Vaughan looks at Norse and Viking explorations and settlements, and the medieval introduction of arctic products to Europe. The Russian and North American fur trades receive even-handed treatment. He is unusually harsh in his judgement of Bering, whom he describes as "a third-rate explorer, cautious and irresolute and so lacking in courage as to be almost incapable of carrying out his instructions" (p. 103). Vaughan ignores the virtual impossibility of anyone's fully carrying out those grandiose instructions. Vaughan is likewise, although more reasonably, critical of the Royal Navy, discussing the search for a Northwest Passage in a chapter entitled "The Arctic Defeats the Royal Navy." He is even-handed in his criticisms and his assignment of blame for the Franklin disaster. Errors that he identifies include overmanning; excessively large ships, crews and sledge teams; the use of lime rather than lemon juice; and Franklin's failure to leave messages along the route, for example in cairns on Beechey Island (although Gore did leave a message on King William Island). He is judiciously agnostic about the issue of lead poisoning.

Whaling is an important part of the story, and here too the coverage is appropriately international. Vaughan notes the cooperation of the Eskimos in the western Arctic in helping whalers to eliminate the species on which they depended for food. Whaling, as well as the Franklin search, took the Americans into the Arctic.

There is a good summary of Russia's economic and political reasons for selling its American colony to the United States. There is less coverage of the first International Polar Year (IPY) than it deserves, partly because Vaughan considers that it was not until the twentieth century that geography gave way to science; but German IPY expeditions, for example, involved first-rate scientific work in the 1880s, fifty years before the second IPY pursued meteorological and geophysical programs. Vaughan's account of twentieth-century science includes the next IPY, the International Geophysical Year, and such projects as the Greenland Ice Core Project, revealing 200 000 years of climatic and environmental history, which reached solid rock in 1992. Twentieth-century science is also associated with the search for minerals, including natural gas in Alaska, Canada, and Siberia—a topic that Vaughan considers judgmentally but fairly. I'd have welcomed more discussion in the later chapters of environmental issues. They are there, with tourism as well as nuclear waste flagged as dangers; but sport receives almost twice as much space as the environment.

The chapter on the Northern Sea Route is a particularly valuable one, identifying Tsarist precedents for Soviet and later activity. Vaughan gives us a wonderful sketch of Georgiy Ushakov's expedition, "the last, and perhaps the greatest of historic Arctic exploring expeditions by dog sledge" (p. 203). He paints a large canvas, describing the Soviet Union's creation of "a veritable Arctic empire or state within a state" (p. 202), and reminding us that "The Arctic Ocean is Russia's Mediterranean" (p. 202). The latter circumstance had military implications that featured in "the war of the weather stations" during World War II. He also describes the extension

of arctic shipping, with the use of nuclear-powered icebreakers, and very recent signs that parts of the route are opening to foreign shipping.

He ends with a chapter on the ownership of the Arctic, beginning with accounts of Europeans kidnapping Eskimos in the 16th and 17th centuries, "in token of possession," looking at tribute extracted, and at the vigorous and briefly successful resistance of the Chukchi to Russia in the 18th century. He also looks at the repeated use of resettlement to bolster sovereignty, by Russia, Denmark, and—recently and deplorably—by Canada. The role of missionaries in destroying native cultures is looked at critically; so, among other issues, is the imposition of Soviet collectivization and of the business economy in Alaska. Altogether, arctic peoples have suffered by contact with Europeans, North Americans, and Russians in health, education, and many other aspects of their culture. But Vaughan ends optimistically, noting the development of education carried on through northern languages, politicization, land claims, moves towards self-government, and population increases after long decline through illness (especially smallpox, and tuberculosis, about which he says little). Northern peoples are developing their own ideas about a national state, and southern peoples are having to listen.

The 35-page bibliography is very useful: circumpolar, international, polyglot, and up-to-date. It is necessarily selective.

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ARCTIC EXPLORATION AND DEVELOPMENT, C. 500 B.C. TO 1915: AN ENCYCLOPEDIA. By CLIVE HOLLAND. New York and London: Garland Publishing, Inc., 1994. 704 p., intro., bib., append., index, maps. Hardbound. US\$125.00.

I suspect that all of us, intent on our own immediate research problems, eagerly consult reference books and then indifferently push them aside as soon as our questions have been answered. Yet even a cursory reading of Holland's brief introduction to this new encyclopedia should cause us to think quite differently about how we value reliable research tools. In fact, when we appreciate the incredible complexities that Holland has successfully juggled in Arctic Exploration and Development, the entire notion of compiling a comprehensive reference book about Arctic exploration seems overwhelming. To create a cumulative index to a journal or to compile a catalogue of manuscripts in an archival collection such tasks, where the editor works within a finite system, are imaginable. What amazes me about Holland's encyclopedia, however, is that it is a wonderfully concrete and useful book, but one that is shaped out of a huge and amorphous subject. Establishing perimeters is the first order of complexity. Where does one draw the line between "arctic" expeditions and others? Was John Cabot an "arctic" explorer? And when did arctic exploration begin? Was there no exploratory activity subsequent to 1915? Are the dates "500 B.C. to 1915" simply arbitrary delimiters, or is there reason to work within this framework? Shall this book reference only scientific geographical expeditions? What about activities spurred by commercial or recreational interests? And how should one classify the attempts to reach the North Pole by Peary and Cook? None of these issues—space, time, or purpose—provide simple lines of demarcation. Nonetheless, Holland deftly and succinctly spells out his editorial policy on such issues in the short introduction.

Even when editorial policy has clarified what will be included, the vast amount of detailed work to be done is staggering. Because this encyclopedia encompasses all the Arctic-not only the North American Arctic-Holland has had to work through expedition accounts in some half-dozen languages. He has had to decide which version of placenames to use in his entries, a thorny enough problem in Canada and a nightmare, one suspects, when working in Russian or Greenlandic. "Inuit" has replaced "Eskimo" in most contexts in Canada, and while I cannot agree with Holland's choice to retain the term "Eskimo," myriad parallel issues must have arisen about other circumpolar peoples. If Holland's cultural politics are old-fashioned on this count, one can at least understand his decision to use in this volume names widely adopted by Europeans. What seems of real importance is that Holland made informed decisions and produced an extremely helpful reference tool. Because of its great chronological scope, it is even necessary to distinguish between dating by the Julian or Gregorian calendars, which differ by about ten days!

For those who know Alan Cooke and Clive Holland's The Exploration of Northern Canada, 500 to 1920: A Chronology (Toronto: Arctic History Press, 1978), the format and mechanical aspects of this new encyclopedia will be familiar. Most of the material in the earlier book—long out of print appears in this more comprehensive volume. The heart of the book is 526 pages of entries, arranged chronologically, documenting nearly 2000 expeditions and major events in the circumpolar Arctic. This is where the new encyclopedia not only outstrips the 1978 Cooke and Holland effort, which covered only expeditions into the Canadian Arctic, but where the complexities of dealing with primary accounts written in Danish, Norwegian, Greenlandic, and Russian become almost mind-numbing. Each entry provides an itinerary of the expedition, the names of its leaders and sponsors, dates of departure and return, a brief statement of its objectives and significance, and a list of bibliographic sources. All this information is painstakingly cross-referenced wherever appropriate.

The entries are followed by 46 pages of bibliography, which give full references for the brief bibliographic tags that appear after each entry. This is followed by a 50-page appendix that lists the main members of the expeditions included in the entries. Thus, a researcher who knows the

name of an expedition member but not the date can find the entry through this appendix. Surely creative scholars will find many other ways to make good use of this appendix.

Next come 30 pages of maps that have been especially prepared for the encyclopedia. As much as is practical, the place-names in the entries are shown on the maps. The maps are followed by 37 pages of general index and then 10 pages that list the ships by name and key them to specific entries.

Only time and frequent use of this encyclopedia will tell how accurate and, hence, how useful it is. Typographical errors and transpositions—inelegant and unprofessional in all books—are the bane of a volume of this sort, full of dates, unfamiliar names, and strange spellings. But with Holland's incredible concern for detail and the excellent reputation of Cooke and Holland's *The Exploration of Northern Canada*, this new circumpolar encyclopedia promises to be very useful indeed. Holland, Garland Publishing, and the Trustees of the Leverhulme Trust (who funded the research) are to be congratulated for their support of this astonishingly comprehensive and decidedly valuable undertaking.

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'TOO MANY PEOPLE': ORDER AND NONCONFORM-ITY IN IGLULINGMIUT SOCIAL PROCESS. By WILLEM C.E. RASING. Nijmegen: Katholieke Universiteit, 1994. 312 p., photographs, maps, bib., tables, illus., appendices. Softbound. Cdn\$40.00.

"In ten to twenty years from today—if nothing changes everyone in the Baffin Region is going to have a criminal record" (p. 209). So states an Inuit paralegal court worker from Iqaluit who is one of many informants cited in this book. While the court worker may be relying upon hyperbole to make his point, there is no doubt that Inuit communities throughout the Canadian Arctic have experienced a dramatic increase in social disorder brought about by population increase, sedentism, alcohol and drug use, unemployment, underemployment, and a history of paternalistic tutelage which has effectively undermined the autonomous nature of Inuit society. Rasing's 'Too Many People': Order and Nonconformity in Iglulingmiut Social Process provides a detailed account of social change in Iglulingmiut society, with particular attention paid to the issues of order, nonconformity and social control. The author rightly states that a thorough understanding of contemporary patterns of social deviance and criminality in the Arctic cannot be realized without a historical perspective that goes back to the earliest period of Inuit-European contact. As a result, the author deals with five distinct time periods of Iglulik area history, from earliest contact to the contemporary settlement period. The stated goals of this work are to answer the following questions: