

***Remembering the Dead in the Ancient Near East: Recent Contributions from Bioarchaeology and Mortuary Archaeology.* Edited by Benjamin W. Porter and Alexis T. Boutin.**

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In this edited volume, *Remembering the Dead in the Ancient Near East: Recent Contributions from Bioarchaeology and Mortuary Archaeology*, Porter and Boutin (eds.) and their contributors seek to interpret ancient burials through a multi-disciplinary approach that combines “at least two different, yet complementary, analytical techniques together to investigate” the way(s) in which societies in the ancient Near East “remembered and commemorated the dead” (p. 2). Their premise is that until recently the scope of most interpretive analyses of ancient mortuary practices have been limited by focusing on one or several selected elements of the mortuary assemblage, rather than attempting to integrate all, or as many as possible, of the numerous components that they comprise. From this, they helpfully conclude that engaging the traditional interpretive tools (culture, history, texts, ceramics, tools, weapons, tomb construction, location and orientation) with the biological data, including osteological, dental, and faunal analysis, paints a much “richer and more robust” (p. 2) picture of the mortuary context while also offering fresh insight into the living.

In their introductory chapter, Porter and Boutin establish the scope of this volume and discuss a range of disciplines and methods, including mortuary archaeology, bioarchaeology, skeletal and dental evidence, textual sources and artwork, noting the various ways in which they signify both remembrance and commemoration of the deceased (pp. 2–8). They also acknowledge the “segmented roles” (p. 2) that each discipline plays relative to the evidence on which they focus, the data they produce, and the contributions they make to the interpretation of mortuary practices, all of which underscores their fundamental

premise that when combined, these data sets offer a more rounded picture of mortuary practice and remembrance.

Ironically, in highlighting each discipline’s particular contribution, it becomes equally clear that the specific “skill set” (p. 2) required for each discipline entails years of education, training and experience, allowing little time for cross-disciplinary preparation. Becoming adept in multiple disciplines such as biology, chemistry, physical anthropology, zoology, linguistics and archaeology requires more years of study and funding than most possess or are willing to sacrifice. This explains, in part, the fragmented and frequently compartmentalized nature of mortuary study and underscores why collaboration and cooperation across the disciplines and between scholars is vital to the interpretation of the entire archaeological record, yet alone mortuary analysis. No single discipline or individual can embrace every facet and these papers demonstrate how teamwork can illuminate various dimensions of mortuary interpretation. In the remaining chapters the authors investigate “acts of memory work” by adopting “a host of interdisciplinary techniques” drawn from the fields of mortuary archaeology, bioarchaeology, and culture history (p. 12).

Each chapter is effectively a ‘case-study’ focusing on the specific ways in which the dead are remembered at selected cemetery sites, illustrated by an amalgam of interdisciplinary data. In chapter 2, Campbell, Kansa, Bichener and Lau, citing the sixth millennium cal. BCE Death Pit at Domuztepe in southeast Turkey, consider the action of burial, not limited to physical remains but also objects, both within the funerary context and beyond that of the grave, and comparison is made between commemoration, remembering and forgetting, and the disposal of refuse. The complex, mixed-use of the Death Pit and subsequent transformation of the space suggests that “burial can be a matter of degree” (p. 33). Burial marks a changed relationship and facilitates the process of forgetting or moving forward, creating “a boundary between the buried object and the living world, [by] placing the buried object in a different context hidden from everyday life” (p. 53). This paper highlights the transitional nature of relationships associated with death and its accompanying burial practices.

Ethnicity and the interrelationship between the Sumerian and Akkadian peoples are discussed in chapter 3 by Pestle, Torres-Rouff, and Daverman. Based on excavated grave goods in the A “Cemetery” at Kish in Iraq and a bioarchaeological approach, they examine the ways in which

Akkadian ethnicity may or may not be expressed and commemorated in these burials. Utilizing well-established criteria, the skeletal remains were reanalyzed, focusing on demographics and biodistance (p. 70). By establishing age, sex and “degree of biological affinity” (p. 71), based on observable and measurable traits such as those found in cranial and pelvic bones and dental features (pp. 70–71), combined with grave goods, location and orientation within the tomb, and data from nearby cemeteries (Ingharra, Mound W), much was learned about these individuals. The data suggest that the A “Cemetery” males “had a different population history or descent, either in their immediate or distant pasts” (p. 85) than did the females. This suggests that males, perhaps of military profession, married into newly conquered territory and were buried and commemorated with their family according to local tradition.

Disability both in antiquity and modernity is addressed by Boutin and Porter in chapter 4. At present, relatively little is known about the treatment and care of disabled individuals in antiquity; however, a young woman who lived in present-day Bahrain during the Early Dilmun period (ca. 2050–1800 BCE) provides some insight. She not only survived to adulthood but was given a proper and comparatively rich burial (p. 121). Based on skeletal analysis, her upper right arm was not fully formed, she had “knock-knees”, and was shorter than normal. Nevertheless, her age and the “numerous and elaborate grave goods” (p. 97) suggest she had been well cared for and “was a highly valued person” (p. 98) and probably productive in her community. This young woman was paired with modern archaeologist, “Peter B. Cornwall, a deaf Harvard Graduate student and explorer of the Arabian Gulf,” who excavated her grave in 1941. The comparison illustrates the treatment of ‘disabled’ individuals and focuses on their abilities rather than their disabilities.

The discussion of the Bab edh-Dhra’ burials by Sheridan, Ullinger, Gregoricka, and Chesson in chapter 5 integrates bioarchaeological and archaeological data enabling the identification of evolving mortuary practices and social organization, some familial ties and commemoration of the deceased. After succinctly describing interment practices at Bab edh-Dhra’, well-established methods and criteria were used to determine age, sex, genetic relationship and the size of the assemblage. The results of this study help explain the relationships of those interred at the site

during the EBIA and EBII–III periods and track evolving mortuary practices relative to population change.

The socio-cultural impact of empire building is illustrated in chapter 6 by Smith and Buzon at the site of Tombos, an Egyptian colony founded in ca. 1400 BCE in Sudanese Nubia. The imposition of colonial power resulting in the comingling of peoples and the development of mortuary practice and architecture is evident in these communities. It is worthy of note that this is the only study to incorporate stable isotope analysis, in addition to the standard metric biological data, providing strong evidence of both the geographical origins of some individuals prior to death and relocation based on colonizing activities.

In the final chapter, Dabbs and Zabecki discuss the non-elite burials of Tell el-Amarna, which reveal settlement patterns, commemoration of the dead commensurate with social status, diet, and the physical toll on the working class in this capital city. The tales told by these bones tell of extreme physical labor, poor nutrition and disease. Evidence of post-burial grave robbing indicates either a lack of respect for the dead or a desire on the part of living family members to retain memory of the deceased on relocating to a new home.

The editors of this volume boldly state that its overarching theme and purpose are to demonstrate that a multi-disciplinary approach and one that particularly embraces the bioarchaeological data in the interpretation of mortuary practices holds the key to expanding our understanding of kinship relationships within the tomb and between graves, and of the remembrance and commemoration of the deceased relative to their corresponding historical, cultural, social and ritual contexts. From their particular perspective, each chapter demonstrates the benefit of incorporating biological data into the interpretation, which in turn elucidates the unique ways in which the deceased were commemorated. This approach addresses a perceived disconnect that until recently has been somewhat prevalent in mortuary interpretation (pp. 1–2); specifically, that bio-data has been marginalized rather than integrated into the interpretation of burial practices. However, it should be noted that this was not always the case and there are earlier excavation reports which do include biological information such as sex, age, stature, morphological characteristics, pathology, and dental analyses (e.g. Kenyon 1960, 1965; Dothan 1979; Tubb 1990; Biran, Ilan and Greenberg 1996; Schick 1998;

Garfinkel and Cohen 2007). Some of these works incorporated biological data into their interpretations relative to the resources available to them at the time, while others relegated it to separate chapters. Limited access to excavated material, funding sources and the lack of testing methods (e.g. DNA and isotope analysis) may have conspired to preclude the more inclusive analyses we enjoy today. Whatever the reasons, this work demonstrates the value of integrating bioarchaeological data into modern investigation and offers a pragmatic theoretical and methodological approach.

Each of these studies describes the biometric data gleaned from the physical remains and utilizes the data in its interpretation of mortuary practices and commemoration of the deceased. The corporeal remains from Tombos, the A “Cemetery” and Bab edh-Dhra’ and their biological data illustrate how the integration of this data can illuminate movement of peoples, comingling of people-groups, the evolution of society and the adoption and adaptation of culture and ritual. However, given that the prevailing theme is the integration of bio-data into mortuary interpretation, the scope of the bio-analyses could have been expanded to include stable isotope analysis, DNA, and microbial analyses. The only study to incorporate stable isotope data is the one by Smith and Buzon at Tombos (chapter 6), which demonstrates how important this data is to understand not only the mortuary setting but also to confirm and challenge conventional conclusions regarding the movement of peoples and assimilation of cultural traditions. In numerous recent studies these approaches have been used to track ancient migrations, familial relationships, detect individuals’ and people-groups’ origins, and detect ancient diet, parasites and some diseases (Fu et al. 2016; Curry 2013; Knudson and Price 2004; Knudson et al. 2005; Bentley 2006; Slovak, Paytan, and Wiegand 2009). These analyses have been conducted among people-groups from Europe to South America. It is surprising and disappointing that similar analyses are not being applied with equal enthusiasm or degree to ancient skeletal remains from the Near and Middle East. Coupled with traditional metric data, such analyses would provide additional, powerful insight into ancient history, culture, and society.

Although the study of disability in ancient civilization has advanced over the last thirty years, and has recently received more attention (Draycott 2015), relatively few remains of disabled individuals have been

discovered. Nevertheless, there is a growing corpus of data in and beyond the Near East of disabled individuals living to adulthood and receiving a proper burial. Although chapter 4 cites several examples (p. 120), extending their scope to include others, such as a Neanderthal male from Shanidar 1 (Crubézy and Trinkaus 1992), a Neolithic adult male, M9, from Man Bac, Vietnam (Oxenham et al. 2009) and a teenage boy known as Romito 2 found in Italy who dates to ca. 10,000 years ago (Freyer et al. 1988), and placing the Dilmun woman into this wider geographical and chronological framework, indicates that physical disability was identified from a very early period. The evidence from their burials also suggests that these individuals appear to have been contributors to their communities and accepted by them, in contrast to the treatment of the disabled in more recent periods. Contrary to the statement that “past societies lacked medical technologies that ameliorated challenging conditions for those persons possessing non-normative bodies” (p. 99), delving deeper into ancient medical technology in fact reveals that the people of ancient Egypt and Mesopotamia possessed well-developed and well-researched medical knowledge. This knowledge is well documented in texts, including ten medical papyri (also mentioned on p. 119), 660 medical tablets from Assurbanipal’s library in Nineveh and 420 tablets from other sites (cf. F. Köcher, *Die babylonisch-assyrische Medizin in Texten und Untersuchungen*), which attest to medical knowledge and technology dating as early as ca. 3000/2000 BCE. According to the medical papyri, Egyptian doctors were well versed in deformities, amputations and replacement of limbs (p. 119; Zaki et al. 2010; Binder et al. 2015; Nunn 1996). Amputations were performed either for medical reasons to treat gangrene resulting from battle or work-related injuries or as a form of punishment, as early as 2000 BCE (Binder et al. 2015: 29). Artifically, prosthetics have been found in Egypt, Mesopotamia, and China. In Egypt, two mummies were found with prosthetic big toes. A wooden one belonging to Tabaketenmut (ca. 1065–710 BCE; Nerlich et al. 2000) and the other made of cartonnage dating to ca. 600 BCE. Judging from the wear on each prosthesis, these were actually used by their owners (Binder et al. 2015). In Mesopotamia, the Burnt City located in southeastern Iran, the skeletal remains of a young woman, ca. 28–32 years of age, dating to ca. 2900–2800 BCE, possessed an artificial eye, which showed signs of wear (Moghadas 2014). Finally,

in Turfan, China a male, 50–65 years of age, from the third/second century BCE was buried with his prosthetic leg made of wood with a horse's or Asiatic ass's hoof at the tip (Li et al. 2013). Additionally, textual references from the Second Punic War (218–201 BCE) describe Marcus Sergius Silus who lost his right hand in battle and replaced it with an iron prosthetic. He learned to handle a sword with his left hand, enabling him to continue to serve in battle (Pliny *Nat.* 7.28.104–5 from Draycott 2015: 192). That all of these individuals were buried with their prosthetics intact suggests that the functionality they continued to enjoy in life should also be preserved in death. While the evidence indicates that medical technology was clearly not lacking during the Dilmun woman's lifetime, it may be that prosthetic devices were either unavailable, too costly or that she simply had no need of one.

This volume is intended by its editors and contributors to demonstrate the significance of bio-data and the benefits of its integration with more traditional methods of archaeological interpretation, particularly in the mortuary setting. By integrating skeletal and dental evidence with written sources, art, and mortuary archaeology, the individual papers are largely successful in achieving their purpose. However, in their enthusiasm to demonstrate the valuable contribution that integrating bio-data offers, the authors tend to underestimate the more traditional markers, such as grave goods, discussing them in general terms rather than offering a more detailed analysis. While the bio-data undoubtedly illuminates the individual interments described in these papers, reference to traditional skeletal and dental metric analyses, augmented by stable isotope, DNA, microbial and chemical analyses, would add another dimension to our understanding and interpretation of burial practices and the remembrance of the dead in the ancient Near East. Today the case for incorporating the bioarchaeological data is well established and seems self-evident. While this volume is to be welcomed as an important addition to the catalogue, a more balanced integration of all the available data would have made it that much more innovative.

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Animal Secondary Products: Domestic Animal Exploitation in Prehistoric Europe, the Near East and the Far East. Edited by Haskel Greenfield.

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The volume's focus is on how, when, where and to what extent animals came to be exploited for so-called "secondary products," that is, mainly those things we use animals for other than hides, furs and flesh. The list of such products includes milk (and other dairy products), hair (with wool being one form), traction (pulling plows and wheeled or unwheeled vehicles) and dung (either for fertilizer or hearth fuels in relatively treeless places). This book is mainly the result of a session at the 2010 International Council for Archaeozoology Conference held in Paris, France. The editor, Haskel Greenfield, is to be commended for the never easy job of pulling together the session papers for publication, and that within four years of the conference. Clearly, animal bones have come a long way

in importance since the Vinča (Serbia) faunal assemblage was dumped into the Danube many years ago, the story of which Greenfield relates toward the end of the book.

Authors who contributed to the conference session and the book were asked to evaluate the goodness of fit of Andrew Sherratt's famous early 1980s papers, as well as earlier works by others that Sherratt drew on, given new data and new methods. The contributors engage with Sherratt's work, mainly using evidence derived from zooarchaeological studies (that subfield whose concentration is on animal bone studies). An exciting, independent (from animal bones) and relatively new method for tracing the history of dairying is the extraction of lipid residues from ceramics. Unfortunately, no chapter in the book is dedicated to that method as its primary source of evidence. Instead, many of the papers mention lipid residue studies in their areas as an additional line of argument. While most papers in the volume use bones as their primary artifact base, a few draw on ancient economic texts (L. Atici) or zoomorphic figurines (T. Kawami), while still others use chemical and microscopic studies of animal bones to engage the subject (J. Giblin, Greenfield, and E. Arnold). A refreshing paper by A. Marciniak offers a critical and philosophical look at not only the proximate subject of secondary products but also more generally of zooarchaeological practice.

What makes this book odd, however, is the editor's very prominent place throughout. In addition to Greenfield being the organizing force behind the conference session and the book, six of the book's 14 essays (including a nearly 20-page introduction) are authored or co-authored by the editor. One chapter co-authored by Greenfield and Arnold is, for at least half of its length, a rebuttal to a critique of Greenfield by two other zooarchaeologists. An edited volume seems a strange place to publish a rebuttal, all the more so since the editor's critics themselves have no essay in the book.

Greenfield also includes a 60-page report on his early 1980s zooarchaeological work at the site of Vinča. This contribution is even longer if the following one (another paper co-authored by Greenfield and Arnold) is included, as it further discusses the bone data from that site. A long essay might be considered an editor's prerogative, but that paper is closer to a final report on the site's faunal assemblage than a paper focusing on the Neolithic and Bronze