Jumping forward to what Mawer terms the 'Second Magnetic Crusade,' which culminated prematurely in the well-known heroics of Shackleton's Nimrod expedition, there are more entertaining vignettes. Enlivened by extracts from Mawson's published diaries, the reader follows in his steps with Alistair Mackay and the ageing T.W. Edgeworth David, given a helping head-start by the expedition's motor car, as they set off on what would become a sledge journey of epic proportions in search of the South Magnetic Pole. By 16 January 1909 they were almost too tired to capture their moment of triumph in a celebratory photograph, despite having left their cumbersome magnetic equipment behind them, but they raised themselves upright in a weary pose, before a featureless landscape. At 3.30 pm the Union Jack was hoisted and David read the words given to him by Shackleton: 'I hereby take possession of this area now containing the Magnetic Pole for the British Empire.' It was a memorable but ultimately useless gesture. After finally being reunited with their ship, they had trekked some 1260 miles — a huge distance, surely a record for man-hauled labour — yet they returned with scanty observations, and almost lost their lives in the process. In time, it would be demonstrated that they had fallen short of their goal; the elusive magnetic pole wandering beyond the explorers' reach once more. One could revisit many more episodes, and Mawer has certainly not exhausted the material available if one wants to study this crucial period of Antarctic exploration. He succeeds in pointing the way again, if a reminder was necessary, to the interesting stories that can be recovered if one redraws an account of the vibrant and contested culture of polar exploration.

One recalls Herschel's address before a British Association audience assembled at Birmingham in 1839. 'Great physical theories, with their trains of practical consequences,' he proclaimed, 'are pre-eminently national objects, whether for glory or utility.' Often the appeal to national pride was too successful, with scientific objects obscured or reduced to an afterthought. In the early twentieth century, the 'crusade' that Mawer describes was a series of expeditions and debates that were concerned as much about science as with the vindication of territorial claims, which were frozen only by the cooperative spirit of the Antarctic Treaty. This highly readable narrative of the ambition and adventure of these events, particularly of this crucial moment for the British Association and for exploration science in the mid-nineteenth century, reminds one how narrow the dividing line was between scientific cooperation and international rivalry. (H.W.G. Lewis-Jones, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge, CB2 1ER.)

LOOKING SOUTH: AUSTRALIA'S ANTARCTIC AGENDA. Lorne K. Kriwoken, Julia Jabour, and Alan D. Hemmings (Editors). 2007. Leichhardt, NSW: The

Federation Press. xxii + 227 p, illustrated, soft cover. ISBN 978-186287-657-6. £22.50; \$AU49.95. doi:10.1017/S0032247408007626

This book, edited by a group of academics, some with long Antarctic associations, consists of 13 chapters, each addressing an aspect of the subject, and a final summary chapter. All but one of the chapters is by active academics; the other is by Australian government Antarctic policy specialists. The work represents the product of two workshops, held in 2004 and 2005. It is unabashedly a call for the non-government sector (particularly this group) to be more heavily involved in Australian Antarctic policy development.

The volume is claimed in the introduction by respected Professor Stuart Harris to be a fitting follow-up to his own Australia's Antarctic policy options, published in 1984, but I believe this is an overstatement. The Harris volume, also following a meeting of 'experts,' included several contributions from government representatives and others with government experience; each paper was followed by a commentary. If it were true that this volume followed in the footsteps of Harris, one would expect that there had not been a serious policy review in the meantime, or that the Harris review established policy for the intervening 23 years. In fact, the Australian Antarctic programme has been the subject of continuing reviews (ad nauseam to those working in the programme).

Several of the authors in this work are well-known in Antarctic circles, but many are not yet, and it is a welcome sign that new commentators are entering the field.

A minor irritation is the ambiguity in the title about the difference between the policy in relation to Antarctica south of 60°S, and the sub-Antarctic north of that boundary. Issues of sovereignty in the two regions are very different and the volume refers regularly to the issue of claims of sovereignty on the continent.

Early chapters deal with more general legal and diplomatic issues, and later ones with more specific topics. The 'legal' chapters draw out the ambiguity of the claimant role within the Antarctic Treaty System (ATS) and, while questioning some aspects (including suggestions of an alternative international management regime), acknowledge the strength of subsequent elements of the ATS, especially the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR) and the Protocol on Environmental Protection to the Antarctic Treaty. CCAMLR is credited with being a highly innovative and effective instrument setting an example for other fishery management agreements — a strength of the ATS dependent on the provisions of the ATS for its successful development.

Haward and others have done it again! T.W. Edgeworth David's first name was Tannatt. This is important because David is emerging as one of the major influences in early Australian Antarctic activities. One could make several observations, but Figure 3 (page 29) deserves particular comment. 'Scientific interests' receive a small

box whereas 'green' and other interests are much more highly differentiated. The science box deserves more subdivision to be comparable, and to include references to the Australian Academy of Science (through which Australia links with the Scientific Committee on Antarctic Research (SCAR)), government institutions with scientific interest (Bureau of Meteorology, Geoscience Australia, etc), and the university sector, even the authors' own institution. SCAR, not strictly part of the ATS, rates no mention at all. There is also the implication that the minister speaks to his department (DEWR) via the Australian Antarctic Division (which is the reverse of reality).

Several later papers (tourism, fishing surveillance, seabird issues, whaling) acknowledge that Australia operates its Antarctic *policy* well but state that more could be done. Clearly it is true that Australia needs to pursue some marine issues (including research) more assiduously with more shipping resources. Some of the questions about *implementation* spring from moral exhortation rather than enforceable law and draw out the difficulty Australia faces as a claimant nation unwilling or unable to apply Australian law to non-Australians. Many issues also are highly relevant to considerations well beyond the Antarctic (for example, the Law of the Sea).

The sub-Antarctic Macquarie and Heard/McDonald Islands are considered non-contentiously, but the rabbit problem on Macquarie Island could have been developed further. Cats (now eradicated but with severe impact on other animals) are now overshadowed by rabbits (dramatic damage to vegetation and the physical environment with consequent impact on fauna) as a curse.

A continuing thread is almost a view of the ATS as an instrument that is ossified and needs to change quickly. I question this view. One of the strengths of the ATS is 'constructive ambiguity' about territorial claims, but one gets the feeling that the many authors/editors of this volume would like this ambiguity clarified. I believe that the whole issue is best left unresolved, as the ATS has it. The Powell/Jackson paper is a solid review showing that the Antarctic Treaty System has evolved effectively in recent years and continues to serve Australian and Antarctic interests well. It also draws out the currency role of science and reminds us that the AAD/government staff have access to many sources of information not yet available to external analysts/commentators (but government will also benefit from views of the external community).

I see two major gaps in the list of contributors. Science is the currency of credibility in the Antarctic Treaty System (ATS) but there are no science authors in the list, an oddity when the Antarctic Climate and Ecosystems Cooperative Research Centre (ACE CRC—the nominal home of most of the authors) is largely science-based. Likewise, there is only a single paper from the government perspective (Powell and Jackson) concerned with Australia's influence in the ATS. The volume would have had more authority if there were comments by the head of the ACE CRC and by a senior

representative of the relevant government department. A government statement would be particularly relevant in the light of a new and different Australian government (although this was not known as the book went to press).

There are several grammatical lapses and editorial control could have been a little tighter.

In summary, there is much useful material in this book, and it should be on the bookshelves of all involved in Antarctic policy analysis. Those in the Antarctic business, but not policy, should also be aware of the attitudes evolving in the law/diplomacy area and try to be involved in discussions around that evolution. The book is written mainly by authors in the academic community and would have benefited by more input from those active in policy direction within government. It would have been strengthened with a more considered discussion of the role of science, ideally with a contribution from the science community. That said, there are many suggestions and exhortations for government to examine, and I am sure officials will do so. (Patrick G. Quilty, School of Earth Sciences, University of Tasmania, Private Bag 79, Hobart, Tasmania 7001, Australia.)

THE FEROCIOUS SUMMER: PALMER'S PENGUINS AND THE WARMING OF ANTARCTICA.

Meredith Hooper. 2007. London: Profile Books. xx + 299 p, illustrated, hard cover. ISBN 978-1-84668-008-3. £20.00.

doi:10.1017/S0032247408007638

Understanding how scientists work is often hard for those with no scientific training. Too often the media picture scientists as rather mad boffins in white coats, cloistered in their laboratories and totally out of touch with the real world. This is a book to set them right, describing how a gifted ornithologist not only works himself, but how he inspires others to join his group and become as passionate as he is in the search for a better understanding of the way our world works.

This is the story of how a scientific quest has taken over the life of Bill Fraser, of how in his determination to understand Adélie penguins he has spent almost every summer for the past 30 years working at Palmer Station on Anvers Island. Fighting for funding and always battling against the weather, Fraser has been driving his team to collect long-term data of very high accuracy in order to test new hypotheses on how and why the numbers of Adélies in that area are declining.

The book comes out of the author's third visit to Palmer in the US Writer & Artists Program, and could only have been achieved because of her close working relationship with Fraser. Meredith Hooper is not a scientist, and it is clear that she worked hard to understand the thinking behind Fraser's approach and how his ability to synthesise data allows him to come up with novel interpretations. It also allowed her to ask the simple questions that are so hard to answer.