Part I

Introduction

1 *Introduction: interpreting violence in the ancient and modern world when skeletonized bodies are all you have*

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1.1 Introduction

If this collection of studies on interpreting violence has a single *raison d'être* it is that bioarchaeology and forensic anthropology make good bedfellows in thinking about the reasons and context for interpersonal violence. Bioarchaeology has emerged as an important and integrated approach to understanding human skeletal biology in the past. It combines analysis of skeletonized human remains with archaeological reconstruction of the grave and habitation site, and other aspects of the environment in which individuals lived. Forensic anthropology is the application of methods from bioarchaeology, but usually in a more recent historic or contemporary setting. The data from the skeleton are usually used in a legal setting while working with police, coroners, or human rights organizations. Both bioarchaeology and forensic anthropology share complex methodologies for gleaning every piece of scientific data from the human remains and the context in which they are found. Yet these two subdisciplines within biological anthropology often are separated in edited volumes, within departments, and across national conferences.

This is among the first organized symposia that we are aware of that presents a thematic set of case studies coming from both subdisciplines. At the 81st Annual Meeting of the American Association of Physical Anthropologists in Portland OR (April 11–14, 2012) the initial poster session focused on case studies that revealed sometimes surprising or counterintuitive interpretations of violence because a more nuanced approach was taken to understand both the bones and the context. The focus is on the theories and methods that are used to interpret violent interactions by identifying both the

Bioarchaeological and Forensic Perspectives on Violence: How Violent Death is Interpreted from Skeletal Remains, ed. D. L. Martin and C. P. Anderson. Published by Cambridge University Press.

perpetrators of violence and those who suffered as a result of their actions. The chapters in this volume all reveal how violence is reconstructed from skeletal and contextual information. However, they provide a range of approaches to foster multiple perspectives with regard to documenting and interpreting the meaning of violence. Individual chapters demonstrate how this can be operationalized on many different levels. In particular, the focus of these case studies is to identify the different participants in violent encounters (victims, witnesses, aggressors) in order to provide more detailed and nuanced interpretations of human behavior.

1.2 The complementarity of bioarchaeology and forensic anthropology

Bioarchaeology focuses on reconstructing ancient and historic cultures from burials and other archaeological evidence in an academic setting. Forensic anthropology deals primarily with more recent (and, most times, violent) deaths in local, national, and international arenas, and it is carried out within a framework that includes law enforcement, medical examiners, human rights organizations, lawyers, and surviving family members. Although both do work that involves excavation and analysis of skeletonized human remains, the career trajectory of bioarchaeologists and forensic anthropologists can be very different.

Bioarchaeology and forensic anthropology have largely developed in the USA as distinctively different career tracks, but there have been many scholars who practice both professionally and this has been the case for a long time (Buikstra and Beck 2006; Komar and Buikstra 2008). Physical (or biological) anthropology historically started out with individuals trained in anatomy and/or medicine. Both Hooton and Hrdlička (dubbed the "father of physical anthropology") worked on forensic cases (Thompson 1982). Ubelaker (1999: 728) writes that Hrdlička worked directly with the FBI on solving cases for them in the 1930s. Thus there is a long and illustrious history of melding biological anthropology and forensic work.

Bioarchaeology and forensic anthropology present complementary perspectives for examining violence in both past and contemporary societies. An important goal of any investigation of conflict and trauma is to place the skeletal data into the larger social, political, or historical context. One way to get a deeper understanding of the motivations and consequences of violence for different categories of participants (e.g. victims, aggressors, captives, warriors) is to examine the different roles that individual agents and groups play and how they interact in a specific location.

An example of this approach is teasing out the victims from the attackers in cases of indigenous or colonial warfare or sectarian conflicts. Careful analysis of the human remains, detailed observations on the burial context, and ethnographic or witness reports all can aid in providing a more accurate and nuanced reconstruction of past events. Chapters in this volume highlight case studies of antemortem and perimortem trauma in contemporary, historic, and ancient contexts. These integrated bioarchaeological–forensic approaches are useful in constructing the contexts in which violence takes place. Ultimately, both subdisciplines aim to reconstruct and explain complex human behavior and so can benefit from directly sharing case studies, methods of analysis, and theoretical approaches to interpretation.

There is currently no umbrella term that would subsume both the work of forensic anthropologists, forensic archaeologists, and bioarchaeologists, although "forensic bioarchaeology" might be something to consider in the future. Increasingly, the work of the forensic anthropologist is highly varied, from work in academic settings and local homicide cases, to working at mass disasters and places where large numbers of people have perished from sectarian warfare and genocide (Crossland 2009). Bioarchaeologists are increasingly volunteering to aid in a wide variety of contexts that involve skeletonized remains, from historic cemeteries to mass disasters (Blau and Skinner 2005). This blurring of the roles of bioarchaeology and forensic anthropology is breaking down the largely artificial divisions between those who study the ancient dead and those who assist with the more recently dead.

Another reason why this is the moment to blend theory, method, and data from bioarchaeology with forensic anthropology is that bioarchaeology itself is emerging in a relatively new configuration (see Martin *et al*. 2013). Modern bioarchaeology is integrated into broader anthropological agendas of engagement and ethical action. Many bioarchaeologists incorporate theories about human behavior into their work and this has broadened and deepened the interpretations derived from human remains (Martin *et al*. 2013). Forensic anthropologists have provided a profound sense of what is at stake for the living when the dead cannot be located or identified (Sanford 2004). In addition, many forensic anthropologists also examine the direct impact of violent acts on the communities from which the victims were taken, and on eye-witnesses to the violence.

One of the issues facing the relatively young discipline of forensic anthropology is the need to create a balance between specialized knowledge embedded in the forensic sciences and training in the other subfields of anthropology. Through interdisciplinary inquiry and engagement across the subfields, anthropology provides a way to view the diversity of opinions about violence, warfare, and human rights issues that often result in death, trauma, and social upheaval.

1.3 A blended forensic–bioarchaeological approach

A variety of forms of violence, covert and vicious types of warfare, and a broad range of activities regarding surveillance or the elimination of human rights have created work for anthropologists that could not have been imagined 100 years ago. Future forensic anthropologists and bioarchaeologists will need to continue training not just in the fundamentals of excavation and skeletal analysis. They also will need training in all four subfields of anthropology to broaden their theoretical and practical approach to dealing with everyday violence. In this way, bioarchaeology (which is already deeply embedded in anthropological inquiry) and forensic anthropology can engage in an interdisciplinary inquiry of the theoretical and empirical issues within the study of violence, warfare, surveillance, and human rights. The approach and perspective that anthropology brings to the study of violence is a critical, self-reflective, and non-reductionist perspective that allows for a holistic examination of the dynamics that have led to the wide array of human atrocities committed throughout the world. It is this strength that is needed to keep forensic archaeology from falling into a trap of creating highly specialized technicians who are disconnected from the rest of anthropology.

Forensic anthropology and bioarchaeology may be considered two sides of the same coin (i.e. human osteology); however, this does not always have to be the case. The two applications of human skeletal analysis may have very different objectives and yet they are fundamentally inseparable in terms of methodology, theories about violence, and, sometimes, ultimate goals. The biggest difference between the two subdisciplines is that forensic analysis tends to focus on the individual while bioarchaeological analysis is more concerned with populations (although individuals can be a focus as well). Furthermore, forensic analysis may not have as much concern for skeletal evidence of events over the life course of the individual, something that has been more recently incorporated into broader bioarchaeological interpretation of individuals and their role within the population.

Bioarchaeology has the depth and cross-cultural breadth to help shape and understand the profound and complicated ways that humans think about and use violence and bodies. Bioarchaeologists use human remains as a lens through which to examine cultural processes. The ways that dead bodies are discussed, hidden, and displayed are used as a point of departure for examining the forms of violence that contributed to the deaths under study. Many of the most horrific genocidal events in the past 100 years demonstrate the relationship between violence and the expressive function that such acts and images have as vehicles of universal human communication. Covert operations are

designed with the goal of unraveling culturally constructed webs of trust. Thus, the bodies have both real and symbolic properties.

1.4 Encompassing and cross-cutting themes

To continue building bridges and meshing methods and theory, the chapters in this book provide case studies that highlight the larger intellectual context within which this kind of scholarship falls. There are three broad sections, each with an emphasis on a particular approach and a particular contribution to new uses of methods and theories. While there is overlap among the sections, each provides a particularly nuanced set of case studies that show that there is no one way to interpret the meaning of violence – rather, there are many different pathways to getting at a more complete picture based on initial examination of human remains. The first section provides a variety of new approaches and methodologies for analysis of human remains. The next section provides a wide range of cases that fall into the broad category of ritual and performative violence. The last section takes up issues of identity and its dynamic interplay with a range of cultural factors. We end the volume with a thought-provoking chapter on what it means to do the kind of work that scholars in this book do in dealing with death and violence.

1.4.1 Innovative methodologies in forensic anthropology and bioarchaeology

Stefan Flohr, Ute Brinker, Elena Spanagel, Annemarie Schramm, Jörg Orschiedt, and Uwe Kierdorf (Chapter 2) investigate the demography of a commingled skeletal collection, located near the Tollense River in Germany, suspected to represent the victims of a battle. To accomplish this, Flohr and colleagues examine the cross-sectional properties of adult femora from this site to test whether the battlefield hypothesis is appropriate. Their results show the demography of the assemblage is largely consistent with what would be expected from a battlefield, mostly young and middle adult males, but that some females were also among the victims at this site. They discuss the important roles that women may have played during battles in the past, providing empirical evidence for the presence of females on the battlefield in this study. The approach taken by these authors contributes to understanding gender roles in violent events and how they may be identified bioarchaeologically.

Anna Kjellström and Michelle D. Hamilton (Chapter 3) reconstruct the events on the Royal Swedish Navy warship *Kronan* that led to sharp force

trauma on some individuals using a forensic anthropological approach. They apply a detailed methodology to examine the sharp force defects present in this commingled collection. The authors demonstrate that the defects are not consistent with wounds resulting from explosions or combat, but rather reflect postmortem taphonomy. They show that the most likely scenario is that these remains, which would have been well preserved at the bottom of the ocean, were affected by the recovery of the cannons from the ship several years after it sank. This research demonstrates the utility of careful analysis of taphonomy, patterning, and context for providing nuanced interpretations of trauma and violence.

Vincent H. Stefan (Chapter 4) discusses the complexities associated with determining manner of death in cases of gunshot trauma. In this chapter he establishes criteria for the identification of victims of homicide vs. suicide, including examination of the context of the remains (buried, unburied, restrained, not restrained). He also suggests criteria based on location of wounds and number of gunshot wounds that will contribute to future investigations of gunshot trauma. He cautions, however, that, while these different criteria may be more consistent with homicide or suicide, in the end it is all of the observations about the trauma made by an investigator that will lead to determining the cause of death. This chapter provides an important, detailed method for considering key aspects of context and patterns of trauma for differentiating victims in both forensic and bioarchaeological investigations of gunshot trauma.

Andrew C. Seidel and Laura C. Fulginiti (Chapter 5) investigate victims and perpetrators of dismemberment cases in forensic contexts. This chapter provides important insight into trends in the nature of relationships between victims and perpetrators. They demonstrate that often in dismemberment cases the victims and perpetrators know each other prior to the violent act and also explore the degree of those relationships for Maricopa County (intimate relationships or not intimate). Significantly, this work also offers a unique analysis of sex differences among perpetrators of dismemberments. For example, they provide evidence that female perpetrators of dismemberments are far more likely to have intimate relationships with their victims. In considering the connections between victims and aggressors, this research illuminates the social patterning of this unique type of violence.

Cheryl P. Anderson (Chapter 6) examines commingled remains from a cave burial site in Northern Mexico to investigate whether the deceased represent victims or venerated ancestors. This research utilizes ethnographic and ethnohistoric information to investigate Rarámuri burial practices and beliefs about the dead. It also reconstructs some aspects of the political and social environment from Spanish accounts of groups living in the region. Based on the

available evidence, the author concludes that, while most individuals likely were not victims of violence, at least one, and possibly a total of three, shows evidence of trauma that is more consistent with violence then burial ritual or ancestor veneration. This chapter demonstrates how consideration of these sources of information may be useful for identifying victims of violence in complex mortuary assemblages.

1.4.2 Ritual and performative violence

Ryan P. Harrod and Debra L. Martin (Chapter 7) examined the human remains from populations living in the ancient Southwest and found that some exhibit the "signature" of captivity and slavery on their bodies. Multiple healed head wounds, healed fractured bones, nutritional anemias, and infections all point to a life of violent beatings and inadequate living conditions. The violent acts involved with taking captives are usually very ritualized and performative, with males being murdered, and females and children being taken captive. The trauma on their bodies suggests multiple beatings across the course of the lifetime. From these case studies of captives who died young and with many traumatic and pathological injuries, a more detailed understanding of how captives were treated, as well as their symbolic and ritualized use as a show of power and domination, is gained.

Rebecca Storey (Chapter 8) explores the relationships between victims and aggressors in Maya warfare and sacrifice. This research discusses evidence for the importance of warfare among elite males in Maya society and the significance of trophies of war, specifically skull masks that were decorated and then worn by the aggressors. The author provides bioarchaeological evidence for the existence of these trophies and confirms that they likely represent elite victims of ritual violence. These trophies would have bestowed greater prestige to the perpetrators during life and the significance of these violent acts continued to link them to their victims after death. This contribution provides unique insight into considering the complex relationships between victims and perpetrators of ritual violence and how they may extend beyond the actual violent event.

Christina Torres-Rouff and Laura M. King (Chapter 9) consider patterns of cranial trauma, in particular nasal fractures, as evidence for face-to-face conflict at oases in the San Pedro de Atacama during the Middle Period. They demonstrate a higher incidence of nasal fractures among males, although some females were also affected, and argue that this form of violence may have had social significance. The antemortem nature of these wounds provides evidence that, while this face-to-face violence was an important part of society, it was

often non-lethal. This case may not have victims and perpetrators in the usual sense; rather the authors suggest that these fractures may result from some sort of culturally approved violence for resolving problems between adult individuals. This contributes to furthering our understanding of how violence may potentially be used for addressing social problems within a culture and how this type of violence may exhibit different patterns.

William N. Duncan and Christopher M. Stojanowski (Chapter 10) provide an analysis of a sixteenth-century calvaria from Georgia thought to belong to a martyred Spanish priest, Pedro de Corpa. Through the process of trying to determine whether or not this calvaria does in fact belong to Pedro de Corpa, the authors explore why some bodies are of greater interest to forensic anthropologists and bioarchaeologists than other bodies. They demonstrate that in this case there are two important factors leading to the high degree of interest. The first is that defacement of the body of the deceased has increased the degree to which it is held sacred. The second reason is that anthropological investigation of this calvaria has amplified the mystery surrounding it as well as the meaning associated with it. This chapter carefully considers how different groups within a community may be impacted differently by bioarchaeological and forensic research and represents an example of positive interaction between the anthropologists and the larger public.

1.4.3 Violence and identity

Heidi J. Bauer-Clapp and Ventura R. Pérez (Chapter 11) examine signs of structural and direct violence on the remains of Yaqui individuals killed in a massacre. The results of their analysis, demonstrating both trauma and signs of physiological stress, illuminate the extensive violence against the Yaqui perpetrated by the Mexican government during the nineteenth and early twentieth centuries. Through the repatriation of these remains to the Yaqui, the authors also aided in the transformation of the bodies of the victims into part of the Yaqui heritage, continuing to tell the story of violence and sacrifice to future generations. This research exemplifies how bioarchaeological and forensic research may further the understanding of violence while positively engaging the communities who are affected.

Kathryn M. Baustian (Chapter 12) explores signs of violence at the Ancestral Pueblo site Grasshopper Pueblo, finding evidence for antemortem trauma as well as scalping, and questions prior views of a peaceful community. The author considers a number of possibilities to explain the clear signs of violence on some of the remains, including warfare and raiding and different types of intra-community violence. She concludes that external violence likely played