and Shackleton's *Endurance*) the *Deutschland* survived a wintering adrift in the ice of the Weddell Sea.

Two vastly differing expeditions represent the Weimar period. The first is Alfred Wegener's ambitious and scientifically very successful expedition to explore the Greenland Ice Cap in 1930–31 (which, however, is probably best known for Wegener's death on the ice cap). The second is Hugo Eckener's equally ambitious flight in the dirigible *Graf Zeppelin* to Zemlya Frantsa Iosifa, Severnaya Zemlya, and Poluostrov Taymyr in the summer of 1931, aimed mainly at an aerial photographic survey.

Finally, Murphy discusses the highly secretive Nazi expedition to the Antarctic on board the *Schwabenland* under Alfred Ritscher in 1938–39. This expedition aimed at staking a German claim to a sector of the continent, i.e., what is now Dronning Maud Land, facing the South Atlantic. Its primary purpose was to make an extensive aerial photographic survey, buttressing the German claim to the sector by dropping aluminum darts with a swastika insignia into the ice at regular intervals.

Murphy has handled the details of each of these expeditions in a very thorough fashion, using both published and unpublished archival sources. But the book goes well beyond a simple narrative of each expedition. A great deal of attention is also paid to the planning and financing of each expedition under the different political regimes, its political implications for German society, its treatment by the press, and how it featured in the German popular imagination of the day. A topic to which Murphy devotes considerable space is the German image of the polar world as influenced by its explorers. For example, he cites the surprisingly positive image of the Inuit (surprising when compared to the image Germans held of other indigenous peoples). This image emerged most clearly in the work of Heinrich Klutschak, the German-Czech artist and surveyor who in 1878–80 accompanied Frederick Schwatka from Hudson Bay on his search for traces of the Franklin expedition.

Murphy has undoubtedly selected seven of the most important German polar expeditions from the period in question, and he can undoubtedly justify his choice, but there are still some surprising omissions. While he mentions Georg von Neumayer's involvement in the First International Polar Year of 1882-83, he overlooks the significance of that involvement, as well as that of the two expeditions that Germany contributed to the First IPY, namely Wilhelm Giese's expedition to Cumberland Sound in Baffin Island and Dr. K. Schrader's expedition to Royal Bay, South Georgia. Another surprising omission is Franz Boas's outstanding expedition to Cumberland Sound in 1883 – 84, important for his pioneering studies of the Inuit and for his competent survey work. Murphy does mention Boas, but he excuses himself for not including him in the detailed studies on the basis that Boas was not widely read or influential in Germany.

Murphy is clearly fully conversant with German political history and with the details of the expeditions on which he has focused, and his accounts of them and their influence are beyond reproach. However, his passing references to other expeditions contain some startling slips. Thus on p. 15 we are told that Bob Bartlett, a rough-andready Newfoundland sealer and merchant captain with a very colourful vocabulary, was "a career military officer." On p. 191, Murphy writes that Nansen (rather than Amundsen) took the $Gj\phi a$ through the Northwest Passage in 1903-06, and that his vessel was steam-powered (in fact, she was driven by a 13 hp kerosene engine). On p. 124, we read that Severnaya Zemlya was charted for the first time by a Russian icebreaker in 1914. In fact, it was discovered by two Russian icebreakers, the Taymyr and the Vaygach, in 1913, but explored and mapped by a fourman party under G.A. Ushakov only in 1930–32, exactly at the time of the Graf Zeppelin expedition. And rather than being two islands, as Murphy states, the archipelago consists of four major islands and many smaller ones.

Murphy also appears not to be very familiar with standard nautical terminology. On several occasions, he refers to the "stranding" of Hegemann's ship, the *Hansa*, which was beset and then crushed in the ice. "Stranding" refers to a ship running aground, usually on a beach, but certainly on a coast. Elsewhere, when discussing Antarctic whaling, he uses the term "whaler" (to contrast with "factory ship"), when it is clear from the context that he means "whale catcher."

But these are relatively minor errors. As an entrée to the history of German polar exploration (a history that until now has been fairly inaccessible to the Anglophone reader) and especially of how it fitted into the political evolution of Germany and the German imagination, this is a very valuable contribution.

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THUNDER ON THE TUNDRA: INUIT QAUJIMA-JATUQANGIT OF THE BATHURST CARIBOU. By NATASHA THORPE, NAIKAK HAKONGAK, SANDRA EYEGETOK, and THE KITIKMEOT ELDERS. Victoria, British Columbia: Tuktu and Nogak Project, 2001. ISBN 0-9689636-0-9. (Available from N. Thorpe, 231 Irving Road, Victoria, British Columbia V8S 4A1; tnp1@hotmail.com; www.polarnet.ca/tuktu.) xvi + 208 p., colour and b&w illus., appendices, glossary, bib., index. Softbound. Cdn\$42.00.

Thunder on the Tundra is a refreshing collaboration that documents knowledge of the Qitirmiut (Inuit of the Kitikmeot region of Nunavut) about their relationship with the caribou herds that pass through their homelands. The book seeks to satisfy multiple objectives. First, it

responds to a lacuna of information about caribou herds and calving in the Bathurst Inlet region. Second, it documents and shares information on caribou harvesting within and beyond the community. Third, it seeks to transfer the knowledge of the diminishing number of elders familiar with harvest and uses of the caribou to the next generation of young Qitirmiut. Finally, the documentation of subsistence harvesting has direct implications on planning for exploitation of non-renewable natural resources (for example, mining). Therefore, the audience of this publication ranges from community members, including Qitirmiut youth, to public policy makers and professionals interested in northern indigenous cultures.

Written in a language that is accessible to high school students, community members, and scholars of indigenous cultures, the book also uses maps, drawings by elders and youth, and photographs to convey Inuit oral tradition on paper. Describing the significance of the caribou to the Qitirmiut, Thunder on the Tundra examines the human ecology (the cultural values guiding the hunting, traditional use, and preparation of caribou); the various predators of the caribou; migratory patterns and reproduction of the different caribou herds; and the effects of climate change. Unlike many anthropological studies of indigenous communities, this work speaks in the voice of the community rather than from the point of view of an outside expert. Since the work involved collaboration with elders, hunters, and even youth, the voice of the researchers is not distinguished from that of the community at large. Images and quotations are well incorporated into the text, producing a seamless narrative flow.

The intellectual property rights rest firmly with the people from whom this knowledge was obtained. While many northern scholars in universities give lip service to participatory research, this publication achieves it in both form and substance. The community set the research agenda to share a corpus of information based on indigenous knowledge of the caribou; it provided researchers as well as informants; it gave advice through a community advisory group; and then it produced the book.

Thunder on the Tundra is a testament to the time-tested knowledge of the Qitirmiut, whose nature can be discerned from the lore of caribou hunting and use. The knowledge is related to and contained within this group of people, who live in a specific geographic region. It informs and is formed by their cosmology or worldview, and thus it is intimately linked to the spiritual and ethical fabric, which manifests itself daily in practical expressions. For example, the etiquette of hunting and the idea of inter-household sharing in the community are closely connected to subsistence harvesting of caribou. Qitirmiut knowledge is cumulative, based on the sacredness of the past or tradition. This does not mean that tradition is fixed in a particular time or age. In fact, it is dynamic and adaptive: the Qitirmiut perceive not only the pastness of the past, but its presence, and new ideas and approaches are quickly adopted if they are seen as beneficial to the group. As a result, neither the knowledge nor its holders are homogeneous. The degree to which an individual within the Qitirmiut may hold this knowledge varies with age, gender, economic condition, and even interest in the subject, creating very permeable boundaries for its generation and transmission. Qitirmiut knowledge arises from closeness to the land and relationships with living things. In this sense, it is performative in nature, being obtained by the labour of living and the experience of subsistence hunting. Qitirmiut knowledge has an empirical trait: it is extensive knowledge of the land on which the caribou live and reproduce.

The value of presenting the knowledge of the Qitirmiut in this format is that it allows the younger generation to integrate the traditional knowledge system with that of modern science, drawing benefit from both. In fact, the best biology course or ecology field school that Qitirmiut youth can take is in their homeland. They learn directly from the seasonal rhythms and the tapestry of biotic and abiotic relationships on the land of their ancestors. *Thunder on the Tundra* can be the introductory text to such an integration of knowledge and experience.

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FIFTY MORE YEARS BELOW ZERO: TRIBUTES AND MEDITATIONS FOR THE NAVAL ARCTIC RESEARCH LABORATORY'S FIRST HALF CENTURY. Edited by DAVID W. NORTON. Calgary, Alberta, and Fairbanks, Alaska: The Arctic Institute of North America. 576 p., colour and b&w illus., index. Softbound. US\$20.00; Cdn\$30.00.

Point Barrow is the farthest north point in Alaska. Sticking out between the Chukchi and Beaufort Seas, it has been a magnet for humans, Native and non-Native alike. Blessed with rich marine and land-based food resources, the area attracted Eskimo settlers who hunted caribou, seal, and whale thousands of years ago. More recently, Westerners came seeking whales for the doubly rich prize of baleen and whale oil. In 1883, a young Charles Brower came north to work in the whaling industry. He stayed more than 50 years, married an Inupiat woman, had many children, and wrote a delightful and well-known book called Fifty Years Below Zero. In 1947, the Navy established a laboratory at Barrow (the Naval Arctic Research Laboratory, or NARL) which, in various incarnations, has been the center of research for Arctic Alaska ever since. Fifty More Years Below Zero is a tribute to that laboratory and the people who worked there. The book was the product of NARL's 50th anniversary meeting and celebration held in Barrow in 1997 and sponsored by the Arctic Institute of North America.