# *Handbook for the Analysis of Micro-Particles in Archaeological Samples*. Amanda G. Henry, editor. 2020. Springer, Cham, Switzerland. xi + 304 pp. $109.99 (hardcover), ISBN 978-3-030-42621-7. $64.99 (paperback), ISBN 978-3-030-42624-8. $49.99 (e-book), ISBN 978-3-030-42622-4.

Carolina Mallol

Instituto Universitario de Bio-Orgánica Antonio González, Universidad de La Laguna, San Cristóbal de La Laguna, Tenerife, Spain; Departamento de Geografía e Historia, UDI Prehistoria, Arqueología e Historia Antigua, Facultad de Humanidades, Universidad de La Laguna, San Cristóbal de La Laguna, Tenerife, Spain; and Department of Anthropology, University of California, Davis, CA, USA

This book is part of the Interdisciplinary Contributions to Archaeology series edited by Jelmer Eerkens. It is a product of the "Workshop on the Analysis of Micro Particles in Archaeological Samples," held in December 2016 at the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany. Under the expert guidance of Amanda G. Henry, a gathering of distinguished scholars in the field shared their expertise on microscopic archaeological remains. The result is a collection of chapters that provide guidelines for identifying and describing various microscopic particles commonly encountered in archaeological sediments and objects.

Each chapter focuses on a specific micro-particle type: marine microfossils, diatoms, nonpollen palynomorphs, starch grains, wood ash crystals, dung spherulites, natural fibers, parasite microremains, pollen, and phytoliths. The chapters are organized into three broad topics according to the kind of information they provide: paleoenvironmental, behavioral, or both. The formation of these micro-particles, their paleoenvironmental or behavioral significance, associated techniques, and limitations are discussed. The contributing authors—Henry, Jeremy R. Young, Jeffrey R. Stone, Chad L. Yost, Lyudmila S. Shumilovskikh, Bas van Geel, Shira Gur-Arieh, Ruth Shahack-Gross, Walter F. Rowe, Morgana Camacho, Angela Perri, Karl Reinhard, Corrie Bakels, Laurent Marquer, Thierry Otto, and Dan Cabanes—are all expects in their respective fields. Collectively, they have published extensively on topics covered in their chapters in the book, making each a good source of references for related works by them and others.

Emphasizing the durability and preservability of micro-particles over extended archaeological time spans, Henry underscores the unique contribution of micro-particle analysis. The book is richly complemented by high-quality images, including scanning electron microscopy (SEM) and optical microscopy microphotographs. One of the book's strengths lies in its detailed practical guidelines for sampling, processing, and analyzing different micro-particles. Standard protocols, common formulas, and specialized concepts from pollen diagrams to phytolith quantification are explained, ensuring that readers have a solid foundation for their own research endeavors. The book also addresses the challenges of micro-particle analysis, such as taphonomic aspects and the risk of contamination. Authors stress the importance of rigorous sampling protocols, control samples, and thorough reporting to ensure reliable results. The need for expanding reference collections and sampling diverse ecological settings is also emphasized, highlighting the ongoing efforts to improve micro-particle analysis.

Furthermore, the chapters delve into specific sedimentary archives where micro-particles are commonly found, expanding readers' knowledge on the varied contexts in which these particles exist. For example, nonpollen palynomorphs (NPPs) can be found in soils, caves, peat bogs, archaeological waterlogged sites, lakes, and marine sediments, and each of these settings is associated with a specific environment. The chapter on NPPs provides examples of how the analysis of these micro-particles has contributed to understanding past human activities and environmental changes; it also includes descriptions and microphotographs of common types. Other chapters focus on micro-particles such

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as starch grains or natural fibers that may be found in nonsedimentary archaeological substrates, including tools, pottery, dental calculus, stone tools, or bone. Researchers and archaeologists interested in the search for clues about ancient diets, food processing, clothing, and arts and crafts will find these chapters to be a valuable resource.

The book is also an invaluable resource for microscopists. Microscopists often encounter unknown micro-particles outside their field of specialization and are driven to explore literatures from different disciplines in their search for clues. Although there is an extensive specialized literature on micro-particles such as pollen and diatoms, this book—by presenting a compilation of common micro-particles from archaeological contexts with the relevant literature from different fields, identification guidelines, and images—serves as a go-to source for microscopists encountering unknown micro-particles that might derive from diverse sources. It even covers lesser-known micro-particles such as insect remains, feathers, and others that may be encountered in archaeological contexts. The book also helps differentiate between similar micro-particles of different natures, avoiding confusion among researchers. Some examples include the distinction between pollen grains and parasite eggs, or between phytoliths and diatoms, sponge spicules, radiolaria, and volcanic ashes.

The book is well organized and written in a clear and accessible manner, making it an ideal resource for both researchers and students interested in the topic of micro-particles in archaeology. Although there is some overlap between chapters addressing similar micro-particles, the comprehensive index effectively aids readers in navigating the content, ensuring a nonredundant reading experience. With its concise writing style accompanied by detailed images and a strong emphasis on rigorous sampling protocols, this book serves as a catalyst for advancing the field of microarchaeology in its exploration of the microscopic scale of the archaeological and geoarchaeological record. In an era marked by the profound impacts of the biomolecular revolution in archaeological science, a finer distinction between scales emerges, where the microscopic—visible through optical and scanning electron microscopy—stands apart from the molecular, which remains invisible. Micro-particles, with their observable micromorphology, become the common denominator in microarchaeological research, setting it apart from biomolecular research.

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## *Comics and Archaeology*. Zena Kamash, Katy Soar, and Leen Van Broeck, editors. 2022. Springer, Cham, Switzerland. xiii + 177 pp. $49.99 (hardcover), ISBN 978-3-030-98918-7. $39.99 (e-book), ISBN 978-3-030-98919-4.

Johannes H. N. Loubser

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This edited volume on comics and archaeology includes seven chapters by 10 authors from five different countries. Following an introductory chapter, three chapters deal with the ways in which archaeological information is conveyed, and three are reflections of archaeologists who produced comics. Overall, contributors focus on current concerns and how these are presented in social media and on the internet. Implicit in the chapters is that the impact of comics on developing young minds and archaeological novices should not be underestimated.

A central tenet of the volume is that both comics and archaeology are political. The narratives that both create cannot be separated from prevailing social relations. The coeditors—Zena Kamash, Katy Soar, and Leen Van Broeck—acknowledge that because different cultures view comics differently,