Nobel Peace Prize before he ever heard of a *Jeannette* relic), or history (Christiania becomes Oslo 10 years ahead of time and the appendices list the *Fram* expedition as occurring from 1883–1886). Commenting on the Soviet aviator Mikhail Vodopyanov's participation in the *Chelyuskin* rescue, we find this: "Certainly the brightest page in his biography," Leningrad told the author' (page 36). What on Earth does that mean? Did the city of Leningrad tell him something? Did he glean this feeling while walking around Leningrad? Is there a reason the Soviet name is used rather than St. Petersburg? This is personification personified.

It is disappointing that the sections dealing with the history of Soviet aviation do not go deeper than their Soviet-era secondary sources, particularly given the author's previous work in aviation history and his visits to Russia. This is especially true with regard to the momentous events on Rudolf Island in 1937-1938, when a series of Soviet aeronautical triumphs was almost immediately followed by an equivalent number of catastrophes. Without the base at Teplitz Bay and the airfield on Rudolf Island's ice dome — the northernmost point of land in the European Arctic — Soviet polar operations and the drift stations they supported, would have been impossible. The author could have benefited from a study of recent and well-written examinations of Soviet Arctic bureaucracy, such as McCannon's Red Arctic, as he sought to explain the machinations of the Central Agency for the Northern Passage (Glavnij severnij morskij put, or Glavsemorput).

Drift station is a missed opportunity to describe, in straightforward terms, the power of the Arctic in the Russian imagination. With a resurgent Russia laying new claims to a warming polar ocean, understanding this imaginative power as it affects the real decisions of the Russian bureaucracy has assumed new importance. Such understanding cannot be found here, because in the end the author could not decide where to place his emphasis: history of science? exploration? technology? climate change? international relations? In the end, it doesn't matter. The unyielding prose takes what should have been a helpful narrative and breaks it as quickly as Yamal carves up pack ice in mid-summer. (P.J. Capelotti, Division of Social and Behavioral Sciences, 103 Rydal Building, Penn State University Abington College, Abington, PA 19001, USA.)

Reference

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SOUTH BY NORTHWEST: THE MAGNETIC CRUSADE AND THE CONTEST FOR ANTARCTICA. Granville Allen Mawer. 2006. Edinburgh: Birlinn. 320 p,

illustrated, hardcover. ISBN 1-84158-501-7. UK£25.00; US\$39.95.

doi:10.1017/S0032247408007614

It is the morning of 1 June 1831. James Clark Ross unpacks his dip circle and after a moment of delay its needle swings to the vertical. Later that day, confident of his measurements, he piles rocks to form a cairn and plants his silk flag at the North Magnetic Pole. Ross knew that he could not fix a precise place for this wandering mark and, indeed, that such precision might be beyond the capability of his instruments, but the attainment of that spot, barren and empty, would quickly become the expedition's most celebrated achievement. Unlike his uncle John, who took much credit for the discovery and promoted himself vigorously upon their return to England in 1833, James was more reticent about their 'prize.' 'If popular conversation gives to this voyage the credit of having raised its flag on the very point,' he would later write, 'on the summit of that mysterious pole which it perhaps views as a visible and tangible reality, it can now correct itself as it may please; but in such a case...the very nonsense of the belief gives an interest to the subject which the sober truth cold not have done.'

The history of exploration is full of symbolic, perhaps futile, moments and gestures of performance such as this: conquests in the absence of any obvious features, the ambition to replace blank spaces on the chart with a few lines and yet another blankness. In this sense the study of terrestrial magnetism, and its extension as an observational field science, suffers from a similar aesthetic: invisible, intangible, difficult to grasp. In the course of Granville Allen Mawer's entertaining study, the reader is given glimpses of these elaborate acts of discovery through which explorers attempted to capture the interest of their supporters and the public at large, whilst sometimes exposing themselves to undue criticism within the scientific community in the process. As rituals of possession and territorial control — exercises both of symbolic and intellectual sovereignty — exploration was the ideal partner for the 'crusade' to discover the secrets of the magnetic Earth, and Mawer's book provides us with a very helpful point of entry into this subject. At its simplest, South by northwest is an account of the search for the South Magnetic Pole, a 'quest' that eluded the rival French, American, and British expeditions sent to find it in the late 1830s and early 1840s. It was a challenge that also defeated their successors — Ernest Shackleton and Douglas Mawson — at the turn of the century, before it became a target of increasing relevance (or irrelevance, you might say) to the progressive unveiling and claiming of the continent. The desire to be the first to attain the Magnetic Pole attracted disputes over priority, rival claims, scientific ridicule, and contrasting newspaper accounts; all of which provide the colourful background to Mawer's narrative of events.

The reader is also introduced to activities far from the field. Mawer pays due attention to the role of the British

Association for the Advancement of Science, for example, that annual peripatetic meeting of minds that marked the beginning of what might be called 'conference culture.' One of the British Association's earliest concerns was terrestrial magnetism, and allying observational science with exploration was a useful vehicle of positive publicity to attract new memberships. Mawer handles the technical details of terrestrial magnetism with considerable skill, not least in being able to make quite detailed and obscure theory clear to the reader. He also provides a helpful glossary, an accurate index, and a series of textboxes sewn throughout his narrative, which are full of accessible information and anecdotes. There is also a wellplaced facsimile of Louis Bernacchi's article on magnetic instrumentation and variations, an article that appeared first in The South Polar Times in 1902, just as Scott's crews were taking to the ice.

Mawer has written extensively on colonial history and many of his published works — histories of clipper ships and convict shipwrecks — speak well of his enthusiasm for maritime history too. Ahab's trade, for example, his exhaustive account of whaling in the South Seas from the heyday of the American fleet to its long decline in the twentieth century, garnered numerous history awards in Australia. He writes with a distinctly Antipodean flair, which makes for enjoyable reading, albeit that his search for a good story often overtakes substantial primary evidence. But to offer that as a major criticism of South by northwest would be unjust, a knee-jerk perhaps in favour of previous traditional histories, or a sign of academic rigidity in the reviewer, wary of anything too popular, too accessible. One is able also to forgive Mawer the occasional lapse toward flowery prose — 'the stories wind about each other in a double helix, the ladder links of which are the explorers and their armchair supporters,' one such fudged metaphor — because his writing is for the main part lucid and engaging. His account follows in the wake of some good books on this subject, namely, Nathaniel Philbrick's best-seller Sea of glory (2003), Alan Gurney's The race to the white continent (2000), and the often-overlooked Ross in the Antarctic, written by M.J. Ross and published by Caedmon of Whitby (1982). South by northwest is an entertaining book about a subject that has attracted wide attention, but one may feel it is a subject that has not had sufficient scrutiny.

Mawer reintroduces many of those characters familiar to followers of this period of Antarctic history. After an exacting Arctic saga with his uncle John, James Ross reappears as the dashing young officer able to enthuse scientific audiences and the Admiralty alike to support a venture toward the south in 1839. The reader finds the irascible Charles Wilkes wrestling a coalition of interests, private and public, in order to secure the command of the United States Exploring Expedition. And the attractive, but somewhat inept, Dumont d'Urville fights brigands in order to secure the Venus de Milo, before becoming a reluctant Antarctic explorer: 'while admiring the courageous efforts of Cook, Ross and Parry through

the ice, I had never aspired to the honour of following in their wakes, but on the contrary, I had always declared that I would prefer three years of navigation under burning equatorial skies to two months in polar climes.' There were few pleasantries in the years following, however, as each national expedition competed with the other in order to claim the continent. It may be true that Ross' attitude toward Wilkes, for example, deserves censure, but he escapes our retrospective criticism surely because the behaviour of Wilkes was even worse.

All these are familiar stories, based upon narratives and journals long poured over by historians, yet they are re-told here with welcome freshness. There is space for some neglected figures too. In early chapters, Mawer rightly draws one's attention to men of science, to the wellconnected and charismatic astronomer John Herschel and to Edward Sabine, veteran of John Ross' first expedition in search of a Northwest Passage in 1818 and a muchmaligned scientific adviser to the Admiralty, a man who later became the doven of established networks of metropolitan science by rising to the presidency of the Royal Society in 1861. In his early career, Sabine was a retiring officer, happier to retreat into his magnetic data than endure the soiréed-diplomacy required to bring so large a project as the 'crusade' was to its full completion. For that he needed Herschel's energy and James Ross' public profile as the celebrity explorer of the moment. In later sections, attention focuses on Eric Webb, Mawson's chief magnetician, who deserves to be more widely known both for the quantity and quality of his observations, and also Charles Barton, to whom the prize eventually fell when he cruised aboard Sir Hubert Wilkins to within 1.6 km of the South Magnetic Pole on 23 December 2000.

The reader joins James Clark Ross' men landing on the surf-pounded Possession Island, off Cape Adare. Toasts were drunk, cheers raised, and the flag planted, all whilst ankle-deep in the guano of a resident penguin colony. Of course, others shared this eccentric behaviour. In 1840 Dubouzet, First Lieutenant of Zélée, ordered that the tricolour be planted on a rocky islet, some five hundred metres offshore of what would later become Terre Adélie, so named after d'Urville's wife. A bottle of Bordeaux was emptied in celebration and some nearby penguins were secured for the cooking pot. The description of the event is worth quoting: 'Following the ancient and carefully preserved English custom, we took possession of it in the name of France. . . our enthusiasm and joy were boundless then because we felt we had just added a province to France by this peaceful conquest. If the abuse that has followed such acts of possession has often caused them to be derided as worthless and faintly ridiculous, in this case we believed ourselves to have sufficient lawful right to keep up the ancient usage for our country. For we did not dispossess anyone, our title was incontestable, and as a result we regarded ourselves as being on French territory. There will be at least one advantage; it will never start a war against our country.'

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