Identified skeletal collections: the testing ground of anthropology?

Edited by
Charlotte Yvette Henderson
Francisca Alves Cardoso
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Human skeletons are widely studied in archaeological, anthropological and forensic settings to learn about the deceased. Methods used to identify individuals in forensic contexts and to determine age and sex in archaeological settings are normally tested on identified skeletal collections: collections of skeletons with known age-at-death, sex, often occupation and cause of death. These collections often represent individuals dying within the last century, but this is variable and often depends on the purpose for creating the collection. Many were developed in attempts to understand local population biology whereas those collected recently are for forensic purposes: to improve identification in legal contexts. Some of these collections were developed from body donation programmes, while others have come from cemeteries: cemeteries which were either no longer viable or needed clearing. All these factors impact on who curates these collections: archaeology or anthropology departments and museums. However, unlike many other skeletons curated in these locations, these are individuals with names. All this raises ethical questions about their creation, curation and their use for research.

This book focuses on identified skeletal collections in the UK, Portugal, South Africa, USA and Canada. The chapters discuss how and why collections were amassed including the local legislation governing them. Alongside this run the ethical issues associated with their collection, curation and access to them. The demographics of the collections: who is included and why, along with such biases and how they can impact on research are also discussed, as are limitations in the documentary data associated with these individuals. The importance of these collections is also focussed on: particularly their role in developing and testing methods for age determination in adults. This shows why these collections are so vital to improve methods and interpretations for archaeological and forensic research. The importance of communicating this to the wider public is also addressed.

Charlotte Henderson is a researcher in CIAS – Research Centre for Anthropology and Health based in the Department of Life Sciences, Coimbra (Portugal). She completed her PhD at the University of Durham in the Department of Archaeology. Her research focusses on methods for identifying activity in past populations. She has a long-standing interest in ethics which she studied as part of her undergraduate degree in Philosophy.

Francisca Alves Cardoso is a research fellow at CRIA - Centre for Research in Anthropology (Portugal). In 2008 she was awarded a PhD in Biological Anthropology/Paleopathology by the University of Durham (UK). Her research focuses on the significance of socio-economic and cultural variables in the interpretation of human skeletons. In 2014 she was awarded a grant to develop the project - Portuguese Human Identified Skeletal Collections (HISC): Shaping their ethical and legal framework, which aims to build a bridge between science and society on the importance of HISC, whilst considering their scientific value, social and cultural, as well as ethical implications.
This edited volume by Charlotte Yvette Henderson and Francisca Alves Cardoso encourages the reader to critically evaluate the ethics that are involved in the use and curation of identified skeletal collections, defined as those collections of human remains derived from “archaeological sources, dissections and other cadaver sources, and those from recent cemetery sites” (p. 1.). While biological and forensic anthropologists routinely rely on identified skeletal collections for both research and applied means, this volume challenges the anonymous treatment of individuals within these collections and emphasizes the underlying biases inherent in all collections. Beyond highlighting these foundational issues, the authors then elucidate the many facets of these biases and suggest ways that professionals can navigate through them with benefit to the discipline. Finally, this volume fosters discussion over the ethics of using identified skeletal collections and how researchers should engage with the individuals interred within the collections as well as with descendent communities.

The volume begins by drawing the reader’s attention toward the debate over the fate of modern identified skeletal collections and their uses within anthropology. That is, if skeletal collections of the past are still useful today despite numerous sample, temporal, and research biases, and if they are how the known individuals within the collections should be ethically considered. Although many professionals are inherently aware of the importance of identified skeletal collections and even some of the biases that are associated with them, Charlotte Yvette Henderson frames these issues within an ethical framework, challenging the reader to define how each individual within a collection can best be utilized. She then warns of the danger of removing an individual from their “geological, temporal, socio-economic, sociocultural, and sociopolitical contexts” (p. 7) in the context of analysis.

To emphasize further the important role of identified skeletal collections, especially concerning the ever-growing desire for public access and education, the second chapter by Jelena Bekvalac and Rebecca Redfern utilizes the Museum of London and the Centre for Human Bioarchaeology’s holdings. Bekvalac and Redfern encourage the dissemination of information (i.e., why the museums hold these collections, results of skeletal analyses, reports, theses, dissertations, and other so-called ‘grey’ literature that are likely not to be accessible to the public) as they believe it is vital to maintaining awareness of the collections, highlighting the collections’ significance and validity, and therefore to their usefulness and accessibility to multidisciplinary interests.

Chapters 3 and 8 both discuss how collections are formed and utilized within demographic categories and how these categorizations within collections are not always representative of an individual’s lived experience. In Chapter 3, John Albanese relays how the
Grant collection of the University of Toronto was formed, emphasizing the importance of verification of the identity of the deceased, and begins a discussion on the curator’s biases related to the construction of a skeletal collection from anatomical or donated cadavers. Further, Albanese discusses how some collections can be used to perpetuate scientific and popular misconceptions of human variation, especially regarding racial categorization. While specifically focused on the Grant collection, Albanese forces the reader to consider the many variables that go into constructing a collection (and their attached biases) as well as how to best avoid unintentional, antiquated, and typological research by the researchers.

From a more ethnographic approach, Francisca Alves Cardoso explores the limitations in using biographical data associated with individuals within a skeletal collection in Chapter 8. By conducting a pilot study on four living ‘domisticas,’ or housekeepers, Alves Cardoso explores the variability of tasks associated under that specific occupation in relation to skeletal remains from Coimbra skeletal collection, a modern cemetery collection of identified individuals housed at the University of Coimbra. In her research, Alves Cardoso demonstrates that occupations listed in biographical information do not account for an individual’s life history and challenges the static nature that is often associated with skeletal collections. Instead, she emphasizes the constantly changing holistic nature of the human body.

This consideration of biases in research is carried into Chapter 4. Here John Albanese discusses the sources of biases found within identified skeletal collections, presents a theoretical model that combines elements of the New Biocultural Synthesis (Goodman and Leatherman 1998) and Cemetery Studies Theory (Hoppa 1996, 1999; Saunders and Herring 1995) for “assessing the level of impact bias has on research, and demonstrates how various biases can be identified, assessed, and controlled for using multivariate statistics to maximize research potential” (p. 60). This well-written chapter demonstrates a clear argument for how to construct the best sampling strategy and is an essential read for any researcher interested in studying human remains.

Continuing on the theme of biases within identified skeletal collections, Jennifer Sharman and John Albanese specifically focus on bioarchaeological collections within Chapter 5. Sharman and Albanese review cultural and social biases associated with six different collections with a specific focus on issues of race. The chapter has many important aspects to consider, but some statements are vague and underwhelm the reader with the overall critical point the authors are trying to establish. For example, when discussing race, the authors state: “Using ancestry terms implies continental origin (not to be confused with genotype) is having the impact on the skeleton, whereas using racial terminology in this chapter we are intentionally drawing attention to socio-political nature of these constructed groupings and the impact of racism in the skeleton” (p. 94). While the meaning is understood from the sentence, ancestry is also a socio-politically charged term and often does incorporate phenotypic expression that stems from ones’ genotype (combined with other factors).

Chapter 6 and 7 both relay information about how elements of the biological profile can be affected by the biases within the collection itself. Vanessa Campanacho and
Hugh Cardoso seek to review factors on skeletal aging within the context of identified skeletal collections and the practical implications of this knowledge. Although the authors outline the importance of understanding the aging process and discuss some of the environmental factors on aging and the limitations those pose in age estimation, more clarity on why there is a need for better age estimation techniques (i.e. the lack of precision) could have been stated. Luisa Marinho, Ana Vassalo, and Hugh Cardoso describe a case study investigating sexual dimorphism in relation to secular change in Chapter 7. Although they put forth an interesting idea and an important point for discussing the continued need for skeletal collections, a wider temporal span between groups analyzed and perhaps different statistical and morphological tests may be more appropriate for demonstrating the authors’ point.

In Chapter 9, Rachel Watkins utilizes structural violence theory to relate lived and postmortem experiences of individuals in US collections. Drawing from the Cobb collection, a collection of past dissected and donated individuals housed at Howard University, Watkins challenges the reader to question our roles as researchers in perpetuating structural violence and unbalanced power dynamics within many identified skeletal collections. Suggesting researchers engage in multidisciplinary collaboration and community engagement to exemplify researcher accountability to individuals interred within collections (including establishing ethical guidelines on what research should be conducted), Watkins exemplifies the ethical discussion brought forth throughout this volume.

The volume’s objectives were to present an argument supporting the creation and curation of identified skeletal collections and to foster a reflective discussion among anthropologists towards the ethics of utilizing these collections. The authors achieve these goals and provoke the reader beyond simple utilization of collections to evaluating their own perceptions and role working with identified skeletal collections. Further, this volume embraces the ongoing debate about the fate of many skeletal collections; something that any biological or forensic anthropologist should be aware of. Each chapter directly ties in the ethical implications of utilizing identified skeletal collections. This volume is an important contribution to anyone who is dedicated to advancing scientific knowledge through the analysis of osseous material and would be beneficial to any level professional within the field of anthropology.

References