## THE ESKIMOS AND ALEUTS. BY DON E. DUMOND. New York: Thames and Hudson, 1977. 180 pages, illus. \$12.95.

This copiously illustrated book contains several artefact inventories dealing primarily with Eskimo archaeology; and a large number of innovative speculations are made in it concerning the lithic peoples of the North, the fundamental - and untenable - premise of which is that a social group, identified by language or physique, should be represented by a "relatively cohesive complex of artifacts" (p. 151). A stated objective of the book is to give particular attention to the Eskimos of the southern Bering Sea and North Pacific Ocean, and to their Aleut cousins, and so redress the past imbalance of the Arctic Eskimos being favoured in the literature of the subject. The latter aim has not been achieved.

The book is marred by a number of errors, some of them serious. Danes will be perturbed to find Rasmus Rask, long considered a major Danish linguist, presented as a Dutch scholar named Rusk. The major Fox Island Aleut uprising took place in 1763-64, not in 1762. Glotov discovered the bodies of the Daris Medvedev party on Chaluka in July 1764, after his return from Kodiak. Aleut whaling is misrepresented as depending solely upon dead whales being allowed to die and drift up onto the shore, whereas in fact lines were inserted into the whales' lower lips and they were towed ashore whenever possible. The sea did not attain its present level 9,000 years ago (shortly before the occupation of the Blade Site 8,700 years ago), but rather as late as 5,000-4,500 years ago. Informative artefacts, whose form, function, use and meaning are known, are categorized as art or else inaccurately identified; for example, the "ivory figure", reproduced on p. 73 of the book, had previously appeared (in Arctic, vol. 4, no. 2, p. 83) with its proper identification — "a household image of the deity in sperm whale tooth ivory". Elsewhere, a specimen of a well known harpoon head style is dubiously identified as either a bone dart or a foreshaft.

In 1974, a team of five Soviet archaeologists under the direction of Academician A. P. Okladnikov carried out research on Anangula. Okladnikov himself found the first associated prismatic blade and bifacial point at the Village site. A reference to his published views on the earlier unifacial core, blade and burin industry and the succeeding Transition culture, and on their Siberian affinities, would have done much to strengthen the portion of this book concerning the Aleuts. Alternatively, this portion could with advantage have been omitted altogether.

The most useful parts of the book are those describing the author's own researches in the Katmai region. The University of Oregon initiated these studies in 1953 as part of a programme sponsored by the U.S. National Park Service. W.A. Davis, J.W. Leach and the present reviewer made the first excavations in the Katmai. The late Professor L.L. Hammerich, an indubitably Danish linguist, came to King Salmon and made available his knowledge of the distribution of Eskimo dialects, which he was then studying at first hand. Dumond has made useful advances from these earlier excavations and found potentially significant artefacts at sites near the Naknek and Ugashik rivers. A chart showing the locations and radiocarbon datings of these artefacts would have provided a useful guide for the reader.

Economy and synthesis, if not accuracy, are achieved through a free lumping together of diverse lithic cultures. The so-called Palaeo-Arctic tradition is taken to embrace diverse coastal and interior complexes in Siberia, northern Alaska and southern Alaska. The artefacts assigned to it may be either unifacial or bifacial, and the cultures may or may not possess carved stone dishes and oil lamps. The Thule tradition is considered to begin with the Old Bering Sea tradition and to range from Kodiak Island to Greenland. In general, the author appears to disregard internal, indigenous adaptation and development, considering instead that changes in artefact typologies were the result of migrations.

Dumond even suggests that a recent migration, from north to south, resulted in a Bering Sea form of the Eskimo tongue becoming dominant on Kodiak Island. An appeal to glottochronology is, however, surely of limited value. A map of languages and dialects would have been very useful for the reader. The principal line of division between Aleuts and Eskimos was considered, correctly, by G.H. Marsh and L.L. Hammerich to have run between Port Moller on the north, and Kupreanof Point on the south, side of the Alaska peninsula. The existence of such a sharp boundary, which must certainly have moved in past times, is most easily explained by the fact that the Aleuts slowly moved to the east from their area of earlier occupation at the terminal point of the southwestern extension of the former Bering Land Bridge. The establishment of the Yupik and Inupiaq dialects of Eskimo - the boundary between which runs through Unalakleet - is likely to

have occurred more recently than did the separation of Aleut and Eskimo. The Yupik-Inupiaq boundary corresponds to the physical differences as well, and is more likely related to population divergence than to production of artefacts.

The major differences between the dialects spoken on the Bristol Bay side of the Alaska Peninsula and those on the Kodiak side are matched by many ethnographic differences, such as in methods of constructing kayaks and making hunting gear. Recognition of such relevant cultural variables as the fact that the Koniags knelt rather than sat in their kayaks would have been helpful for the purposes of relating the past to the present and establishing affinities between geographical groups.

The book has some fundamental weaknesses. There is a tendency to compress, or average to a single date, periods of occupation which may have spanned several centuries, and to compare camp sites and their short periods of occupation with village sites, without due allowance or qualification. Artefact inventories are equated with people through the use of terms such as "slate-polishing people", "stone-chipping people", "Arctic Small Tool people" or "Dorset folk". The inescapable implication is that since lithic peoples could phonate, migrate and reproduce themselves one may dispense with attention to them as people - to their skeletons, blood groups, dentition, measurements, longevity, pathologies, or other carnal aspects of their human existence. In other words, the prehistoric identity of Eskimo populations is assigned to limbo.

Skeletons of Aleuts and Eskimos date back to approximately 2000 B.C. Before that time, ethnic identification by inference is probably more reliable in closed population systems in appendicial areas, such as the Aleutian Islands and Greenland, than in communities in more accessible areas exposed to a seeming multitude of long-range migrations.

As the book is concerned in the main with artefact typologies based on the finished forms, an illustration of the phases in the manufacture of prismatic blades, burins and other stone tools, including the rejuvenation of cores and burins, would have been useful. It might also have indicated affinities with the lithic industries of the Sea of Okhotsk, including northern Japan.

The possible roles of invention, diffusion of stimulus, diffusion of manufacturing techniques as well as items of finished form, and also trade, are processes worth as much consideration as migration. In many cases, techniques and artefacts appear to have diffused from older populated centres to places more recently populated. Such may have been the case with oil lamps, some bifacially flaked stemmed points made on prismatic blades, and with mummification and burial in caves. Grottochronology may be as useful as glottochronology in establishing the directions of diffusion.

Readers, including the living Eskimos and Aleuts themselves, who may be curious about the evolutionary and cultural identity of past and present Eskimo, Aleut, Indian and Siberian populations will not find this book useful.

## William S. Laughlin

GEOLOGY OF GREENLAND. EDITED BY ARTHUR ESCHER AND W. STUART WATT. Copenhagen: Geological Survey of Greenland, 1976. 603 pages, illus., maps. DKr 195.00.

Geology of Greenland is a major work. In it are presented the results of studies undertaken both by the staff of the Geological Survey of Greenland and by an international group of geologists, many of whom are past staff members of, or who have carried out research projects for, the Survey. That the manuscripts which have become chapters of the book date back only to three years before it was published is eloquent tribute to the editors' combined abilities not only to charm and discipline the twenty-nine scattered and diverse individual contributors into writing the first drafts, but also to ensure their effective cooperation in doing the thousand things necessary to fashion them at commendable speed into a well-coordinated symposium.

The work comprises twenty-one chapters or papers, including a summary of the geology by the editors. The principal papers are arranged following the geological time scale, Archean to Quaternary. Two papers on the fold belts of East and North Greenland are regional, however, and describe rocks of a wide range of ages. Six papers, which provide reviews of such subjects as economically-exploitable minerals and fossil floras, form the last quarter of the book.

The Precambrian gneisses of Greenland are extensively exposed in the narrow fringe of land around the huge inland ice cap. Detailed studies of these rocks have resulted in