

full research strategy as somewhat less powerful than the authors claim, I am convinced that it promises a significant contribution to our understanding of the matter. Their detection and utilization of a naturally occurring situation to develop a quasi-experimental research strategy is itself somewhat of a landmark. As a total work, the book is of substantial importance. Wherever its propositions and arguments are given the careful study they deserve, it is bound to spark lively debate and probably will stimulate research efforts. It seems to me that no better recommendation can be given to a scientific work.

R. JAY TURNER

Temple University
Community Mental Health Center,
Philadelphia, Pennsylvania

Skills of the Eskimos

Hunters of the Northern Ice. RICHARD K. NELSON. University of Chicago Press, Chicago, 1969. xxiv + 432 pp. + plates.

In recent years the Eskimo villages of northwest Alaska have received considerable attention from anthropologists. Published community studies deal generally with the various aspects of contemporary Eskimo life, but none has focused on a particular aspect of Eskimo culture. Nelson's book does just that. His is a systematic study of modern and traditional methods of hunting, travel, and survival on the sea ice based on firsthand experiences in the villages of Point Hope, Wainwright, and Point Barrow between 1964 and 1966.

In an appendix Nelson documents the methods of full participation that enabled him to obtain his information. He rightly points out that previous arctic ethnographers have seldom participated fully enough in Eskimo subsistence activities to describe them in meaningful detail. By maintaining himself as a hunter, Nelson documented subsistence techniques in such a manner that he believes they could be used successfully by persons who have not observed them at first hand.

The major part of the book is divided into two parts, the first of which deals with the development of sea ice and its conditions throughout the lengthy period of the year when it is present in the vicinity of the villages of northwest Alaska. Emphasis is on the manner in which Eskimos recognize and interpret the signs that

are characteristic of the ever-changing ice. What is revealed is the complicated body of knowledge and techniques that lies behind the adaptation that Eskimos have made to one of the most extreme environments on earth.

Part 2 deals with the biological environment. Chapters are devoted to each of the major animals utilized by the Eskimos. Such factors as distribution and feeding habits, as well as the primary means of hunting the animals, are examined in detail. Although some attention is paid to traditional subsistence techniques, the emphasis is on today's hunting methods and equipment.

In a chapter entitled "The Eskimo as hunter" Nelson provides a subjective assessment of some mental attitudes possessed by hunters which appear to be specifically adapted to the exploitation of an arctic environment. These include self-assurance, perseverance, good physical condition, and, of course, knowledgeability concerning the environment. The reader is certain to agree with these points, but he may also be led to believe that all hunters possess these qualities to an equal degree when, in fact, in any village the expected range of competence is encountered. Even though the division of labor is minimal, there are some individuals who are simply not skilled at the activities in which Eskimos are supposed to excel, a fact the author does not stress sufficiently.

In the final chapter Nelson sketches in broad outline the effects of 100 years of culture change on hunting. Because of increased education and exposure to outside influences, young Eskimos are increasingly unwilling to undergo the arduous learning necessary to become skilled hunters. To Nelson this means that the native economy will die with the passing of the present generation, a point of view that may be overly pessimistic. More than most Eskimos, those in the coastal villages of northwest Alaska appear to be making a successful adaptation to a way of life which combines some traditional subsistence activities with participation in the wider economy through wage labor. Nelson is correct, however, in assuming that the "death of hunting" is inevitable, and his study is a masterly work of salvage ethnography.

JAMES W. VANSTONE
Department of Anthropology,
Field Museum of Natural History,
Chicago, Illinois

Human Genetic Polymorphisms

Genetic Markers in Human Blood. ELOISE R. GIBLETT. Davis, Philadelphia, 1969. xxviii + 632 pp. + plates. \$15.

Human Blood and Serum Groups. OTTO PROKOP and GERHARD UHLENBRUCK. Translated from the second German edition (Leipzig, 1966) by John L. Raven. Interscience (Wiley), New York, 1969. xvi + 892 pp., illus. \$45.

The recognition and analysis of human genetic polymorphisms have had both important theoretical and extremely practical implications. The discovery of the glucose-6-phosphate dehydrogenase polymorphism led not only to the first critical test of the Lyon hypothesis in man but also to the recognition of specific X-linked enzyme-deficient phenotypes, carried by millions of males in many parts of the world, which may affect their response to a variety of drugs, may influence their sensitivity to certain dietary constituents, and possibly may alter their resistance to malaria. In a similar manner, the elucidation of the complex genetic and biochemical interrelationships of the major red cell antigen systems has provided some of the most elegant examples of epistasis in man, and has also permitted the development of measures which should lead to the virtual eradication of erythroblastosis—once an important cause of neonatal mortality and neurologic damage. And, surely, the demonstration that one of the most alarming complications an anesthesiologist can encounter—namely, the failure of a patient to recover from the paralytic effects of certain muscle relaxants for many hours instead of a few minutes—is caused by homozygosity for a recessive gene, carried in the heterozygous state by many normal individuals, has provided a useful and satisfying answer to this life-threatening surgical complication.

Because of the relative ease with which samples can be obtained, genetic studies of human blood protein differences are far advanced in comparison with the analysis of human variation in other organs and tissues. However, there is little reason to doubt that, if similar studies were performed on the set of gene products that leads us to classify one group of cells as "liver" as opposed to the sets that distinguish other cells as being "kidney" or "heart" or "thyroid," a comparable degree of genetic variation and polymorphism would be found. Except in small or highly inbred populations, variation