SIKU: KNOWING OUR ICE; DOCUMENTING INUIT SEA-ICE KNOWLEDGE AND USE. Igor Krupnik, Claudio Aporta, Shari Gearheard, Gita J. Laidler, and Lene Kielsen Holm (Editors). 2010. Dordrecht: Springer. xxxi + 501 p. illustrated, maps, soft cover. ISBN 978–90-481–8648-8. US\$179.00.

As originally proposed, the recent International Polar Year (IPY) appeared to be void of a 'human dimension'. However, at an Arctic Council meeting of foreign ministers in 2004, the importance of the continuing contribution of indigenous and traditional knowledge to research in the Arctic, along with the initiation by Arctic residents in research programmes, enabled the introduction of social and human studies into the science programmes of the IPY. This book, published as part of the IPY 2007–2008, is a valuable outcome of that objective, with many of the 38 authors of the 20 chapters coming from various parts of Alaska, northern Canada, and Greenland.

Because ice conditions in the Arctic in the colder parts of the year are a daily challenge for natives living there, the local populations have had to develop their own means of designating terms for whatever conditions were encountered in their livelihood of hunting, traversing sea ice, and interpretations of conditions as they saw them develop. These very useful qualities are discussed in this book, which in many respects will provide a 'bible' of terms for Inuit everywhere. Sea ice is the focus of how indigenous populations survive in the Arctic, for without thorough knowledge of how it affects their lives, they would be unable to hunt and pass along their knowledge to younger populations.

Chapter 1 provides an overview of the history of the project known as SIKU and how it developed into the various vocabularies in this book. SIKU involved many investigators and some 30 villages/settlements in Alaska/Chukotka in the west, and Nunavut/Greenland in the east. As the project developed, individual investigators worked to combine proposals while efforts were made with regard to the funding requirements of the work. By 2005, the acronym SIKU (Sea Ice Knowledge and Use) was named for both the 'Knowledge' ('Elders') and 'Use.' An additional acronym, ISIUOP (Inuit Sea Ice Use and Occupancy Project), was developed as an IPY pre-proposal and is listed as an umbrella project to the overall study in the organisational structure initiative, 2006-2010, in a table (pages 18-22) that also lists project titles, collaborating communities, contributors, and funders, which included mainly the government of Canada, U.S. National Park Service, and National Science Foundation. Anthropologist Franz Boas has been credited with many pioneer contributions to the field of Arctic anthropology as a result of fieldwork among the Inuit on Baffin Island, following the first IPY, 1882-1883. Chapter 16 describes his work in some detail, including how his original four unrelated words for snow in the Eskimo language were picked up and exploited by later writers. Through repeated recycling, Boas' original four terms eventually 'snow-balled' into up to 200 terms for snow that reportedly were known by the Eskimo, a sequence of events commonly known as 'The great Eskimo vocabulary hoax' (page 390). The acronym and new project SIKU was appropriate, for it is also the main Inuit word for sea ice (*siku*) known in every Inuit (Eskimo) community from Greenland to Russia.

Although siku is the common word or prefix for many varieties of sea ice, individual settlements have their own terms for the same or different types of ice, based on Inuit lore. For example, the selected list of sea ice terms for eastern Greenland and western Greenland show differences for the same feature, but are also similar in other respects. The Inupiaq sea ice dictionary for Wales, Alaska (Kingigin) (Chapter 14) is one of the first of 25 indigenous sea ice vocabularies for the SIKU project and its associated projects. Other chapters apply to terminology in the other study sites, for example Qeqertaq, west Greenland; Cape Dorset; Igloolik; Pangnirtung; Gambell; Barrow; and Nunavut. Inuit experience with sea ice in areas of walrus hunting and whale hunting becomes very specific with regard to terms. For example, the Kingikmiut (Wales) term analuaq means 'piece of floe ice that has walrus droppings on it.' A modern initiative and product of SIKU is a cybercartographic atlas of Inuit sea ice knowledge and use that was developed as an online tool that can be updated and accessed over time (Chapter 10).

A number of vocabularies and glossaries of snow and ice have appeared over the years (Armstrong and others 1966, for one example), but none like those developed in the SIKU project, in which in-depth interviews were conducted from local knowledge experts, team meetings of elderly experts, native speakers working with local experts, linguists, anthropologists, and local sea ice working groups. Armstrong and others (1966) is an especially useful guide because of equivalents of terms in as many as 9 languages, along with illustrations of many of the examples. What is not in that resource are equivalents in Inuit terms, which makes the SIKU project valuable throughout much of the Arctic, including differences in terminology depending on which general area was studied. Furthermore, the varieties of terms that result from Inuit experience over centuries for siku would fill many pages, as can be seen in this book. One term that stands out and might well be related to global warming, which is affecting sea ice distribution and thickness in the Arctic, and thus affecting polar bear and walrus populations, is sikujuippoq, which means 'there is no more sea ice' in the western Greenland terminology, an ominous situation indeed for hunters.

This book is of value for scholars of northern indigenous populations and their response to changes in their environment in a cryogenic sense, surviving for centuries by adapting to changes in the ice conditions that govern their very survival. A detailed index (pages 479–501) leads the reader to the numerous uses of the word 'ice', which alone includes 5 pages. (John Splettstoesser, P.O. Box 515, Waconia, Minnesota U.S.A. 55387.)

Reference

Armstrong, T., B. Roberts, and C. Swithinbank. 1966. *Illustrated glossary of snow and ice*. Cambridge: Scott Polar Research Institute, (special publication 4).