Book Reviews

NORWAY: A CONSISTENT POLAR NATION? ANALYSIS OF AN IMAGE SEEN THROUGH THE HISTORY OF THE NORWEGIAN POLAR INSTITUTE. Susan Barr. 2003. Oslo: Kolofon AS. 593 p, illustrated, soft cover. ISBN 82-300-0026-3. NOK 399. DOI: 10.1017/S0032247404213936

This titanic effort, at more than 400,000 words, is a vast and extended analysis of Norway's self-image as a 'polar nation,' that is, a nation that derives much of its national ethos in relation to the polar regions of the planet. Since Norway is the only country with territories in both north and south polar areas, such a meticulous analysis is highly appropriate. This image, however, is not explored through an examination that would be familiar to most foreigners, who equate Norwegian polar competence with such giants of exploration as Fridtjof Nansen, Roald Amundsen, Otto Sverdrup, and Bernt Balchen.

Instead, Barr, a British-born polar historian who lives in Oslo and was former Head of Polar History and Documentation at the Norwegian Polar Institute (Norsk Polarinstitutt or NPI) before the Institute moved to Tromsø in 1998, explores this theme through a minutely detailed history of NPI, Norway's primary organization dedicated to polar research, mapping, and logistics. Her aim is to explore whether or not this self-proclaimed 'polar nation,' one that prides itself on pre-eminence in polar research, has integrated this real or imagined pre-eminence with actual financial and infrastructure support at the private, academic, and, most importantly, state level. Barr has a secondary objective as well — to create an archive, 'a database of details,' for innumerable follow-on theses on the Norwegian polar experience.

In both of these areas Barr, who operates with equal facility amongst both English and Norwegian archival sources and had unrestricted access to the NPI archives for several years, has produced a masterwork of polar historiography. The closely spaced narrative at times takes on an almost saga-like directness: 'Sverdrup left from Braganza at the end of the month to return to Norway. The weather conditions were good this summer' (page 120). Norway: a consistent polar nation? succeeds comprehensively as well as analytically, and is marred only by a few technical shortcomings and one major flaw.

Barr's 'database' is focused on the leadership of the NPI from its inception in 1906 as a seasonal exploration of Svalbard led first by the urbane Gunnar Isachsen in association with Prince Albert I of Monaco. In 1911, this more-or-less annual cruise was named De norske statsunderstøttede Spitsbergenekspeditioner (The Norwegian state-supported Spitsbergen expeditions, or DNSS), and was led by the multi-faceted but flawed

Adolf Hoel. In 1920, DNSS became Norges Svalbard-og Ishavs-undersøkelser (Norway's Svalbard and Arctic Ocean Research Survey, or NSIU). Following Hoel's disgrace after liberation in 1945, the history follows the dual interregnum directorships of the solid Anders Orvin (1945–48 and 1958–60); shines new light on the ambitious but curiously vacant tenure of the highly respected but inexplicably distracted geophysicist Harald Ulrik Sverdrup (1948–57), when NSIU became NPI; and concludes with the modernization and increasing professionalization under the directorship of the geologist and former resistance fighter Tore Gjelsvik (1960–83), and the following years of anguish as NPI was moved first to a new ministry and then to a new city.

These are largely unfamiliar names to non-Norwegians, who associate 'Norway' and 'polar' with the aforementioned greats and with more recent additions to the Norwegian polar pantheon such as Børge Ousland. And therein lies a caution for those expecting another popular account of heroic polar expeditions. Nansen, Amundsen, Balchen, and Finn Rønne make only brief cameo appearances herein. They flit in and out of the narrative as peripheral specters to the main examinations of the overarching issues of state versus private expedition support; the changing geographic and scientific agendas of NPI; and the nagging, century-long tension between those who favored a main polar institute centered in the capital of Oslo and various, persistent, and ultimately successful interest groups who agitated for the northern city of Tromsø as the logical home for NPI.

This latter issue, while outside the strict 1906–83 boundaries of the main Hoel-Orvin-Sverdrup-Gjelsvik history, is examined in great and painfully personal detail here. The ultimate decision, to pull out of Oslo bit by bit over a decade even as a doctor diagnosed the staff as suffering from stress symptoms similar to those arising from 'a harrowing divorce or even a death in the family' (page 525), leaves one perplexed as to why the Norwegians would build up an internationally respected institute in Oslo over more than 80 years only to abruptly dismantle it, scatter its staff, and relocate across the country only for the seeming purpose of relocation itself. Gaining a few kilometers of proximity to Longyearbyen even as the Institute was equally occupied with Antarctic matters — hardly seems worth the trauma of lost national expertise.

As for earlier history, Barr sees several differences in the approaches to polar work of the famous Norwegians versus that of the almost forgotten Hoel. The polar heroes were almost exclusively supported through private, as opposed to government, grants. Hoel spent his career hiking the government route, and his appeal to those authorities was vastly different from Nansen or Amundsen. The great explorers were after 'firsts,' to be acclaimed with banquets, medals, speeches, and books, while Hoel sought specifically to create Svalbard — *terra nullius*, when he started his work — as a kind of Norwegian polar preserve for exploration, science, resource extraction, and tourism.

Forty years after his death, that is almost precisely what Norway now has. As Barr writes, 'his focused personality became so captivated by the area after his first visit that he could not let it go' (page 20). Yet even in Svalbard, the first of regular Norwegian science expeditions, under the leadership of Isachsen, was financed by a foreigner, the esteemed Albert I. Forever after, each succeeding NPI director would gather only limited success in staffing, funding, and infrastructure, in part because the dichotomy between national interest applied work (laying aids to navigation or mapping coal seams, for example) was never reconciled with the more nebulously defined national interest pure science research.

One could make the argument that in the first half of the twentieth century a small group of Norwegians such as Hoel in Svalbard, Helge Ingstad and Søren Richter in northeast Greenland (or Eirik Raudesland — Eirik the Red's Land — as the Norwegians preferred it), Lars Christensen in Antarctica, and Hjalmar Riiser-Larsen in Franz Josef Land (briefly and unsuccessfully renamed Fridtjof Nansen Land — in that case by the Soviet Union, not Norway) were trying to engineer a second Viking expansion — albeit a bit farther north, much farther south, and a thousand years after the first. Between the two of them, Hoel and Ingstad chaired the Norway Polar Club for more than half a century (1933–85).

Hoel's bureaucratic stamina was prodigious, and contributed mightily — despite funding increases that had more in common with Svalbard's glaciers than modern expeditionary realities — to eventual Norwegian sovereignty over Svalbard in 1920 (effective as of 1925). Hoel grossly overestimated the coal deposits on Bjørnøya (page 128), but Norway got the island as part of Svalbard, and Barr hints that this may have been the very point of the rosy estimates. Hoel himself viewed Norwegian sovereignty, when it came, with an admixture of pride and regret — never again would a scientist or prospector voyage to Svalbard with the same thrill of stepping foot in an untamed no-man's-land.

After securing Svalbard, Hoel's annual surveys were institutionalized as NSIU, as much to guard against any lessening of official interest in Svalbard as to regulate and control foreign expeditions and business interests. It also allowed Hoel to shape NSIU into a basket of responsibilities that he personally found most engaging (geology and oceanography from a dedicated research vessel) from those he successfully jettisoned (fisheries research and meteorology).

Hoel then turned his sights on East Greenland, Franz Josef Land, Jan Mayen, and south to Antarctica, with mixed results. An international tribunal left Greenland to Denmark in the early 1930s, and the Soviet Union exerted

its claim to Franz Josef Land. Norway eventually gained Jan Mayen, as well as a slice of Antarctica (Dronning Maud Land), but government resources to NSIU and later NPI to survey, explore, and administer these lands never matched the Hoelian vision of a greater polar Norway.

As late as 1937, when the Norwegian Parliament, or Storting, finally gave NSIU total state funding, NSIU was still being called 'only a temporarily-established institution' (page 185). Staff positions suffered from too many responsibilities and a lack of clarity in the civil service, and from the typical sexual divisions that led to the strict division between professional (male) labor and staff (female) labor. In one brilliantly telling detail, Barr notes that the '30-year-old female cleaner/caretaker/messenger also had the job of snow clearing around the office building and down the street' (page 180). No indication here that the hardy male polar explorers chipped in with their Arctic expertise.

Given this, and despite a frequently hostile Storting, what Hoel accomplished on light staff and minimal resources was nothing short of extraordinary. *The place-names of Svalbard*, NSIU's seminal gazetteer compiled by Orvin, was both a political as well as a geographic accomplishment. The savvy Hoel had all names rendered in *nynorsk* to secure the support of an influential *nynorsk*-speaking state minister.

Hoel cooperated with the German occupation to the extent that he supplied aerial photographs of Svalbard, supported expeditions to emplace weather stations in East Greenland, and served as a minor functionary in Vidkun Quisling's illegal regime, apparently in several hopes: to secure East Greenland for Norway when Germany won the war, to protect his two institutions, NSIU and the University of Oslo, and to secure Svalbard coal for Norway but not for Germany. As Barr drily notes: 'His attitude can be said to have been naïve' (page 28). This naïveté cost him dearly after the war, when his earlier calls for polar 'living space' came back to haunt this man with the now unfortunate name Adolf and the initials AH. Hoel was sentenced to one and a half years of forced labor for his role in the occupation, although he continued to write on polar subjects, including the three-volume Svalbards historie 1596-1965.

Barr notes that the war left Norway, especially north Norway, prostrate, and left enormous complications for NSIU (as one example, the survey vessel *Svenør* was damaged by German grenades in Svalbard and was not back in even marginal service for three years after the war). In addition, between 1945 and 1960, other, larger nations, especially the US and USSR, began to flood the polar regions with technology, expeditions, and bases, much more activity than Norway could or would have expended even in a prosperous peacetime. (It is worth noting, however, that Norway can claim a large part of this credit as well. Without the Norwegian experts Bernt Balchen in the north and Finn Rønne in the south, US efforts after the war would have fallen back onto the discredited offices of Richard E. Byrd.)

Norway attempted to salvage the situation in good measure by recruiting homewards H.U. Sverdrup from Scripps Institution of Oceanography in La Jolla, California, and renaming NSIU as NPI. Sverdrup's tenure resulted in eight new positions but an essentially static budget from 1948 to 1958, at the same time that the Geological Survey of Norway's budget tripled. This was far short of Sverdrup's vision of a hard-research institution, and along with considerable ancillary analysis Barr lays to rest the mini-controversy as to whether NPI was a new institute or a continuation of NSIU.

Having lured him home to take advantage of his worldwide scientific reputation, the authorities seemed to be content with that. As Barr writes: 'before the start of NP [in 1948], the authorities responsible for the Institute knew that it was being given too small resources to meet its challenges' (page 278). Occupied with two major expeditions to Antarctica and with myriad non-NPI jobs and responsibilities, his directorship cut short by his early death in 1957, the Sverdrup experiment seems to have been a failure. His scientific purity, however, placed his name on the new NPI facility at Ny-Ålesund, rather than that of the more relevant but discredited Hoel, or the herobureaucrat Gjelsvik.

After Orvin once again held down the fort for three years, Tore Gjelsvik was the surprise choice to become director, and remained for nearly a quarter century. A hardened resistance fighter with connections up and down the bureaucracy, Gjelsvik was a steady hand during the strategic challenges of assisting the management of Svalbard in the Cold War, which included rumblings in the early 1970s of a possible Soviet invasion of Norway to secure the approaches to the North Atlantic (bordered on the north by Sørkapp in Svalbard); a new research village in Ny-Ålesund; a new environmental and cultural protection attitude; and a failed scramble for oil in Svalbard that threatened to outdo the scramble for coal in 1906–11.

No oil for Svalbard, but the Ekofisk strike in 1969 made Norway a wealthy nation, and some of this largesse flowed to the Arctic, where new modes of Arctic transport were coming on line. The helicopter revolutionized field research and, finally in 1981, a dedicated NPI research vessel, *Lance*, arrived — more than seven decades after Hoel began agitating for just such a tool.

As Barr writes, the 40-year-long attempt to relocate NPI to the grounds of Nansen's Lysaker estate Polhøgda (The Polar Height) outside Oslo finally ended in the early 1970s and largely sealed the fate of NPI in Oslo. The question of applied versus pure research was still not settled, and perhaps never could be, even as NPI shifted from the arguably more applied Ministry of Industry to the more research-oriented Ministry of Environment. But the question of moving to Tromsø could not be held at arm's length forever, and in 1993 the government ordered the Institute to begin packing up. After nearly a century of denying the Institute the resources necessary to cover its global responsibilities, the relocation produced 45 new

positions overnight, leaving Barr to note that 'if the capital city of a self-designated "polar nation" could not be entrusted with polar research, what kind of polar nation was it really?' (page 520).

This massive work will supply graduate theses in the histories of science, exploration, and organization for decades to come; one pops up almost within each paragraph. This great achievement suffers from a title as off-putting as the earlier Norges Svalbard-og Ishavs-undersøkelser was to those who transformed it to the user-friendly Norsk Polarinstitutt in 1948. Either 'Norsk Polarinstitutt: a history,' or 'Norsk Polarinstitutt: image and reality in polar research, 1906–98,' would have simplified the task of achieving a wide audience for this important work. The index consists for the most part in long strings of page numbers for unhelpful subject headings (and omits names like Balchen, Nobile, Ronne/Rønne, and Sjølander; and while the primary source material is unquestioned, the secondary bibliography is missing a few of the usual suspects penned by the likes of Balchen, Binney, Conway, Mittelholzer, and Nobile, which would be helpful to future students and a more general audience.

These minor quibbles are nothing compared to that major flaw that for all appearances resided outside the author's control. An institutional history as important as this, written by NPI's own historian, should have been published by NPI itself, in a handsomely produced trilogy that corresponded with the tenures of Hoel (Vol. I), Orvin-Sverdrup-Orvin (Vol. II), and Gjelsvik and the eventual move to Tromsø (Vol. III). Whether the current leadership of NPI has no use for self-reflection, or whether the Tromsø move put them beyond their historic responsibilities to document and examine their own activities through their highly-regarded skrifter, meddelelser, and polarhåndbok series, are shameful questions that should never have had to be asked when one considers the enormity of this effort. (P.J. Capelotti, Division of Social and Behavioral Sciences, 103 Rydal Building, Penn State University, Abington College, Abington, PA 19001, USA.)

ENCYCLOPEDIA OF ANTARCTICA AND THE SOUTHERN OCEANS. Edited by B. Stonehouse. 2002. Chichester: John Wiley & Sons. xi+391 p, illustrated, hard cover. ISBN 0-471-98665-8. £235.00; US\$375. DOI: 10.1017/S0032247404223932

The librarian at the Geophysical Institute tells me that there has been a rash of scientific encyclopedias published in recent years and she neither knows nor understands why. Judging by the cost of this book, perhaps money is the reason. This is an expensive book by any standard. The price leaves a lasting impression.

Here are a few basic facts and figures about what the buyer receives for 58p or 93¢ per page. First, there is not much colour. Other than the iceberg photograph on the cover of this single volume, colour is used only for the three regional to continental scale, folded maps that are

glued in at the center of the book. The Antarctic Peninsula is featured in one of those maps, the continent in the other two. The latter maps are somewhat unusual inasmuch as the continent has been split in two along 90°W/90°E, with half of the continent printed with a scale on one side of the fold-out and the other half printed without a scale on the other side. Heavy use will quickly damage these maps, which are less useful than a single map of an undivided continent.

Second, there are many black-and-white illustrations. I counted the following: 103 maps at a variety of scales, from local to regional to continental; 62 photographs; 26 diagrams and graphs; and 15 tables. The maps, diagrams, and graphs have a uniform and pleasing style, and the maps each have a scale, north arrow, and latitude and longitude ticks. If there was greater use of colour I would describe the book as lavishly illustrated. As it is, it is amply illustrated but on low-quality paper with a poor binding.

Third, according to the blurb on the back cover there are over 1,300 entries. There are also five appendices, a 'Further reading' list, and eight study guides. The appendices give the full text of the Antarctic Treaty and subsequent agreements, conventions, and protocols. Cross-referenced to appropriate entries, the study guides 'help readers to follow learning paths through the Encyclopedia.' And last, but not least, there is an A–Z listing of entries.

The editor has no control over what the publisher chooses to charge for a book. The editor has more control over the content and organization of a book. Here, too, I see numerous problems, beginning with the definition of what constitutes the southern oceans. For the purpose of this encyclopedia, they are defined by the Antarctic Convergence. It is described as 'winding sinuously between latitudes 45°S and 60°S' (page 74) and 'a zone of a few km wide winding between 47°S and 62°S' (page 374). To compound the error of having contradictory definitions of the Antarctic Convergence, there are entries for islands such as Tristan da Cunha (37° 05′S) and Gough Island (40° 21′S) located hundreds of kilometers to the north of 45–47°S.

In an encyclopedia of Antarctica and the southern oceans I expected to find individual entries for topics such as biological oceanography, currents, marine ecosystem, ocean productivity, physical oceanography, thermohaline circulation, and water masses. Instead, apart from an individual entry for 'Convergence, Antarctic,' all oceanographic information is contained in the single entry for 'Southern Ocean.' There you will also find some information on sea-ice ecology and productivity, which play a vital role in Southern Ocean productivity.

There is an entry for 'Sea ice' that focuses entirely on physical characteristics and processes. It mentions that 'floes are mobile, drifting freely with the winds and currents,' but does not give any ice-velocity values. Elsewhere in the encyclopedia there are entries for 'Pack ice' and 'Fast ice,' but there is no room for 'Ice concentration,' a fundamental term that describes the

amount of ice (and thus open water) in the pack ice. The marginal ice zone and the pancake ice, which is so characteristic of this wind-, wave-, and swell-dominated transition from open ocean to pack ice, are omitted. Platelet ice, only occasionally observed in the Arctic but common in Antarctic waters, where it results from the outflow and adiabatic supercooling of cold, low-salinity water from below ice shelves, is also absent.

'Lakes, Antarctic' mentions that they have a thick ice cover, but neither gives thickness values nor mentions that Antarctic lake ice is often perennial, unlike lake ice in the Arctic, where seasonal ice is predominant and perennial ice is rare. Probably the most unusual lake ice in the world, the >200 m thick layer at the base of the ice sheet immediately above Lake Vostok, is not mentioned at all in 'Vostok, Lake.' 'Lake ice' deserves its own entry in view of the fact that it plays a vital role in creating the unusual physical and chemical conditions in Antarctic lakes that support flourishing communities of microorganisms that 'may offer insight into the first stages of the evolution of life on Earth,' and perhaps also insight into possible life on other planets and their moons.

The RADARSAT Antarctic Mapping Missions of 1997 and 2000 are not mentioned at all. Significant technological achievements that will yield valuable scientific information for years to come, they deserve an entry. The application of remote sensing in Antarctica is described in 'Ice monitoring by remote sensing' and 'Satellite imagery.' Curiously, each entry is limited to the ice sheet and glaciers, with considerable overlap and redundancy. Remote sensing and satellite images are also widely used in sea-ice, ocean, meteorological, and geology studies. A variety of satellite images could have been used throughout the encyclopedia to illustrate ice streams, ice shelves, calving icebergs, ice tongues, sea-ice maximum and minimum extent, sea-ice drift, ocean colour and productivity, cloud cover, storms, nunataks, and the Transantarctic Mountains, to name but a few possibilities.

I have been critical of some of the scientific content and its organization that is most familiar to me. I am sure that scientists from other disciplines would be too. To be fair to the editor, and his advisory editors and contributors (a Who's Who of UK polar science with a few overseas individuals for good measure), he does make it clear that 'this encyclopedia is intended for general readership as much as for scholars and researchers' (page xii). Also, in compiling an encyclopedia for a continent that intrigues scientists and the general public alike, you inevitably cannot please all of the people all of the time.

Nevertheless, there is room for improvement. If a second, revised edition of the encyclopedia were ever to be published, the problems with the science content and organization must be addressed for the benefit of the general reader, scholar, and researcher alike. There should also be fewer entries for dead men, thereby increasing space available for new and updated entries on other topics. While a number of minor names could be safely dropped, I recommend the addition of A. P. Crary

(the internationally renowned bi-polar geophysicist and science administrator, and a most surprising omission) and the inclusion of Virginia Fiennes (sadly she died in February 2004) as the first female entry. 'Buildings and construction,' 'Philately and postal services,' and 'Transportation' are just a few possible additional entries about topics that I am certain would interest a broad spectrum of readers.

Notwithstanding the above, I enjoyed reading the book. I learned many new things and satisfied some long-standing questions. For example, if you too have ever wondered about the abbreviation in Mac. Robertson Land, go to page 213 and wonder no more. This is an atlas, gazetteer, dictionary, and encyclopedia all rolled into one, a fairly comprehensive reference work full of useful information covering a wide range of disciplines. It will serve as a useful primary information source or the starting point for initial information and guide to further reading for the general reader. Antarctic scholars and researchers could safely bypass it and go directly to their usual sources. (Martin O. Jeffries, Geophysical Institute, University of Alaska Fairbanks, 903 Koyukuk Drive, Fairbanks, AK 99775-7320, USA.)

SHIPS OF WOOD AND MEN OF IRON: A NORWEGIAN-CANADIAN SAGA OF EXPLORATION IN THE HIGH ARCTIC. Gerard Kenney. 2004. Regina, Saskatchewan: Canadian Plains Research Center, University of Regina. xii + 135 p, illustrated, soft cover. ISBN 0-88977-168-5. Cdn\$14.95.

DOI: 10.1017/S0032247404233939

It's quite fitting that the same year in which the achievements of the Norwegian explorer Otto Sverdrup (1854-1930) are being commemorated with stamps jointly issued by Canada, Norway, and Greenland, should see the publication of a book mainly devoted to Sverdrup's exploration of the Canadian high Arctic from 1898 to 1902. About 70% of Gerard Kenney's slight volume relates the story of the Second Norwegian Polar Expedition with the famous ship Fram (Forward), commissioned by Fridtjof Nansen for his planned drift across the polar basin in 1893–96. The remainder of the book provides brief accounts of the northern explorations of other wooden ships and men of iron: A.P. Low and Neptune (1903-04), J.E. Bernier and Arctic (1904–25), the Canadian Arctic Expedition (1913-18) led by Vilhjalmur Stefansson on board the doomed Karluk, and Henry Asbjorn Larsen and the Royal Canadian Mounted Police vessel, St Roch.

Although often overshadowed by his countrymen Nansen and Roald Amundsen, Otto Sverdrup's accomplishments in northern exploration are truly remarkable. In 1888, Sverdrup accompanied Nansen on the first east-to-west crossing on skis of the Greenland Ice Cap. Immediately upon their return, Nansen began planning his polar drift expedition, with Sverdrup's assistance. Along with Nansen, Sverdrup had a strong hand in supervising the construction of *Fram* and captained her during the

three-year drift in the polar basin. Two years after his return from the polar drift, on 24 June 1898, Sverdrup set out from Norway onboard Fram, along with a crew of 13 Norwegians, one Dane, and a Swede. Financed by Consul Axel Heiberg and the Oslo brewers, the Ringnes brothers, their objective was to explore the northern coastline of Greenland, but fate had different plans in store for them. Encountering heavy pack ice in Kane Basin, Sverdrup guided Fram into a sheltered bay in Rice Strait on the east coast of Ellesmere Island, which they named 'Frams Havn' (Fram Harbour). From this base, Sverdrup and his men spent the autumn, winter, and spring of 1898-99 hunting walrus, seals, and muskox, and exploring and mapping the Bache Peninsula region and across to Bay Fiord on the west coast of Ellesmere Island. The events of their first year in the Canadian Arctic included a brief encounter with the American explorer Robert E. Peary, who was overwintering onboard Windward at Cape Hawks to the north of Rice Strait, and the suicide of the doctor, Johan Svendsen, at an outpost camp named Fort Juliana on the south coast of Knud Peninsula.

Departing from Fram Harbour in August 1899, Sverdrup and his crew found the route northward into Kane Basin still blocked by ice and so they steered southward to Jones Sound. Here they would spend three more winters: one in Harbour Fiord and two in Goose Fiord. One can imagine the crew's disappointment at facing a fourth winter in the Arctic, when the ice in Goose Fiord during the autumn of 1901 prevented them from reaching the open sea. From 1899 to 1902, Sverdrup and his men carried out several awe-inspiring spring and summer sledge expeditions from Fram, during which they explored and mapped more than 200,000 km² of the central high Arctic, including most of the west coast of Ellesmere Island and the islands named by Sverdrup for the expedition's benefactors: Axel Heiberg Island and Amund and Ellef Ringnes islands. Sverdrup took possession of the latter islands in the name of the Norwegian king, which strained Norwegian/Canadian relations for decades, until Norway formally recognized Canada's title to the islands in 1930 and the Canadian government paid Sverdrup for his maps and documents from the 1898-1902 expedition. The islands discovered and named by Sverdrup are known collectively today as the Sverdrup Islands.

Kenney describes how Sverdrup's discoveries and land claims for Norway 'shocked Canada out of its complacency' (page 92) and acted as a catalyst for the 1903–04 expedition to Hudson Bay of A.P. Low to assert Canada's sovereignty to the eastern Arctic. The task of affirming Canada's title to the Arctic islands was then taken on by Joseph Elzear Bernier, who made many government-sponsored and private trips to the Arctic between 1904 and 1925.

The four pages devoted by Kenney to the Canadian Arctic Expedition, 1913–18, seems to be an awkward fit in a book about iron men and their wooden ships. Stefansson was not aboard *Karluk* when she began drifting in the

Beaufort Sea, westward to Siberia, where she was crushed in the ice. Captain Robert Bartlett was the true hero of the *Karluk* saga.

Kenney ends his book with a brief discussion of Henry Larsen and his 20 years of Arctic patrols on the specially built RCMP vessel *St Roch* and an account of the Canadian government's settlement with Norway and Sverdrup concerning ownership of the Sverdrup Islands.

Ships of wood and men of iron was clearly a labour of love for the author, who shows a deep respect for these northern explorers of the late nineteenth and early twentieth centuries. As an editor, I would have liked to see greater care taken in the production of the book. A diligent copy-edit and proofing would have caught the grammatical and spelling errors. The maps are a most welcome (and necessary) addition to any book on exploration, but these too should have been carefully proofed to correct the misspellings and misnamings (for example, on Map 2, Hendriksen Strait has become a Sound; on Map 3, Cairn, Gale, and Paget Points have each become 'Head'). Kenney quotes liberally from Sverdrup's own account of the Second Norwegian Polar Expedition (1904), but a check of several quotations revealed minor discrepancies with the 1904 English version. The quotes do, however, match the adapted text of T.C. Fairley's (1959) book, Sverdrup's Arctic adventures, which may actually be their source.

For readers with little or no knowledge of Otto Sverdrup's importance to Canadian history and to the Arctic exploits of Low, Bernier, and Larsen, Gerard Kenney's book will be an informative and enjoyable introduction to these explorers. Sverdrup deserves to be as well known to Canadians as he is to Norwegians. Canada Post's release this year of a commemorative stamp of *Fram* in winter quarters and the publication of Kenney's book should bring long overdue recognition to a man described by Henry Larsen (quoted by Kenney, page x) as 'the most competent and practical of all the Norwegian explorers of that era.' (Karen McCullough, The Arctic Institute of North America, University of Calgary, 2500 University Drive NW, Calgary, Alberta T2N 1N4, Canada.)

References

Fairley, T.C. 1959. Sverdrup's Arctic adventures. London: Longmans, Green and Co.

Sverdrup, O. 1904. *New land: four years in the Arctic regions*. 2 vols. London: Longmans, Green and Co.

HAN: PEOPLE OF THE RIVER. Craig Mishler and William E. Simeone. 2004. Fairbanks: University of Alaska Press. xxxviii + 297 p, illustrated, soft cover. ISBN 1-889963-41-0. US\$24.95.

DOI: 10.1017/S0032247404243935

This modest volume was a collaborative effort between Alaskan and United States federal agencies as well as between the authors and the descendents of the native communities that are the subject of the study. The book was commissioned by the Alaska Department of Fish and Game and the United States National Park Service as part of their responsibility to evaluate and interpret the Yukon-Charley Rivers National Preserve created following the 1980 passage of the Alaska National Interest Lands Conservation Act. The National Park Service's current interpretation of the preserve (http://www.nps.gov/yuch/home.htm) makes scant mention of the aboriginal inhabitants of the territory. In that respect, this work will be a welcome addition. The authors, a retired (Mishler) and a current (Simeone) staffer of the Alaska Department of Fish and Game, based their text on ethnographic interviews and some limited participant observation, as well as on previously published works and archival sources. Their efforts received the blessings of Han leaders.

The Han are a linguistically distinct group of sub-Arctic Dene Indians whose traditional lands lay along the upper Yukon River and straddled what has become the international border between Canada's Yukon Territory and Alaska. Today, there are Han communities on both sides of the border — in Eagle and Fairbanks, Alaska, and in Dawson City, Yukon. Han in the Yukon refer to themselves as the Tr'on Dek Hwech'in First Nation.

In the mid-nineteenth century the Han were loosely organized in three or four extended family groups or bands associated with particular winter encampments, much like the -miut distinctions made by Inuit. There was some fluidity between the local bands due to marriage and other causes. In addition the authors documented several cases in which individuals from neighbouring Dene groups came to reside among them, and, thus, became Han. While today it is frequently important to identify individuals as Han, Gwich'n, or Tutchone, or to distinguish between Canadian First Nations and Alaska native peoples, the limited evidence presented in this volume suggests that these ethnic and cultural distinctions were not so firmly asserted before the existence of an enforced international border, aboriginal land claims settlements, and exposure to EuroCanadian and EuroAmerican concerns with genetic ways of reckoning kinship.

The Han came into direct and sustained contact with non-native missionaries, traders, and colonists only in the 1870s — relatively late in the colonization of North America — although manufactured trade goods and unfamiliar infectious diseases reached the Han much earlier through indigenous trade routes. Prior to the establishment of trading posts in their territories, the Han themselves may have benefited from their occupation of a central node in indigenous distribution networks. Critically, the Han were in the path of the 1897-1900 Klondike Stampede, which brought as many as 50,000 fortune seekers onto their lands. In fact, the name Klondike appears to be an English corruption of Tr' ondëk, the Han name for the site of a seasonal village at the mouth of the Klondike River near present-day Dawson City (Tr'on Dek Hwech'in means 'the people of Tr'ondëk'). Much has already been written about the impact of gold rushes and other catalysts of massive population influx on indigenous peoples, but unfortunately Mishler and Simeone have almost nothing to say about the social implications of the Klondike Gold Rush and the Han response to that critical event. Rather they present the gold rush as an uninterpreted series of events. Perhaps the historical or even archaeological sources have nothing to say, or more likely, the emphasis on interpreting an aspect of United States' history for visitors to a United States cultural site limited the scope of the present work, but I would have welcomed a discussion of the processes that led to the establishment, and later abandonment of the all-native village of Moosehide outside Dawson City. Or a discussion of the social interactions between the newcomers and the Indians. The authors provide some hints — the miners held dances to which only Indian women were welcome, the Han band led by Chief Isaac, at least for a time, was the primary supplier of meat for the residents of Dawson, and the availability of work on steamboats led Han men to abandon fur trapping and trading — but they offer no extended discussion or analysis of the social implications of these activities. Especially frustrating is a partial list of by-laws enacted in 1921 by the first village council of Moosehide. The laws, as reported, reflect an effort by Han leaders to exert extreme control over the movements and behaviours of Han men and women both in and outside of the community, banning alcohol, forbidding women from interacting with non-natives, limiting the length of time men could spend in Dawson, encouraging Han to report transgressors to the council, and imposing fines on violators. The authors note that the laws were 'remarkably intrusive, [but] were intended to keep families together, limit the Moosehide people's access to Dawson, and enforce standards of behavior' (page 23). Apparently they were also unsuccessful. Such an effort at legalistic methods of social control reflects not only a social system out of control, but also acceptance of imported, if imperfectly understood, methods for maintaining order.

Also missing from the book is a nuanced discussion of how and in what circumstances the international border became meaningful to the Han. The laws and policies directed at Indians differed between the United States and Canada, and over time the differences in Indian administration encouraged divided groups to regard themselves as socially and politically distinct entities. In some instances the border became a barrier to Han. But in at least one case reported by the authors the border provided the Han with a refuge of sorts. During the early part of the twentieth century, Canada criminalized and staunchly enforced a prohibition on potlatching. The Canadian Han did not quit Canada, but their leader, Chief Isaac, 'gave' his band's songs and dances to Tanacross relatives in Alaska for safekeeping and so that they would continue to be performed. The songs and dances have recently been returned. Also, for reasons that are not explained, the Tr'on Dek Hwech'in of Dawson City have enrolled Alaskan Han as beneficiaries of their 1999 landclaims settlement.

Despite these shortcomings, two particular strengths of the book deserve mention. The book is illustrated with a large number of beautifully reproduced contemporary and historic photographs. Furthermore, using the photographs as primary data the authors have traced changes in Han clothing styles and aesthetics. The book would be substantially stronger had they offered the level of analysis they give to clothing to other topics touched on. (Pamela Stern, Department of Anthropology, University of Waterloo, Waterloo, Ontario N2L 3G1, Canada.)

ANTARCTIC BESTIARY. Monika Schillat. 2002. Ushuaia: Editorial Fuegia. 43 p, illustrated, hard cover. ISBN 987-96999-2-0. EURO 10.

DOI: 10.1017/S0032247404253931

A bestiary is essentially an allegorical literary work in which human beings are satirised as beasts, birds, and fishes. Many examples were produced in monasteries and other centres of learning. The genre was popular from the fifth century until the Middle Ages and, towards the end of that period, examples were often lavishly illustrated with miniatures. Nowadays, of course, they command high prices from collectors when they appear at auction.

The present work is a reminder that the art of bestiary is not completely extinct. It is a very good-humoured, and rather whimsical, attempt to imagine 'what would have happened if a group of medieval monks and scholars had reached the White Continent.' The author, Monika Schillat, teaches at a college in Ushuaia, Argentina, and is well known as the writer (with Maria Teresa Luiz) of important works on the history of Tierra del Fuego, which are, regrettably, only available in their original Spanish. But in this case she is working in a much lighter vein and one that is almost guaranteed to raise a smile among readers.

An essential feature of a bestiary is that it includes both real and imaginary animals, and this bestiary is no exception to the general rule. Each page contains illustrations, painted by the author herself, together with a small amount of text, which is sometimes in Latin. The artwork has a somewhat naive quality that is immediately attractive, and the text is always informative and amusing. Examples of real animals include the 'mollymauk,' which needs 'neither continent nor islands to rest its wings,' the leopard seal, 'a beast most cruel,' killer whales, 'delphines,' and several types of penguin. The imaginary beasts include dragons, the 'most greatest of all serpents' and 'sirenes,' which 'draweth shipmen to peril by sweetness of song.'

To sum up: a charming little book in a most attractive binding. Those about to embark in Ushuaia for the Antarctic Peninsula could do worse than purchase a copy. It might make their voyage across the Drake more pleasant! (Ian R. Stone, Laggan Juys, Larivane Close, Andreas, Isle of Man IM7 4HD.)

EXPLORING POLAR FRONTIERS: A HISTOR-ICAL ENCYCLOPEDIA. William James Mills. 2003. Santa Barbara, CA: ABC-CLIO. 2 vols: xliii + 388 p and x + 409 p, illustrated, hard cover. ISBN 1-57607-422-6. \$US185.00.

DOI: 10.1017/S0032247404263938

William Mills was for 15 years librarian, and most recently keeper of collections, of the Scott Polar Research Institute, Cambridge. This is perhaps the world's largest polar library and, conjoint with the Institute's archives, arguably its most comprehensive assembly of polar literature and information. During his tenure William took every step allowed by limited budgets to catalogue the library's contents electronically, and make its resources known and available to scholars throughout the world. Simultaneously he developed a personal interest in the history of polar exploration, and four years ago began to write an encyclopaedia that he intended would make the stories of polar exploration available to a wide public.

The result is a remarkable work, recommended for both its comprehensive coverage and its readability. The two volumes of Exploring polar frontiers start with six pages listing the contents in alphabetical order, an eightpage listing of expeditions in chronological order, a four-page listing of entries by category (two categories: geographical location and subject), and 20 pages of blackand-white maps (eight Antarctic, 12 Arctic). Already this adds up to a useful, quick-reference outline of polar history, with a matching set of maps. A brief twopage author's introduction includes a list of colleagues who helped with the writing. The main text is arranged alphabetically, starting with an account of Luigi, Duke of the Abruzzi and his Arctic expedition of 1899-1900, and ending with a brief but comprehensive account of Zavodovski Island in the South Shetland Islands. The work is rounded off by six pages of glossary, a ninepage chronological listing of polar expeditions by region, well over 1000 selected references, and a 26-page index.

It is by any standards an excellent book, written in quiet, engaging librarian style, drawing attention not only

to people, events, and stories, but also to alternative sources and accounts.

Have you heard of Anthony Fiala (1869–1950)? Mills tells us (pages 222–224) that, 'If ever a man tried to buy the North Pole it was William Ziegler. Having spent \$250,000 — equivalent to many millions today — on one futile expedition, he funded the American explorer Anthony Fiala to lead another. Fiala was not incompetent, but it takes more than money to reach the Pole.' There follow four columns, complete with historic photograph, detailing Fiala's exploits, mostly unfortunate, in Franz Josef Land. The account ends with 10 cross-references to other entries and three sources for further reading.

Do you know of the Russian Bear Islands? There's a good column on them, mostly on the history of their discovery from 1655 to the establishment of a meteorological station in 1935, complete with five cross-references. On page 329, in the entry on Frederick Jackson, you'll find a full account of Jackson's explorations, including *verbatim* the conversation that occurred at his historic meeting with Nansen in June 1896, again followed by more than a dozen cross-references and five sources.

So it goes on, a generous and entertaining work, written by a scholar who, having found his way around a wonderful library, found also a way of sharing it. There are unfortunate errors, mostly attributable to hurried proof reading: no one knew better than William Mills that Scott's return from the South Pole was not in 1925 (page xiv). However, the book's general accuracy, precision, and integrity are the more remarkable for the circumstances in which it was written. Ill-health intervened shortly after he began, and developed into terminal cancer. He continued writing, mostly in early-morning stints before his infant children awoke and demanded a share of his attention, and before putting in a full day's work at the library. William enjoyed the satisfaction of seeing the work completed and published a few weeks before his death in May 2004. (Bernard Stonehouse, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)