

Formation Processes Of The Archaeological Record

Synthesizes the most important principles of cultural and environmental formation processes for both students and practicing archaeologists.

It has been clear for many years that the ways in which archaeology is practised have been a direct product of a particular set of social, cultural, and historical circumstances - archaeology is always carried out in the present. More recently, however, many have begun to consider how archaeological techniques might be used to reflect more directly on the contemporary world itself: how we might undertake archaeologies of, as well as in the present. This Handbook is the first comprehensive survey of an exciting and rapidly expanding sub-field and provides an authoritative overview of the newly emerging focus on the archaeology of the present and recent past. In addition to detailed archaeological case studies, it includes essays by scholars working on the relationships of different disciplines to the archaeology of the contemporary world, including anthropology, psychology, philosophy, historical geography, science and technology studies, communications and media, ethnoarchaeology, forensic archaeology, sociology, film, performance, and contemporary art. This volume seeks to explore the boundaries of an emerging sub-discipline, to develop a tool-kit of concepts and methods which are applicable to this new field, and to suggest important future trajectories for research. It makes a significant intervention by drawing together scholars working on a broad range of themes, approaches, methods, and case studies from diverse contexts in different parts of the world, which have not previously been considered collectively.

A tightly focused group of papers on the deconstruction and significance of the concept of time, with a historical background on the development of time perspectivism and a range of case studies and examples. After reading this you may never think about time in quite the same way.

This guidance document covers the use of geoarchaeology to assist in understanding the archaeological record. Geoarchaeological techniques may range in scale from landscape studies to microscopic analysis, and are carried out by practitioners with specialist knowledge about the physical environment in which archaeological stratigraphy is preserved, and excavations take place. The main aim is usually to understand site formation processes, but there may also be issues concerning site preservation, refining field interpretations of archaeological contexts and identifying changes in the physical landscape through time.

Machine generated contents note: 1. The trouble with theory; 2. The total record; 3. Formation theory; 4. Materialized culture; 5. Archaeological entities; 6. Archaeological interventions; 7. A 'new' social archaeology?

"The polygenetic origins of archaeological sediments create formidable interpretive challenges. Cultural and natural mechanisms operate in tandem to form and transform the archaeological record. While natural formation processes can be complicated in their own right, anthropogenic agents substantially increase the level of ambiguity in interpreting these sediments. In this thesis I cultivate methods first developed by practitioners of the earth sciences to provide insight into formation concepts that otherwise prove elusive. Fieldwork was conducted in coastal zones of southwestern Alaska over a period of four years. The region is characterized by a dynamic natural and cultural history, and the location provides an ideal setting for a study of this nature. Archaeologists regularly cite frost-related mechanisms (cryoturbation) as potential disturbance agents. Actual field data demonstrating the phenomenon, however, are few. In 1999, I established a long-term experiment designed to measure frost-induced displacement of the archaeological record. Objects buried in experimental plots demonstrated little movement after the first year. Objects positioned in one surface plot, configured to minimize the effects of all mechanisms except cryoturbation, moved an average of 4.7 cm during the same period. Objects in a second surface plot, which lacked restraints on wind and

other variables, shifted an average of 18 cm, rendering their original arrangement unintelligible. Extrapolated over periods of decades or centuries, the data show that spatial patterning in the archaeological record is subject to substantial postdepositional reworking by frost, wind, and biological agents. I use thin-section micromorphology to assess whether a 6000 year-old living surface at the Mink Island site on Katmai National Park was abandoned due to a volcanic eruption. I also show that thin, dark lenses visible in lithostratigraphic sequences at the site represent the decomposing remains of vegetal fiber rather than charcoal. I further demonstrate that the microfabric of living surfaces at this coastal Alaska site does not resemble the composition of living surfaces identified elsewhere. The differentiation of floor deposits in this sociocultural and environmental context is more complex than in regions where plaster floors were common. Thin-section micromorphology illuminates site formation processes at a resolution unachievable using standard excavation techniques"--Leaves xix-xx.

This is an introductory text for students interested in identification and analysis of animal remains from archaeological sites. The emphasis is on animals whose remains inform us about the relationship between humans and their natural and social environments, especially site formation processes, subsistence strategies, the processes of domestication, and paleoenvironments. Examining examples from all over the world, from the Pleistocene period up to the present, this volume is organized in a way that is parallel to faunal study, beginning with background information, bias in a faunal assemblage, and basic zooarchaeological methods. This revised edition reflects developments in zooarchaeology during the past decade. It includes sections on enamel ultrastructure and incremental analysis, stable isotopes and trace elements, ancient genetics and enzymes, environmental reconstruction, people as agents of environmental change, applications of zooarchaeology in animal conservation and heritage management, and a discussion of issues pertaining to the curation of archaeofaunal materials.

This book is a discussion of the study of soils as a component of earth science applications in archaeology, a subdiscipline known as geoarchaeology. The volume focuses on how the study of soils can be integrated with other aspects of archaeological and geoscientific research to answer questions regarding the past. Anyone who needs to know how soils can be used to help answer archaeological questions will be interested in this work.

Paleobiology struggled for decades to influence our understanding of evolution and the history of life because it was stymied by a focus on microevolution and an incredibly patchy fossil record. But in the 1970s, the field took a radical turn, as paleobiologists began to investigate processes that could only be recognized in the fossil record across larger scales of time and space. That turn led to a new wave of macroevolutionary investigations, novel insights into the evolution of species, and a growing prominence for the field among the biological sciences. In *The Quality of the Archaeological Record*, Charles Perreault shows that archaeology not only faces a parallel problem, but may also find a model in the rise of paleobiology for a shift in the science and theory of the field. To get there, he proposes a more macroscale approach to making sense of the archaeological record, an approach that reveals patterns and processes not visible within the span of a human lifetime, but rather across an observation window thousands of years long and thousands of kilometers wide. Just as with the fossil record, the archaeological record has the scope necessary to detect macroscale cultural phenomena because it can provide samples that are large enough to cancel out the

noise generated by micro-scale events. By recalibrating their research to the quality of the archaeological record and developing a true macroarchaeology program, Perreault argues, archaeologists can finally unleash the full contributive value of their discipline. Matthew Keith and the contributors to this volume provide a series of studies that examine the ways to identify the natural and anthropogenic processes that shape shipwreck site formation. The volume also showcases emerging technologies and methods by which archaeologists study shipwreck sites, including computer modeling and site reconstruction, as well as how human activities such as trawl fishing affect shipwreck sites.

A synthesis of the most important principles of cultural and environmental formation processes. For students and practicing archaeologists.

Advances in Archaeological Method and Theory

The last 20 years have witnessed a proliferation of new approaches in archaeological data recovery, analysis, and theory building that incorporate both new forms of information and new methods for investigating them. The growing importance of survey has meant an expansion of the spatial realm of traditional archaeological data recovery and analysis from its traditional focus on specific locations on the landscape-archaeological sites-to the incorporation of data both on-site and off-site from across extensive regions. Evolving survey methods have led to experiments with nonsite and distributional data recovery as well as the critical evaluation of the definition and role of archaeological sites in data recovery and analysis. In both survey and excavation, the geomorphological analysis of landscapes has become increasingly important in the analysis of archaeological materials. Ethnoarchaeology-the use of ethnography to sharpen archaeological understanding of cultural and natural formation processes-has concentrated study on the formation processes underlying the content and structure of archaeological deposits. These actualistic studies consider patterns of deposition at the site level and the material results of human organization at the regional scale. Ethnoarchaeological approaches have also affected research in theoretical ways by expanding investigation into the nature and organization of systems of land use per se, thus providing direction for further study of the material results of those systems. Nathan Richards seeks to discover what we can learn by examining intentionally abandoned vessels and to determine what the differences are between cultural site formation processes and those created "naturally" (that is, by shipwrecks and other nautical disasters). Using Australian waters as a case study, Richards examines over 1,500 vessels abandoned over a period of more than 200 years. --from publisher description.

The subject of 'Molluscs in Archaeology' has not been dealt with collectively for several decades. This new volume in Oxbow's 'Studying Scientific Archaeology' series addresses many aspects of molluscs in archaeology. It will give the reader an overview of the whole topic; methods of analysis and approaches to interpretation. It aims to be a broad based text book giving readers an insight of how to apply analysis to different present and past landscapes and how to interpret those landscapes.

A guide to the systematic understanding of the geoarchaeological matrix

Reconstructing Archaeological Sites offers an important text that puts the focus on basic theoretical and practical aspects of depositional processes in an archaeological site. It contains an in-depth discussion on the role of stratigraphy that helps determine

how deposits are organised in time and space. The authors — two experts in the field — include the information needed to help recognise depositional systems, processes and stratigraphic units that aid in the interpreting the stratigraphy and deposits of a site in the field. The book is filled with practical tools, numerous illustrative examples, drawings and photos as well as compelling descriptions that help visualise depositional processes and clarify how these build the stratigraphy of a site. Based on the authors' years of experience, the book offers a holistic approach to the study of archaeological deposits that spans the broad fundamental aspects to the smallest details. This important guide: Offers information and principles for interpreting natural and anthropogenic sediments and physical processes in sites Provides a framework for reconstructing the history of a deposit and the site Outlines the fundamental principles of site formation processes Explores common misconceptions about what constitutes a deposit Presents a different approach for investigating archaeological stratigraphy based on sedimentary principles Written for archaeologists and geoarchaeologists at all levels of expertise as well as senior level researchers, *Reconstructing Archaeological Sites* offers a guide to the theory and practice of how stratigraphy is produced and how deposits can be organised in time and space.

Papers of a symposium held at the 51st annual meeting of the Society for American Archaeology in New Orleans, Louisiana on Apr. 27, 1986.

Archaeologists have long labored under the implicit assumption that the archaeological record is a direct reflection of past human behaviors. However, numerous cultural and environmental processes intervene between past behaviors and their reconstruction through archaeological inference. This study examines the interface between household archaeology and formation processes through the study of domestic materials from two contemporaneous sites in the Zapotitlán Valley of El Salvador that were occupied by people who spoke the same language and belonged to the same regional political system. Cerro was a small village that was occupied for several decades before it was deeply buried by the eruption of Loma Caldera volcano. San Andrés was a much larger center that also was affected by several eruptions, but did not experience long-term catastrophic abandonment or exceptional preservation. The research examines the effects of cultural formation processes, including reuse, discard, abandonment, and post-abandonment disturbance processes, and non-cultural formation processes, such as effects of catastrophic volcanic burial, and the effects of plants and animals. It compares the de facto refuse from Cerro with discarded materials from Cerro, and San Andrés using the discard equation and methods developed in accumulations research to build a foundation for more generally applicable models to interpret household remains in western El Salvador and throughout Mesoamerica.

The *Encyclopedia of Archaeology* encompasses all aspects of archaeology, including the nature and diversity of archaeology as a scientific discipline, the practice of archaeology, archaeology in the everyday world, and the future of the discipline. Featured in the *Encyclopedia of Archaeology* are articles by leading authors that summarize archaeological knowledge at the beginning the 21st century, highlighting important sites and issues, and tracing the development of prehistoric cultures around the globe.

The Oxford Handbook of Maritime Archaeology is a comprehensive survey of the field at a time when maritime archaeology has established itself as a mature branch of archaeology. This volume draws on the expertise of nearly fifty international scholars who examine the many distinct and universal aspects of the discipline.

Groups of people abandoned sites in different ways, and for different reasons. And what they did when they left a settlement or area had a direct bearing on the kind and quality of cultural remains that entered the archaeological record, for example, whether buildings were dismantled or left standing, or tools buried, destroyed or removed from the site. Contributors to this unique collection on site abandonment draw on ethnoarchaeological and archaeological data from North and South America, Europe, Africa, and the Near East.

This volume brings together contributions from an experienced group of archaeologists and geologists whose common objective is to present thorough and current reviews of the diverse ways in which methods from the earth sciences can contribute to archaeological research. Many areas of research are addressed here, including artifact analysis and sourcing, landscape reconstruction and site formation analysis, soil micromorphology and geophysical exploration of buried sites.

This book is the only text devoted entirely to archaeological stratigraphy, a subject of fundamental importance to most studies in archaeology. The first edition appeared in 1979 as a result of the invention, by the author, of the Harris Matrix--a method for analyzing and presenting the stratigraphic sequences of archaeological sites. The method is now widely used in archaeology all over the world. The opening chapters of this edition discuss the historical development of the ideas of archaeological stratigraphy. The central chapters examine the laws and basic concepts of the subject, and the last few chapters look at methods of recording stratification, constructing stratigraphic sequences, and the analysis of stratification and artifacts. The final chapter, which is followed by a glossary of stratigraphic terms, gives an outline of a modern system for recording stratification on archaeological sites. This book is written in a simple style suitable for the student or amateur. The radical ideas set out should also give the professional archaeologist food for thought. Key Features * Covers a basic principle of all archaeological excavations * Provides a data description and analysis tool for all such digs, which is now widely accepted and used. * Gives extra information

Behavioral archaeology offers a way of examining the past by highlighting human engagement with the material culture of the time. 'Behavioral Archaeology: Principles and Practice' offers a broad overview of the methods and theories used in this approach to archaeology. Opening with an overview of the history and key concepts, the book goes on to systematically cover both principles and practice: the philosophy of science and the scientific method; artifacts and human behavior; archaeological inference; formation processes of the archaeological

record; technological change; behavioral change; and ritual and religion. Detailed case studies show the relevance of behavioral method and theory to the wider field of archaeological studies. The book will be invaluable to students of archaeology and anthropology.

Geoarchaeological studies can significantly enhance interpretations of human prehistory by allowing archaeologists to decipher from sediments and soils the effects of earth processes on the evidence of human activity. While a number of previous books have provided broad geographic and temporal treatments of geoarchaeology, this new volume presents a single author's view intended for North American archaeologists. Waters deals with those aspects of geoarchaeology—stratigraphy, site formation processes, and landscape reconstruction—most fundamental to archaeology, and he focuses on the late Quaternary of North America, permitting in-depth discussions of the concepts directly applicable to that research. Assuming no prior geologic knowledge on the part of the reader, Waters provides a background in fundamental geological processes and the basic tools of geoarchaeology. He then proceeds to relate specific physical processes, microenvironments, deposits, and landforms associated with riverine, desert, lake, glacial, cave, coastal, and other environments to archaeological site formation, location, and context. This practical volume illustrates the contributions of geoarchaeological investigations and demonstrates the need to make such studies an integral part of archaeological research. The text is enhanced by more than a hundred line drawings and photographs.

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Reconstructions

The archaeological site of Pirque Alto (CP-11), located in the Parotani valley region of Cochabamba, Bolivia, is a multicomponent site with components dating back as far as the Formative Period up until Inca times. Previous archaeological work done at this site shows that this site has been impacted by both natural and cultural formation processes. This report examines ceramic artifact remains collected from a systematic surface survey of the whole site from 2005 and subsequent excavations conducted during 2007, both of which were done as a part of the Prehistoric Parotani Settlement Project. Comparisons are made between the surface and subsurface ceramic densities and from these comparisons, I determine the extent to which surface and subsurface artifact densities reflect formation processes active at this site. This research seeks to add to our understanding of how difference processes impact the archaeological record from which interpretations are made.

Over the past three decades, “landscape” has become an umbrella term to describe many different strands of archaeology. From the processualist study of settlement patterns to the phenomenologist’s experience of the natural world, from human impact on past environments to the environment’s impact on human thought, action, and interaction, the term has been used. In this volume, for the first time, over 80 archaeologists from three continents attempt a comprehensive definition of the ideas and practices of landscape archaeology, covering the theoretical and the practical, the research and conservation, and encasing the term in a global framework. As a basic reference volume for landscape archaeology, this volume will be the benchmark for decades to come. All royalties on this Handbook are donated to the World Archaeological Congress.

For more than 200 years, archaeological sites in the Middle East have been dug, sifted, sorted, and saved by local community members who, in turn, developed immense expertise in excavation and interpretation and had unparalleled insight into the research process and findings—but who have almost never participated in strategies for recording the excavation procedures or results. Their particular perspectives have therefore been missing from the archaeological record, creating an immense gap in knowledge about the ancient past and about how archaeological knowledge is created. *Why Those Who Shovel Are Silent* is based on six years of in-depth ethnographic work with current and former site workers at two major Middle Eastern archaeological sites—Petra, Jordan, and Çatalhöyük, Turkey—combined with thorough archival research. Author Allison Mickel describes the nature of the knowledge that locally hired archaeological laborers exclusively possess about artifacts, excavation methods, and archaeological interpretation, showing that archaeological workers are experts about a wide range of topics in archaeology. At the same time, Mickel reveals a financial incentive for site workers to pretend to be less knowledgeable than they actually are, as they risk losing their jobs or demotion if they reveal their expertise. Despite a recent proliferation of critical research examining the history and

politics of archaeology, the topic of archaeological labor has not yet been substantially examined. *Why Those Who Shovel Are Silent* employs a range of advanced qualitative, quantitative, and visual approaches and offers recommendations for archaeologists to include more diverse expert perspectives and produce more nuanced knowledge about the past. It will appeal to archaeologists, science studies scholars, and anyone interested in challenging the concept of “unskilled” labor.

First published in 1999. Routledge is an imprint of Taylor & Francis, an informa company.

Research into the anthropogenic and taphonomic processes that affect the formation of maritime archaeological resources has grown significantly over the last decade in both theory and the analysis of specific sites and associated material culture. The addition of interdisciplinary inquiry, investigative techniques, and analytical modeling, from fields such as engineering, oceanography, and marine biology have increased our ability to trace the unique pathways through which archaeological sites progress from initial deposition to the present, yet can also link individual sites into an integrated socio-environmental maritime landscape. This edited volume presents a global perspective of current research in maritime archaeological landscape formation processes. In addition to “classically” considered submerged material culture and geography, or those that can be accessed by traditional underwater methodology, case studies include less-often considered sites and landscapes. These landscapes, for example, require archaeologists to use geophysical marine survey equipment to characterize extensive areas of the seafloor or go above the surface to access maritime archaeological resources that have received less scholarly attention.

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