diagrams, and photographs. This material has been carefully edited and occasionally compressed. Appendix 4 is a conflation of two concluding reports, while Appendix 6 appears in an abridged form.

In achieving this level of clarity, Gold has followed the wishes of Dr C.J. Mackenzie, President of the National Research Council of Canada, who 'expected the story of the Canadian involvement in the Habbakuk project would be written up as soon as the work was declassified' (page 7). The synthesis of the 'single-drawer locked filing cabinet' (page 7) described by the author containing the Habbakuk records is far from a modest achievement, rendering this book of interest to technical and nontechnical audiences alike. (Ian N. Higginson, Unit for the History of Science, University of Kent, Canterbury, Kent CT2 7NR.)

ARCHEOLOGY OF THE FROBISHER VOYAGES. William W. Fitzhugh and Jacqueline S. Olin (Editors). 1993. Washington: Smithsonian Institution Press. xvi + 271 p, illustrated, hard cover. ISBN 1-56098-171-7. £34.95; US\$45.00.

This volume presents the preliminary results of a multidisciplinary project investigating the physical remains of Martin Frobisher's three expeditions to Baffin Island in 1576–1578. Frobisher's first expedition was concerned with the discovery of a Northwest Passage, while the second and third were conducted expressly for the purpose of establishing mines to extract 'gold' ore (assays of which in 1578 revealed it to be worthless, thus ending the enterprise). The project was initiated in 1981 by William Fitzhugh of the Smithsonian Institution, and followed an earlier, preliminary investigation of several Frobisher sites by Walter Kenyon of the Royal Ontario Museum in 1974.

The various chapters in the volume explore four central themes that have guided the research: specific historical issues relating directly to the Frobisher voyages; a detailed inventory and assessment of associated archaeological remains; the environmental context of the voyages; and the effects of Elizabethan (and later) contact on the indigenous Inuit of southern Baffin Island. Each of the 14 papers addresses one or more of these themes.

The first four chapters briefly outline the archival history (Fitzhugh, Laeyendecker, and Hogarth) and Inuit oral accounts (Rowley) of the three voyages, as well as the history of research on previously collected Frobisher artifacts (Washburn; Olin), including the 'Smithsonian bloom,' a 10-kg mass of smelted iron collected by the explorer Charles Francis Hall in 1861–1862 from the Frobisher site on Kodlunarn Island.

Chapters 5-8 present results of archaeological (Fitzhugh; Auger) and geological (Hogarth) field studies conducted in 1981, 1990, and 1991. Included are detailed site and feature descriptions of various prehistoric and historic Inuit, as well as Frobisher, localities.

Chapters 9-13 concentrate upon the analyses of the iron blooms and other iron artifacts (Harbottle, Cresswell, and Stoenner; Unglik; Wayman and Ehrenreich;

Ehrenreich), and of associated wood and charcoal (Laeyendecker), recovered from the Frobisher sites. Certainly the most interesting results of the analyses are the anomalously early dates of the five blooms recovered to date. These dates, ranging from AD 640–760 to AD 1250–1440, result in several conflicting interpretations for the origin of the blooms: Norse (Harbottle, Cresswell, and Stoenner; Unglik); Frobisher, and used as carpenter's 'dollies' (Ehrenreich); or unknown, but used and left by Frobisher (Laeyendecker).

In the concluding chapter, Fitzhugh discusses a number of questions remaining for future research, including the problem of five men and a ship's boat that disappeared in 1576, and that of the origin of the iron blooms. Included in the discussion of the latter problem is the suggestion by Ivor Noel Hume that the blooms originated in Russia.

Although reporting primarily on preliminary results only, the book represents an excellent contribution to northern archaeology and the history of northern exploration, and is highly recommended. (James M. Savelle, Department of Anthropology, McGill University, 855 Sherbrooke Street West, Montreal, Quebec H3A 2T7, Canada.)

EAST OF THE SUN: THE CONQUEST AND SETTLEMENT OF SIBERIA. Benson Bobrick. 1992. London: William Heinemann. 542 p, illustrated, hard cover. ISBN 0-434-92889-5. £20.00

This book is history with a broad sweep, and, in view of the current situation in Russia, its publication is very timely. Bobrick attempts to present an account of Siberia from the first crossings of the Urals by the Russians to the present. Its scope is, in fact, somewhat wider than indicated by the subtitle and includes the history of Russian Alaska, the diplomatic relations between Russia and its neighbours, and Russian exploration and other activities in the Pacific, notably in Hawaii.

The subject is handled chronologically and in a straightforward and attractive manner well suited to hold the attention of the general reader, to whom the book is primarily addressed. The breadth of the material presented is impressive and the sources used are comprehensive. Good accounts are given of all of the obvious topics and some of the less obvious ones. For this reviewer, the most impressive sections are those that deal with the relations between Russia and China concerning the Amur valley, with the Great Northern Expedition, and with the exile system, both under the tsars and under the Soviets. The latter is quite impossible to read without shuddering.

This said, the book has its deficiencies. There are several trivial errors and indications of inadequate or hasty proof reading. One example of this is on page 223. The reader is informed that the Russian authorities at Petropavlovsk agreed 'to safely convey copies of Cook's Journal overland to St Petropavlovsk' and in the very next paragraph that Macao (sic) is a Portuguese colony on the Chinese coast, when it is referred to two pages previously without this qualification.

This is merely irritating: what is much worse is the inadequacy of the maps. There are only five of these for the entire book. The first is a double-page map of Siberia that is acceptable insofar as it goes, but that is inevitably at so small a scale as to mean that very many places mentioned in the text are not entered on it. This map has an insert showing the Aleutian Islands and the tracks of Bering and Chirikov. A fold-out map would have been much more useful. The third map indicates the distribution of the 'major tribes' of northern Asia and is an (unattributed) copy of a map dating from, to judge from the cartography, circa 1900. The other maps are of the Russian settlements in Alaska and of 'Basic disposition of forces in Siberia during the Civil War.' Both of these are taken from works by other authors and are attributed in the acknowledgements. The other illustrations, very few of which are attributed, are interesting and embellish the text in a helpful way.

To sum up: a useful book at a very reasonable price for the general reader and for any student who may desire a rapid overview of the topic. The deficiencies of the book no doubt arise from cost considerations, and these are, of course, a matter of judgement for the publishers. In this case, however, one feels that a slight relaxation of this stringency with the consequent small increase in price, could have made an adquate book into a much better one. (Ian R.Stone, The Registry, University of Kent, Canterbury, Kent CT2 7NZ.)

OVERLAND TO STARVATION COVE: WITH THE INUIT IN SEARCH OF FRANKLIN 1878–1880. Heinrich Klutschak. Edited and translated by Willam Barr. 1993. Toronto: University of Toronto Press. xxxi+261 p, illustrated, soft cover. ISBN 0-8020-7397-2. £16.25; US\$28.00.

This is the paperback edition of one of William Barr's many major contributions to the study of Arctic exploration and science, originally published in 1987. The core of the book is a translation of Heinrich Klutschak's Als Eskimo unter den Eskimos, an account first published in German in 1881. But the book also contains a scholarly introduction and postscript and enlightening annotations by Barr.

The idea for the expedition of which Klutschak was a member was conceived by James Gordon Bennett Jr, the owner of *The New York Herald*, whose goal was to search for records of the Franklin expedition, which, according to Inuit statements, were supposed to be in a cairn in an island in the Gulf of Boothia. The expedition was ultimately sponsored by the American Geographical Society and led by Lieutenant Frederick Schwatka of the US Army, with William Henry Gilder, a reporter for *The Herald*, as the second-in-command.

It was a thoroughly remarkable expedition. Its members emulated the Inuit as much as possible, adopting their diet, clothing, sledging techniques, and other basic methods of survival. One result of this was that they were able to make the longest sledge journey (some 5200 km) that

whites had yet made. And despite the return journey being made in the depth of winter, with temperatures regularly near -50°C, there were no fatalities, nor indeed any major injuries or illnesses. Although the members of the expedition did not find a cache of documents from the Franklin expedition, they did locate or obtain from the Inuit a number of relics of the expedition, and they also discovered a number of skeletons on King William Island and Adelaide Peninsula. Klutschak's account is particularly valuable on this score, because from August to December 1879 the group split into two, with Schwatka in command of one party and Klutschak in charge of the other. Klutschak's group discovered the skeletons at Starvation Cove; these had been missed when Schwatka and Gilder had been there earlier because of the deep snow.

What most distinguishes Klutschak's account from those of Gilder or Schwatka (Gilder 1881; Stackpole 1965), however, is his focus not just on the search for the Franklin records, but on the Inuit. This book was an early ethnographic account of enormous significance, and one from which Franz Boas drew heavily when discussing the Inuit of the Keewatin in his classic work *The central Eskimo* (Boas 1888). Klutschak was a generally reliable observer, and he gave an early account of a number of aspects of Inuit culture and of several Inuit groups, such as the Utkuhikhalingmiut.

As with his other translations, Barr has helped make Klutschak's narrative extremely readable and enjoyable. It is an important work, and the paperback version of this study, which is already difficult to obtain in hardback, is a valuable addition to polar literature. (Beau Riffenburgh, Scott Polar Research Institute, University of Cambridge, Lensfield Road, Cambridge CB2 1ER.)

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SAAMI AND DENE CONCEPTS OF NATURE. Timm Rochon. 1993. Umeå: Center for Arctic Research, Umeå University. v + 116 p, softcover. ISSN 0283-9717.

This paper, published by the Center for Arctic Research in its in-house report series, began life as a dissertation for a master's degree in environmental studies. Herein lies an immediate problem: the published version betrays its origins. Indeed, the dissertation appears to have been published in its original format. Rochon's writing style is of someone addressing his examiners, paying careful attention throughout to 'the purpose of the paper,' 'the design of the research project,' 'approach,' and 'the findings of the field research work.' This is a shame, because