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978-0-521-88827-1 - Lithic Technology: Measures of Production, Use, and Curation

Edited by William Andrefsky

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## LITHIC TECHNOLOGY: MEASURES OF PRODUCTION, USE, AND CURATION

The life history of stone tools is intimately linked to tool production, use, and maintenance. These are important processes in the organization of lithic technology, or the manner in which lithic technology is embedded within human organizational strategies of land use and subsistence practices. This volume brings together essays that measure the life history of stone tools relative to retouch values, raw material constraints, and evolutionary processes. Collectively, they explore the association of technological organization with facets of tool form such as reduction sequences, tool production effort, artifact curation processes, and retouch measurement. Data sets cover a broad geographic and temporal span, including examples from France during the Paleolithic, the Near East during the Neolithic, and other regions such as Mongolia, Australia, and Italy. North American examples are derived from Paleoindian times to historic period aboriginal populations throughout the United States and Canada.

William Andrefsky, Jr., is a professor of anthropology at Washington State University. He is the author of more than 100 articles and books, including *Lithics: Macroscopic Approaches to Analysis*.

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Edited by

WILLIAM ANDREFSKY, JR.

*Washington State University*



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*In memory of Yukiko Akama Andrefsky*

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## PREFACE AND ACKNOWLEDGMENTS

In 1968 George Frison introduced the notion of artifact transformations as a result of use and resharpening. This “Frison Effect,” as it has come to be called, on stone tools can be viewed as the life histories of individual tools. Such life histories are intimately linked to tool production, use, and maintenance. This collection of chapters grew from presentations at a symposium entitled “Artifact Life-Cycle and the Organization of Lithic Technologies” that took place at the 71st Annual Meeting of the Society for American Archaeology in 2006. The focus of that symposium and this volume is upon the relationship between the manner in which humans organize their lithic technology and the life history of lithic tools.

Researchers interested in lithic technological organization realize the importance of artifact life histories in understanding the intricacies of tool form and shape as they relate to production strategies for those tools. In an effort to better understand those relationships, lithic analysts (including contributors to this volume) have explored lithic reduction sequences, chaîne opératoire, tool curation, tool production effects, retouch measurements, and the role of lithic raw material as these relate to lithic technological organization and stone tool life history. A great deal of imaginative and compelling research has occurred since the Frison Effect was first recognized, and this collection of papers provides a fresh new look at all of these topics from both a methodological and a theoretical perspective.

I would like to thank all of the participants of the original symposium for their participation. For various reasons, not all symposium



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participant chapters are included in this volume. Also, as chapters were reviewed, revised, and adjusted, some chapters gained authors and some authors contributed different written research. This blend of chapters captures opinions and ideas about lithic technology from some of the most respected scholars in the field today, but it also includes research from many young new researchers who will one day guide the field of lithic technology. It was a joy to bring this group together under a single cover. My best wishes go to all volume contributors and symposium participants.

I must also thank the team of editors and production staff from Cambridge University Press and their associated collaborators. In particular I thank Publishing Director Beatrice Rehl and her editorial assistant Tracy Steel for managing this book project. The production manager for Aptara, Inc., Maggie Meitzler, helped me navigate through the technical challenges of today's high-tech world of publishing. William Stoddard was a fabulous copy editor. Lastly, I thank the Cambridge University Press peer reviewers for making important comments on the original draft.

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## LIST OF CONTRIBUTORS

WILLIAM ANDREFSKY, JR., is professor and chair of anthropology at Washington State University. His interests include hunter–gatherer land use and technological strategies, archaeological ethics, and the Neolithic transition. He is currently the president of the Register of Professional Archaeologists. Some of his research has been published by *Journal of Archaeological Science*, *American Antiquity*, *Geoarchaeology*, *Journal of Archaeological Research*, *Lithic Technology*, *Journal of Middle Atlantic Archaeology*, *North American Archaeologist*, *Journal of Field Archaeology*, and Cambridge University Press, University of Utah Press, Elsevier, Blackwell Publishing, AltaMira Press, Westview Press, and Cambridge Scholars Publishing.

BROOKE BLADES received his doctorate in anthropology with a specialization in the European Upper Paleolithic from New York University in 1997. He has undertaken archaeological excavations or research in France, the Czech Republic, Luxembourg, Northern Ireland, and eastern North America. His research interests focus on lithic material procurement and reduction in the European Paleolithic and in hunter–gatherer societies in eastern North America. He was the author of *Aurignacian Lithic Economy: Ecological Perspectives from Southwestern France* (Kluwer Academic/Plenum 2001) and is the co-editor, with Brian Adams, of *Lithic Materials and Paleolithic Societies* (Blackwell forthcoming).

ANDREW P. BRADBURY received his M.A. from the University of Tennessee, Knoxville, in 1994. He is currently a principal investigator

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and lithic analyst with Cultural Resource Analysts, Inc., in Lexington, Kentucky. His research interests include southeastern U.S. prehistory, lithic technology, and evolutionary theory.

PHILIP J. CARR is Associate Director of the Center for Archaeological Studies and specializes in the prehistory of the southeastern United States and lithic analysis. Since joining the University of South Alabama faculty, he has engaged in the study of the rich cultural heritage of the Gulf Coast. Recent publications include the co-edited volume with Dr. Jon Gibson, *Signs of Power: The Rise of Cultural Complexity in the Southeast*, and he edited the volume *The Organization of North American Chipped Stone Tool Technologies*.

DAVID S. CLARKE earned his B.A. in anthropology from Mercyhurst College and his M.A. from the University of Montana. Currently he is an archaeologist for the Delaware Department of Transportation. His research interests include lithic technology, evolutionary theory, Pacific Northwest hunter-gatherers, and the peopling of the Americas. He has contributed to articles in *American Antiquity* and *Journal of World Prehistory*.

CHRIS CLARKSON received his Ph.D. from the Australian National University in 2004 on long-term technological change in the Northern Territory of Australia. He has since held positions at the University of Cambridge and the Australian National University. He is currently employed in the School of Social Science at the University of Queensland, where he continues research into the lithic technology of Australia, India, France, and Africa. He is the author of *Lithics in the Land of the Lightning Brothers* (ANU E-Press) and the editor of *Lithics Down Under* (BAR).

D. RANDALL COOPER is a staff archaeologist at Cultural Resource Analysts, Inc., in Lexington, Kentucky. He has a B.A. in anthropology from the University of Tennessee, where he developed an interest in lithic technology beginning in 1983. He has since analyzed lithic assemblages from North Dakota, coastal Alaska, the Tahoe National Forest, the Mojave Desert, and several regions of Kentucky. Other interests include relational database design and Appalachian folk culture.

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METIN I. EREN holds degrees in anthropology from Harvard University (A.B.) and Southern Methodist University (M.A.) and is currently pursuing an M.A. degree in experimental archaeology from the University of Exeter. He has participated in fieldwork in Ohio, Colorado, Turkey, the Georgian Republic, Tanzania, and China. His recent awards include a National Science Foundation Graduate Research Fellowship and the 2006 Society for American Archaeology Student Paper Award (with Mary Prendergast).

BILL FINLAYSON is the Director of the Council for British Research in the Levant and a visiting professor at the Department of Archaeology, Reading University. His undergraduate and postgraduate degrees were in prehistoric archaeology at the University of Edinburgh. He is a director of two major PPNA projects in Jordan, at Dhra' and in Wadi Faynan, and editor and author of the recent volume *The Early Prehistory of Wadi Faynan, Southern Jordan*.

NATHAN B. GOODALE is currently a visiting instructor in anthropology at Hamilton College. He received his B.A. from Western State College and his M.A. from the University of Montana and is currently a Ph.D. candidate at Washington State University. He has published articles in *American Antiquity*, *Paléorient*, *Archaeology in Montana*, *JONA*, and *Levant*, as well as a chapter in the edited volume *Complex Hunter-Gatherers*. He is interested in using evolutionary theory to explain technological invention and its relationship to population dynamics during the transition to agriculture.

CHERYL HARPER is a graduate student in anthropology at Washington State University and an archaeologist with the U.S. Forest Service. Her research interests focus on understanding landscape use by Archaic populations in the American Southwest.

PETER HISCOCK is a reader at the Australian National University. His work has concentrated on ancient technology, both in Paleolithic Europe and in Australia. His latest book is *The Archaeology of Ancient Australia* (Routledge).

IAN KUIJT specializes in the archaeology of the Near East, Ireland, and Western North America. Completing his doctoral work at Harvard University, he is the editor of *Life in Neolithic Farming Communities*:

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*Social Organization, Identity, and Differentiation* (2000) and the co-editor of *Complex Hunter–Gatherers: Evolution and Organization of Prehistoric Communities on the Plateau of Northwestern North America* (2004). His research has been supported by the National Endowments for the Humanities, the National Science Foundation, the Social Sciences and Humanities Research Council of Canada, and the British Academy.

DOUGLAS H. MACDONALD is an assistant professor at the University of Montana, but worked at GAI Consultants in Pittsburgh during the Skink Rockshelter project. Influenced by his graduate work at Washington State University, he studies lithic technological organization at prehistoric sites in the North American Plains, Rockies, and mid-Atlantic.

SHANE J. MACFARLAN is a Ph.D. student in evolutionary anthropology at Washington State University. He has an M.A. in museum science (Texas Tech University 2003) and a dual B.A. in anthropology and history (University of Pittsburgh 1998). He is currently performing ethnographic research on the island of Dominica and archaeological research in Baja California Sur. His interests are human behavioral ecology, economic reasoning, and cooperation.

MARGARET C. NELSON is a professor in the School of Human Evolution and Social Change and Vice Dean of Barrett, the Honors College at Arizona State University. Her research examines technology and land use in small-scale Puebloan societies in the U.S. Southwest. Her recent book, *Mimbres During the Twelfth Century: Abandonment, Continuity, and Reorganization*, examines the continuities and changes in social and subsistence organization in the Mimbres region of southwest New Mexico from A.D. 1000 to 1250. She has published in numerous journals and books on the organization of prehistoric stone technology.

CURTIS OSTERHOUDT received a dual B.A. in mathematics and physics at Western State College Colorado and a Ph.D. in physics at Washington State University. He is currently a postdoctoral researcher at Los Alamos National Laboratory, focusing on physical acoustics and

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its uses for measuring various qualities and features of systems. Other academic interests include statistical mechanics and its applications to disparate fields, including archaeology.

MARY E. PRENDERGAST is a doctoral candidate in anthropology at Harvard University, where she has been studying terminal Pleistocene and Holocene hunter-gatherers and transitions to food production. She conducts fieldwork and faunal analyses in China, Kenya, and Tanzania and has published research on Middle Stone Age through Pastoral Neolithic sites in East Africa.

ANNA MARIE PRENTISS earned her B.A. and M.A. degrees in anthropology at the University of South Florida. She completed her Ph.D. in archaeology at Simon Fraser University and is currently associate professor of anthropology at the University of Montana. Her research interests include Pacific Northwest hunter-gatherers, evolutionary theory, and lithic technology. She edited (with Ian Kuijt) *Complex Hunter-Gatherers: Evolution and Organization of Prehistoric Communities on the Plateau of Northwestern North America* (University of Utah Press) and has published articles in a wide range of journals, including *American Antiquity*, *Current Anthropology*, *Journal of Anthropological Archaeology*, and *Journal of World Prehistory*.

COLIN PATRICK QUINN is a graduate student at the University of Michigan and has acquired degrees from the University of Notre Dame (B.A.) and Washington State University (M.A.). His research interests include stone tool production and use, experimental techniques, personal adornment production and use, and costly signaling theory in small-scale and middle-range societies in the Near East, western Europe, and northwestern North America.

MICHAEL J. SHOTT teaches archaeology at the University of Akron. His interests include hunter-gatherers, how the archaeological record formed, and lithic analysis. He has written or edited six books and about 80 articles. He works chiefly in the North American Midwest and Great Basin but also has worked in Mexico and Argentina.

JENNIFER WILSON received her M.A. from Washington State University in May 2007. Her thesis focused on technological organization and

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measuring tool curation from a chert quarry assemblage in the northern Great Basin. Currently, she is employed with Archaeological and Historical Services at Eastern Washington University, and her research focuses on hunter-gatherer organization and lithic technology in the Columbia Plateau and the northern Great Basin.