Book Reviews

Prehistoric Craftsmanship

Lithic Technology. Making and Using Stone Tools. Papers from a congress, Chicago, Aug. 1973. EARL SWANSON, Ed. Mouton, The Hague, 1975 (U.S. distributor, Aldine, Chicago). x, 252 pp., illus., + plates. $27.50. World Anthropology.

Over the last decade there has been in archeology a renascence of studies of stone tool technology. A group of young scholars, inspired and taught by Don Crabtree and François Bordes, have devoted their talents to acquiring the skills and rediscovering the techniques involved in the manufacture and use of stone implements. This renewed interest in lithic technology is not just an isolated fad or whim; it reflects the new optimism and scientific approach that the "new archeology" has brought to the discipline. It is only too frequent, for most of prehistory, that we are left with an archeological record that consists almost entirely of stone implements; without a detailed knowledge of how these implements were made and used, we can make very little of the similarities and differences "apparent" between lithic assemblages. The recent work of "lithic technologists" attempts to replace the intuition, "common sense," and rather imprecise ethnographic analogies on which we have depended in the past with knowledge gained by careful experimentation using the tools and methods of science.

This volume, a collection of papers from the 9th International Congress of Anthropological and Ethnological Studies, epitomizes this renewed interest and the new approaches being employed. As is typical of such collections, the quality of the papers is uneven, with some added variation introduced by the fact that the majority are short and presumably substantially as they were read at the congress, whereas a few are quite long, much too long to have been read aloud. The short papers present mainly results and conclusions or discussions of terminology without much mention of methods or techniques. This is not a limitation suffered by the long papers. The short papers are worth reading, if only to get an impression of the kinds of information that lithic technologists can provide and the kinds of questions they can frame about stone implements. Certainly a few are excellent examples of their genre, such as Crabtree's, which is as good a summary of the problems addressed by lithic technologists as can be found, and Purdy's, which summarizes her work on the thermal treatment of flint. There is a quantity of useful information in all the longer papers, but space only permits the mention of a couple that this reviewer found particularly interesting.

Joel Gunn, in a paper entitled "Idiosyncratic behavior in chipping style," attempts to isolate some technical features of implements that would be useful in distinguishing the work of individual knappers in lithic assemblages. He employs a series of multivariate statistical analyses using data from laser spectrograms, which reflect scar orientation, in trying to distinguish among the work of five experimental knappers and a (presumed) single prehistoric knapper. While this effort is not entirely successful, the approach is a most interesting one which does offer a reasonable hope that such distinctions can be achieved and provides a new technique for extracting reliable data on scar orientation.

Another interesting paper is "Toolmaking and tool use among the preceramic peoples of Panama" by Anthony Ranere. In a straightforward manner, which contrasts favorably with some of the other papers' gratuitous "flow diagrams," "models," and their verbal accompaniment, Ranere interprets some lithic assemblages from Panama in the light of his experiments in replicating the implements and their wear patterns. His utilization experiments were limited to woodworking, and it is therefore not surprising that he interprets most of the wear patterns on the archeological specimens as traces left by woodworking. Had he conducted a broader range of experiments, working a variety of materials, one might feel more confidence in his specific interpretations, although his general conclusions are probably correct. Despite such shortcomings, this paper demonstrates how much valuable information can be extracted by a modern student of lithic technology using the experimental approach.

The final part of the book is a discussion section that begins with two critical "Comments" by J. Coe and J. Epstein followed by short replies from the various authors. This, as might be expected, is the liveliest section of the book. Both Coe and Epstein, but especially Epstein, point out some methodological problems and basic questions that have been glossed over or ignored by some of the authors here (and the authors of many other papers elsewhere on lithic technology). Their "Comments" are a fitting way to end the volume, and help to unify and generalize what would otherwise be a rather desultory, though interesting, collection of papers on a new area of archeological research.

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Sorting Out a Populace

Aboriginal Tribes of Australia. Their Terrain, Environmental Controls, Distribution, Limits, and Proper Names. NORMAN B. TINDALE. With an appendix by Rhys Jones. University of California Press, Berkeley, 1975. xii, 404 pp. + plates + loose maps, boxed. $50.

Few people have contributed as much to our understanding of the Aboriginal societies of Australia as has Norman Tindale during his long research career. At the end of World War I he began work in entomology, a field in which he has remained active. Soon afterward he extended his interests to various aspects of Aboriginal life and society, and in the ensuing 50 years he has pursued his investigations among Aboriginal communities in many parts of Australia. In addition, in those early days he and a few colleagues initiated systematic archeological inquiries into the prehistory of the Aborigines. Later he joined with Birdsell in a program of long-term research into the physical anthropology of the Aborigines, the results of which they have attempted to integrate with the data derived from his anthropological and archeological work. In all, this is a formidable record of sustained and productive scientific endeavor.

Tindale's research into the social organization of Aboriginal tribes has always been very much in the vein of what nowadays is called cultural ecology in the United States. In the 1930's and 1940's, at a time when most British (including Australian) anthropologists were preoccupied with structural-functional sociological analyses of kinship systems and terminologies, too often divorced from identifiable environmental settings, Tindale concerned himself with the basic questions of how Aborigines adapted to and made a living in differing ecological regions, how effective were the