LATE QUATERNARY ENVIRONMENTS OF THE SOVIET UNION. Edited by A.A. VELICHKO. Edited for English-language edition by H.E. WRIGHT, JR., and C.W. BARNOSKY. Minneapolis: University of Minnesota Press, 1984. xxvi + 327 p., figs., tables, refs., index. Hardbound. US\$45.00.

The Soviet Union occupies a considerable portion of Eurasia. including almost all natural extratropical climatic belts. The territory of the U.S.S.R. comprises 22.4 million km², 16% of the Earth's land area. The northern region, extending from the Kola Peninsula in the west to the Chukotsk Peninsula and the Komandorskiye Islands in the east, covers 11 million km² (Kudria, 1985). Taking these figures into account, it appears obvious that the paleoclimatic and paleogeographic studies of the Soviet North should play a very important part in the evolutionary studies of the Earth. For a long time, however, Quaternary studies in the Soviet Union were focused almost exclusively on European Russia, but in the last decades, as a result of industrial development in Siberia and the Far East, our knowledge about North Asian Quaternary environmental history has been expanded. The Moscow Institute of Geography of the Academy of Sciences of the U.S.S.R. and the Novosibirsk Institute of Geology and Geophysics of the Academy of Sciences of the U.S.S.R. are especially active in developing and conducting long-term Quaternary projects. Undoubtedly, the evolutionary study of natural climatic fluctuations and paleogeographic reconstructions, by using uniform general principles of long-term geological processes, will permit a clear prediction of future natural trends on the Earth.

Late Quaternary Environments of the Soviet Union is a collection of articles by Soviet researchers that examines the evolution of the natural environment in the U.S.S.R. during the last 100 000-125 000 years. The monograph consists of nine chapters, an introduction to the English edition by H.E. Wright, Jr., and C.W. Barnosky, and an introduction by the editor of the Russian version, A.A. Velichko. The book discusses the most recent data gathered by Soviet researchers and also provides basic information in brief overviews on the following topics: (1) Late Pleistocene glaciation of the northern U.S.S.R., (2) mountain glaciation, (3) permafrost in the Late Pleistocene and Holocene, (4) loesses, fossil soils and periglacial formations, (5) vegetational history, (6) development of animal population, (7) inland sea basins, (8) paleoclimatic reconstructions, and (9) dispersal of primitive cultures.

This monograph is well structured, well illustrated and especially well printed by the University of Minnesota Press, Minneapolis. I highly recommend it both for students of Quaternary studies and those interested in prehistoric archaeology.

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DIE AUSRÜSTUNG ZUR SEEJAGD DER WESTLICHEN ES-KIMO, UNTERSUCHT IN IHREM KULTURELLEN KONTEXT. By J.-L. ROUSSELOT. Münchner Beiträge zur Amerikanistik, Band 11; Klaus Renner Verlag, Hohenschäftlarn, 1983. 425 p., tables, maps, figs., index. In German.

This is a book on hunting equipment used by the western Inuit: the repeating lance (chapter 1), light throwing weapons (chapter 2), and the kayak (chapter 3). These items are seldom mentioned in the literature and no monographs on these components of the hunting complex have

been published so far. The author describes and culturally classifies these objects used for maritime hunting.

Chapter 1 deals with the repeating lance. This appears to be the first detailed description of the weapon in the literature; it is seldom mentioned in the ethnographic literature. The design of the repeating lance is transitional between that of a lance and a harpoon, blending characteristics of both weapons. The author assumes that it evolved under environmental and economic pressures peculiar to the region (p. 67). The repeating lance is limited to the American coast of the Bering Sea and the islands. The author states that the repeating lance is used from a kayak against big seals and whales, and its main feature is the removable and replaceable point. Its design enabled the hunter sitting in a kayak to fire several points into the animal (p. 11).

In examining the museum specimens, the author was able to analyse critically the work and interpretations of other authors. On a number of occasions new conclusions were reached, for example in the interpretation of shaft lacing (p. 32). Thus, the book makes an important contribution to the knowledge of the material equipment of the western Inuit.

Chapter 2 deals with harpoons, bird spears, and spear throwers under the heading of light throwing weapons. Inconsistencies in the book appear in this chapter. Spear throwers are not throwing weapons but merely devices that support the throw (Hirschberg and Janata, 1980). So, also, there are problems with the terminology of light throwing weapons where the reader expects a corresponding discussion on heavy throwing weapons. Other difficulties exist with respect to harpoons, and while these problems may appear trivial, it is important in a book such as this that the organization be clear and direct, especially in dealing with material equipment.

While the book is very well written, an important error appears in terminology when the author refers repeatedly to material culture. This term is now outdated, and it should be replaced with that of material equipment. Culture is a permanent and mutual interreaction of all cultural domains, and the continued use of the term material culture is no longer appropriate. With the formal term material culture a demarcation is implicit with regard to social structure, ideology, and economic conditions on the one hand and material articles on the other. This is not justified since material articles are designed and used in social circumstances and in the context of ritual and daily life (Schlatter, 1985).

Chapter 3, the kayak, is outstanding. The author is very well informed on all the relevant literature and presents technical details and definitions very thoroughly. The kayak is described comprehensively and is discussed under headings of existing documentation, measures, forms, scaffold, hull of the boat (seams and tension), superstructures, paddles, paintings, condition, application, origin, and age. In the same way, the author deals with the design of kayaks extensively. He notes the large number of designs: many are on display in museums, and there are many more in storage not generally available for examination (p. 41). These studies led the author to question the hypothesis of McGhee (1974), who postulated a cultural affiliation between the Inuit of Norton Sound and those of the Mackenzie Delta.

The information in this book will be of good value to museum scientists and students engaged in the study of material equipment of the Inuit.

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