science, St Francis Xavier University, PO Box 5000, Antigonish, Nova Scotia B2G 2W5, Canada.)