

**AKMAK: AN EARLY ARCHAEOLOGICAL ASSEMBLAGE FROM ONION PORTAGE, NORTHWESTERN ALASKA.** BY DOUGLAS D. ANDERSON. APPENDIX BY THOMAS D. HAMILTON. *Acta Arctica Volume XVI. Copenhagen: Monksgaard, 1970. 9 x 11½ inches, 80 pages, illustrated.*

Site reports make notoriously tedious reading, and *Akmak* appeared to be no exception, but in retrospect, I find myself in an elated state of appreciation. Little in the straightforward description of the *Akmak* assemblage is causative of this response although it may be appropriate to compare a site report to a rite of passage. One must instead look to the subtle expressions of the author's modesty and temperance in scientific ethics and reporting along with the gratifying experience of seeing a northern site report published within four years of the close of excavation. In the present sense the reviewer considers Onion Portage to be a locality or cluster of sites.

The *Akmak* assemblage has been published prior to a full report on Onion Portage due to its importance as the oldest cultural material there and its potential significance to Paleo-Indian or Paleo-Arctic prehistory.

A displaced *Akmak* artifact was recovered in 1965 at Onion Portage by geologist Sten Florin one year after the unfortunate death of J. L. Giddings. Subsequently, in 1966, the Hillside location of *in situ* artifacts was found and excavated.

The main section of the *Akmak* paper, a formal and technological classification and description of the artifacts, is preceded by a description of the site and an account of its discovery and excavation. A discussion of the function of the implements, plus a summary of the *Akmak* assemblage, in turn, follows the forty pages of formal description. Anderson concludes his part of the report with a comparative section.

In his eight-page appendix, Thomas D. Hamilton presents a lucid narrative that traces the *Akmak* occurrences from a test pit in one of the gullies behind the main Onion Portage site upslope to the small remnant of the *Akmak* or Hillside site. Fan deposits and cultural bands then were followed into the gully from the main or stratified Onion Portage site to demonstrate that the *Akmak* artifacts displaced from their original context occurred stratigraphically below Band 8 layer 3, the lowest occupation layer. Thus the *Akmak* assemblage is provided with a minimum age in excess of 8,300 years ago based on radiocarbon dating of Band 8. Anderson

earlier provides in a footnote the radiocarbon date  $7907 \pm 155$  B.C. (K-1583) or approximately 10,000 years ago obtained on a sample of bone from the gully fill but apparently associated with *Akmak* implements. This date had arrived too late for consideration in the analysis.

The *Akmak* assemblage of approximately 500 artifacts, half of which are utilized flakes, is grouped into eight morphological-technological classes. As the author points out, and as is the case with nearly all formal classifications, this arrangement presents a problem of the logical exclusiveness of some categories but I did not find this case to be particularly distracting, perhaps because of the relatively few artifact types involved. *Akmak* is characterized by large core bifaces, blade and microblade cores, blades and artifacts on blades, burinated flakes and blades, and large flake bifaces and unifaces almost exclusively made of a hard chert—*akmak* in the local Eskimo dialect. These implements, particularly the large core bifaces together with a core and blade industry, make *Akmak* unique among published sites in the North American arctic.

The reader who follows the text closely may find himself annoyed by the incomplete and dispersed provision of frequency data for subtypes, some of which can be derived through arithmetic operations, as well as by several confusing entries and oversights. The last appear to be of the common genre that seemingly accrue to the embarrassment of nearly every author, either through accident or due to the author's close association with the material, preventing him from seeing elements in the presentation that might not be clear to others.

Perhaps the least satisfactory section, but one of the briefest, is Anderson's classification of the *Akmak* assemblage by function. This presents a mixture of functional classes, knives for instance; other classes which by name are not very indicative of the tasks performed, e.g., heavy tool implements and beaked implements; and burins which are defined primarily by specialized technological or formal criteria but which also carry a functional definition, as a grooving and carving tool, not applicable to all formal burins. As an attempt to identify in terms of familiar tools the artifacts which have been described by form and manufacturing techniques, and also considering the difficulty in making positive functional identifications, the functional typology might have been replaced by less formal discussions of probable use at appropriate places within the descriptive part.

Anderson sees Akmak, together with the later Kobuk complex of Onion Portage dated to 6500-6000 B.C., as forming the relatively localized American Paleo-Arctic tradition. The American Paleo-Arctic in turn is drawn from a "diffusion sphere" extending from Lake Baikal to Northwest Alaska that existed prior to the flooding of Beringia, at the very least 10,000 years ago. I should draw attention to the moderation with which the author tempers his extended comparisons and hypotheses.

Akmak, in the reviewer's estimation, belongs to a late terminal Pleistocene aspect of the early man stage in North America not directly related to the fluted point hunters or Llano horizon. Anderson does not explicitly tie Akmak into Paleo-Indian prehistory, but it is tempting to do so and one may wonder if there is not some relationship, possibly at a period prior to the Akmak occupation as may be exemplified by various fluted point collections from northern Alaska which unfortunately are largely from surface sites.

Within recent years archaeologists have argued convincingly for a complex model of early New World prehistory involving an extended time depth, multiple migrations from Asia, population shifts in North America, and the development of local diversity. Akmak occupies a pivotal position in the arctic as a document of the latest major wave in early man's occupation of the New World, while at the same time it may perhaps bear the imprint of an antecedent belonging to the Paleo-Indian fluted point horizon. Considering, however, the broad scale of generality involved in this remark there is nothing to prevent us from regarding Akmak, in more specific terms, also as a relatively localized development.

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**THE EUROPEAN DISCOVERY OF AMERICA: THE NORTHERN VOYAGES, A.D. 500-1600.** BY SAMUEL ELIOT MORISON. *Don Mills: Oxford University Press, 1971. 6¼ x 9¼ inches, 712 pages, illustrated. \$15.00.*

This new book by a master historian and a long and well-tried authority on maritime history is certainly the prime modern work on North Atlantic discovery in any language. It is intended, and very well succeeds I think, to be a single-volume comprehensive synthesis of all the scholarly investigations on the subject to date. It is the first attempt in

a long time to treat the European discovery of North America as a coherent historical unity, and to trace its development from the Irish initiatives in the "Dark Ages" to the first unsuccessful attempts at planting colonies. To complete the picture Morison promises another volume on the European discovery of the Caribbean and South America running from Columbus to Cavendish (1492-1593), and then a third and final volume on the discoveries which filled in the North American coastline in the areas of New England and Hudson Bay and which were contemporary with the successful founding of Virginia, New England, and New France in the first decades of the seventeenth century. Now at eighty-four, may God grant him the years to write them.

The bulk of the book, sixteen out of twenty chapters, deals in chronological sequence with the Era of Exploration and Discovery proper, from Cabot's voyages to Raleigh's Roanoke Colonies (1497-1590), prefaced by two information-rich chapters on the English and French maritime development as of about A.D. 1500. Besides his detailed recounting of the history of each of the sixteenth century voyages of discovery to North America, Morison's most valuable contribution in these chapters — based as they are on previously well-cultivated historical documentation and scholarship — is his ability to pinpoint reasonably accurately the places sighted, visited, and named by the explorers as a consequence of his personal survey of the North American coast by private plane from the Carolinas to Labrador. The book is definitely better for his numerous photographs of significant points along the coastline reproduced in black and white, as well as the reproductions of old and modern maps and of portraits of the great navigators. Lacking, however, is a chronology of the voyages which would have been useful for reference both while reading the book and afterwards. In the notes at the end of each chapter Morison discusses sources, bibliography, and continuing or controversial problems in such a lively manner as to make them as interesting and, for scholars at least, as important as the text itself.

One of these controversial problems is the matter of John Cabot's landfall in 1497. Morison places it at the northern tip of Newfoundland on the latitude of Ireland's Dursley Head (51° 33' N.; p. 174), and believes Cabot then coursed the east coast of Newfoundland down to the Avalon peninsula — never once touching or sighting Cape Breton. Basing himself on the scant but firm statements of