

## REFERENCE

NELSON, E. W. 1899. The Eskimo about Bering Strait. 18th Annual Report of the Bureau of American Ethnology. Washington, D.C.: Government Printing Office. 3-518.

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TRADITSIONNOYE MIROVOZZRENIYE OKHOTNIKOV TAYMYRA (na materialakh Nganasan 19 - nachala 20 stoletiya). [Traditional world-view of Taymyr hunters and gatherers based on data gathered on the Nganasans of the 19th - beginning of the 20th centuries.] G.N. GRACHEVA. Leningrad: Nauka, 1983. 176 p. 1 r 50 k (North American price unknown). (In Russian.)

To my knowledge this is the first Soviet research that addresses the questions of relationships between man and the environment, with emphasis upon Nganasan hunters and gatherers of the nineteenth and the beginning of the twentieth centuries. It uses the environmental-psychological method of analysis, which is relevant to microeconomics (economic behaviour) on the one hand and to ethnoscience or "new ethnography" on the other.

Gracheva's analysis is an attempt to describe the behaviour of a rational economic unit in its pursuit of certain objectives within the framework of its environment. Of course, it is quite conceivable that not every firm or consumer acts as rationally as we assume in our analysis, either because of a lack of knowledge or perhaps a lack of desire. It is, therefore, quite appropriate to think of some of our findings as a set of rules designed to instruct the decision maker in the pursuit of his objectives. Thus, Gracheva's investigation and its conclusions depend directly on what she assumes about both the objective and the environment of the decision maker.

She takes the view that the actions of the Nganasans can be rationalized in terms of their desire to maximize their own satisfaction. Therefore, the author focuses her research on the strategic behaviour of people in making choices and modifying patterns. She uses the cognitive, decision-making processes of man as a theoretical basis, thus advancing toward elucidation of ultimate causes of human behaviour rather than remaining at the descriptive level. In her study, Gracheva demonstrates the ecological and sociological implications for analysis of Nganasan material culture and their world views on the basis of their ecological adaptations derived from rules of individual decision. In short, Gracheva's methodological approach rests on a set of assumptions concerning the relationship among language, cognitive rules, codes and categories that the native himself must know in order to understand the social situations confronting him in daily life and closely approximating the "truth" of cultural reality.

Concerning the traditional world views of the Nganasans, the author examines four aspects of their lifestyle. They are their (1) world view on environment, (2) world view on man, (3) burial customs and (4) shamanism. In the course of her analyses, in which she relies on archaeological, ethnographic, folkloristic and linguistic data, an attempt is made to demonstrate subjective (etic) native notions about their world and then to make objective (emic) interpretations.

The research is well done. However, the printing is not. Soviet publishers should try to improve format, quality of paper and illustra-

tions in publishing scientific literature. Improvement of the publication quality would also serve to present Soviet scholarship in a much better fashion.

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ARCTIC AND ANTARCTIC — A MODERN GEOGRAPHICAL SYNTHESIS. By DAVID SUGDEN. Oxford: Basil Blackwood, 1982. ISBN 0-631-13085-3. 473 p. incl. illus., tables, maps. Hardcover. \$84.25.

David Sugden, Senior Lecturer in Geography at the University of Aberdeen, has worked in Greenland, Arctic Canada, and Alaska, as well as Antarctica. Though his special field is geomorphology, his polar interests are very wide, and in *Arctic and Antarctic* he attempts "to describe and interpret the polar environment, to explore the problems associated with economic and social development, and to provide a framework for a better understanding of the overall geography of the polar regions". This area covers a fifth of the land surface of the world and presents an enormous task that few would dare to tackle. To do it so well is a noteworthy achievement.

The author adopts a systems approach, examining how the systems associated with the land, the atmosphere, the oceans, the native people, and industrial society operate in the arctic and antarctic regions and how they interrelate. He begins with plate tectonics and climate, as the two global natural systems responsible for the special characteristics of the polar regions, and then discusses them in relation to the three polar environments — namely, permanent ice covering land or sea, land that is not covered by ice, and the oceans. A concluding chapter in the section on natural systems considers the changes that occur in these systems on four time scales: over millions of years, over periods of 100 000 to 10 000 years, over periods of 1000 to 10 years, and over decades.

The section on human systems begins with a general chapter on the evolution of man in the polar regions, covering the original penetration of the north by nomadic people, the development of reindeer herding, the Norse colonization of southwest Greenland, and the exploration of the Arctic and Antarctic. It is followed by a chapter on the Inuit, a term Dr. Sugden uses to include the Yuit, and how they lived as hunters and gatherers. The next five chapters consider the intrusive Western society on a regional basis: Greenland and Svalbard, Arctic Canada, Alaska, the Soviet Arctic, and Antarctica. The final chapter draws conclusions.

This method of treatment is unusual and is at first rather difficult to follow, but it is logical and permits a great deal of material to be considered in a rational and comprehensible manner. It also presents the polar regions in a rather different light and in a way that stimulates thought. This reviewer, however, felt somewhat uneasy with the models of regional development adopted throughout the book. That on network and node evolution by Taaffe, Morrill and Gould is based on transportation patterns in Ghana and Nigeria, and it requires too many explanations and adjustments in each of the five polar regions, where conditions are so very different, to carry any conviction. That on resource frontier regions and downward transitional areas, applied by Friedmann to the situation in Venezuela, also needs too much manipulation to be an acceptable fit for the north. Neither model seems to serve much purpose. Perhaps this is because the United Kingdom is much farther from the frontier than is North America, and especially Canada. Models are useful to explain and illustrate the unfamiliar, but their shortcomings are more obvious to those who deal with the subject on a daily basis.