

Honigmans show.

What happens to these native peoples? The Honigmans are careful not to think of the societal development of the community as one of disorganization. It is rather one of transition. Given the varied background of the inhabitants of Inuvik on the so-called native level, one might ask wherein the points of differences in interaction most pointedly lie. Through the pages of the Honigmans' book, for example, runs the theme of alcohol. This, it is true, creates a problem and gives rise to ills, at least so viewed by the members of the main-line society, attendant upon it, but it is also shown that alcohol has a significant social function and serves to some extent as a factor of group integration. In answer to the question as to whether the modernizing culture from the outside will replicate itself here or in other similar towns in the Arctic, the Honigmans are careful to argue that this prediction does not seem indicated. Instead, it looks as though the community will continue to change but to retain at the same time its suggestions of uniqueness.

The Honigmans have performed an important service both to the changing human dimension in the Arctic and to the community of Inuvik itself in recognizing the processes at work. Too often, the researcher in the area tends to dismiss with some contempt patterns which on the surface appear reflective of a disorganization, a failure on the part of the natives to "measure up" to dominant modes. But Inuvik does not represent a decline. On the contrary, the inhabitants and their children have made their own adjustment to a continuing world of the frontier. In respect to the problem of the development of personality in this frontier situation, the authors point out that there are different primary definitions of such institutions as child-rearing, its attendant expectations, the views of family and family integrity, of the concepts of self-reliance and responsibility from those which characterize the dominant culture. The end result is a point of view which is distinctive for the native population of the town. Considering these factors, the Honigmans develop various predictive hypotheses, subject to testing on the basis of empirical data, as to the kinds of adaptations which children of the town may make. These relate to such factors as success in the school situation, in employment, and may also reflect some difference in regard to ethnic background.

A work such as this is definitely "must" reading for anyone working in or out of a community such as this one, an arctic phenomenon, true, but equally applicable to

other frontier areas elsewhere. As the concept frontier culture is seen, the Honigmans conceptualize not so much the actual geographic situation of the frontier, but rather the internal symbols which characterize the residents of the community. It is a phenomenon resident in the minds of the actors. Their behaviour, their reactions, seen in this light, become eminently predictable. The upshot of this study, considering its wealth of detail and its evaluation of the residents of the community, is not then that of a pathological societal situation, but rather an adaptation that requires awareness of the rise of a special and a new social type. In this respect, the Honigmans have produced an important evaluation of what is happening in the Arctic today.

Robert F. Spencer

THE ARNAPIK AND TYARA SITES. AN ARCHAEOLOGICAL STUDY OF DORSET CULTURE ORIGINS. BY WILLIAM E. TAYLOR, JR. *Memoirs of the Society for American Archaeology*, no. 22, 1968. 7¼ x 10 inches, 129 pages, illustrations and maps. \$4.50.

One of the most persistent problems with which arctic archaeologists have been concerned since the mid-1920's is the nature and origins of the prehistoric Dorset culture which flourished in the eastern Canadian arctic and Greenland between approximately 800 B.C. and A.D. 1300. No one has made more important contributions to the solution of this problem than William E. Taylor, Jr., and in this well-reasoned and persuasive monograph he shows us that there was no problem after all. What he has documented is a logical and sustained cultural continuity through 2,000 years of arctic prehistory.

Taylor's report begins with a thorough history of Dorset studies from the recognition by Diamond Jenness in 1925 that certain archaeological assemblages from Baffin Island were quite distinct from the newly discovered Thule culture, to the author's own research in the late 1950's. The largest part of this monograph, however, is devoted to a description and analysis of materials from two key archaeological sites, Arnapiik and Tyara, tested under Taylor's direction during the field seasons of 1957 through 1959.

The Arnapiik site on the east coast of Mansel Island in northeastern Hudson Bay produced nearly 2,000 Pre-Dorset artifacts. These materials are compared with assemblages from other Pre-Dorset sites and the conclusion drawn that Arnapiik was probably

occupied at seasonal intervals over a period of from 100 to 200 years in the latter half of the second millenium B.C. by a people with an Eskimo way of life.

Tyara is a stratified site on Sugluk Island off the south coast of Hudson Strait. Here almost 800 Dorset culture artifacts were recovered from three cultural layers that spanned most of the first millenium B.C. Like those who lived at Arnapiik, the occupants of Tyara appear to have had an Eskimo-like culture which was adapted to an arctic environment and the hunting of sea mammals. The Tyara site also yielded fragmentary human skeletal material including a mandible bearing morphological characteristics of the Eskimo physical type.

On the basis of comparisons utilizing the materials from these two sites and other recognized Pre-Dorset and Dorset assemblages, the author convincingly demonstrates cultural continuity from one to the other. He is also able to show that not only did Dorset follow Pre-Dorset chronologically, but the two also shared similar ways of life under virtually identical environmental circumstances in the same general geographical area.

Proceeding from these major conclusions, Taylor compares his material to related data from sites throughout the arctic and subarctic regions. By so doing, he is able to demonstrate continuity between the Sarqaq (Pre-Dorset) and Dorset cultures of Disko Bay in Greenland, and to document the *in situ* development of Dorset culture in the eastern Canadian arctic. With reference to this latter conclusion, Taylor rejects the hypothesis that the Dorset culture developed as a result of migration or cultural diffusion from Archaic Indian cultures of the northeastern boreal forests.

In writing this important report, a revised doctoral dissertation, the author utilized data available up to 1960. Delay in publication made it advisable for him to add a postscript in which he summarizes relevant research through 1966. The reader is impressed to discover that more recent work has simply served to support Taylor's conclusions. Equally impressive are carbon-14 dates for the Arnapiik and Tyara sites that compare favourably with estimates derived through reference to dated sites in the general area.

Taylor's monograph is thoroughly researched and clearly written. The only major weakness, in fact, is the mediocre photographs which hardly do justice to the variety of small stone artifacts characteristic of the Pre-Dorset and Dorset cultures. It is regrettable that in the past arctic archaeologists have all too frequently been forced to rely

to an inordinate degree on personal communications, mimeographed circulars, and hastily written preliminary reports in order to construct their theoretical arguments. Future students of the Pre-Dorset and Dorset cultural manifestations will not labour under such a handicap. This reviewer cannot recall another study in recent years which has provided as many carefully documented and convincing answers to some of the most significant questions raised by nearly half a century of archaeological excavations in the north.

James W. VanStone

GEOGRAPHICAL VARIATION IN THE POLAR BEAR *Ursus maritimus* PHIPPS. BY T. H. MANNING. *Canadian Wildlife Service, Report Series Number 13*. 1971. 8½ x 11 inches, 27 pages illustrated, tables and map. \$1.00.

It is the habit of mammal taxonomists to gather large numbers of skulls from various parts of the range of a "species", to make a series of standardized measurements on each of them, then to compare them statistically to see whether or not they vary significantly in different geographic areas. Differences may be great (at the species level) or small (at the subspecies or "population" levels). Skulls are generally used for this purpose because they tend to concentrate, and reflect in their features many of the adaptations of animals to their particular environments. In 1959 T. H. Manning began a study of this nature to see if polar bears differed enough in any part of their range to be called separate species or subspecies. In 1966 the emphasis of his work was shifted to detect population differences below the subspecies level. To do this he took 17 measurements on each of 628 skulls collected by museums, universities and other agencies from many countries, separated them according to sex, age and region, then compared them. His central conclusions are that only one species of polar bear *Ursus maritimus* exists, and that possibly one new living subspecies and another extinct ice age subspecies may be recognized. These conclusions differ from those of Knottnerus-Meyer who described four new species and one new subspecies in 1908, and from those of Birula who recognized a single species consisting of three subspecies in 1932. Further, Manning found that skull size increased from east Greenland westward to the Bering Strait and inferred that a similar trend (cline) extended eastward from Greenland towards the Bering Strait. The difficulty in confirming the exist-