The Body as (in, and with) Text: Doing Bioarchaeology with Archives

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Abstract

Bioarchaeological analysis is often portrayed as 'reading' the skeletal body, examining clues and signs that offer insights into past people and social worlds. But physical remains are just one kind of tissue whose materiality informs our inquiries. Bioarchaeologists who work in historical contexts also encounter bodies in and through textual sources. We discuss how historical bioarchaeologists 'read' the various sources they draw upon, which include, but are not limited to, human skeletal remains. This article proposes that social bioarchaeology, as a theoretical approach to human remains, can contribute to more holistic readings of skeletal and textual data. Social bioarchaeology engages with multiple traces to enhance, complement, and problematize the study of human remains. Informed by theories of materiality and embodiment, this approach emphasizes multi-scalar biosocial phenomena that influence bodily forms and actions. We argue that social bioarchaeology encourages new articulations of archival and corporeal remains and present two case studies as examples of the generative potential of doing social bioarchaeology in, and with, archives. Importantly, such 'doings' bring our own practices and material manipulations into the frame of analysis.

Introduction

Human skeletal remains provide a unique window into the past, but rarely stand alone as a source of evidence. Our access to past lives involves some

combination of the material remains of human bodies and textual sources, even if the latter are merely laboratory standards and forms. Importantly, how these different sources are 'read' by bioarchaeologists has implications for the amplification or silencing of particular bodies. This paper examines how bodies enter into, emerge from, and mingle with texts and how bioarchaeologists might better incorporate various bodily representations into their research.¹

Numerous scholars have highlighted the contributions that come from bridging texts with skeletal evidence (Fay 2006; Geber 2015; Ion 2016; Mitchell 2017; Roberts 2011). Indeed, a subdiscipline of historical *bio*archaeology seems to be emerging. This research generally falls into three categories: using textual sources as background context for skeletal studies, using skeletal data to fill gaps in the historical record, and testing skeletal data against textual sources (Grauer and Miller 2017; Perry 2007; Robb et al. 2019). While these approaches certainly have merit, we propose that the methodological and theoretical emphases of social bioarchaeology allow for a more holistic integration of text and bone while recognizing the partial potentiality inherent to both.

Social bioarchaeology emerged in North America as a complementary approach to population-based research of the late twentieth century. This interdisciplinary perspective integrates skeletal remains with archaeological, ethnographic and historical sources to pursue a deeper, more contextualized understanding of human lives (Agarwal and Glencross 2011, Baker and Agarwal 2017; Buikstra et al. 2011). Social bioarchaeology invites a focus on individual life histories which, in tandem with population studies, inform on how social and biological contingencies come to be reflected in the body (Baadsgaard et al. 2011; Robb 2002). To "transcend the skeletal body into

¹ While scholars who study human remains in the UK are generally referred to as 'osteoar-chaeologists', we have chosen to use 'bioarchaeologists' in this paper to reflect our focus on the theoretical perspectives of social bioarchaeology, a term developed in the United States. However, we acknowledge that many osteoarchaeologists also utilize social theory (see Gowland and Kacki 2021) and engage with textual sources in their work.

the realm of lived experience," social bioarchaeologists actively engage with social theory, particularly theories of materiality and embodiment (Agarwal and Glencross 2011:3).

This article explores how social bioarchaeology can contribute to an historical bioarchaeology that moves beyond establishing historical context or testing skeletal data against texts. Importantly, this is not simply an additive process (i.e., bones + texts = better [pre]history), but is relational, offering generative potential (Fowler 2016; Novak and Warner-Smith 2020). We discuss the relationship between text, the body and how practitioners 'read' these sources, as well as the role of the researcher in creating new archives. We outline how social bioarchaeology is a productive space for bringing together archival and corporeal remains and present two case studies that generate new perspectives on past bodies.

Reading the body

At the most basic level of analysis, bioarchaeologists examine human remains to determine demographic information. The trope of 'reading the body' is frequently used to describe how bioarchaeologists glean information from the skeleton (Crossland 2009; Krmpotich et al. 2010; Rautman 2000; Sofaer 2012). Bones are placed in anatomical position and visually inspected before being measured, counted, photographed, sketched and sampled. Of course, this metaphor of the body as text is not without its critics. Sofaer (2012) argues that such a conceptualization overemphasizes the visual component of skeletal analysis, neglecting the role of touch and the sensorial body. Furthermore, our ability to 'read' skeletal remains 'scientifically' implies some tangible reality, upon which more 'humanistic' interpretations can be propped up (see Buikstra et al. 2017, for example).

Bioarchaeologists often emphasize information extracted from human remains as an unbiased and factual representation of the past. As this evidence comes from the very bodies of humans living in the past, the assumption goes, it cannot be tainted with the biases of the historical record (Grauer and Miller 2017; Mitchell 2017). Indeed, while there are many types of archives, textual

sources often focus on the literate and/or elite (Grauer and Miller 2017; Perry 2007; Robb et al. 2019). When marginalized or subjugated persons are included in archives, it is often through the lens of governmentality or colonial power (Basu and De Jong 2016; Fuentes 2016; Zeitlyn 2012). Historical archives themselves are curated collections, subject to institutional and cultural constraints (Baird and McFadyen 2014; Zeitlyn 2012).

While skeletal research arguably allows for "a more democratic history" (Robb et al. 2019: 29), the biases inherent in the skeletal record are also well-acknowledged (Agarwal and Glencross 2011; Perry 2007). For example, the oft-cited 'osteological paradox' points to how selective mortality and heterogeneity in disease risk influence the formation of skeletal samples (Wood et al. 1992). Attempts to address these issues are now standard practice (De-Witte and Stojanowski 2015), but emphasis often remains on the impartiality of the skeleton when compared to most other sources (Perry 2007; Robb et al. 2019).

More recently have been challenges to how skeletal populations are formed and the conflation of diverse life histories based on shared mortuary or museum space (Fahlander 2016; Komar and Grivas 2008; Novak 2017a; Watkins and Muller 2015). These challenges articulate with those of Indigenous and Black scholars (e.g., Blakey 2021; Lans 2020; Lippert 2007; Robertson 2018; Watkins 2020) and their call to decolonize research and collections. Ongoing changes to practice and ethics in the discipline (Blakey 2008; Kakaliouras 2012), along with recent events in the United States, have spurred conversations that cross boundaries and form solidarities for action (Dunnavant et al. 2021; Watkins 2018).

Without losing sight of this ethical shift to praxis—and in fact drawing from a reflexive turn—there is another critical way of thinking about the body as text in bioarchaeology. Lines can be blurred between bone and text, and between collection and archive. Archives are collections of records and data in an array of media (Baird and McFadyen 2014; Battaglia et al. 2020; Zeitlyn 2012). The skeletal body is an archive of life history, containing records of past traumas, labours, and consumption. Skeletal assemblages in aggregate may

also be considered archives. Many of these collections were created through frontier and colonial violence (Geller 2020; Lans 2018; Watkins 2018). Others have been formed through the sampling and research priorities of more recent archaeological projects.

Importantly, the practice of bioarchaeology generates new 'bodies of evidence' (Herring and Swedlund 2003) as practitioners measure, score and record their observations on forms, in databases, and through photographs and illustrations. Curatorial practices also produce paper and digital files. Each body becomes an archival amalgam of text and image as analytical notes, catalogue entries, data points, photographs, sketches, radiographs, CT scans and other media create new representations of our 'primary' source.

Both the analytical trope of 'reading the body' and the role of the bioarchaeologist as archivist highlight ethical considerations. Michel-Rolph Trouillot (1995: 29) explains that "the production of traces is always also the creation of silences" which enter history at different points as sources are created, archived, transformed into narratives, and given historical significance. Zeitlyn (2012) similarly points out how the archivist plays a role in the production of silences by acting as a gatekeeper whose choices create records of certain histories and obscure others.

With this in mind, we must consider not only how skeletal collections are formed, but also how our research questions and analyses result in new records and representations while potentially obscuring others. While bioarchaeologists may not see their everyday practices in the lab –measuring elements, jotting down scores – in terms of archivist or gatekeeper, the production of silence and absence is built into our practices (Novak 2017b). The most basic questions of *which* skeletal remains to excavate or include in a sample, and *what* data to record prioritizes the creation and archiving of some information over others. Furthermore, certain techniques of analysis are uniquely destructive; radiocarbon dating, DNA, isotope and histological analyses recover trace histories while also fragmenting the body through the removal and destruction of samples (Squires et al. 2020).

Thinking about the body as text and how texts and other media are created during our analyses is meant to foster a more careful approach to the questions that precede our research, guide its execution, and produce new archives of data for dissemination (Chamoun 2020). We suggest that one means of doing so involves the deep contextualization of human remains offered by social bioarchaeology.

Social Bioarchaeology in the Archives

Both anthropologists and historians have turned to texts for biological data (e.g. Grauer 1995; Laqueur 1990; Mant et al. 2021; Newman 2003; Rose 1985; Saunders et al. 2002; Steckel and Rose 2002; Tremblay and Reedy 2020). In anthropology, a biocultural paradigm rooted in Marxist political economy aimed to synthesize the biological and cultural (Goodman and Leatherman 1998; Leatherman and Goodman 2020; Wiley and Cullin 2016; Zuckerman and Martin 2016). In doing so, scholars also invited a synthesis of datasets and methods, including archival data (Blakey and Rankin-Hill 2016; Grauer et al. 2016; Herring and Swedlund 2003). Likewise, historians of the body have applied a material cultural approach to seek out textual forms of embodied experience (e.g., Clever and Ruberg 2014; Duden 2005; Harvey 2019, 2020; Sappol 2002; Wahrman 2008).

Following these developments in related fields, practitioners of historical bioarchaeology engage with textual sources alongside skeletal remains. Buikstra (2000) and Perry (2007) connect the emergence of historical bioarchaeology in North America to the study of historic cemeteries and remains associated with historic sites. Historical archaeologists have used temporal context, types of sources, methods and subjects to draw disciplinary boundaries (Hall and Silliman 2006; Hicks and Beaudry 2006; Orser Jr. 1996), and definitions of historical bioarchaeology are similarly proliferating. For example, in Perry's (2007) formulation, the 'historical' is not a temporal context, but is distinguished methodologically by moving between documents and bone. A recent special issue in *Historical Archaeology* (Novak 2020) similarly emphasizes a relational methodology between bone and archive, highlighting the materiality of the bodies that consume, labour, (re)produce, and negotiate identity.

As outlined by Perry (2007), historical bioarchaeologists generally approach textual sources as an introductory context to skeletal remains, an incomplete record to be augmented by skeletal data, or a framework against which to test skeletal research. However, some scholars have taken a more integrative and explicitly theoretical path, notably Meredith Ellis' (2020) assembling of skeletal data, vital records, coffin plates and historic letters to examine how fetal identities were made in relation to parents and faith communities in nineteenth-century New York City. Following this type of work, we acknowledge specific areas where social bioarchaeology can benefit historical bioarchaeologists. While social bioarchaeology does not have an explicit emphasis on textual integration, the practice of contextualizing skeletal remains through other sources lends itself to studies with a historical focus. A social bioarchaeology perspective invites integration of text and bone along with the acknowledgement of biases and silences in these sources without giving primacy to one over another.

The theoretical focus of social bioarchaeology on lived experience and the social and biological forces that influence the body also offers a way to rematerialize bodies in archives. This perspective acknowledges the body as a 'work-in-progress' that is formed and transformed by social and physical environments (Harvey 2020; Sofaer 2006). Importantly, Joanna Sofaer (2006) observed that bodies are part of the material world and proposed approaching the archaeological body as a type of material culture enmeshed in social processes. Food must be chewed, buttons fastened, tools wielded. In recovering such embodiments from archives, we might better follow human traces and tissues through both skeletal and textual records.

The following case studies demonstrate how non-skeletal evidence can be integrated with corporeal remains. In this limited space, we focus on the scale of the individual while acknowledging that aggregate data and population studies have important articulations with other sources. This approach builds upon the notion of osteobiography (Hosek and Robb 2019; Robb 2002; Saul and Saul 1989) but does not give primacy to the skeletal evidence. By presenting how skeletal data and text can be 'read' together, these case studies present richer insights into past lives than either bone or text alone can provide.

The Body and the Martyr

Libice nad Cidlinou was an early medieval center in Bohemia (today part of the Czech Republic), influential in both politics and emergent Christianity in the region (Mařík 2009; Sláma 2000). Excavations at Libice uncovered a large cemetery containing approximately 500 graves (Mařík 2009; Turek 1980). Bioarchaeological analysis, including an examination of trauma, was conducted by Hosek on a sample of 117 individuals from burials dating to the height of Libice's influence – the late ninth through tenth centuries – based on artifacts and site stratigraphy (Mařík 2009). While a small number of remains exhibited perimortem trauma (n=4), one individual stood out for both the severity and pattern of wounds.

Burial 264 contained the remains of a young adult female (20-29 years) in a typical extended position with the head to the west. Grape-style earrings date this burial to the first half of the 10th century (Turek 1980). The young woman was found to have multiple deep, sharp force wounds in her cranium suggesting an attack with a heavy, bladed weapon (fig. 1). Wounds to the superior and posterior surfaces of the cranium suggest that her attacker struck from different positions, including from above and behind, or potentially while she was lying prone. Extensive postcranial trauma includes 14 wounds to the left posterior radius and ulna, indicative of parry wounds made while her arm was raised to block an attack. Nine stab wounds on the left ribs suggest that she was stabbed in the upper left part of her back with a smaller blade. Evidence for decapitation is found in a cut slicing completely through the fifth and sixth cervical vertebrae.

The only other individuals in the sample exhibiting perimortem trauma are three older males with different sharp-force trauma patterns suggestive of warfare or punitive violence (Hosek 2019; Mitchell 2014). As such, the violent death and mutilation of a young woman is unusual by itself at this site. However, early medieval textual sources show that her wounds also bear significant similarities to those described in written accounts of the life and death of a contemporary Czech martyr. Importantly, these documents are extant copies of originals, subject to replication and alterations by many (often unknown)

hands, including modern historians on whose translations this analysis relies.

Václav (more famously known as St. Wenceslas) was a Czech ruler killed by his brother in the early tenth century (fig 2). His martyrdom made him one of the earliest Czech saints and a cult quickly grew around his relics (Kantor 1983; Vlasto 1970). One of the earliest *vitae* (lives, or biographies of saints) of Václav, the *First Church Slavonic Life of Saint Wenceslas*, was likely written in the AD 930s shortly after his death and is known today through fourteenth-century Croatian versions (Kantor 1983). As described in surviving copies of his *vita*, Václav was brutally attacked by several assailants:

Thereupon the Devil inclined Boleslav's ear and corrupted his heart...and he struck him over the head with his sword. And Wenceslas [Václav] turned around and said, 'What have you plotted?'...Now Tuza came running and struck him on the arm, and Wenceslas released his brother and ran toward the church. And Hněvysa came running and pierced his ribs with his sword, and Wenceslas gave up the ghost...they hacked Wenceslas apart and left him unburied (trans by Kantor 1983: 148-9).

The traumatic parallels (struck over the head with a sword, wounded in the arm, stabbed in the ribs, and dismembered) between the saint's demise and Burial 264's injuries are striking. Knowledge of Václav's death was likely common in the tenth century as he was a popular Czech political and religious figure. Historical evidence also connects Václav and his legacy to Libice. Some accounts suggest that after his assassination, his most devoted followers fled there (Vlasto 1970). Additionally, a historic massacre at Libice in 995 purportedly occurred on September 28, St. Václav's feast day (Panek and Tumá 2009; Vlasto 1970).

The postmortem treatment of Václav and Burial 264 offers further insight into medieval fragmented bodies. While the bodies of saints and kings might be divided for religious or political purposes, there was much concern over bodily integrity for the Resurrection (Tracy and DeVries 2015; Walker Bynum 1991) and separated body parts might be gathered in death (Gilchrist

2012). The *vita* describes how Václav's mother, Drahomíra, collected the pieces of his body and laid him out in clothing before burial (Kantor 1983). Of course, Václav's body was later moved and separated as a cult grew around his remains, but the initial focus on bodily integrity by mourners is apparent in the text. The body and mortuary treatment of Burial 264 parallels this concern. Despite clear skeletal evidence of decapitation, she was buried 'intact' in a normative position with the head anatomically placed. Indeed, the archaeologists unearthing the remains did not record anything unusual about this burial (Turek 1980).

Similarities in wound patterns and historical associations with Libice aside, we cannot otherwise explain how this woman might have been connected to the saint. The use-period of the cemetery also means that her death may have preceded Václav's assassination. Of course, exploring the parallels between these textual and skeletal traumas is not meant to 'prove' that Václav's martyrdom was reenacted on Burial 264, or to offer a direct link between these individuals. However, when read together, these two sources generate new understandings of the complexity of early medieval violence and ideologies around what constituted a 'good' death and proper burial.

With other evidence for violence at Libice, we might interpret Burial 264's wounds as collateral damage from local warfare or as punitive violence. However, the textual accounts of Václav's death and his connection to Libice add potential ritual or performative significance to this woman's trauma. This pattern of wounds may in fact position certain violence relative to the sacred or holy, complicating what might otherwise be interpreted as denigration of her body and soul. Furthermore, the textual emphasis on bodily integrity offers insight into how this mutilated body received a normative burial. At the same time, the skeletal remains demonstrate how depictions of a martyr's wounds and death may be more than mere literary flourishes. Instead, these narratives might extend beyond oral traditions or the pages of manuscripts to be archived in embodied experiences of violence.

The Storage Drawers of an Anatomical Collection

The George S. Huntington Collection is comprised of over 3,000 individuals who died between 1893 and 1921 in New York City. These decedents were dissected at the College of Physicians and Surgeons before becoming part of Dr. Huntington's comparative collection, curated in Washington, D.C., at the National Museum of Natural History (Muller et al. 2017). As a documented collection, information such as names, occupation, sex, age-at-death and cause of death are recorded, drawing many scholars to this rich archive (Hunt and Spatola 2008; Lans 2018, 2020; Muller et al. 2017; Pearlstein 2015; Zimmer 2018). The information documenting each skeleton, while providing more personal data than is typically available, still offers only fragmentary hints of complex biographies. Importantly, these remains were gathered to document "racial character, variations, reversions" (Huntington 1901: 610) and were used to argue for racial variation in the long bones (Hrdlička 1932).

Though these archives are shaped by race science, they also can be brought into articulation with skeletal remains to offer detailed life histories. The power of doing so is illustrated by Anne (#318945), a woman who died at the age of 70 years and was examined by Warner-Smith as part of a larger study of Irish immigrants in the collection.² Anne was born around 1834 in Ireland and was about ten years old at the start of the Great Famine in 1845 which forced many families to leave Ireland (Diner 1983). Anne, however, did not leave until after the event, arriving in New York City at the age of 30. She, like many other women, became a domestic servant (Diner 1983; Lynch-Brennan 2009).

² The use of names has been described as a move to humanize past peoples for the general public (Robb et al. 2019). However, I argue that naming is also a methodology that can emplace individuals back on the landscapes they experienced during life, and I refer to this woman as Anne to avoid objectifying her as a specimen number. In compliance with the National Museum of Natural History confidentiality request, this name is a pseudonym.

The bones of Anne's right shoulder offer evidence of experiences in the city. A traumatic injury has resulted in new bone formation on the anterior surface of her scapula (fig. 3). The joint surfaces also display extensive osteophyte development and remodeling and her humerus was displaced anteriorly. These changes indicate an unreduced or chronic shoulder dislocation. Anne's death record reports that she lived in New York City for 40 years prior to her death, which suggests the injury occurred in the city while she laboured as a domestic servant. Nineteenth-century hospital records indicate falling and broken bones were hazards for domestic servants (Linn 2008). Over 90% of dislocations are caused by traumatic injury, many of them from falls (Buikstra 2019).

CT scans offer further insight into the long-term effects of this injury. These scans, taken at the distal end of the humeral shafts, document cross-sectional geometric properties as a measure of activity. This practice is shaped by methodological concerns for documenting 'normative' movement. Bones with pathologies are portrayed as 'skewing' the results and not typically included in a scanning sample (Saers et al. 2017; Wesp 2020). Selective sampling therefore introduces silences, while creating a 'normal' collective. In this study, however, Anne's bones were included to obtain a more comprehensive perspective of labour across the life course. The CT scans of Anne's humeri show that her right humerus exhibits markedly less cortical bone (30%) than the left (52.5%). The atrophy of her injured arm suggests she was unable to use her right arm or chose not to. Such changes to movement likely affected her ability to perform salaried work, and it was not uncommon for ageing or debilitated domestic servants to enter the almshouse for this reason (Lynch-Brennan 2009).

Interestingly, the injury was not noted on her admissions record when she entered the almshouse (renamed the City Home for the Aged and Infirm in 1903) on Blackwell's Island. These documents often made note of disabilities, injuries and other impairments (fig. 4), as institutions were concerned with the kinds of labour residents could perform to 'pay' their way and justify receiving aid. There was also an increasing concern with classifying diseases and ailments. Institutions segregated bodies, both bureaucratically and spatially,

into "appropriate places" for targeted treatment (Kingsbury 1915: 101). For example, Blackwell's Island included a series of subdivisions in addition to the almshouse itself: the Almshouse Hospital, the Hospital for Incurables, and the Blind Asylum (The City Club of New York 1903). The fact that Anne's injury went unacknowledged by the admitting physician suggests her impairment was considered typical of ageing and infirm bodies. Thus, while osteologists would consider Anne's arm 'abnormal,' her injury was not notable within the context of the almshouse. The absence in the ledgers is therefore suggestive of how disability was 'read' and categorized within public institutions.

Importantly, a contemporary population-based analysis of the life course would preclude using Anne's bones based on her injury, which works to mark her as unable to perform 'normative' activities. By contrast, a traditional osteobiography would have likely centered on the skeletal and radiographic evidence of her traumatic dislocation. From this perspective, however, there is a temptation to highlight the 'truth-value' of the bone and the inadequacy of the archives. At the same time, both the traces and silences in the archives provide a more vivid sense of how this injury might have occurred, the potential reverberating effects on her life, and how others might have perceived her impairment.

Anne's case demonstrates the value of bringing together sources and reading them against the grain (Stoler 2009; Zeitlyn 2012) to generate new findings and questions. Bones alone offer evidence of a traumatic injury in the shoulder joint. CT scans in isolation suggest uneven development of the arms. When brought into conversation, these sources make visible changes to Anne's embodied experience that remain absent from the ledgers. But the ledgers provide insight into how her work as a domestic servant may have resulted in an injury and the need for public aid. Furthermore, the *absence* of the injury in the ledgers suggests that her impairment was read as normative, even as public institutions were becoming increasingly specialized. Here, at the intimate scale of Anne's shoulder, the generative value of working *with* the various traces, is made apparent.

Concluding Thoughts

We have aimed to reinvigorate a reading of the body with, and through, text. The two cases present different types of textual sources brought into articulation with skeletal remains. Each highlight ways data is constructed and manipulated, including how presence and absence can manifest and inform our understandings of the past. Burial 264 is invisible in the historical record, but her suffering takes shape within ideological landscapes that leave less tangible remains. Anne, by contrast, has a greater archival presence, and yet the absence of her aches and pains in the ledgers persists unacknowledged as simply a fact of ageing and urban poverty. These integrations provide richer life histories than could be gleaned from one type of evidence alone.

The case studies are also attentive to the formation of the archives – skeletal and otherwise – that anchor narratives, and the silences implicated therein. This framing positions archives as dynamic, contingent, and partial, while acknowledging our own roles as scholars in selecting and assembling traces, thereby forming new archives. The theoretical intervention we propose emphasizes the materiality of bodies, both in the archives and on the laboratory table. The bodies of evidence and the narratives that activate these traces are still partial and incomplete. Recognition of these many silences and absences offer possibilities for new materials and meanings to be identified, articulated and debated. Rather than a quest for the final word, our approach leaves frayed edges. While it might seem untidy, these threads offer opportunities to explore past lifeways in all their many forms.

Acknowledgments

Lauren Hosek's research was funded by a National Science Foundation GRFP, DGE-1247399. Special gratitude is owed to Jan Mařík and the Archaeological Institute of the Czech Academy of Sciences, including the library staff. Access to research collections and laboratory support was generously provided by Petr Velemínský and the National Museum in Prague. Alanna Warner-Smith's research was funded by a National Science Foundation GRFP, DGE-1746928. The writing of this article was supported by the Palo-

heimo Fellowship from the School for Advanced Research. Special thanks are owed to David Hunt of the National Museum of Natural History, Smithsonian Institution, for assistance in accessing the collection, for support during research, and never-boring lunch conversation during lonely research days. Shannon Novak extends her gratitude to Lucy Mulroney and the Syracuse University Special Collections Research Center, where a Faculty Fellowship allowed her to expand her understanding of archives in their many forms.

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Fig. 1. Burial 264 cranium, posterior view. Four perimortem, sharp-force wounds are marked by arrows. These wounds are most likely the result of blows from a large, double-edged weapon such as a sword. (Photograph by Lauren Hosek).



Fig. 2. Image from a tenth century Latin vita depicting the martyrdom of St. Vaclav at the hands of his brother. St. Vaclav flees to a church to escape his brother's sword, but a priest closes the door. (Herzog August Bibliothek Wolfenbüttel: Cod. Guelf. 11.2 Aug. 4, folio 21r).



Fig. 3. Anne's right scapula and humerus, anterior view. New bone formation is present on the anterior surface of the scapula, where the humerus came into contact as a result of an anterior dislocation. (Photograph by Alanna Warner-Smith).

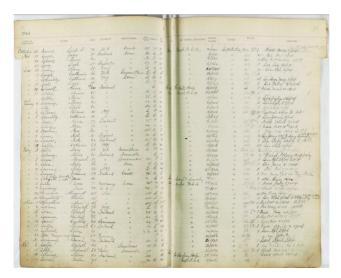


Fig. 4. A page from the Blackwell's Island Almshouse admission ledger showing the fields of information gathered for each inmate. From the Almshouse Ledger Collection, Municipal Archives, City of New York. (Photograph by Alanna Warner-Smith)