

The ethics of excavating: bioarchaeology and the case for rehabilitating legacy human skeletal collections in the Near East

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Excavation is considered by many to be an inextricable part of bioarchaeology, generating assemblages of human skeletons that bioarchaeologists rely on to reconstruct the past. However, in the Near East and beyond, little reflexivity has been given as to whether skeletal collections should continue to be amassed amidst the existence of already-excavated assemblages, especially those skeletal collections that have not yet been properly curated, analyzed, and/or published. What are the ethical implications of excavating human bone without subsequent accountability to care for the dead? Are we ethically obligated to disseminate findings on legacy collections excavated by our predecessors, despite the challenges in doing so? In lieu of generating new human skeletal assemblages through excavation, I argue for an ethical imperative for bioarchaeologists to first seek out and rehabilitate understudied, legacy and orphaned collections. The benefits of working with such collections, as well as prioritizing funding and training towards these efforts, are likewise explored.

Keywords bioarchaeology, ethics, legacy collections, orphaned collections

Introduction

Archaeology as a discipline has increasingly recognized the urgency behind what has been termed a ‘curation crisis’, referring to the rapid accumulation of archaeological collections through unchecked excavation, while at the same time lacking space and/or resources to properly curate or otherwise care for these materials (Allen *et al.* 2019; Cherry 2011; Childs 1999; 2004; Kersel 2015; MacFarland and Vokes 2016; Marquardt *et al.* 1982; Voss 2012). Tied to this growing awareness of post-excavation failures in collections management are ethical questions surrounding whether or not excavation can be justified amidst ‘mountains’ of untapped data from already-excavated, understudied and underreported assemblages (Cherry 2011). While many archaeologists agree that a moratorium on excavation is untenable (e.g., Demoule 2011; Kersel 2015), proposed solutions

have generally been met with resistance or are deemed too costly and/or unrealistic to implement.

As with archaeology, excavation is considered by many to be an inextricable part of bioarchaeology, generating assemblages of human skeletons that bioarchaeologists rely on to reconstruct the past. In the Near East and beyond, however, little reflexivity has been given to whether skeletal collections should continue to be amassed at current rates amidst the existence of already-excavated assemblages, especially those legacy or orphaned skeletal collections that have not yet been properly curated, analyzed and/or published. Archaeological solutions proposed to alleviate overburdened storage facilities (as they attempt to house and curate huge swaths of archaeological materials) such as *partage*, catch-and-release archaeology, long-term leases, or de-accessioning (e.g., see Beltrametti 2013; Childs 1999; Gonzalez *et al.* 2006; Kersel 2015; Kremer and Wilkening 2014) are artefact-based in nature and so cannot be easily or

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ethically applied to human skeletons, which are not objects or specimens, but are instead people, and must, therefore, be treated with sensitivity, dignity and respect, and in consultation with descendant communities¹. Subsequently, new ways of thinking about best practices for the excavation, curation and analysis of archaeological human skeletons must take place, and new codes of ethics developed.

Neglect of excavated skeletal assemblages

The potential of bioarchaeology to illuminate human behaviour and adaptation in the past has not always been widely recognized, with the value of human skeletons deemed limited, relative to the artefacts that accompanied these interments. This is especially the case in the Levant, where skeletons were (and are) sometimes excavated in order to reach artefactual materials or other, deeper stratigraphic layers of interest (Eakins 1993: xvii,1; Spencer 1993: xv; Toombs 1985: xix). As part of these excavations, only particular bones considered to be of high value — for example, the skull, pelvis, some long bones, or those exhibiting some pathological condition, anomaly, or traumatic injury — may have been retained, while the majority of the remaining skeletons were reinterred (Baadsgaard *et al.* 2011; Eakins 1993: 2; Gregoricka and Ullinger 2022; Risdon 1939: 102–03; Sheridan 2019).

Throughout the Near East and elsewhere, excavated skeletons were frequently bagged, stored and forgotten, with limited (if any) preliminary analyses conducted beyond an unpublished report or mention in an appendix. For those collections lacking proper curation, decaying cardboard boxes and plastic bags that break down with time, as well as containers damaged by rodent or insect infiltration, may result in significant loss of contextual information (Bawaya 2007; Sheridan 2017; Teeter *et al.* 2021); accompanying documentation and field notes may have also been lost, or cannot be clearly linked to skeletons from a site (Kersel 2015; Plumer-Moodie *et al.* 2019; Silberman 2015). Certainly, this problem is not unique to bioarchaeology — many archaeological assemblages suffer the same fate of improper storage and missing or piecemeal

documentation (e.g., see Bawaya 2007; MacFarland and Vokes 2016). Avoidance of under-curated assemblages by bioarchaeologists is exacerbated when intentional mortuary practices or subsequent disturbance (either in antiquity or today) result in the commingling of skeletons due to the challenges associated with their study (Osterholtz 2019; Sheridan 2017). In these ways, bioarchaeology continues to claim ownership of the past through excavation, but ultimately avoids responsibility for its stewardship when such assemblages are subsequently neglected. As such, we must acknowledge a curation crisis in bioarchaeology which, because of the involvement of now-dead individuals, has ethical implications that must be addressed.

Why do we excavate?

There are, of course, many scientifically-driven reasons for why bioarchaeologists excavate. Unlike other lines of evidence, such as historical documentation, human skeletons provide ‘a direct means through which we may come to know our ancestors’ (Walker 2000: 24). It follows that excavation of mortuary sites is deemed necessary to access the wealth of information contained within human skeletons and thus remains a high priority for bioarchaeologists seeking insight into the human condition. This is particularly the case when significant geographic and/or temporal gaps exist in knowledge of the past (Demoule 2011).

Beyond this simplistic spatiotemporal reasoning, however, lies the important theoretical recognition of a social bioarchaeology grounded in the concept of embodiment — in other words, that bone is a living, dynamic tissue that constantly responds to its surroundings, so that the skeleton provides a detailed record of a myriad of environmental and biosocial influences experienced by an individual during life (Agarwal and Glencross 2011; Krieger 2005). Subsequently, the filling of such ‘gaps’ in knowledge through excavation, may also be applied to the examination of bodies from marginalized or otherwise oppressed communities, those whose stories have not or could not be told (de la Cova 2010; 2011; 2012; 2019; Fleskes *et al.* 2021; Muller *et al.* 2016; Nystrom 2011; 2014; 2017; Zuckerman *et al.* 2014). Few other sources of knowledge (whether historical, archaeological, or otherwise) have the ability to access such information while giving voice and returning agency to those without power.

Finally, justification for bioarchaeological excavation may sometimes be convincingly applied when already-excavated legacy, orphaned, or otherwise

¹Consultation with Indigenous descendant communities in the United States is already required by federal law through NAGPRA. While adherence to NAGPRA has resulted in repatriation and reburial of some Ancestors, tens of thousands continue to be held in American museums or storage facilities without consent, and should not be studied without descendant approval. In some cases, however, NAGPRA has instigated productive partnerships between tribes and bio/archaeologists in both academia and CRM (e.g., see Teeter *et al.* 2021), in which descendants may consent to bioarchaeological research prior to repatriation and reburial. In this way, at least some Ancestors are not held in storage in perpetuity.

under-analyzed skeletal collections, that exist for a particular region or time period, are arguably too problematic for bioarchaeological data to be meaningfully collected. Legacy collections, as originally defined for archaeological assemblages, refer to those collections where prior curation had initially taken place and where contextual documentation may still be present but do not meet today's curation standards (Allen *et al.* 2019). Orphaned collections, on the other hand, may have undergone some curation efforts but were never examined, and are often in poor condition with variable accompanying documentation (Allen *et al.* 2019). As a result, such assemblages can present significant challenges to conducting meaningful research (MacFarland and Vokes 2016), and bioarchaeologists may choose, instead, to seek out better-contextualized human skeletons to replace or expand upon extant collections using modern excavation techniques and documentation.

Nevertheless, it is important to note that all of these arguments prioritize the supremacy of scientific knowledge and thus encompass a decidedly Western, colonial agenda. It must be acknowledged that such an approach comes from a place of privilege, and that — while some bioarchaeologists may view excavation and subsequent study of the dead as an inherently respectful act, ethically justified in giving voice to the voiceless and in generating information that may aid modern human populations (Armelagos and Van Gerven 2003; see also Walker's [2000] preservation ethic) — for many Indigenous, marginalized and oppressed communities, removal of the dead from their resting place (or preventing them from reaching that resting place) is the ultimate act of disrespect, harm and structural violence (de la Cova 2019; 2021; Supernant 2021; Thomas and Krupa 2021; Thornton 2002; Watkins 2020). For bioarchaeologists, then, excavation is not an unassailable right, but one that must be carefully justified — especially given that many such collections were amassed under considerable power inequities, and that current structures of knowledge-building in academia often disregard or downplay the knowledge and belief systems of descendant communities (Blakey 2010; Kakaliouras 2012; Teeter *et al.* 2021).

While not explicitly in reference to the decision to excavate human skeletons, Thomas and Krupa (2021) outline six levels of consideration for ethical research design for bioarchaeologists, arguing that the wishes of the deceased, descendant and local communities, relevant cultural or religious groups, and/or those who lived in the same place and time should be

considered, regardless of how old skeletons may be. Centring praxis around consent is important, and these questions should be applied by bioarchaeologists as they map out new research programmes from their inception, particularly as they consider the necessity of excavation. Such consent also extends beyond excavation, to the actual study of human bone as well — particularly as most skeletal collections are composed of individuals who did not consent to disinterment, and whose postmortem agency has, subsequently, been taken away.

Here, in lieu of generating new human skeletal assemblages through excavation, I argue for an ethical imperative for bioarchaeologists to seek out and rehabilitate understudied, legacy, or orphaned collections. This is in line with Geller's (2021) concept of bioethos — to move past the mere acknowledgement of ethics, and instead, to habitually, voluntarily and proactively carry out ethical actions, beyond mandated legislative requirements. To be clear, working with previously-excavated assemblages does not absolve us from obtaining consent from descendant communities — consent must be established prior to the analysis of any skeletal collection, even if they were excavated many decades ago. If consent is sought but not given, efforts should be made to repatriate skeletal assemblages that cannot be ethically studied.

The ethics of excavating?

Over two decades ago, Walker (2000: 19–20) notably outlined three overarching ethical principles for bioarchaeologists working with human skeletons:

- (1) human remains should be treated with dignity and respect;
- (2) descendants should have authority to control disposition of remains of relatives;
- (3) owing to their importance for understanding the history of our species, the preservation of collections of human remains is an ethical imperative (i.e., the preservation ethic).

Since that time, the discipline of bioarchaeology has increasingly recognized the importance of normalizing and embedding ethical discussions into many different aspects of our work, including (but not limited to) conservation and curation (Clegg 2020; Freiwald and Miller Wolf (2019); Squires *et al.* 2020), consent (Stantis *et al.* 2023; Thomas and Krupa 2021), working with and respecting the wishes of descendant communities (Boutin *et al.* 2017; Colwell-Chanthaphonh *et al.* 2011;

Kakaliouras 2012; 2017; Thomas and Krupa 2021; Walker 2000), decolonization (Lans 2021; Lonetree 2012; Supernant 2021), digital imaging and dissemination (Alves-Cardoso and Campanacho 2022; Colwell 2020; Lagan 2022; Robbins Schug *et al.* 2020). One area that has not yet been explored, however, lies in the ethics of excavating itself. In particular, is it ethical for bioarchaeologists to excavate and continue to amass skeletal collections, particularly when understudied skeletal assemblages from that region or period already exist?

Various professional organizations in anthropology, archaeology and biological anthropology have published ethics statements outlining general guidelines for practitioners that can be used as a starting point. The American Association of Physical (now Biological) Anthropologists' *Code of Ethics*, for example, states that biological anthropologists have an ethical obligation 'to work for the long-term conservation of the archaeological, fossil and historical records' (AAPA 2003); in this case, the proper care and curation of archaeological assemblages is more explicitly identified as an ethical imperative, but no mention of excavation is made. The British Association for Biological Anthropology and Osteoarchaeology's *Code of Ethics* goes further in acknowledging 'the ongoing debate regarding the ethics of excavating, analyzing, curating, and displaying human remains' (BABAO 2019: 4), but under subsection 4.0. *Excavation, analysis, and further research* (BABAO 2019: 6), while they encourage excavations to be conducted ethically, they do not broach the topic of whether it should be done in the first place. The Society for American Archaeology's *Statement Concerning the Treatment of Human Remains* (SAA 2021: 2) has a more explicit statement that 'encourages its members and their affiliated institutions to develop detailed policies and procedures for the treatment of human remains during excavations, lab research, teaching, curation, exhibition, and publication', but again, this statement inherently assumes excavation will occur.

These organizational statements do little to directly address questions surrounding the ethics of excavating, particularly for academic research purposes outside contexts of cultural resource management (CRM). As a result, bioarchaeologists in academia are left with little guidance on deciding whether the process of excavation is necessary or ethical. Importantly, then, we can begin by examining what these statements DO emphasize — that as an ethical imperative, efforts must be made to ensure that we care for already-excavated skeletal collections

through proper curation. With this in mind, and in conjunction with Walker's (2000) first and third ethical principles, we might ask: are we treating people with dignity and respect when we continue to excavate skeletons while allowing previously-excavated collections to languish, whether because they are poorly curated or simply understudied? Are we really treating people with respect if we continue to excavate the dead without accountability?

I would argue that the answer to these questions is no — and as such, the only ethical course of action is for bioarchaeologists to commit to rehabilitating legacy and orphaned skeletal collections, as well as to revitalizing understudied skeletal assemblages. I do not suggest that bioarchaeological excavation be completely abandoned; for example, new excavations may be necessary in order to explore particular research queries that cannot be addressed with existing collections (Barker 2003). Instead, and in following suggestions made within the field of archaeology in response to the curation crisis (e.g., see Voss 2012), I advocate for bioarchaeologists to more consciously consider reducing the long-term excavation of mortuary sites in favour of seeking out already-existing collections in need of care. Such action is not only ethical, but holds considerable research benefits that are discussed further below.

For bioarchaeologists who choose to continue excavating human skeletons, we have an implicit obligation to follow through with a commitment to properly document, curate and store the skeletal assemblages we produce (e.g., see Freiwald and Miller Wolf 2019). Unfortunately, however, there is little structural accountability in place to incentivize such action. Grant proposals favour fieldwork and require budgets that detail costs associated with excavation and subsequent analysis (and more recently, digital data management), but rarely do these proposals require detailed curation plans or financial commitments to long-term storage to ensure the integrity of these assemblages in perpetuity (Green 2015; Kersel 2015; MacFarland and Vokes 2016; Milanich 2005; Silberman 2015), despite organizational ethics statements advocating for adequate care and conservation (e.g., AAPA 2003; BABAO 2019). Furthermore, once funding is secured, excavation permits granted by a particular country may not stipulate long-term curation or storage parameters, and so assemblages grow (often without accompanying analysis) with each subsequent field season as excavations continue unchecked (Cherry 2011; Kersel 2015).

This lack of accountability also extends to the dissemination of knowledge, including publication and public outreach. Grant proposals may contain perfunctory reference to planned, future publications in particular journals, but there is often no real accountability should publication not occur in a timely manner — for instance, funding may not be revoked nor withheld in the future. Similarly, excavation permits seldom demand a pledge to disseminate data through public outreach or publication before conferring subsequent permits for future field seasons, and bioarchaeologists are generally not sanctioned (or permission to excavate revoked) by local government agencies should such commitments fail to be met. All too often, then, as we continue to excavate, we accumulate more, but publish less (Cherry 2011).

How do we move forward?

Human skeletons are more than just objects of scientific value. As such, when legacy, orphaned, or understudied assemblages of human skeletons exist, we are ethically obligated to act, and should work proactively and beyond the ethics legislated by law or by professional academic organizations (Freiwald 2019; Watkins 2000) to ensure that these collections are cared for — and their research potential reached — before engaging in additional excavations. Nevertheless, moving forward to practically and productively address neglected assemblages is no easy task. As such, the following steps are suggested:

(1) *Identify a legacy, orphaned, or understudied skeletal collection.* The first step towards working with legacy collections is to identify such assemblages. We need to take responsibility for doing this legwork — to get out there and find these assemblages, so that we can take action. This is unlikely to be a difficult task; those bioarchaeologists working in the Levant are likely to have encountered storerooms or repositories housing neglected collections, particularly those that were excavated by others some decades ago. This will require us to work closely with local departments and ministries of heritage and culture to begin examining the state of these collections, along with any remaining documentation associated with them.

(2) *Seek consent from descendant communities.* Bioarchaeologists do not own the past nor archaeological human skeletons — it is descendant communities that are the rightful stewards of their ancestors. Subsequently, before any plan of action can be developed to move forward with rehabilitating legacy skeletal collections, including curation, subsequent bioarchaeological analyses and publication,

consent must be sought from relevant descendant communities (Stantis *et al.* 2023). Thomas and Krupa (2021) offer a useful path forward to ethically seek consent to curate and study human skeletons, delineating six stages ranging from the wishes of the deceased or descendant and local communities to contacting relevant contemporary cultural groups. Community consultation and institutional permissions are critical not only from an ethical perspective, but also because we can create better research questions and enrich context by integrating these communities, and the wealth of traditional knowledge they offer, into collaborative work efforts (Colwell-Chanthaphonh and Ferguson 2010; Geller 2021; Wylie 2015). Moreover, academic journals such as the *American Journal of Biological Anthropology* have increasingly adopted policies requiring proof of consent that must accompany manuscripts upon submission; such steps move bioarchaeology in a positive direction towards more formally codifying ethical practice.

While discussions surrounding repatriation often centre on Indigenous communities in the United States, these conversations can and should extend to descendant groups worldwide (Kakaliouras 2012), including in the Levant. If consent is sought but denied, bioarchaeologists should facilitate efforts to work with descendant communities and repatriate human skeletons into their care, as recommended by the 'World Archaeological Congress' (1989) Vermillion Accord, a series of ethical approaches regarding treatment of the archaeological dead (see also Zimmerman 2002). Outdated perspectives bemoaning such repatriation as a 'fundamental loss for science' (Kakaliouras 2012: S212) that only benefit Indigenous groups need reframing; instead, we should view repatriation as a responsibility in which multiple parties — including descendant communities and bioarchaeologists alike — are involved (Kakaliouras 2017).

Nevertheless, the identification of rightsholders or descendant communities is often fraught with difficulties. First, it is not always straightforward or clear who should be designated as such. As discussed previously, Thomas and Krupa (2021) contend that if descendant communities are unidentifiable, then the wishes of relevant cultural or religious groups, and/or those who lived in the same place and time, should be prioritized. In the Levant, however, such ethical regulations are not so easily discerned, as diverse cultural and religious communities are inextricably tied to a lengthy socio-political history of migration, admixture, invasion, war and diaspora.

Should ALL relevant communities receive equal voicing in the matter? Is this even possible, given conflicting beliefs about working with human skeletons among some religious factions in the region, and should these beliefs be treated with primacy over others? Conversely, do we simply defer to working only with governmental agencies, bypassing regional complexities that may be too multifarious for any one bio/archaeologist to dissect?

Secondly, regulatory guidelines determining ‘ownership’ of human skeletons may differ between countries. For instance, in Turkey, working with descendant communities remains a challenge because ownership of archaeological human skeletons belongs to the state (Doğan *et al.* 2021). Moreover, despite a survey demonstrating a clear interest in and opinions about archaeological skeletons among the public, Turkish museum professionals, and even archaeologists generally, expressed disbelief at the notion that any living rightsholders would exist, making ethical considerations and public engagement in managing archaeological human skeletons ‘pointless’ (Doğan *et al.* 2021: 94).

There are no easy answers to such ethical dilemmas surrounding the identification of current rightsholders, and I do not pretend to have any one solution here. Instead, as bioarchaeologists, we must use any and all context available *prior to* bioarchaeological analyses (i.e., archaeological, textual) to make difficult but necessary decisions about the most ethical path forward to pursue consent. This may be aided, in part, by submitting proposed bioarchaeological research to Institutional Review Boards (IRB), which thus far bioarchaeology has managed to avoid, as a means of evaluating our research and its ethical implications prior to its inception (Geller 2021).

(3) *Rehabilitation through curation.* While many understudied collections hold tremendous research potential, stepping into a legacy or orphaned collection and combing through the weeds of excavation work and field notes completed by others — sometimes decades (or even centuries) ago — is no easy task (Demoule 2011; Voss 2012). Such documentation associated with human skeletons is often incomplete or lost, and the bones themselves may be damaged by decades of improper storage. Voss (2012: 148) aptly juxtaposes the ‘ideal of untapped research potential... against the reality’ of curating such assemblages prior to research, resulting in a perceived ‘compromised’ (2012: 149) potential that can be discouraging to those attempting to rehabilitate these collections. If some collections are found to be too

compromised in these ways and thus cannot be properly curated and studied, repatriation and/or reburial efforts should be pursued. For others, while these considerable challenges can be intimidating and pose real limitations on the kinds of data that might be collected, such conditions should not relegate these collections to gather dust in untouched repositories — this only perpetuates the cycle of continued atrophy of under-curated assemblages and continues to hamper possibilities for future research. Instead, we should view curation efforts as ethically necessary, and also recognize that curation and continued collections management reinvigorate and exponentially increase the long-term research potential of these collections, both now and for future bioarchaeologists (Barker 2003). Nevertheless, what is considered ethical with regards to collections management may change over time, and so for more detailed bioarchaeological insight into current challenges and best practices for the conservation of archaeological human skeletons, readers are referred to Freiwald and Miller Wolf’s (2019) excellent and timely special issue of *Advances in Archaeological Practice*.

It is crucial that we train the next generation of bioarchaeologists to view the care, curation and/or repatriation of skeletal collections as an ethical imperative, and to normalize (and perhaps even prioritize) working with legacy, orphaned, or understudied assemblages, instead of working under the assumption that excavation is always required. The solution to this challenge is largely structural; we need to educate faculty on the value of understudied collections and how to effectively confront the challenges of rehabilitating under-curated assemblages and of long-term collections management. In this way, their students will be taught to value legacy collections, and will not shy away from the work it takes to rehabilitate them (with rehabilitation replacing the work of excavation). Meaningful change would necessarily include encouraging graduate students to take on collections-based thesis and dissertation research in lieu of excavation (Schiappacasse 2019). As a starting point, the development of skills-based educational workshops would not only enable our discipline to more adeptly learn curation as a pragmatic process and necessary precursor to research, but more than this — by ‘excavat[ing] our current collections’ (Childs 2004: viii) — we can fundamentally shift our perspective and view curation as not only a management strategy, but as an investigative process in and of itself, generating ‘meaningful encounters between scholars and objects’ (Voss 2012: 145), or in this case, between bioarchaeologists and the human

bodies they study. This type of engagement creates a wholly different interaction to that experienced in the field, and can result in new interpretive frameworks that would not otherwise be generated (Voss 2012). Moreover, training community members where collections are housed, to become experts in the curation and conservation of skeletal collections is strongly encouraged, not only to ensure the long-term care of collections, but also to empower local descendants and communities (Miller Wolf 2019).

4. *Demonstrate accountability through analysis and dissemination.* Demoule (2011:8) contends that ‘an unpublished excavation is a lost excavation’; this certainly also holds true for the bioarchaeological excavation of human skeletons. As bioarchaeologists, I argue that — following consent and curation — we are obligated to collect data on legacy skeletal collections, despite the challenges (as outlined above) in doing so. Such work takes time and dedication, but is rewarded by potentially exciting new discoveries as we approach neglected assemblages with fresh eyes, modern methodological and technological advances, and new theoretical perspectives (Cherry 2011; Roberts and Mays 2011). This also allows us the opportunity to work in tandem with descendant communities, and when such groups are marginalized, to develop a more restorative public archaeology (e.g., see Odewale 2020).

While the challenges of working with orphaned, legacy, or understudied collections may seem a daunting task, bioarchaeologists working in the Near East and Arabia have already begun such work. For instance, following Woolley’s early 20th century excavations of thousands of human skeletons at Ur, in what is now Iraq, those few that were retained were only cursorily described by Keith (1927; 1934); it was only years later that bioarchaeologists combed through Woolley and Keith’s records before re-examining these skeletons (Baadsgaard *et al.* 2011; 2012; Molleson and Hodgson 1993; 2000; 2003). Similarly, after lying untouched for decades, the Early Bronze Age II–III skeletons from Bab adh-Dhra’, Jordan were finally curated and studied (Sheridan 2017), resulting in a multitude of publications (Gasperetti and Sheridan 2013; Gregoricka *et al.* 2020; Sheridan *et al.* 2014; Ullinger and Sheridan 2015; Ullinger *et al.* 2012; 2015). Likewise, after Peter B. Cornwall’s expedition to Bahrain and Saudi Arabia in the 1940s, the materials and skeletons he accumulated were shipped to the United States and later given to the (now) Phoebe A. Hearst Museum of Anthropology. Six decades later, the Dilmun Bioarchaeology Project has brought the lives of these 2nd millennium BCE

individuals into focus, largely through osteobiographies, facial reconstructions and public outreach (Boutin 2016; Boutin and Porter 2014; 2019; Boutin *et al.* 2012; Porter and Boutin 2012). Other examples come from sites such as Kish (Pestle *et al.* 2014; 2023; Torres-Rouff and Pestle 2012; Torres-Rouff *et al.* 2012) and Ottoman-period Tell el-Hesi (Gregoricka and Ullinger 2022; Ullinger *et al.* 2022).

Nevertheless, all of these examples represent groups of skeletons shipped to Europe and North America in the early 20th century, often under colonial authority. Poor record-keeping and reporting can, in many cases, make it difficult to discern where skeletons are located today, as there is no one database outlining their whereabouts; researchers may even be hesitant to disclose their location. This is compounded by the fact that groups of skeletons from the same site may have been gifted, loaned, or sent to different individuals and institutions, both within the same country (e.g., Bab adh-Dhra’ in the United States) and around the world (e.g., Jericho in the UK, Jordan and Australia) (Sheridan 2017). Additional accountability is subsequently needed when archaeological skeletons have been exported outside their country of origin to ensure that their location is widely reported, in addition to a commitment to consent, curation, analysis and dissemination.

Accountability for dissemination of data generated from these assemblages should include community engagement, public outreach and, if possible, publication. Failures to publish call into question why excavation is conducted in the first place (Cherry 2011), yet continues to be common practice among archaeologists and bioarchaeologists excavating today. Some have called for local authorities and agencies responsible for issuing excavation permits to enact stricter sanctions against those archaeologists who fail to adequately publish their findings, and to withhold subsequent permits until such obligations are met (e.g., Cherry 2011). Nevertheless, while this carrot-and-stick approach may provide some external incentive to ensure proper dissemination, it is unlikely to gain widespread application or enforcement in the near future. Instead, we must hold ourselves accountable by shifting our thinking beyond what is simply required to excavate and ask ourselves more broadly if, by allowing their bodies to remain disinterred without telling their stories, we are truly treating the dead with respect.

Normalizing community engagement and publishing on understudied assemblages must also extend to prioritizing funding for collections-based research from major granting agencies and professional

organizations. Current funding parameters make it clear that curating human bone, collecting skeletal data and publishing previously excavated assemblages is generally less valued than excavation (Cherry 2011). As such, these agencies must acknowledge the importance of working with unpublished legacy collections and reducing the unnecessary excavation and continued amassment of human skeletons, by offering competitive funding opportunities to aid bioarchaeologists in revisiting neglected assemblages (Childs and Benden 2017; Kersel 2015). For Near Eastern archaeologists and bioarchaeologists, for example, the American Society of Overseas Research (ASOR) recently instituted the Study of Collections Fellowship (<https://www.asor.org/fellowships/study-of-collections-fellowships/>) to alleviate costs associated with the study of museum-based collections (although compare these two \$2,000 awards with up to \$62,500 in ASOR grant funds available for excavation projects and at least \$91,000 earmarked for fieldwork scholarships in 2022 alone). Non-excavation-based funding for bioarchaeologists should be prioritized and expanded, not only for the study of legacy collections, but also as an integral part of planning for long-term curation and storage (e.g., see Childs and Benden 2017) of the human skeletons under our care, and for public outreach and publication efforts related to the rehabilitation of legacy collections.

Conclusions

Excavation has and always will be a critical component of bioarchaeology as a discipline. Nevertheless, as we work with the bones of once-living individuals, we must think more reflexively about why we excavate, and about the necessity of disturbing even more human burials when the bodies of already-excavated individuals have been left to deteriorate in improper conditions and without analysis — begging the question of why we (or our predecessors) have removed them from the ground in the first place. By ‘we’, I argue that even though we as bioarchaeologists did not excavate these skeletons, nor may we be directly responsible for their legacy or orphaned status, we have a collective, ethical responsibility to care for these collections through proper curation, analysis and publication before engaging in additional bioarchaeological excavations. In this way, we take responsibility for their preservation and curation while ensuring that their research potential is reached, and ultimately, that their stories are heard.

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