Nevertheless, there are several points that negatively impact this publication's usefulness. Two of the biggest concern chronological and spatial distribution of the artifacts. First, information on dating is not readily available for individual objects or groups thereof. Although the majority of finds derive from third-millennium contexts (which, at Tell Bi'a, themselves represent the Early Dynastic, Akkadian, and so-called "*shakkanaku*" periods), occasionally objects from second-millennium levels (such as Palace A) appear in the discussion without being clearly designated (e.g., p. 179). Although the current publication is intended to be used with the other series volumes, including information on the chronology of the objects, even if problematic or provisional, would have reduced the necessity for the reader to keep referring to a large stack of unwieldy books. Second, maps showing the spatial distribution of the objects are also lacking. These would permit the reader to see if there are any notice-able clusters of artifacts by area.

Finally, although this issue is not limited to the book under review, such publications, due to their cost and inherent limitations, raise another matter: that of online/internet publication. Excavation reports seem to be especially suited to this medium: readers generally consult them for specific information and illustrations on particular stratigraphic levels and relationships, on objects (e.g., manufacturing technique, style, chronology), and architecture, and not for general background information. Reports that are searchable and easily accessible would thus greatly facilitate extracting information as quickly and easily as possible—and would be much cheaper as well.

Nevertheless, *Altorientalische Kleinfunde* is a good example of a timely and well-presented final excavation report, and the information therein will be welcomed by everyone interested in the third and second millennia in Syria.

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Textile Terminologies in the Ancient Near East and Mediterranean from the Third to the First Millennia BC. Edited by C. MICHEL and M.-L. NOSCH. Ancient Textile Studies, vol. 8. Oxford UK and Oakville, CT: OXBOW BOOKS, 2010. Pp. xix + 444, illus. \$70.

Textile production comprised the major manufacturing industry of the ancient Near East and eastern Mediterranean, yet it has received relatively little scholarly attention. As garments and furnishings, textiles may provide warmth and utility, but they are also indicators of status, objects of trade and tribute, products of technology, and economic generators. The role of textiles is both pervasive and complex, yielding rich and specific vocabularies that do not easily transcend time and space for contemporary understanding. This brilliant volume offers a compilation of twenty-two papers that result from an exciting collaboration between the Danish National Research Foundation's Centre for Textile Research and a project of the French Centre National de la Recherche Scientifique, specifically "The Economy of Wool in the Ancient Near East," which was launched in 2005 by the Histoire et Archéologie de l'Orient Cuneiforme (HAROC). This publication, the eighth in a series of Ancient Textile Studies, arises from an exploratory workshop that took place in Copenhagen in 2009 with sponsorship of the European Science Foundation.

Packed with interesting ideas, critical approaches, and new theoretical frameworks, the papers reviewed here address textile terminologies in different languages and cultures of the ancient Near East and eastern Mediterranean. Considering that terminologies are text-based, the editors have taken literally and prudently the third-to-first millennium focus within which written materials augment the archaeological record. But the breadth of the materials covered extends back to the ninth millennium, far beyond evidence of written sources. The collective value of these papers exemplifies the highest scholarly standards and the strength of collaborative scholarship engaging different disciplinary perspectives. The project reflects the visionary guidance of the editors in developing a technological base of understanding through observation, experimentation, and critical evaluation of the archaeological

record, and the bringing of this to bear on the interpretation of textual sources. This book lays a new foundation for the study of production, use, and trade of textiles in the ancient Near East and eastern Mediterranean. New interpretations of terms, based upon archaeological and textual sources in Egypt, Mesopotamia, the Levant, Anatolia, Cyprus, and beyond provide a strong contemporary platform from which to expand and refine our understanding of ancient textiles.

The concept of "terminology" implies both completeness and a complexity. What is presented here could *not* have been assembled half a century ago. In 1966 the nearly simultaneous publication of Dorothy Burnham's *Warp and Weft: A Textile Terminology* by the Royal Ontario Museum (Toronto, repr. 1980) and Irene Emery's philosophical treatise on structure, *The Primary Structures of Fabric: An Illustrated Classification* by the Textile Museum (Washington, DC, repr. 1980, 1995, 2009) initiated new directions for the study of ancient and historical textiles based on studies of fabrics as sources, rather than written evidence.

These early works augmented the relevant vocabularies of European languages compiled under the aegis of the Centre international d'études des textiles anciens, *Vocabulary of Technical Terms: English, French, Italian, Spanish* (Lyon, 1964) and *Bulletin de CIETA* (1955—present), which has continued to explore scholarship on ancient textiles through its annual meetings and publications. Those early explorations of the specifics of textile terminology were followed by attempts to define discrete textile techniques by Annemarie Seiler-Baldinger (*Textiles: A Classification of Techniques* [Washington, DC: Smithsonian Institution Press, 1995]) and Ann Pollard Rowe ("After Emery: Further Considerations of Fabric Classification and Terminology," *The Textile Museum Journal* 23 [1984]: 53–71), the latter building upon the fundamental work of Emery on primary structures.

The volume under review curiously omits subsequent efforts along this trajectory undertaken by the Textile Museum in Washington, DC, under the rubric first of the Irene Emery Roundtables and, more recently, of the Lloyd Cotsen Textile Documentation Project. The latter effort has resulted in the publication of *The Textile Museum Thesaurus*, ed. C. Gunzburger (Washington, DC: The Textile Museum, 2005), which establishes four hierarchies of textile vocabularies: objects, materials, structures, and techniques. Working through broader and narrower terms in a hierarchical manner, it was envisioned as a useful tool for standardized cataloging in a digital age, but I imagine it would also serve the needs of translation.

The present volume strives, through individual studies, to garner all of the vocabulary and compound terms from many ancient languages, including Linear B, Linear A, Mycenaean Greek, Egyptian, Hittite, Ugaritic, Sumerian, Akkadian, and Indo-Iranian languages such as Vedic and Avestan, as well as reconstructed proto-Indo-European, to advance our understanding of ancient textiles. Through study of context, etymology, structure, and historical linguistics, examined in relation to textile technologies and what is called a "chaine opératoire" (advanced with reference to textiles at an earlier conference), this volume represents collaborative efforts to develop terminologies that relate to materials, production processes, products, and their functions, in a single given area of human activity, in this case, textiles. Data and interpretations regarding textile terms reflect the study of textual sources in conjunction with archaeological finds and representations in the visual arts, and experiments in technology.

The individual papers bring together the newest advances in scholarship, including innovative approaches to thinking about ancient textiles, not just in terms of particular vocabulary but also in terms of technological processes, epistemology, and the limits of our knowledge. What we don't yet know or understand is carefully delineated within the context of what can be known at present. The fragile and organic nature of textiles precludes a high rate of survival in most archeological contexts, but with greater awareness and sensitivity, more textile finds are now being recognized during excavation, retrieved, and studied with more thoughtful and insightful interpretation than fifty years ago. The expanded study of textile imprints and pseudomorphs also contributes to our understanding of ancient textiles, as do new analytical methods and scientific analyses. And this information is brought to bear on the diverse and manifold textual presence of textile terms, specific in their usage if not yet precisely understood in meaning.

The table of contents (see www.oxbowbooks.com/ddbc/textile-terminologies-in-the-ancient-neareast-and-mediterranean-from-the-third-to-the-first-millennia-bc.com) readily conveys the breadth and diversity of approaches and sources, considering textiles in terms of materials, structures, forms, and functions in ancient societies of the Mediterranean basin and beyond. Interpretations take into account interrelated sources—textual, representational, archaeological, and experimental, the last particularly with respect to technologies. Such technologies include, in addition to the more familiar weaving with continuous wefts, spinning and the preparation of yarns as well as fiber manipulation such as twining, braiding, plaiting, looping, netting, knotting, tapestry-weaving [discontinuous wefts], and felt-making, all of which are attested in the archaeological record.

The introduction of color and the extraction of dyes in antiquity are not yet well understood, but individual authors document the uses of terms that suggest early appreciation of color (not always evidence for the use of dyes)—white and black are mentioned with respect to wool, along with references to red, reddish brown, bluish purple. Vocabulary terms for red seem especially reserved for ceremonial uses of textiles. Decorative techniques, such as embroidery, and a range of finishing processes are also discussed. The further development of weaving technologies to encompass pattern-weaving and compound weave structures exceeds the temporal scope of this volume, as does the dramatic expansion of human ingenuity concerning dye technologies. But there is no doubt that the basic frameworks for textile production were already achieved in antiquity. What complicates our understanding perennially, however, are the difficulties faced in reconciling the archaeological record with terminology in written sources and the specificity in linking terms to objects and images. This group of papers collectively extends our understanding, and, in several instances, archaeological finds offer support for translations of terminology. This book is the first, to my knowledge, that brings to bear current research from so many disciplinary perspectives to the issues of ancient textile terminologies.

Many of the papers drawing from cuneiform texts written on clay tablets (Foster, Biga, Pasquali, Pomponio, Waetzholdt, Michel and Veenhof, Lassen, Vigo, Vita, Villard, Joannès, Zawadski) deal with a broad range of topics—from diplomacy, tribute, and gift exchanges at the royal level, to palace management of the industrial production of textiles, and trade and commerce in mercantile environments. One might expect that inventories and the keeping of records and vocabulary lists might be particularly useful to identify tools, equipment, garments, and furnishings, but in spite of extensive enumeration, there is still considerable uncertainty of meaning sufficient for incontrovertible translation. The importance of textiles in the economy gives rise to ample vocabulary with clearly intended specificity, but this does not yield ease of correspondence of understanding through translation among different cultural traditions.

Two papers (Biga, Pasquali) consider the Royal Archives at Ebla, where documentary evidence for the textile industry is extensive. One study (Lujàn) explores vocabulary of the Mycenaean textile industry, and two others treat the terminology that can be assessed from Linear B tablets. Two papers review references to linen and terms for its processing in Egyptian hieroglyphic sources (Herslund, Jones) and another paper deals with linen in Hittite inventory lists. One paper (Andrés-Toledo) uses comparative historical linguistics to relate textile terms in Indo-Iranian and Indo-European languages, where wool is attested, but neither flax/linen nor cotton. Several studies (Breniquet, Foster, Jones) broach the representation of cloth manufacture and garments as depicted on seal impressions and glyptic, carved stone reliefs and sculpture, and palace paintings, to contribute to the interpretation of textual sources. Together with experiments in replicating textile technologies and establishing classifications (Strand, Desrosiers), these papers advance exciting new interpretations for understanding ancient textiles.

Critical apparatus includes full citations for each contribution, as well as footnotes, but there is no comprehensive bibliography. The lack of an index is a hindrance and a map would facilitate quick grasp of the geographic scope and location of archaeological finds and textual archives. Front matter includes a statement concerning research frameworks, as well as an introduction, "Textile Terminologies," by the editors, in which a useful initial synthesis of the collectivity of these papers is approached. Efficient utilization of the results may require tabular formats with comparative data arranged by language, culture, and date.

Future research can well be directed to further advancing the knowledge that is so carefully delineated and circumscribed here; several key issues that remain unresolved are hinted at within the depth and breadth of papers published in this volume. The origins and earliest uses of wool remain obscure,

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as is the date of the introduction and early appearance of cotton. Titillating reference is made to the presence of silk (pp. 30–31) and rug knotting (p. 42; illustration p. 45) in ancient Near Eastern contexts; whether these finds will require a rethinking of the standard paradigms remains to be seen.

Three papers specifically address color (Biga, Waetzholdt, Villard), a subject that continues to elude comprehensive understanding. The term "multi-colored" in Sumerian, Neo-Assyrian, and possibly Linear B languages does not yield distinctions among pigments and dyes, organic and inorganic colorants, nor whether the colors derive from coloring agents or natural variations. Given the lack of evidence for dyeing technologies, quite rightly emphasis is placed on the extraordinary range of natural hues found among untreated fibers, from off-whites, to browns, grays, and blacks, and the many different gauges, textures, and qualities that are evinced in terminologies. Questions raised about the tailoring of garments may well be answered by inquiring of emergent sources from neighboring cultures in Central Asia and among steppe peoples, which lie beyond the geographic scope of this volume. The model of cooperative scholarship among philologists, linguists, archaeologists, and historians of art, technology, and textiles could well be adapted for other regions with enormous benefit for the production of knowledge.

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Le Temple d'Hathor à Dendara: Relevés et étude architecturale. By PIERRE ZIGNANI. Bibliothèque d'Étude, vol. 146/1. Cairo: INSTITUT FRANÇAIS D'ARCHÉOLOGIE ORIENTALE, 2010. Pp. xii + 425, 39 plates.

The Institut français d'archéologie orientale (IFAO) has had a long and distinguished history of publishing the ancient Egyptian temple of Dendera. Following Émile Chassinat's work in the early twentieth century and the more recent publications of François Daumas and Sylvie Cauville, we are now treated to a full and highly detailed architectural study of the temple by Pierre Zignani. Casting his architect's eye over every room, column, and light shaft, indeed every nook and cranny of the temple, he presents his results in clearly defined chapters in an exhaustive and lavish production, to which this review can hardly do justice.

The site of Dendera had long been important. The capital city of the sixth Upper Egyptian nome, it was close to the prehistoric site of Nagada and the desert roads that led westward toward the oases of the western desert, and in the vicinity of Coptos, the departure point to the mines and quarries of the Eastern Desert and the gateway to the Red Sea. Although there are a number of traces of earlier builders, the imposing structure that still stands today mostly dates to the very end of ancient Egyptian history. The earliest surviving building, the Birth House, or *mammisi*, to the northwest of the main temple area, dates to the reign of King Nectanebo I (380–362 B.C.E.) of the Thirtieth Dynasty. One of the noteworthy aspects of the temple of Dendera is its orientation. The great eastward bend of the Nile means that the river does not flow in its usual north-south direction at this point, but rather eastwest. Given that Egyptian temples often face toward the river for easy access by water, the temple of Dendera symbolically points to "local east," with its front actually facing north. As explained in an early section (2.1.2), this slight deviation from true north is due to the position of the star Sirius on the horizon at the dawn of the 16th of July, 54 B.C.E., the day of the official founding of the temple.

Section 2.2.1 situates the temple within its overall surroundings, about two kilometers away from the river; although there are only scant traces of such a feature, the author argues that there must have been a canal connecting the site to the river in ancient times. The next section (2.2.2) briefly describes the necropolis south of the main temple, which contains material dating from the Old Kingdom, the First Intermediate Period, and the Late Period. The New Kingdom is scantily represented, which may be due to the fact that, as the author points out, large areas of the necropolis have not been excavated. Remnants of a large urban center (2.2.3) dating to the late Old Kingdom and First Intermediate Period