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Howard Williams & Lorna-Jane Richardson

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Introduction: Public Archaeologies of Death and Memory

Howard WILLIAMS

University of Chester

Abstract

This Introduction to AP*'s third special issue seeks to provide context and rationale to the study of 'public mortuary archaeology' before reviewing the development of the volume. Building on the presentations of the first Public Archaeology Twitter Conference of April 2017, these articles comprise a wide range of original analyses reflecting on the public archaeology of death. In addition to evaluations of fieldwork contexts, churches and museums, there are discussions of the digital dimensions to public mortuary archaeology, an appraisal of ancient and modern DNA research as public mortuary archaeology, and an evaluation of the relationship between mortuary archaeology and palliative care. Together, the articles constitute the state of current thinking on the public archaeology of death, burial and commemoration.*

Keywords

death, digital archaeology, mortuary archaeology, politics of the past, public archaeology

Introduction

There has been a steady growth of published academic research and debate on the intersecting fields of public archaeology and mortuary archaeology over recent decades. This work has focused on the complex and evolving ethics, politics and popular reception of the digging, displaying and curating human remains and other mortuary traces and environments (see Clegg et al. 2013; Fforde

2004; Giesen 2013; Redfern and Clegg 2017; Sayer 2010). Recently, Giles and Williams (2016) have suggested a re-definition and re-contextualization of mortuary archaeologists' public-facing work as part of a theoretically more robust and thematically wider field of archaeological and heritage investigation. In their view, the public archaeology of death is defined by the ways in which: '… archaeologists, in different ways and to different degrees, have become deathworkers: mediators who construct narratives about the dead… for the living' (Giles and Williams 2016: 12).

By adopting the title 'Death in the Contemporary World: Perspectives from Public Archaeology', this special issue takes forward this flexible and broad approach to the ethics, politics and popular culture of mortuary archaeology. This is because it recognizes mortuary archaeologists' and public archaeologists' many shifting relationships and interdependencies in contemporary society. Defined as 'public mortuary archaeology', a term that foregrounds the relationships and connectivities between the subdisciplines (see also Sayer 2010; Williams 2018a), this field extends the exploration of mortuary archaeology's public entanglements beyond the important and specific museum-focused discussions of reburial and repatriation. Certainly, the relationship between indigenous communities and archaeologists in post-colonial contexts in the Americas and Australasia (with offshoot European debates often framed in post-colonial terms) has been the most intensively discussed dimension of mortuary archaeology's place in contemporary society (e.g. Bienskowski and Coleman 2013; Fforde 2004; Giesen 2013; Jenkins 2011; Nilsson Stutz 2016). Yet, mortuary archaeology's wider relevance in education and fostering senses of place and identity also require study (Sayer 2010). Moreover, it is increasingly clear that mortuary archaeologists should regard human remains as but one element in considering the ethics, politics and popular dimensions of the archaeological dead. Grave-goods and grave-structures, tombs, cemeteries and ancient monuments, as well as their landscape contexts and environments, can also be important arenas of contestation and engagement between archaeologists and present-day communities and publics (Williams and Giles 2016).

Such studies might investigate appropriations and engagements with prehistoric and early historic cemeteries (e.g. Sayer and Sayer 2016). Yet they might also explore the more emotive instances of public engagement with archaeological work in relation to recent and contemporary graves and tombs (e.g. Anthony 2016). Among the most emotionally charged and contentious of all are instances where archaeologists work to investigate war crimes and/or recover human remains and graves from battlefields and other conflict contexts (e.g. Brown 2016). Public mortuary archaeology extends to evaluating societal participations and engagements with, as well as multi-vocal perspectives on, mortuary sites and remains (Bienskowski and Coleman 2013; Jenkins 2011) whilst also evaluating work with stakeholder groups and organizations in every stage of research from survey and excavation to laboratory analysis (McClelland and Cerezo-Román 2016).

The growing battery of archaeological and scientific methods available for analyses pose fresh ethical and theoretical challenges for mortuary archaeology. For instance, our desire to create individual personalities and name prehistoric and early historic individuals from our archaeological investigations constitutes a secular modern-day resurrection of 'immortal' ancestors, from the 'Amesbury Archer' to Lindow Man (see Nordström 2016). This strategy of public engagement has been enhanced in many instances through the deployment of life-like facial reconstructions. These come to operate as 'talking archaeo-heads', allowing people to establish dialogues with the dead. As accessible entry-points into different times and places, they collapse time and afford a personal, perhaps even intimate, connection to the distant past for contemporary communities (Williams 2014c). The Beaker Burial from Achavanich, Caithness is one such recent example (Hoole 2016; see Giles 2016). Likewise, these facial reconstructions are afforded to historical personages when uncovered and identified, most notably in the case of Leicester's Richard III (Greyfriars Research Team et al. 2015). While such resurrection strategies of public engagement can enhance emotive affinities and an individualized sense of relatedness between archaeological finds and modern people, they are also inherently problematic by perpetuating romanticized images of noble ancestors freed of disease and even detached from their own personal biographies and social contexts.

Exceptions prove the rule: some of the public responses to the skin pigmentation of the new facial reconstruction of 'Cheddar Man' in 2018 sheds light on the widespread and uncritical problematic 'whiteness' of previous facial reconstructions (both of this individual, and ancient people more broadly), as well as showing how issues of 'race' remain complex and contentious in 'Brexit Britain' as well as in many parts of the Global West. More positively though, the dark-skinned Cheddar Man affords an example how genome research, combined with such reconstructions, can rapidly and powerfully challenge popular misconceptions of the prehistoric past (Brace et al. 2018; see also Williams 2018d).

This last example leads us to consider further how genome research has, in recent years, begun a fundamental transformation of the theories and methods of mortuary archaeology as well as affecting how it is being disseminated in public contexts. Notably, DNA research is both fostering new debates and rehabilitating very old ones regarding past cultural identities and population movements. The topic of ancient migrations and diaspora is prominent here, including contentious discussions regarding the scale and character of Early Bronze Age and early medieval migrations based on ancient DNA evidence extracted from skeletal material found during archaeological excavations (summarized by Bodies and Academia 2018a). Equally though, there are high-profile controversies in the application of genome research, epitomized by the recent publications on the mummified Chilean infant 'Ata': while published in a high-profile peer-review academic journal, the study has been criticized for its methods, findings as well as its ethics (Bhattacharaya et al. 2018; Halcrow et al. 2018). Similarly, a media and academic furore recently surrounded the genomic evidence that supported earlier osteological identifications that a rich martial chamber-grave dated to the tenth century AD from Birka, Sweden, contained a biological adult female and not a male-sexed individual as might be supposed from the presence of weapons and other high-status items. The published academic study inferred that this might be the grave of a Viking 'warrior-woman' (Hedenstierna-Jonson et al. 2017). The vociferous responses from some quarters to the Birka 'warrior woman' grave draws attention to the many challenges archaeologists face in communicating their research in public environments and media. Likewise, such high-profile studies

chime with contemporary identity politics and raise many questions regarding both the appeal and the practice of mortuary archaeology, specifically how osteological and genome interpretations are integrated into archaeological inferences. Where do our ethical responsibilities begin and end in terms of public engagement and involvement with the archaeological dead when our research 'goes viral' via the media and social media?

Further dimensions of public mortuary archaeology include the investigation of the metal-detecting and the illicit trade in human remains and objects derived from mortuary contexts (Daubney 2017; Huffer and Graham 2017), as well as suspected ethical abuses of mortuary archaeological research itself (e.g. Halcrow et al. 2018). Public mortuary archaeologists, furthermore, might investigate political and popular appropriations and uses of mortuary archaeology's discoveries, concepts, methods and interpretations. Indeed, the wider popular culture of death is a burgeoning field in which mortuary archaeology can be considered a vibrant and diverse 'morbid space' for engagement with mortality in contemporary society (Penfold-Mounce 2018). Since the nineteenth century in particular, mortuary archaeology's data and methods, but also increasingly its concepts and perspectives, have inspired and infused Western popular culture's dealings with death and the dead. Notably, Egyptian, classical and medieval archaeology have inspired popular culture's perceptions of mortality. For example, we might critically explore the variegated and interweaving use of 'Viking' mortuary archaeological sites, monuments, themes and symbols in contemporary society, including their use in sports, neo-Pagan and specific musical subcultures, by some far-right groups (e.g. Trafford and Pluskowski 2007; Brandt Djupdræt 2016; Sturtevant 2017), but also specifically their deployment in contemporary death rituals (Ask a Mortician 2013).

Further examples of popular mortuary archaeology include critiques of how archaeologists and heritage professionals deal with death, burial and commemoration in heritage interpretation (e.g. Williams 2014a), popular and votive engagements with mortuary archaeological sites (e.g. e.g. Williams 2018b), as well as archaeology inspired/influenced popular fictional fascinations with dying, death and the dead in apocalyptic scenarios. Western

societies' specific obsession with zombies and other forms of the undead in horror fiction, for instance, can be considered to be in dialectic with archaeological discoveries and tropes (Penfold-Mounce 2018: 63-86; Williams 2018c).

From this contemporary and public-orientated perspective, mortuary archaeology permeates many different debates and environments in the Global West. Conversely, almost all mortuary archaeology possesses public dimensions by design or subsequent acquisition. Hence, public archaeological dimensions should be regarded as integral to all aspects of mortuary archaeological thinking and practice (see Williams 2018a). In particular, there are many ways in which mortuary archaeology can equally enhance insights and public education regarding the human past as well as facilitate engagements with mourning and mortality in the present and the future. Specifically, archaeology can form a key part of the broader 'death positive' movement by which people today confront mortality in the present through a deep-time and culturally contextual set of lenses (see Büster et al. this vol.; Lacy this vol.).

Despite the maturity of the ethics and reburial debates of recent decades, mortuary archaeologists are only now starting to tackle the many further interactions of its subject in popular culture. In particular, mortuary archaeology's digital dimensions demand detailed exploration, especially at time when the methods and practices of the subject are rapidly expanding (Ulguim, this vol.). The revolution in digital communication, learning and interaction has not only transformed the mourning and commemorative media and materials of our death, but it has also facilitated the revaluation of how Western societies perceive and deal with death in the human past (Sayer and Walter 2016). Williams and Atkins (2015) have sketched the sub-theme of digital public mortuary archaeology (DPMA) in broad terms, including the use of blogs, vlogs and social media, and they have identified some critical concerns for the future. Moreover, there have been some notable case studies investigating the digital applications to the public archaeology of death, burial and commemoration (e.g. Delaney et al. 2015; Huffer 2018; Huffer and Graham 2017; Sayer and Walter 2016). For instance, in the digital age, displaying the dead in public environments extends far

beyond museums and heritage sites (Williams and Atkin 2015): the archaeological dead (and mortuary archaeologists themselves) are far more readily encountered on Instagram or Twitter than in display cases or academic publications (e.g. Huffer 2018). By way of example, the appropriation and viral deployment of archaeological images of the dead undergoing excavation, as well as posed photographs of archaeologists themselves in laboratory and teaching environments via social media, is a serious area for ethical discussion. Here, the desire for public engagement with archaeological discoveries clashes with a professional need to retain ethical standards in writing and envisioning the dead (Williams and Atkins 2015). Archaeologists need to write and lobby in digital environments to retain context for their discoveries and interpretations, even if inevitably uncritical readings and disrespectful humour can exploit mortuary archaeological data (e.g. Finn 2018). This asserts the urgency for digital public archaeology and public mortuary archaeology to be fully enmeshed in theoretical and methodological terms. This concerns the ethics and politics of digital communication and digital participation (cf. Bonacchi 2017); as well as the production of mortuary archaeological knowledge and authority via digital media (cf. Richardson 2013; Richardson and Lindgren 2017).

My public mortuary archaeology background

Before proceeding, I wish to briefly sketch how my own work has attempted to explore the ethical, political and popular uses of mortuary archaeology, since this was integral to the rationale and motivation to take this project forward. My early archaeological research involved critiquing the history and popular misconceptions of the Early Middle Ages via its burial data and presenting a new interpretation of early Anglo-Saxon cremation practices in particular (e.g. Williams 2005; 2006; 2007). Subsequently, whilst directing fieldwork on a medieval manorial site adjacent to a contemporary churchyard at Stokenham, Devon, I learned why a community supported archaeological fieldwork near their burial ground. In this project, archaeological practice operated as a mechanism of 'digging for the dead', not in this instance by exploring ancient graves, but by facilitating the expansion of the churchyard for

the future-dead. Thus, fieldwork operated to support the village's engagement with the medieval past but also their aspirations for future burial and commemoration (see Williams and Williams 2007; Simpson and Williams 2008). In broader terms, whether we are dealing with early historic graves or 21st-century churchyards, archaeologists can find themselves working with and for the dead in multiple regards simultaneously.

This realization inspired further investigations into how and why the early medieval dead populate contemporary society through the ways they are envisioned in archaeological illustrations, artistic reconstructions and museum displays (Williams 2009). I also addressed how and why the prehistoric and early historic cremated dead are incorporated into museums and heritage sites and how displays often misrepresent cremation processes and variabilities (Williams 2016). This research has, in turn, suggested new ways in which we might engage with death and the dead through archaeology beyond the tendency to focus on whole and well-preserved, unburned and individuated bodies: namely mummies and articulated skeletons. Most recently, my fieldwork and research with Project Eliseg has investigated how fragments and partial traces of both cremated human bodies and textual memorials associated with a multi-period composite monument, afford particular challenges for public participation and engagement with the dead and their landscape contexts (Tong et al. 2015; Williams forthcoming). Simultaneously, I have explored dimensions of the contemporary archaeology of death in the 20th and early 21st centuries: attempting to pursue archaeological perspectives on today's deathways (e.g. Walls and Williams 2010; Williams 2011; 2014b; Williams and Wessman 2017).

Linked to these research endeavours, since 2013, I have been experimenting in new ways of communicating mortuary archaeological research online. Notably, I have deployed a Wordpress blog *Archaeodeath* as a medium for discussing the archaeology and heritage death, burial and commemoration beyond the academy: one of a series of academics and researchers who have deployed this medium for detailed yet public-facing discussions of mortuary archaeology (Meyers and Williams 2014; see also Meyers Emery and Killgrove 2015).

Bringing these strands together, as a mortuary archaeological researcher, I have come to regard public engagements as integral to many aspects of my academic endeavoirs. Public mortuary archaeology has become pivotal to how we write, envision, debate and disseminate the archaeological dead and their material cultures, spaces and landscapes. It is set against this background that I'm privileged to have had this opportunity to co-edit this special issue of *AP.*

Mortuary archaeology and the #PATC

Drawing together selected contributions from #PATC and respondents to an open call for papers, this special issue of the journal AP aims to show-case the latest research and critical thinking in the public archaeology of death. As such, this special collection fills a much-required niche for students and scholars in public archaeology and mortuary archaeology. Indeed, the digital environment of the conference is reflected in the manifold digital dimensions of the contributions. Specifically, the collection builds on the successful first Public Archaeology Twitter Conference (PATC 2017; 2018), organized by Dr Lorna Richardson. The conference included a striking range of public archaeology projects that contained a wide variety of mortuary and memorial themes tackling graves but also other memorial material cultures, monuments and landscapes. For while few of the presentations initially and explicitly framed themselves in terms of public mortuary archaeology, their memorial and funerary dimensions offered distinctive contributions not addressed in academic publications to date. Moreover, the #PATC format offered a more effective way of connecting academic arguments through case studies and evidence-based argumentation than more traditional academic conference venues.

Some examples (taken from the presentations delivered in the #PATC conference by authors who could not join the current special issue) provide additional evidence for the diverse ways by which mortuary archaeology infuses current public and community archaeology projects. Andy Jepson offered a review of work at Stobbs Camp First World War prisoner of war camp, including the investigation of the sites of graves of German soldiers subsequently exhumed for reburial at Cannock Chase. The project therefore was

not primarily about digging up graves, but investigating instead the site of a former cemetery: a public engagement with empty graves via archaeology. As such, the case study shows how archaeology can negotiate powerful and evocative mortuary absences through fieldwork (Stobbs Camp 2018).

Likewise, the themes of fragmentation and absence were central to Ben Wills-Eve's presentation. Drawing on computational approaches in the Digital Humanities, he considered how the National Trust site of Sutton Hoo (Suffolk) is partially portrayed via digital media. Despite cremation dominating the 'princely' burial site, his research showed how rarely this disposal method was featured in digital media about the site whereas much of the attention is afforded to the contents of the rich inhumation graves of Mound 1 and Mound 17 (see also Giles and Williams 2016: 7–10; Walsh and Williams 2018).

Other #PATC papers had implicit and implied mortuary dimensions. For example, Jennifer Thoms discussed Archaeology Scotland's initiative to foster local people to become 'heritage heroes'. Working with, and fostering local custodians of, local ancient monuments, this initiative encapsulates historic environments with mortuary dimensions, such as the historic Dunfermline Abbey graveyard (Seaborne 2018).

The unprovenanced and unrecorded portable antiquities from Lincolnshire discussed by Adam Daubney's #PATC talk are part of the UK's 'floating culture' (see Daubney 2017). Many will have originally had mortuary contexts and hence one might argue there is a pronounced ethical dimension to their retrieval and sale as a result, even though they have become divorced from a burial environment. This further underpins the imperative to promote understanding of mortuary contexts by antiquities vendors and collectors, as well as to work to educate metal-detectorists and, where possible and feasible, to work with them to investigate late prehistoric and early historic funerary contexts.

The AP special issue articles

The ten articles in this collection address a range of dimensions and significances of the archaeological dead in contemporary society. The ordering of the special issue is intended to chart the focus from field-based investigations (Goldstein; Lacy; Daly) to considerations of historic buildings and museums (McEvoy; Paites and Reeve). The special issue then tackles digital environments of death and archaeology's contribution towards them (Ulguim; Cook; Romero Pellitero et al.) before concluding with two broader discussions of mortuary archaeology and ancestry explored through DNA research and palliative care (Booth; Büster et al.).

Mortuary archaeology is always rooted in contemporary perceptions of space and place. Investigations respond to specific historical and cultural traditions of dialogues with the dead via material and corporeal means. Yet digital public mortuary archaeology in particular creates an inherently international profile and audience for discoveries, sites and monuments. Therefore, choices made over how to display and write about archaeological research in (for example) the UK might be read from Chile to New Zealand. Mortuary archaeologists need to be aware of these complex and diverse audiences to their research, and consider the implications regarding how they write and envision their research online for these audiences (see Williams and Atkin 2015). The global scope of mortuary archaeology's public engagements and manifestations is reflected in the articles, which extend from California, USA (Goldstein), Newfoundland, Canada (Daly and Lacy) and Barbados (Cook) to Granada, Spain (Romero Pellitero et al.) and the UK (Büster et al.; McEvoy; Paites and Reeve). Further studies tackle international and global themes (Booth; Ulguim).

Within this geographical spread, the articles engage with the diverse identities afforded to the archaeological dead in popular culture. These include migrants both ancient and recent (Booth; Paites and Reeves) as well as different social classes and ethnicities (Cook), religious affiliations (Goldstein; Romero Pellitero et al.), the victims of disasters (Daly), as well as those who might be perceived as founding fathers or 'ancestors' (in different spiritual, social and biological regards) to present-day communities (Goldstein; Lacy; McEvoy; Romero Pellitero et al.). The articles

together show that terms like 'ancestors' (see Redfern and Clegg 2013) and collective titles for the 'archaeological dead' are always problematic and political in different contexts and require nuanced deployment. Indeed, the traces of past human lives that mortuary archaeologists reveal often relate to multiple and shifting identities and categories. Moreover, some in the collection consider directly the potential for mortuary archaeological enterprises to transcend cultural restrictions to explore mortuary themes linking past and present from across the globe (Büster et al.).

While archaeological research has enabled some well-preserved human remains to become present-day celebrities (such as Ötzi and Lindow Man) (Giles and Williams 2016: 5-7; Nordström 2016), this collection instead aims to highlight the broader burial communities and population-level significance of the archaeological dead. Furthermore, the focus here is upon more historic-period mortuary traces, with only two articles touch directly upon prehistory (Booth; Büster et al., although see also Paites and Reeve). The hitherto relatively neglected significance of the ancient (here represented by Roman) and early medieval dead is countered through the articles (e.g. Paites and Reeve; Romero Pellitero et al.). Likewise, contributions address the enduring power of medieval monuments (McEvoy) and later historic burial sites cemeteries to enthral the public about life and death in the human past (Goldstein; Lacy).

What is also important is the broad scope of landscapes addressed in this special issue. These range from ancient and historic monuments and fieldwork in burial grounds and cemeteries (Lacy; Goldstein) to engaging with mortuary remains in museum settings (Paites and Reeve). We also find discussions of mortality mediated by archaeology taking place in quotidian settings: notably death cafés (Paites and Reeve; Büster et al.). Meanwhile, Booth addresses how academics must qualify and counter origin mythologies and ethnic narratives promulgated by popular misuses of the scientific analysis of ancient and modern DNA.

Human remains are often enmeshed to a wide range of other media and presences of the ancient dead in the landscape, akin to a form of distributed personhood (cf. McClelland and Cerezo-Román 2016; see also Giles and Williams 2016: 9). The articles in this collection illustrate well this point, since they foreground

networks of intangible, fragmented and cenotaphic citations to the dead, mediated by archaeological fieldwork, museum displays, archaeological publications and digital media (see also Williams forthcoming). This is in contrast to recent collections where the focus has remained on tangible bodies – usually whole and sometimes fleshed (Clegg et al. 2013; Giesen 2013; Williams 2016). Indeed, none of the studies focus specifically or directly on public participation and engagement with the discovery, analysis and interpretation of human remains per se (although see Romero Pellitero et al. this vol.). Instead, many of the articles in this special issue prefer to address materialities of absence: memorials and monuments, graves and artefacts that imply the archaeological dead in the absence of bones. For instance, Lacy's discussions are most directly linked with absence; she considers how visitors to her fieldwork were intrigued less with her discoveries as with the absence of imagined early colonial cemeteries in the vicinity. Perhaps among the most emotive of all the intangible categories of the archaeological dead is the cenotaph: Daly considers the role of a cemetery-like memorial to presence the absent graves of air-crash victims. Similarly, many of McEvoy's church monuments are either displaced or never were connected to graves to begin with: their significance relates to their individual and collective mnemonic power, including examples of their anthropomorphic form, and the names they bear in relation to the church architecture.

The theme of absence is considered further in the museum setting. UK and European museums continue to curate and display many different kinds of human remains, in contrast to many in North America and Australasia where bodies have been removed from the public gaze (see Nilsson Stutz 2016). While there have been recent debates regarding how these practices are adapted and retained (e.g. Bienskowski and Coleman 2013; Jenkins 2011; 2016), Paites and Reeve address their decision on practical and ethical grounds *not* to include human remains in their temporary exhibition on mortuary practices. Likewise, in their workshops, Büster et al. this vol.) they deployed images rather than material culture and human remains to facilitate engagements with mortality and mourning. Yet absence can still be key even when human remains are present: as with cremated remains (cf. Williams 2016). Goldstein evokes another form of absence: the poor preservation

of the Fort Ross human remains denying a ready attribution of most graves to any of the different ethnic groups that might have been interred there. Even when human remains are preserved, their display is temporary and only 3D modelling can preserve the funeral environment for the public to engage with (Romero Pellitero et al. (this vol.). Mortuary archaeology's public dimensions thus extend far beyond cemeteries and tombs to a variety of different landscapes of memory linking past, present and future (see Holtorf and Williams 2006).

The digital element is prominent for the first time for a collection focusing on mortuary archaeology's public engagements. A number of articles consider the potential of DPMA to facilitate online engagements with death and the dead from blogs and social media to more formal electronic publications. Notably, Cook and Ulguim, from contrasting perspectives, appraise the power of digital media for engaging with the archaeology of death, burial and commemoration. Cook focuses on memorials, while Ulguim considers bones and other mortuary remains, yet both show the potential of digital relationships to be fostered through the online arena. Romero Pellitero et al. address how their digital scans of graves during fieldwork fostered community engagement, and set the scene for future and broader debates on the deployment of Sketchfab in particular. Other papers also tackle aspects of the public and social media reception of mortuary archaeology (Daly; Lacy; Goldstein). McEvoy promotes digital media as new possibilities for engaging with complex three-dimensional church monuments, whilst Daly identifies the potential and threats to mortuary and memorial heritage sites of promoting fieldwork via social media.

Together, the articles highlight how important fieldwork, museum, heritage and digital environments have become for understanding death as both a conduit to past times and for reflecting on mortality today and tomorrow. Moreover, they reveal how relationships between archaeologists and the public are not static, but shift and evolve during and subsequent to particular research projects (Goldstein).

A venue for debate

How we publish our archaeological research is an ethical issue in itself. Indeed, publishing open access has been couched as ethical: allowing the public direct and unpaid access to the results of investigations. How and where we publish our research is especially important when considering mortuary archaeology because stakeholder communities are keen to acquire rapid and clear results from archaeological investigations. We wished to ensure that, were we to publish on the public archaeology of death inspired by the #PATC conference, an affordable venue was required.

The irony is not lost in the fact that both of the most recent outputs on this subject appear as standard-priced hardback academic books which are more difficult for heritage professionals and the public to access (Williams and Giles 2016; Williams et al. 2018). This reflects the complex challenges of costs and labour involved in disseminating archaeological research, in which funding is either sought through retail purchases or funding to cover 'Author Processing Charges' (APCs). Therefore, just as the media and the content of #PATC were interlinked, so is the rationale for publishing this special issue in an open-access journal without APCs. Indeed, of recent publications on this theme, there is only a single open-access journal discussion article (Parker Pearson et al. 2011) and a single book (Fletcher et al. 2014) available for free download. Meanwhile, the latest digital open-access companion has no dedicated focus to mortuary archaeology's public dimensions (Moshenska 2017). While there are a wide range of public-facing blogs by academics tackling popular themes (including Powered by Osteons (2018) and Bodies and Academia (2018b)), the facility of *AP* to provide a venue to publish peer-reviewed work in public archaeology is sincerely welcomed.

This collection will not be the last word in public mortuary archaeology. Yet it will hopefully foster critical engagement with, and exploration of, the diversity and significance of public archaeology's and mortuary archaeology's many intersections. With sustained ongoing research, public mortuary archaeology looks set to be a critical theme for understanding the value of archaeology in mediating both (pre)history and mortality in the Global West. Via real-world and digital environments, mortuary and memorial traces

and material cultures, monuments and landscapes are essential to death and contemporary society, mediated by archaeologists as deathworkers.

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Decisions and Adaptations on the Frontier: The Russian Cemetery at Fort Ross, Northern California

Lynne GOLDSTEIN

Michigan State University

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Abstract

This study focuses on stakeholders and changing perspectives on a heritage site. The case study is an historic cemetery within a public state park that was the location of a Russian colony in northern California: Fort Ross State Historic Park. From 1990–1992, I excavated the cemetery at the Russian Colony Ross, which was in use from 1812–1841, and which included Russians, Native Alaskans, Native Americans, and combinations thereof. A total of 135 burials were excavated and reburied. Although the Russian Orthodox Church has clear requirements for funeral and burial, the specific location and extent of the cemetery were unknown. Examining the site from the perspective of different stakeholders and their agendas, this article explores the changing nature of a mortuary heritage site, as well as how different groups interpret and use the same site, how communities reacted to the excavation project, and how the project continues to have an impact on communities. Various stakeholders have used the cemetery in different ways to memorialize their own pasts and make claims in the present.

Keywords

California, cemetery, mortuary excavations, public interpretation, Russians

Introduction

David Lowenthal is noted for his famous critique of heritage: *The Past Is a Foreign Country* (1985). In 2015, he revisited and revised that classic volume, noting that the past is now even more bitterly contested and remade. His 2015 book places more emphasis on the notion of memory and its importance, noting that: 'The remembered past is malleable and flexible; what seems to have happened undergoes continual change' (Lowenthal 2015: 320). Likewise, in her now classic book on heritage studies, *Uses of Heritage,* Smith (2006) suggests that we should focus on heritage as a process, in order to better understand the social phenomena of 'heritage'. She identifies themes to examine heritage from this perspective: identity, intangibility, memory and remembering, performance, place, and dissonance. Relevant to the discussion here is that each of Smith's themes is not inherent in an object or thing, but is instead part of 'an active process of continual creation and recreation … [that is] continually remade and negotiated' (Smith 2006: 301). Skrede and Hølleland (2018) reexamine Smith's 2006 work carefully, and although there are aspects they find confusing, they find value in the general approach and methodology. Similarly, Harrison (2013) finds heritage to be ubiquitous, and also notes that heritage is not a thing, but 'refers to a set of attitudes to, and relationships with, the past' (2013: 14).

The current research on heritage and heritage studies share some commonalities: heritage is not a thing or one thing, but is rather a process or set of relationships with the past. There seems to be general agreement that Smith's themes (2006) of identity, intangibility, memory and remembering, performance, place, and dissonance are key components of heritage, but how, where, and when they operate can be debated. While the past is integral to our being, and the whole past — ugly or not — is our legacy (Lowenthal 2015: 609–610), that legacy is not set in stone, but changes over time.

This article focuses on a historic, frontier cemetery, not describing or analyzing the site per se (see Osborn 1997 and Goldstein and Brinkmann 2006 for a discussion of the cemetery and its excavation), but instead looking at how perceptions of the cemetery have shifted over time. This involves considering how communities reacted to

the excavation project, and how the project had, and continues to have, an impact on communities. In other words, I consider the cemetery to be a heritage site.

Fort Ross is (and was) an isolated location along the northern California coast (Figures 1 and 2). Today, it is a California State Park. During its existence as a fort from 1812–1841, it was a place with a multi-ethnic population (cf. Lightfoot 2005; Lightfoot et al. 1998). The cemetery is located across Fort Ross Creek from the fort, in view of the chapel. The Colony included European Russians, Yakuts from Siberia, creoles, native Alaskan Aleuts, native Alaskan Koniag Islanders, native Californian Pomo, native Californian Miwok, and occasional non-Russian Europeans and native Hawaiians (the Russians had another settlement on Kauai in Hawaii). From fifty to one hundred and twenty native Alaskans (including Aleuts, Koniag Islanders, and some Athabascan men from Cook Inlet) were stationed at Ross as specialized sea mammal hunters, with the apparent majority from Kodiak Island (Blomkvist 1972: 107; Federova 1973: 203; Knecht and Jordan 1985: 19). Approximately one hundred to two hundred Kashia Pomo, Southern Pomo, and coast Miwok people were recruited from nearby villages to work as agricultural laborers (Federova 1975: 12; Gibson 1976: 119). Inter-ethnic cohabitation and marriage was common (Federova 1975), although strict class and ethnic distinctions were maintained in more public spheres.

From 1990–1992, I directed excavations at the Fort Ross cemetery. Sannie Osborn, one of my Ph.D. students at the time and a Californian who had studied in Russia, proposed that her dissertation research focus on studying mortuary practices in the frontier setting of Fort Ross (Osborn 1997). A key question for Osborn's research and my own work was: what happens to prescribed customs of funeral behavior when certain members of a society are removed from the familiar surroundings of family, friends, and church, and relocated to a multi-ethnic frontier outpost such as the Russian colony at Fort Ross? Approaching the question required two major lines of research. First it demanded an extensive review of church and Russian-American Company records that might locate the names, ages, sex, causes of death, and other information for the individuals who may have been interred at the

Figure 1: Location of the Fort Ross cemetery along the northern California coast.

Figure 2: The rugged northern California coast (photo by L. Goldstein).

cemetery. Second, the location and complete excavation of the Fort Ross cemetery was sought to allow determination of its nature and structure. Osborn's dissertation (1997) primarily focused on archival materials, and the first year of excavations, and my own research (Goldstein and Brinkmann 2006) was directed towards the complete cemetery excavation to explore spatial and chronological patterning in mortuary practice, including the possible effects of colonialism on native populations and the colonists. This article draws on this research by considering the use of the cemetery over time as an unfolding process of engaging with place, inspired by Lowenthal's and Smith's perspectives.

Background

Most people today see the northern California coast as a beautiful place for a vacation, hiking, or a drive (see Figure 2). However, it is also a dangerous place that includes the San Andreas Fault with earthquakes and mudslides, rockslides, and harsh conditions. Indeed, Fort Ross Creek, which divides the cemetery from the main fort, is part of the San Andreas Fault. This harsh environment has frequently been misunderstood. Notably, the Russians who colonized this landscape in the nineteenth century did not initially fully understand this location and its lack of suitability for farming (cf. Federova 1973; Goldstein and Brinkmann 2006). Even today, it is somewhat difficult to reach the site and the area is still only sparsely populated.

The Russian American Company officials who conceived of the idea of Fort Ross also thought that the colony might serve as a base for accumulating foodstuffs received via trade with the Spanish. The colony was ultimately not a success as an agricultural colony, in part because of the setting, and in part because the people who were initially sent to Ross were artisans and sea mammal hunters, not expert farmers. The Spanish interacted with Ross to some extent and some less perishable goods came via the Spanish to Ross and on to Alaska, but the Spanish largely ignored the colony once it saw that it posed no real threat. By 1836, the Company sent a trained agronomist to improve the agriculture of the Colony, but Ross was never a thriving agricultural enterprise (Gibson 1976).

A variety of scholars have written about Colony Ross. Lightfoot and colleagues (1998) examined Ross from the standpoint of the different ethnic groups living there, demonstrating that their worldviews and structuring principles were indeed reproduced in daily practices at the site at different scales, while at the same time certain cultural transformations took place as people adapted to this new pluralistic setting. Farris (1992) illustrates these same points by outlining several stories recorded by linguist Robert Oswalt, and Lightfoot (2005) compares the Russian and Spanish experiences, particularly from the perspective of their influence on native groups.

The cemetery reflects this pluralistic setting. Initially, the Department of California Parks and Recreation estimated the number of possible burials in the neighborhood of fifty to seventy-five graves. This estimate was based primarily on descriptions of the cemetery made by Ernest Rufus, who leased Ross with a partner in 1845 (Hasse 1952: 25). Rufus indicates that there were never more than fifty graves in the cemetery, but we excavated a total of 135 graves. The disconnection between the number expected and the number recovered may simply be an issue of preservation; the wooden markers used to mark graves were not stable and they did disintegrate. In addition, Rufus and other early visitors may not have considered the possibility of a marker being gone, of a grave not having a marker, or of one marker indicating more than one grave. Rufus also may only have examined one portion of the cemetery, since the extent of the site is not indicated in his description. Rufus' was the first interpretation of the site.

Stakeholders

From the beginning of the Fort Ross cemetery research, it was clear that there were many different stakeholders with many contrasting perspectives, and it was considered critical in order to follow best archaeological practice to include them all in the planned work and decision-making process of the project. In the early 1990s, such inclusion was far from universal. However, in the previous twenty or more years, due to heightened sensitivities, California cemetery excavations were undertaken only when there

was a direct threat from a construction project. In addition to the fact that there was no direct threat at this site, the multi-ethnic nature of Fort Ross required permission from groups with very different perspectives. The regional park archaeologist and I decided that our unusual request to excavate a non-threatened cemetery required active participation and approval from all possible stakeholders. Since the excavations took portions of three summers to complete, maintaining all of these permissions required extensive juggling, communication, and discussion. If any single group decided to withdraw their permission, the entire project would have been in jeopardy. Each stakeholder group had their own agenda(s), including specific information that they hoped the cemetery excavations would reveal.

As Clegg, et al (2013: 162) have much more recently noted: 'Those of us who undertake research on remains of past individuals need to acknowledge that there are different points of view…' They go on to point out that collaboration and providing an equal footing between groups represent the only way forward. This statement was true of the Fort Ross cemetery, and even though the excavations were undertaken some time ago when such sentiments were not ubiquitous in the archaeological community, there was an emphasis on collaboration, inclusion, and equal treatment.

A variety of scholars have focused on what is now called community archaeology or collaborative archaeology, and this is a positive direction for mortuary archaeology that has in large part been an outgrowth of repatriation and repatriation interactions (see Clegg, et al 2013; Fforde, et al 2002; and Williams and Giles 2016 for many examples). It is a direction that will be increasingly required of burial archaeologists in the future, and as Giles and Williams note:

> …the last decade has been a profitable period of self-reflection in many different areas of archaeological practice: from how human remains are excavated, analysed, stored, how access is managed, and how the dead are displayed and to what ends…. (Giles and Williams 2016: 3)

Both Redfern and Clegg (2013: 1) and Giles and Williams (2016: 3) recognize that a museum or other kind of display space is one of contextualization, interpretation, and engagement. Acknowledging many of the problems in creating such spaces, a number of the chapters in Williams and Giles (2016) 'explore the intersection between heritage and the archaeology of death and thus the contributions archaeologists make towards contemporary society's long-term perspective on mortality'(Giles and Williams 2016: 14). At Fort Ross, there is a small display museum, a reconstructed fort, and the cemetery is in a very visible part of the park, along Highway 1. Several meetings at Fort Ross were required to determine the list of stakeholders, and it required an additional eighteen months to receive all required written permissions.

The Fort Ross property is owned by the State of California, and operated by the California Department of Parks and Recreation. Conducting *any* archaeological work in the park requires permission from this department, and specifically the archaeologist in charge of the region. The regional park archaeologist was our main contact for all work throughout all phases of the project. He insured that we contacted all of the appropriate people, offices, and groups. Because the Fort Ross State Historic Park includes a museum, interpreters, and a reconstructed fort with buildings, permission and cooperation was needed from the individuals working in the park daily and doing the interpretation. The Fort Ross Interpretive Association (FRIA) is an independent organization that raises funds, oversees the bookshop and museum shop, and supports a variety of park activities. This group has an active board, including both scholars and local citizens. In more recent years, the Fort Ross Conservancy (FRC) has replaced FRIA, but for purposes of this discussion, the park support group was a critical stakeholder at the time of the fieldwork.

Excavating any burial in California also requires permission of the county coroner, and if Native American remains are potentially involved, the California Native American Heritage Commission must also grant permission. In general, the Heritage Commission insures that the appropriate tribes are contacted and involved. Once the commission grants permission, they turn over decision-making to the individual stakeholder tribe(s), unless there is a dispute. In terms of the county coroner, once he agreed that the cemetery

was an historic one, he granted permission and we simply kept him informed of our progress.

At the time that we began the permissions process, two separate groups of the Russian Orthodox Church affirmed their relationship to the cemetery, and we worked with both groups extensively and intensively.

For those unaware of the structure of the Russian Orthodox Church (ROC), some clarification is warranted (cf. Wikipedia 2017). The ROC, the largest group of Russian Orthodox followers, claims jurisdiction over Orthodox Christians throughout the world. The ROC is not the same as the Orthodox Church of America (OCA), another Orthodox Church that traces its existence in North America to the time of the Russians in Alaska in the late 18th century, and thus relevant to Fort Ross. The OCA group adheres to the ROC liturgical tradition.

A third group is the Russian Orthodox Church Outside Russia (ROCOR) (Wikipedia). Russian communities outside then-Communist Russia established this group in the 1920s; they refused to recognize the authority of the Moscow Patriarchate. As of 2007, ROCOR is a self-governing part of the Russian Orthodox Church. We did not directly interact with ROCOR. ROCOR was organized long after the time of the occupation of the Fort, and they left interactions with us up to the other two groups.

All branches of the Church were interested in the cemetery excavations because they wanted more detailed knowledge about the individuals in the cemetery, as well as the extent and layout of the cemetery. Further, the cemetery represents a visual, clear link between the Russians of the past and the Russians today. The Church groups also wanted it made physically clear that this area was consecrated ground; at the time excavations began, there was a simple interpretive sign noting the past cemetery and there were sheep grazing on the site. One of the Russian Orthodox groups came out to the cemetery area in the 1970s — without park permission — and put up a large wooden Russian Orthodox cross to demarcate the area as sacred. Once excavations were completed, a group of Russian Orthodox Boy Scouts made individual Russian Orthodox crosses for each burial, and the archaeologists, with the assistance of several priests, placed a cross in the proper location on each grave (Figures 3 and 8).

Two native California tribes – the Kashia Pomo and Bodega Miwok – were identified as having historic relationships with the Russians at the site. The Bodega Miwok allowed the Kashia Pomo to take the lead in terms of California native input on the project for several reasons. First, when we requested permission in 1989–90, the Bodega Miwok were not well organized as a tribe, and did not have individuals available to serve as collaborators or monitors. Second, the majority of non-Alaska natives who interacted with the Russians at the fort were Kashia Pomo.

The Kodiak Area Native Association (KANA) provided permission for excavation on behalf of Alaska natives, since most of the Alaska natives present at Fort Ross were known from historical records to have come from Kodiak Island. After giving permission, KANA later decided to defer in ongoing decision-making to the Russian Orthodox priest in Alaska, and he provided comment and input on the excavations. The priest also visited the site several times. To be clear, it was not that the Alaska natives were uninterested in the excavations, but the distance from California and the fact that any native Alaskans at the fort would have converted to Russian Orthodox, meant that they were comfortable leaving day-to-day oversight to the Church, and specifically to this priest. We provided KANA with regular project updates. In the last few years, some additional Alaska native groups have expressed interest in the cemetery, but this was not the case in 1989–90. By August 1992, everyone was reburied in their original graves, so the current interest by these groups has focused on cemetery interpretation. Based on the poor bone preservation at the site, we could not have determined the presence of specific individuals, and it is doubtful that we would ever have been able to distinguish between different Alaskan groups.

At the end of the permissions process, the groups we interacted with the most included the state park and FRIA, two branches of the Russian Orthodox Church, the Kodiak Area Native Association (KANA), the Kashia Pomo, and the California Department of Parks and Recreation.

The goals and desires of stakeholders are often different from the archaeologists' goals. In particular, archaeologists are trained to develop theoretically informed research questions that are

testable. Most stakeholders are not necessarily concerned about broader theoretical issues. As Brown (2016: 135) notes from his experience excavating a World War I cemetery: 'They (the burials) retain an agency … and have a presence, both physical in the cemetery and through their artefacts in a museum. They inspire and inform discussion, description, and remembrance.'

When the project began, the precise location of the cemetery was unclear, particularly in terms of the number of graves and extent of the site. This lack of knowledge was of great concern to the California Department of Parks and Recreation – how could they effectively protect and preserve a cemetery whose location and extent were unknown? The main cemetery was known to be located across from the fort, in view of the chapel, as directed by Russian Orthodox Church canon (Figure 3). However, this location does not account for all burials, since two individuals were accidentally recovered north and west of the cemetery. Both of these individuals appear to be isolated burials, one perhaps interred early in the life of the colony (Schulz 1972), and the other later in the fort's history (Sandra Hollimon, pers. comm. 2010). We do not know of any cultural reasons (e.g., crimes, suicide) that might account for these burials outside the cemetery. This is not to say that Russian Orthodox do not bury some people outside the cemetery boundaries, but in these instances, time — before the cemetery was founded and after the Russians left — appears to be the most likely explanation.

In general, the Russians who came to Ross belonged to the Russian Orthodox Church, and the Church presence was a strong one in this setting. The Russians had converted the native Alaskans who accompanied them, although their relationship with native Californians is less clear. We began by assuming that since the Russians established the cemetery, people followed traditional Russian Orthodox canon, with a distinct cemetery within view of the chapel, separated from the village, and including individual graves and traditional treatment. In the Russian settlements in Alaska of about the same time period and earlier, there were separate formal cemeteries following these customs, and there was every reason to believe that the same would be true for Fort Ross (Osborn 1997).

Figure 3: The cemetery's location in relation to the chapel (chapel in background is building closest to cemetery in foreground). Picture is looking west from the cemetery; the ocean is to the south.

Excavation results

We recovered a total of 131 graves with evidence of burials, and an additional four 'empty' graves. The empty graves may have been those in which preservation was exceptionally poor, or these features may represent graves from which individuals were later exhumed and their remains moved to other locations. Russian priests have noted that everyone was buried in the cemetery because both the Alaska Natives and the Kashia converted to Orthodox. Lightfoot et al. (1998) and others (Osborn 1997) have demonstrated that this was not necessarily true: Russians may have thought they converted them, but the Kashia thought otherwise. Kashia elders have stated that, according to oral tradition, their ancestors moved a number of buried Kashia back to their homes after the Russians left. Kashia tradition requires cremation, and the Kashia say that they never wanted their dead to be inhumed in the cemetery. One reason that some Kashia elders were interested in the cemetery excavation was that they wanted to see if there was evidence of Kashia individuals being removed (Otis Parrish, pers. comm. 1990).

The Kashia asked that we not excavate any Kashia burials. We explained that we would keep that promise to the extent possible, but it was very likely that we would not know it was a Kashia grave until after it was excavated. Once that was known, we would cease excavation and/or immediately rebury the individual. They agreed to this procedure, but, as discussed in more detail below, none of the graves excavated could be identified as Kashia. Kashia elders regularly visited the excavations.

When we began the cemetery excavations, it became clear that heavy equipment would be needed to open the area for excavation; the soils were very dense and difficult to dig, and it would be impossible to clear sufficient area by hand. The park arranged for the equipment, and the main operator of that equipment was the late Warren Parrish, a local Kashia elder and son of Essie Parrish, a Kashia spiritual leader and expert basketmaker who had worked with anthropologists in the past. Warren was at the site nearly every day, providing insight and his interpretations of what we recovered. Figure 4 shows the excavations after clearing off about the top 50–60 cm.

Figure 4: Excavations after machine clearing of the area. Note excavated graves. In the U.S., publication of burial photos is discouraged.

The spatial pattern of the cemetery was generally in rows, following the topography (Figure 5), with people likely interred in order of death; that is, there is no evidence that the structure of the site is by status or rank or even by family, based on the nature of the individual graves. We expected some differentiation by rank, particularly given the clear social hierarchy that the Russians employed, yet such a pattern did not emerge. The earliest description of the cemetery is by Spanish priest Father Mariano Payeras who visited Fort Ross in the fall of 1822, and he notes several distinctions among the graves (Osborn 1997: 139–140). One of the features noted was a Three Saints Memorial, the likely location of which is indicated in Figure 5, where we found wooden remnants of a memorial. This Orthodox memorial may have been placed for higher status individuals or to mark the cemetery generally, but would not have necessarily been placed for a single individual. The memorial was visible until the 1907 earthquake, after which it collapsed.

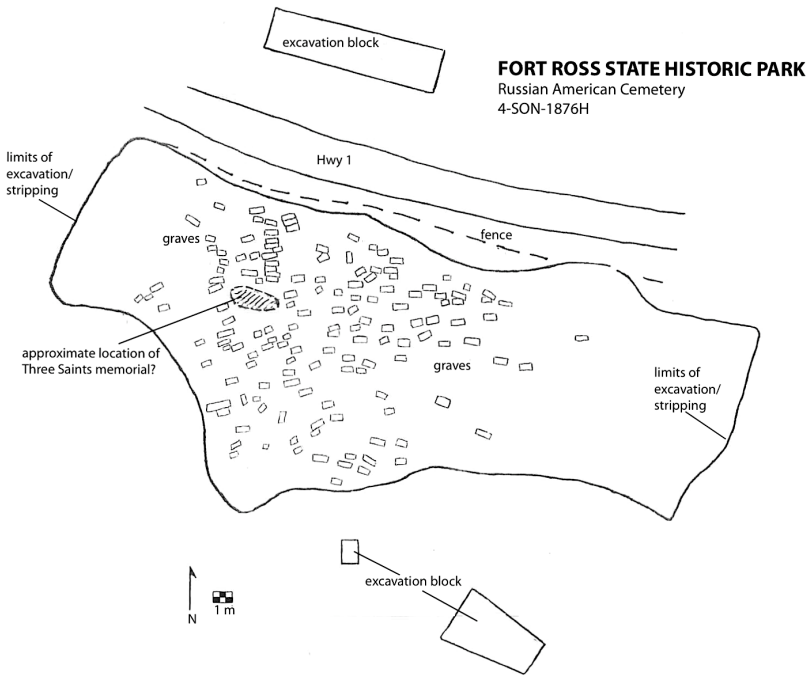

Figure 5: Map of the cemetery excavations, including graves excavated and all areas examined. The land slopes from north to south.

The orientation of the graves in the cemetery was generally west–east (i.e. with the head to the west), so that at Resurrection the individual would sit up facing east, as dictated by Russian Orthodox canon (Father Alexander Krassovsky, pers. comm. 1990). Interestingly, at this point on the California coast, the Pacific Ocean is actually to the south rather than the west, and although some early burials apparently were placed with the assumption that the ocean was generally west, the location and orientation of later burials seem to have been adjusted for the proper orientation. Since a later commander of the fort was a seaman, he may have used his skills to correct the earlier error, or at least insure that the placement was accurate while he was in charge (Goldstein and Brinkmann 2006).

Coffins were narrow and made of redwood, and most burials seem to have had a coffin. If a coffin was absent, there was evidence of a cloth shroud. The coffins were constructed crudely, with butt-end joints, many nails, and rarely evidence of decoration or lining. Construction suggests that the coffins were made on site and expediently. We found a cross, or a religious medallion, in a total of 56% of graves (Figure 6), and other crosses or medallions may have been made out of wood or other perishable material.

Other grave-goods were present, but limited (Figure 7), and included such items as glass and metal buttons, glass beads, earrings, buckles, one military coat, bottles, some dishes, cloth, and a coin (see Goldstein and Brinkmann 2006). We had hoped that the beads might allow us to distinguish between Alaska natives and California natives since the groups favoured different kinds and colours of beads. Lester Ross (pers. comm. 1992) analyzed the beads and found that most were imported from Europe and are within the range of those used by Alaskan natives (Figure 7). None are specifically California native in style, colour choice, or pattern. We found two pairs of beaded earrings laid out in a distinct pattern, as well as evidence of several other beaded garments or items in place.

Bone preservation was poor due to high acidity in the soils, and in some areas, an anthropogenic pan formed within graves (Goldstein and Brinkmann 2006). The combination of physical and chemical processes made long-term preservation of the landscape unlikely;

if we had not excavated the cemetery, it is unlikely that much would be left in another hundred years. The overall preservation at the cemetery was unusual; bone preservation varied from poor to absent, but occasionally items such as cloth were preserved. In addition to the soils, the redwood coffins tend to be acid in nature and likely contributed to the poor preservation. If a coffin was absent, there was slightly better, but not good, bone preservation.

Figure 6: Religious items recovered from graves at the Fort Ross cemetery. Upper-left and upper-right are cross pendants; lower-right is religious medallion; lower-left is enameled pendant of St. Mitrophan, according to Russian Orthodox Archbishop.

Figure 7: Other grave-goods recovered from the Fort Ross cemetery excavations (scales in metric). Top row – examples of beads; lower-left – remnant of military coat; centre is a 5 kopek piece; middle-right are examples of Spode china from one grave; lower-right are metal buttons.

Modern impacts on the past

As noted earlier, in the 1970s, one branch of the Russian Orthodox Church erected a large Russian Orthodox cross on the presumed cemetery site. When cemetery excavations began, the cross had to be moved because it was located within the presumed cemetery area. The California Department of Parks and Recreation and the Church approved moving the cross, and we discovered that the Church had placed the cross through the centre of an historic grave. The local priests were pragmatic and not concerned about this disturbance: their intentions had been good, and it was the overall cemetery visibility and commemoration that mattered.

Part of our agreement with the California Department of Parks and Recreation, native groups, and the Russian Orthodox Church was that all individuals would be reburied in the graves from which they were excavated. The Church wanted everyone reburied in their original graves, but were not concerned about artefacts – if we could learn something from the artefacts, they should be kept and curated. Members of both branches of the Russian Orthodox Church, the Kashia Pomo tribe, and the Kodiak Area Native Association were kept apprised of all developments during excavation and analysis. Moreover, they were invited to visit and/or be present during all excavations, were encouraged to comment and inform, and were invited to a total of six separate reburial ceremonies overseen by priests from the Church. We held two reburial ceremonies each year, one for each branch of the Church. There was no way to identify individuals by name, so for each ceremony, we geographically and evenly divided the burials, one group for each church to rebury. Figure 8 represents how the cemetery looks today; each individual was reburied in their original grave, and a simple Russian Orthodox cross marks the foot of each grave.

Figure 8: The historic Fort Ross cemetery today (looking southeast). Note the large cross that marks the site and was moved from its original location within the cemetery.

The use of the simple Russian Orthodox crosses on each grave may have inadvertently imposed a coherence on the cemetery that may have been absent in the past. The Church was insistent that each burial be marked, and although we knew that there were some larger wood monuments at the high point of the cemetery, we did not know how many were present, and whether those marked the cemetery itself, a group of graves, or an individual grave. It was not surprising that we found no evidence of individual grave markers, since, if present, they would likely be relatively small, made of wood and subject to decay. While some wanted the monuments at the high point of the cemetery reconstructed, the more immediate problem was how to mark each grave. After much discussion among stakeholders and scholars, simple wooden Orthodox crosses for each grave seemed to be the best approach and was based on what was done at Orthodox cemeteries in Alaska of the same time period.

One of the priests with whom we collaborated, Father Alexander Krassovsky, worked diligently to bring the different branches of the church together, focusing on joint interests in Fort Ross. This was an extremely difficult and delicate undertaking because, historically, there had been little communication between the groups. One group held services annually at the cemetery site in late May, on Memorial Day, and the other group held services on 4 July. Each group requested their own reburial ceremonies, and although the project divided the burials into two groups for each set of reburial ceremonies, the priests made sure to include all burials in their services.

In 2012, Fort Ross celebrated the two hundredth anniversary of its founding, and Father Krassovsky worked for several years to coordinate a cemetery rededication and reconsecration by all branches of the Russian Orthodox Church (Figure 9). He was successful because of the symbolic importance of Fort Ross to all groups, and because they were pleased that the cemetery had been reconstructed and was clearly visible on the landscape as a cemetery. This event is one of the most significant direct results of the cemetery project.

Not surprisingly, the cemetery represents different things to each stakeholder group, and each group has a unique perspective

on the importance of the site. The adaptations and decisions made over time tell us about the more human aspects of life on this harsh frontier and how perspectives change over time; they highlight, rather than detract, from the site's significance.

A few modern residents of the area had mixed feelings about our cemetery excavations. They understood that we had all of the required permissions, but they did not accept that cemetery excavation was desirable, necessary, or acceptable. The California burial law and procedures had been in placed for many years, and it was generally understood that cemetery excavations should be done only when threatened by construction. We maintained relationships with group members and kept them informed about the project. Some members of this group participate each summer in the Fort Ross Festival during which they don period costumes and celebrate the Fort. Although disapproving of the cemetery excavations, they appreciated the details on Russian period clothing construction that we were able to provide directly from the excavations.

Figure 9: Rededication of the Fort Ross cemetery in 2012 by all groups of the Russian Orthodox Church.

Very recently, after a visit to Fort Ross by the Russian ambassador to the U.S. in 2017, the Russian government has taken an interest in the cemetery because the ambassador felt that the cemetery was in poor condition (Alexander Zimin email comm., February 2018). According to the Russians, in 2016, the Washington office of the Russian side of the U.S.-Russia Joint Commission on Prisoners of War and Missing in Action (USJC on POW/MIAs) discovered that in 1812–1841, a number of sailors of the Russian Emperor's Navy died and were buried at Ross. Some archival research questions the validity of this statement (Glenn Farris, pers. comm., Feb. 2018), but the Russian government, working with Russian businesses, want to improve the appearance of the cemetery. As a first step toward undertaking this improvement, the Russian Federation officially recognized the cemetery as a Russian military burial site abroad.

The Russian plan includes the installation of new wooden Orthodox crosses on the graves and a large adoration cross with a stone slab at its foundation with the names of the buried (Alexander Zimin, email comm., 2 February, 2018). The Russian initiative has already received the support of Governor Brown of California, as well as the U.S. Secretary of Defense, James Mattis. The Russian government has also officially informed the State Department about the project. The work is being done in collaboration with the California Department of Parks and Recreation, the Kashia Pomo Tribal Government, the Fort Ross Conservancy, the Russian Orthodox Community of West America, as well as the Office of the Governor of Alaska. Finally, the Russian government wants to work closely with the archaeological community on this restoration. To this end, the cemetery was a focus of discussion at the 2018 Fort Ross Dialogue in Veliky Novgorod, Russia, and California State Parks is overseeing a project that includes ground-penetrating radar to determine if the cemetery extends beyond the areas examined as part of the original cemetery project. I was invited to attend the Veliky Novgorod conference (funded by several large multi-national companies including Transneft and Chevron), and presented an overview of the findings of the cemetery excavations. Notably, several of the business representatives at the conference commented that the report on the cemetery excavations made the Russian presence in California come alive in a way that had not been the case previously.

Ongoing cemetery interactions

The Fort Ross cemetery project began in 1988, with a question about whether or not it would be possible to locate, excavate, and analyze the historic cemetery. In creating and designing a project that has had so much input and collaboration from stakeholders, one unanticipated result is that the project is never finished. As the cemetery draws new interest and becomes important to different groups in different ways, the archaeologist is drawn back into new plans and directions. This is not necessarily a negative, but as archaeologists conduct more collaborative work, it is important to remember that such projects can rarely be considered complete. Importantly, perceptions, uses, and interpretations of the project change over time, including some changes in stakeholders.

Brown (2016: 135) notes in his discussion of a First World War cemetery excavation: 'The process of excavation brings the individual back into the foreground of consciousness for different groups, whose reactions can and will simultaneously conflict, contrast, and yet share common ground in elements of remembrance.'

Cemeteries also draw the attention of people who are not necessarily stakeholders, but who are fascinated by the idea of a particular cemetery. This is well documented in several of the papers in Williams and Giles (2016), and has been a long-term issue for archaeologists, which we have not necessarily addressed very well. At Fort Ross, a nineteenth-century novelist typifies this kind of interest.

Although largely forgotten today, Gertrude Atherton was a San Francisco-based writer popular in the late 1800s. She made Fort Ross one focus for her literary work, and visited there on multiple occasions, staying in a hotel not too far away. She bribed some boys at the hotel to go with her to the cemetery and excavate one of the graves.

> A redwood coffin was found in good preservation, except that the lid had fallen in and the interior was filled with earth. Search in this fill showed the 'shin bones,' the soles of the shoes, and some buttons, all that remained to indicate that there had been an occupant. Mrs. Atherton was much disgusted; she

> needed a dead Russian for literary purposes, and had hoped at least to get an officer with his trappings, if not indeed records buried with him. (Greene 1893: 14)

Atherton may have set her hopes a bit high, and the 1990s excavations may have located this grave; at the south edge of the cemetery, we found a clearly disturbed and expanded grave that had been excavated more than once. Although this grave may not be the one that Atherton and her party disturbed, it was disturbed in the historic past and still included a few bone fragments, some buttons and a religious medal.

Atherton wrote an entirely fictional and very dramatic love story about Fort Ross, with the heroine accidentally dying as she meets her love after a long period apart. The story (Atherton 1984) ends as follows:

> They made her a coffin out of the copper plates used for their ships, and laid her in the straggling unpopulous cemetery on the knoll across the gulch beyond the chapel.
>
> 'When we go, we will take her,' said Rotscheff to his distracted wife.
>
> But when they went, a year or two after, in the hurry of departure they forgot her until too late. They promised to return. But they never came, and she sleeps there still, on the lonely knoll between the sunless forest and the desolate ocean.

Conclusions

Returning to the stakeholders, all identified stakeholder groups were included and encouraged to collaborate, although not all groups chose to be involved. The project conducted a significant amount of outreach to the general public throughout the excavations, including welcoming all visitors to the site, undertaking public lectures, and newspaper and television coverage. Looking at the different stakeholders, we can examine whether or not they achieved their individual goals.

1) Fort Ross State Historic Park and the Fort Ross Interpretive Association. The park wanted to make certain that the cemetery was identified, that it was treated with respect, and that new information be gained. The excavations resulted in a considerable amount of information that has been subsequently incorporated into the overall site's interpretation. Individual park rangers, interpreters, and maintenance people assisted the crew on a regular basis with a variety of tasks and problems. In 2012, the park hosted the bicentennial celebration of the founding of Fort Ross. The celebration drew many visitors, and included a rededication of the cemetery, with three new interpretive panels.

2) The Russian Orthodox Church. Both branches of the Church remained actively interested and involved in the project from the very beginning. A variety of church representatives visited the excavations regularly, and provided extensive information on burials customs and Russian Orthodox canon, as well as interpretation of religious symbols. The primary focus of the Church's interest was in making the cemetery visible as a cemetery; they wanted each grave marked, and the cemetery as a whole set aside as consecrated ground. More recently, one of the priests used the cemetery and the Fort's bicentennial celebration as a means to bring the different branches of the church together. By focusing on the cemetery rededication, differences could be minimized and the Russian past and common interests celebrated.

3) Kodiak (Alaska) Area Native Association. Senior State Park Archaeologist E. Breck Parkman visited Kodiak to request permission for the project. He discussed the project in detail with the association and with representatives of the Russian Orthodox Church in Alaska. Because the cemetery was created and organized by the Russians at Fort Ross, the native group decided to let a local Russian Orthodox priest be the point-of-contact person for their interests. They made no specific requests, beyond wanting the cemetery to be visible and maintained as a cemetery. We sent them regular reports of the excavations and included them in all communications.

4) Kashia Pomo. The Kashia visited regularly, and one Kashia elder served as the project's heavy machinery operator. Many Kashia had been told that no Kashia would be found in the cemetery

because they would have been moved after the Russians left, and they wanted this information verified. We could not directly prove that this was the case, but we did not find any graves that could be specifically identified as Kashia, and we found four graves that had been deliberately excavated, but contained no evidence of a burial. Several elders told us that a few Russian children had drowned and that the Kashia had returned their bodies to the fort. Although there were children buried in the cemetery, we could not verify this specific story.

5) California Department of Parks and Recreation. The California Department of Parks and Recreation issued the required permits, and a number of people in the department are scholars of the time period and have considerable knowledge about Fort Ross. They were extremely helpful throughout all stages of this project, and continue to be helpful and inclusive. Their main concern at the time of excavation was identifying the cemetery location, and clarifying the nature of the cemetery, so that they could maintain and preserve it. All artefacts that were not reburied are housed in the department. The department was able to use the project for publicity, and they continue to include Goldstein in discussions and interpretations about the cemetery.

We did not originally include the Russian government as a separate entity in our initial identification of stakeholders, in part because of the politics of the time. We discussed our plans and details of the excavations with scholars and museums in Russia, as well as Orthodox Church officials, and they have all remained interested. However, in 1989, Russian government officials did not see the project as something of interest to those outside the museum and religious world. It is possible that we should have pushed this with the Russian government more than we did, but we simply accepted their lack of interest. Recently, however, as the Russian government has become more involved in the operation of Fort Ross (the private Renova Fort Ross Foundation is a Russian business conglomerate that created a foundation to provide funds to Fort Ross for specific projects), they have become more interested in all Fort Ross research. They approve of the cemetery excavations, but now want the site treated as an official Russian

military cemetery, and want to fund cemetery restoration. As noted earlier, the Russian government has already designated the site as a military cemetery, and there is nothing that anyone in the United States can do about that. However, negotiating precisely what a restoration will entail will be the focus of future discussions, and will include archaeologists, as well as state government, federal government, and state park officials.

The Fort Ross cemetery represented and continues to represent different things to different people and groups at different times. As I noted in discussing the papers in Williams and Giles (2016): 'Material objects have a social life, but human remains have both a social life and power in the past, in the present, and in the past in the present' (Goldstein 2016: 450).

Comparing the work at Fort Ross to other cemetery excavation projects may make the Fort Ross case appear to be more successful, and there were relatively few major problems or disagreements. However, there are a variety of reasons that the Fort Ross excavations succeeded. First, we spent eighteen months negotiating permissions, working with stakeholders, and determining stakeholder interests. Second, the project began almost thirty years ago. There were fewer laws and procedures in place at the time, although California was ahead of most of the U.S. in its burial laws, and the laws were quite strict. Stakeholders were certainly vocal at the time, but likely not as sophisticated as they are today. By contrast, today's stakeholders have laws to support their involvement, have experience working with archaeological projects, and understand what kinds of information archaeology is able to provide. In this project, we attempted to include all possible stakeholders, and we were as collaborative as possible. One of the most significant things we did was to identify what result or 'product' each stakeholder group wanted from the cemetery excavations, whether that was confirmation that they were not present, identification of cemetery boundaries or a specific event, or recognition of the site. Unlike most cemetery excavations, there was no construction or other direct threat to the site, so it was critical to get a different kind of approval. People were not giving approval to get information before a site was destroyed. In this case, groups needed to determine that there was information that the excavations might provide,

and that was not otherwise available. As Smith (2006: 3) notes in her discussion of heritage as a cultural process, heritage 'is used to construct, reconstruct, and negotiate a range of identities and social and cultural values and meanings in the present.' The Fort Ross cemetery excavations represent, in Smith's (2006) terms, a multi-layered performance that negotiates and constructs a sense of place in the present. The cemetery is used to present both an agreed version of the past, as well as a contested one.

Finally, it is important to reiterate that unlike some other projects, this project is never finished, and the archaeologist is drawn into discussions and debates again and again over the decades following the fieldwork. This may well be true of excavations in any cemetery that remains accessible and interpreted. The Fort Ross cemetery is now a clear, visible, and important physical presence in the park. As people interact with the site, different questions, concerns, and interpretations arise, but the detail of the excavations are not readily available to all. As Smith (2006:2) also notes, the idea of heritage is not so much a 'thing', but a social and cultural process that 'engages with acts of remembering that work to create ways to understand and engage with the present.' People learn some things from reading interpretive signs, but they learn more from stories, rituals, celebrations, and interactions provided by tour guides, relatives, friends, and other stakeholders. From this perspective, ongoing archaeological involvement in a cemetery project can prove to be a benefit to the archaeologist and the various publics.

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Public Engagement through Burial Landscapes: Cupids and Ferryland, Newfoundland

Robyn LACY

Memorial University of Newfoundland

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Abstract

British occupation of Newfoundland dates to the early 1600s with the founding of settlements such as Cupids and Ferryland. While records of deaths exist at both colonies, their seventeenth-century burial grounds have not been located. Historic burial grounds in Newfoundland come with certain characteristic features: surviving gravestones in a rocky landscape, views of the ocean, and often a large cross on top of a hill. Though not visible at the sites in question, these 'lost' burial landscapes can be employed as an engagement tool by archaeologists. By exploring a 'lost' burial landscape with visitors, a dialogue is opened to speculate where the settlers were buried and why. While indirect, discussing these themes with visitors provokes thought on historic vs. modern burial practices and acknowledges the seventeenth-century dead within the context of the modern landscape. This article aims to explore the use of burial landscapes to engage visitors in a conversation about early colonial history, but also about mortality in both historic and modern contexts.

Keywords

burial ground, engagement, intangible, landscape, Newfoundland

Introduction

The article aims to explore ways in which archaeologists and tour guides at the historic sites of Cupids and Ferryland, Newfoundland and Labrador, can use the 'lost' seventeenth-century burial landscape to encourage dialogue about death, both historic and modern. Through engagement with archaeological research on death, dying, and burial, interested members of the public can be encouraged to ask frank questions about death in history, thus opening discussions on, and comparisons with, contemporary burial practices. I reflect on how archaeology can foster engagements with the public about mortality by creating an environment where such engagement is open, frequent and encouraged (see also Sayer 2010). My case studies explore this topic by considering how archaeology can alert local communities and archaeologists to the presence of early colonial graveyards, even when memorials might be displaced or long gone.

The excavation at Ferryland was conducted as a part of my Masters research at the Memorial University of Newfoundland, searching for evidence of burial shafts that could indicate the early seventeenth-century burial ground at the 1621 settlement. During the ten weeks of excavation, I made many observations regarding the public's reactions and questions regarding my research, and the concept of burials being potentially anywhere within the settlement, which fueled this research.

Death and burial in colonial Newfoundland

During attempts in the 1600s by the British to establish year-round settlements on the coast of the island of Newfoundland, immigrants were faced with an unfamiliar environment. There exist records of many settlers' deaths during the first few years of settlement (Cell 1982; Guy 1611). While death is inevitable, early British colonies often had to cope with the dead before they were able to implement or adapt an existing system (including ritual practices and burial grounds) of disposal and commemoration. Their bodies would become some of the first European deposits deliberately placed in the environs of these settlements. Often early burial

grounds on the east coast of North America were not associated with contemporaneous churches, and while churches may have been constructed at some sites later on, in regards to the case study sites, as well as many sites in eastern Newfoundland, later cemeteries did not append these early burial grounds (Lacy 2017). Unidentified or unlocated seventeenth-century burial grounds are thus the result of the original burial space not being reused as a burial ground or cemetery at a later date, the monuments being removed or destroyed, and their locations lost, or a combination of these two processes. The burial landscapes at the case study sites, London and Bristol Company's Cupids Plantation (established in 1610) and George Calvert's Colony of Avalon at Ferryland (1621) (Cell 1969; 1982), are known to history through documents recording the deaths of settlers, but these have not endured as known features within the modern landscape. Therefore, through uncovered archaeological features of the historic settlements, archaeologists and visitors can today actively engage with hitherto hidden dimensions of the seventeenth-century landscape. When presented with the idea of an unidentified colonial burial ground at these archaeological sites, a distinctive engagement with the space transpires: visitors are inspired to question *where* burials might be located, and *why* they might be in different locations to cemeteries established at later dates.

Many colonial settlements in eastern North America such as Jamestown (1607), Cupids (1610), Plymouth (1620), and Ferryland (1621), experienced high mortality rates in the first few years, prior to their earliest surviving gravestones. Early graves may have been left unmarked, or indicated with a biodegradable material (i.e. a wooden cross), which will have long since rotted, leaving them virtually invisible on the modern landscape. Markers like these are only sometimes visible in the archaeological record, for example through traces of a post-hole. As a result, these earliest burial monuments/grounds can be overlooked when compared with highly visible, and enduring, stone monuments of the later seventeenth and eighteenth centuries (Bartram 1978; Baugher and Veit 2014; Mytum 2004, 18). We can call these 'lost' burial landscapes: early burial grounds within the landscape of a historic site or space, unbeknownst to visitors passing through, and often unrecorded in existing archaeological and historical records. Through active

and open discussion on these early burial grounds, aspects of an historic site that engage with mortality and burial can be made more accessible to visitors. Such engagement can evoke a different understanding of the landscape in which these settlements are presently situated.

Before proceeding, it is essential to reiterate that the burial sites discussed in this paper are associated with colonial settlements in Newfoundland. No Indigenous burials were explored or disturbed during this project, although it is important to acknowledge that these colonial settlements were built on the traditional territory of the Beothuk people. With this research, I suggest an aspect of the burial landscape that could be employed to open discussions on mortality at historic settlement sites; however, the study of an Indigenous burial ground requires an understanding of different ethical dimensions to archaeological practices. In current practice, Indigenous burial grounds should not be investigated without the express consent and support of the Indigenous community, as the impacts of colonial archaeological research are still palpable in North America today (e.g. McGee 2008; Phillips and Allen 2011; Giles and Williams 2016).

Public engagement with the burial landscape

Archaeologists inherently deal with death. Mortuary archaeology can be used to explore not only the contents of graves, but the monuments, memorials, structures, and other aspects of the burial landscape beyond the confines of the burial ground itself, and within those, social relationships with death. These themes are explored in terms of the past, but extend to our present understanding of mortality, closely examined by archaeologists and the public at burial sites (Meyers and Williams 2014: 152). While people are often fascinated by burial practices throughout history, today we in the Global West deal with our own mortality in an often-indirect way. In a period where death and dying in the Western world are often kept away behind the closed doors of funeral homes and hospitals, archaeology can offer a less visceral way to interact with mortality through the long-dead (Giles and Williams 2016; Meyers and Williams 2014: 155; Sayer 2010).

The term 'burial landscape' implies not only the physical burials themselves, but also the space's interconnectedness with the community, and with a wider expanse of burial practices within a society. Burial landscapes can be explored through community participation and engagement, without the public being exposed to potentially controversial subjects such as public viewing of human remains, especially important in places where community members could feasibly be the living descendants of the deceased buried at the archaeological sites in question. Through researching and experiencing landscapes associated with and populated by the dead, the social, legal, and political complications that occur with the uncovering and exhumation of human remains can, for the most part, be avoided. In North America, colonial burial grounds have been the subject of much interdisciplinary research, from archaeologists (Baugher and Veit 2014) and art historians (Blachowicz 2006; Slater 1987) to genealogical research through websites such as Ancestry (2018) or historical society groups on Facebook such as the Greenspond Historical Society (2018). As a result, these historic cemeteries have both physical and digital presences in contemporary society.

A landscape embodies the views, practices, and activities of those who inhabited it (Jackson 1984; Anschuetz and Scheick 1998). While burial landscapes and memory have been a recent subject of study (Cannon 2002; Rugg 2013; Baugher and Veit 2014), these spaces have primarily been those clearly delineated and remaining in use and thus commonly known. 'Lost' burial landscapes may not be immediately recognizable to archaeologists or public, but that does not mean that the landscape is devoid of potential knowledge. The knowledge that there is a burial ground somewhere close by can influence the way in which local people interpret the use of their quotidian space, and it is this potential that can be utilized by public archaeologists. While any element of the historic landscape that cannot be directly observed may not seem as sensational to interested audiences as human remains, this aspect of colonial mortuary archaeology can be seen as an attempt to encourage researchers and visitors focus on the many other elements that comprise a mortuary environment (Mytum 2004; Williams and Atkin 2015: 15). Further, by contemplating the burial spaces of the past, individuals can consider burial spaces of the present (Figure 1).

Figure 1: View from the known historic Old Non-Denominational Burial Ground at Ferryland towards the site of the 1621 settlement and its lost burial landscape (photo by author, 2015).

Cupids and Ferryland

Cupids and Ferryland are among some of the oldest colonial British settlements in North America. Initially established as economic ventures by the Newfoundland Company (another name for the London and Bristol Company) (Gilbert 2003: 117) and Sir George Calvert, the First Lord Baltimore, respectively, these settlements set out to carve a profitable British colonial foothold on the island of Newfoundland (Figure 2). Similar to other early colonial settlements, Cupids and Ferryland were heavily fortified, primarily against attacks from other Europeans. Cupids boasted

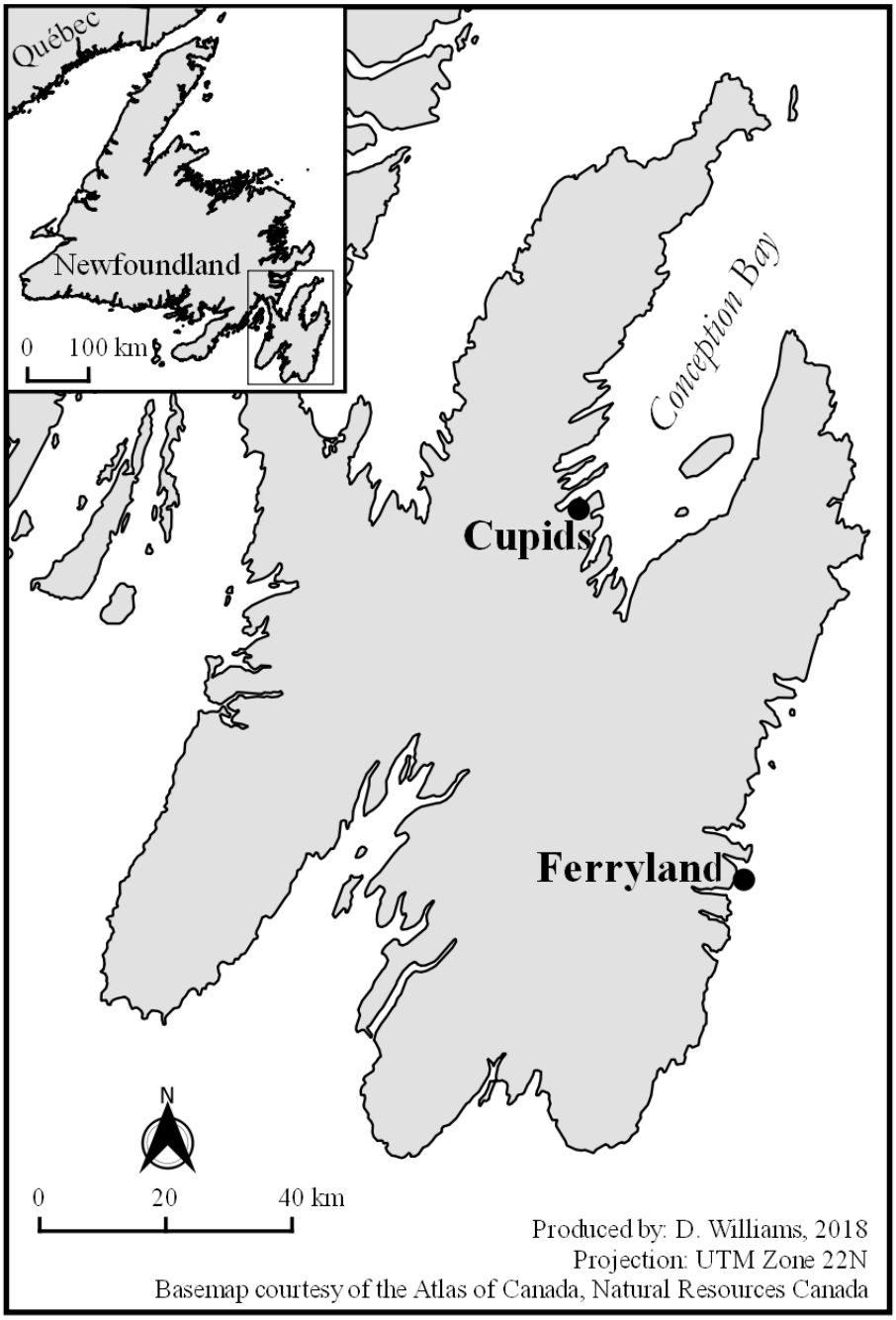

Figure 2: Map showing Newfoundland's Avalon Peninsula, with Ferryland and Cupids indicated with stars (map by Duncan Williams 2018, printed with permission).

a large stone fortification facing the harbour with three cannons overlooking the water (Gilbert 2003: 118), while Ferryland was surrounded by a deep ditch, earthwork embankment, high wooden palisade, and bastion earthwork, with a cannon trained on the entrance to the protected harbour (Miller 2013: 252; Tuck and Gaulton 2003: 190). Both settlements are known through surviving contemporary letters which outline some of the structures that were built, what was grown, and even the climate, but there are no mentions of a burial ground. Talk of death was certainly not taboo in the seventeenth century (Stannard 1977), but perhaps the burials were not mentioned in records to disguise the harsh reality of colonial settlement in North America for benefactors back in England. At least in the case of Ferryland, documentary evidence indicates that Captain Edward Wynne purposefully omitted details about life in Newfoundland in letters to the colony's benefactor, when he called Ferryland 'as pleasant and as profitable a Harbour as any in the Land' (Cell 1982: 254). Like much early literature on Newfoundland, he promoted the island's 'favourable climate' (Gaulton and Miller 2009: 114). Early records from settlements such as Boston contain frank discussions of death and burial, yet details of the burial grounds themselves are not often given (Morton 1669; Sewall 1878).

Surviving records from Cupids detail the individuals who died at the plantation during the early years of the settlement. Their names and causes of death were recorded, and research on similar settlements suggests that they would have been buried in or near the plantation (Lacy 2017). In 2008, several graves were identified to the east of the main settlement, marked with rough stone and two eighteenth-century headstones (Gilbert 2008) (Figure 3). Archaeologists at Cupids have suggested that the narrow width of three of the grave shafts could indicate that they were dug during the seventeenth century. However, a seventeenth-century date for this site has yet to be confirmed (Cupids400 ND; Gilbert 2013: 84).

Few written records survive from Ferryland during this early period of settlement. Letters from Captain Edward Wynne, the colony's first governor, provide archaeologists a glimpse into the first few years but (as noted above) while the letters detail construction efforts and requests for supplies, they are also

Figure 3: Eighteenth-century headstone at Cupids made from imported stone. Some letters and a border decoration are visible (photo by author, 2015).

propaganda to maintain the support of George Calvert, the colony's benefactor and founder (Cell 1982). When Calvert moved himself and his family over to Ferryland in 1628, he found the environment much less desirable than was previously described, and a letter from the particularly tough winter of 1628/9 describes a sickness that ravaged the colony. Not long before he left his Ferryland colony for good in 1629, Calvert wrote to King Charles stating 'my howse hath been an hospital all this winter, of 100. persons 50. sick at a tyme, myself being one and nyne or ten of them dyed.' (Cell 1982). However, Calvert did not give up on North American colonization, and although he died in London in 1632, his sons went on to found the settlements of St. Mary's City and Baltimore, Maryland. Several individuals died at Ferryland in 1628 – sadly, no records have survived that might indicate their names, cause of death, or burial locations.

Ongoing research at both historic sites seeks to identify these early seventeenth-century burial grounds, which are likely the first British burials in colonial Canada. I have conducted research into the burial landscapes of early seventeenth-century British North America in an attempt to identify patterns in the spatial relationship between burial locations and settlement structures of early colonies, and, during 2016 and 2017, applied the resulting dataset to the search for the first British burial ground at Ferryland (Lacy 2017).

The statistical analysis of similar sites suggested that the most likely location for burials at Ferryland might be an elevated landform, such as a hillside or hilltop, located in the centre of a settlement, or an eastern location from the centre of a settlement (Lacy 2017). In 2016, locations to the east and south from the centre of the settlement were investigated for human burials using selective excavation units informed by geophysical survey. In 2017, the excavation focused on a central location within the fortified settlement, due to the likelihood of the location based on the statistical evidence presented in the model. This was close to where three seventeenth-century decontextualized gravestone fragments were recovered during excavations in previous years, further suggesting that a burial ground may have been located nearby (Carter et al. 1998; Gaulton 2006, 88; Lacy et al. 2018). After two seasons of excavation, the exact location of the burial

ground remains unknown, suggesting that Ferryland is anomalous for early eastern North American colonial settlements, or perhaps that the burials were destroyed sometime in the past either by natural or cultural processes (see Figure 4).

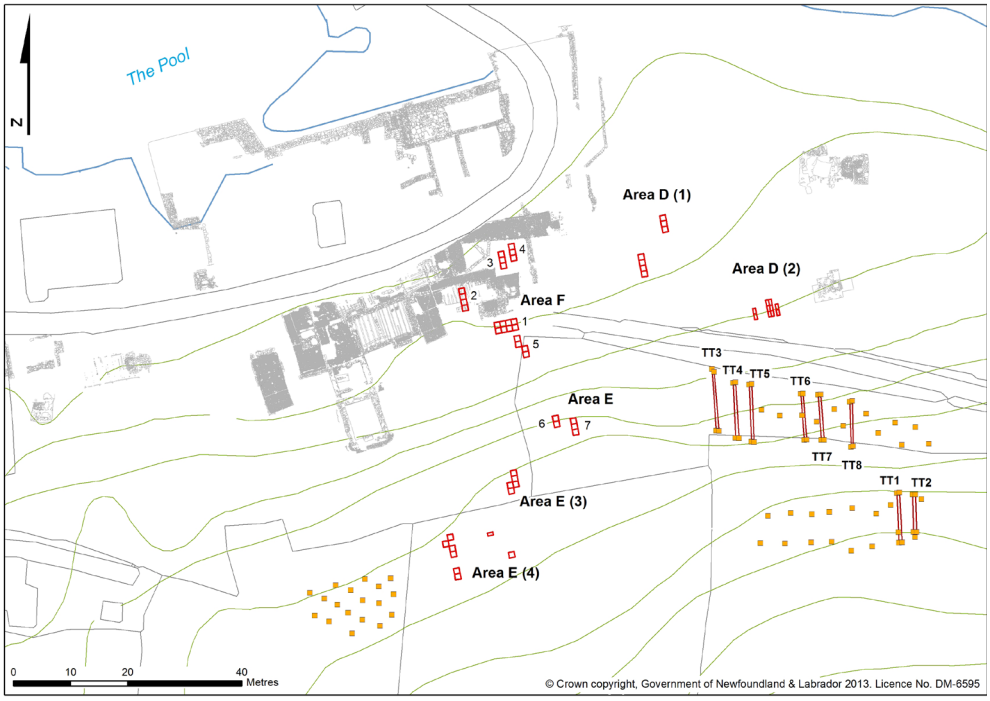

Figure 4: Map of Lacy's excavation areas, 2016/17. Areas tested were of high probability for burials but were negative. This expands our understanding of the Newfoundland colonial burial landscape (printed with permission (Lacy 2017)).

Excavations at Cupids are ongoing, led by archaeologist William Gilbert (of the Baccalieu Trail Heritage Organization). The graves identified in 2008 were to the east of the historic settlement, and if these can be dated accurately to the seventeenth century then the area would be the oldest organized British burial ground in what is now Canada. The eastern location of the burials is slightly elevated from the rest of the settlement, on the gentle north-west-facing slope where the settlement is located, which is a likely location for the burial ground according to the statistical analysis (Lacy 2017).

The burials may or may not be within the fortified settlement, as the location or existence of a south-east wall is unknown. While the identified eighteenth-century burial ground at Cupids is a likely location for earlier, seventeenth-century burials as well, evidence of seventeenth-century remains, or materials has not been located or dated at the burial ground at the time of this paper. The Cupids burial ground presents an interesting case of a visible burial landscape for the eighteenth century, but a lost burial landscape when considering the seventeenth century.

Both historic settlements are similarly accessible to the general public. They are located approximately one hour from St John's – the capital city of Newfoundland – and operate as protected provincial historic sites with museums, active archaeological investigations, and guided tours of the sites during the summer (Colony of Avalon Foundation 2018; Cupids Legacy Centre 2018). At Cupids and Ferryland, visitors can engage with the historic site and landscape through stories of the people who lived there, based on the interpretation of the archaeological record in conjunction with historic documents. Tours at both sites during the field season (approximately June to September) have the potential to encourage active discussion about death in the past, creating an environment to explore themes relating to death and dying, both in the past and the present.

Encouraging engagement with burial landscapes and mortality

Public engagement with mortuary archaeology is often the topic of ethical debates, especially in a museum context (Lohman 2013: 122–38; Pearce 1990: 59, 76). However, when exploring a physical space with no visible human remains, engagement is far more theoretical and dependent on the interactions with the site itself, as well as the tour guides, archaeologists, and anyone else responsible for the presentation of the site. Undiscovered, lost burial landscapes provide a blank canvas for discussions on death and mortality in modernity through a historic context, and the sites of Cupids and Ferryland are perfect candidates for such interactions.

Public engagement with archaeological deposits that cannot be seen and experienced might seem like a difficult concept to present to visitors, but such aspects of the landscape can be worked into the narratives which archaeologists and tour guides present to visitors. Staff at Cupids and Ferryland have a high rate of one-on-one interactions with visitors. Tour guides, usually students or local community members, could use that position to initiate conversations about death and dying at the early colonies, as part of the story of the sites. Currently, visitors to Cupids are shown the eighteenth-century burial site, and informed that the burials have not been dated to the seventeenth century, while at Ferryland, tour guides do not currently provide burial discussion in their tours but discussions on the deaths during the winter of 1628 could easily be implemented.

During tours at Cupids, the eighteenth-century burials are a starting point to exploring the burial landscape of the site. They are visible in the eastern portion of the settlement and have been incorporated into the tour as an aspect of the physically accessible modern landscape. While observing the excavated gravestones, visitors are informed that these burials were dated to the eighteenth century, and the seventeenth-century burials have not been found yet, despite having documentary evidence of many deaths at the seventeenth-century plantation. Visitors are presented with a laminated book detailing death in the 1600s, compiled from the plantation records. These records are the only surviving physical evidence indicating that the individuals were buried nearby. When presented with this information, visitors can reflect on burial practices from the seventeenth century through to the twenty-first century. Burial grounds which were originally located close to settlements were replaced with burials on the outskirts, away from the direct, daily sight of most of the population. This process began as early as the turn of the nineteenth century and persisted into the twentieth century (Dwight 1823; Lacy 2017). As the seventeenth-century burials at Cupids have not been identified yet, there is an opportunity to guide visitors to view the entire landscape before them as a potential burial landscape and speculate where the best spot for burials might have been.

Potential discussion on this topic could begin by asking visitors why they think the eighteenth-century people were buried in this particular location, and what makes this spot different than a location closer to, or farther away from the plantation. Visitors might then discuss other locations near the settlement that might be good candidates for graves, and why. Tour guides could then direct the discussion by asking visitors question such as 'Why do you think they buried their dead so close to the town, instead of around the harbour, or up the hill? How does this compare to what we do now, in the twentieth and twenty-first centuries?'

By connecting the discussion of historic burial practices with modern ones, visitors will gain a better understanding of the choices people made when dealing with death in the seventeenth century.

Tours at Ferryland rely heavily on the ongoing archaeological work to guide visitors through the settlement. During 2016 and 2017, visitors on tours were brought to the locations I was excavating throughout the settlement to discuss the ongoing search for the seventeenth-century burial ground at the site. I used that opportunity to ask if the visitors had been told of the only recorded deaths from the early 1600s, located not far from where we were standing. The Mansion House, built for George Calvert and his family was used as a residence, a space for Anglican and Catholic prayer, and a hospital during the difficult winter in 1628/29 (Figure 5). As the surviving record of deaths in early Ferryland were associated with the Mansion House, which also acted as a church, and the gravestones were recovered nearby, it was suggested to me during fieldwork that perhaps the burials were near the structure. Several individuals died inside the house, but the sources identify who they were, what they died of, and where they were buried was never created or has not survived, so any unexcavated area around the settlement has the potential to contain a burial ground. However, excavations near the Mansion house have not revealed indications of burials; this is most likely due to the compact nature of the settlement not providing much open space within the fortifications.

When discussing my excavation with visitors, I was frequently asked questions about the location of graves, and burial practices, which would often become talks about historic versus modern burial practices. Here are some examples of the type of discussions I had

with visitors at Ferryland, after explaining my research objectives to them.

> Q: 'If you're looking for graves, why are you looking so close to the houses?'
>
> A: 'In the seventeenth century, people would be buried close to homes in the middle of town. They liked to keep their loved ones nearby.'
>
> Q: 'Was it common to bury people in the middle of towns?'
>
> A: 'Yes! Based on my research, even the burial grounds that weren't right in the middle of town were still very close to the living areas'
>
> Q: 'Why don't we do that anymore?'
>
> A: 'Well there isn't a lot of room in cities anymore! It wasn't until the eighteenth century, when the burial grounds became crowded, that people started to open burial spaces outside of their settlements. In the nineteenth century, the reasons for this were more based on health and morality than practicality, but it happened all the time, and people began to prefer the garden cemeteries outside of town to the 'old' burial grounds.'
>
> Q: 'What if they were buried at sea, instead of in the ground?'
>
> A: 'We do have gravestone fragments which suggests that there was a burial ground here, but it wasn't common to bury people at sea unless they were sailors who died on a ship.
>
> Q: 'But if they died in the winter, how could they have dug graves?'
>
> A: 'They probably didn't. Since Western societies didn't embalm until the nineteenth century, the bodies were probably kept in an unheated building until the spring, when the graves could be dug.'
>
> Q: 'Was there a church they could have been buried beside?'
>
> A: 'As far as we know, there was no church constructed at Ferryland during Calvert's time here. The Mansion House, Calvert's home, was used to hold Anglican and Catholic services, but excavations around the house have shown no indication of graves.'

Figure 5: The Mansion House, where the only recorded deaths of the 1620s occurred (photo by author, 2015).

Visitors appeared to appreciate the comparison of historic burial practices and modern ones, as it allowed them to use their own knowledge to connect with the past. One visitor, who had previously worked as a grave-digger, explained how they would dig graves by hand, a practice which had not changed for hundreds of years before the use of machinery.

Speaking frankly to visitors about the use of space near settlements as a burial ground, even if its location is still currently unknown today, opens the door for an important conversation on death and dying to the public. Through the lens of historic death, archaeologists can discuss modern fears and uncertainties about dying as it was seen by different cultures and societies. By encouraging visitors to contemplate the spaces before them as a *potential* burial landscape, they are engaging with an aspect of

that landscape. Asking questions such as why, where, how, and when might people have been buried in specific areas allows archaeologists and visitors to gain a new awareness of the space that they are all occupying in that moment. Discussing death and burial with visitors at public archaeology projects such as Cupids and Ferryland is something which should be encouraged freely, and archaeologists should continue to use their position as so called 'death dealers' (Meyers and Williams 2014: 155) to promote open discussions about mortality. Along with direct engagement and discussion with visitors, archaeologists can employ social media platforms to expand the accessibility of their research, which helps to create open access of archaeological data. Through platforms such as Twitter, personal blogs, Instagram, or Facebook groups, discussions of historic death and burial are not limited to the several weeks that an excavation might have.

Conclusions

There is a growing interest in mortuary archaeology to improve public outreach, access, and engagement with fieldwork and collections where it is appropriate to do so (Williams and Williams 2007; Williams and Atkin 2015). While there are ongoing ethical debates about the excavation and display of human remains in many parts of the world (Curtis 2003; Lohman 2013; Pearce 1990; Renshaw 2007), this article suggests that by promoting engagement through verbal dialogue with the local communities and visitors during fieldwork, the burial landscape of a historic period site can be better understood.

Archaeologists are uniquely situated between two groups; death professionals who deal regularly with the modern dead and the public who encounter death in a subtler way. As directly argued by Giles and Williams (2016) we deal indirectly with themes of mortality every day as researchers and field technicians, and as a result, we have an excellent platform with which to open a discussion about death and dying with visitors through the medium of death and dying throughout history. Exploring human mortality through archaeology can be seen as a gentle way to ease into discussions of modern death, allowing visitors to ask questions that

they might otherwise feel uncomfortable asking, facilitated by the open and engaging discussion already taking place.

This article advocates the use of unidentified or lost burial grounds as a catalyst for discussions of death and dying at public archaeological excavations, heritage tours, and historic sites. For instance, a heritage walking tour in the city of Baltimore, Maryland, could easily mention the theories over the placement of the earliest burial ground south-east of the present settlement as a means to discuss early burial practices in colonial America. Visitors to Guilford, Connecticut could be greeted by an interpretation panel at the well-preserved seventeenth-century Guilford Green, which discussed the Green's original use as a Puritan burial ground, and the high likelihood that it was only the gravestones and not the burials themselves that were relocated by 1817 (Bloomer 1994: 60; Dee 1998; Sexton 2002, 4; Smith 1877: 37–38). A significant aspect of a site's history, burial have the power to provoke thought and discussion from researchers and the public, and to employ such 'lost' burial landscapes as part of a site's engagement provides a space to ask questions and consider the landscape before them.

To open dialogues on mortality at a colonial site, archaeologists and tour guides can explore comparisons to modern burial practices, and why these practices have changed through time. While visitor engagement with a lost burial landscape may appear as an abstract concept, through open discussion facilitated by archaeologists and tour guides, visitors can gain a better understanding of how settlements and burial grounds were established in the colonial period. By promoting open discussions about death, a more holistic narrative of history can be achieved, and visitors will come away with a better understanding not only of how Europeans settlers in North America lived and died centuries ago, but how our relationship with the dead has drastically changed in the twentieth- and twenty-first centuries.

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An Empty Graveyard: The Victims of the 1946 AOA DC-4 Crash, Their Final Resting Place, and Dark Tourism

Lisa M. DALY

Independent Researcher

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Abstract

In 2013, archaeologists succeeded in locating a plane crash that had been presumed buried based on local stories. The aircraft had crashed into a steep hill, subsequently known as Crash Hill. On the summit is a deteriorated memorial which resembles a cemetery, marking the thirty-nine people who died in the 1946 tragedy. This memorial has been a spot of pilgrimage for family and an attraction for adventure seekers. This draw to dark tourism sites is not uncommon but since archaeologists shared their finds with the public through social and local media, many of those visitors are drawn to the crash site instead of the memorial. This is a problem as there are possibly mass graves at the crash site, and visitation can potentially disturb those remains. This article argues for caution when discussing finds publically and for the repair and restoration of the memorial at the top of the hill to fill the want to visit a site of tragedy without disturbing the actual crash site.

Keywords

aviation archaeology, dark tourism, aviation history, Newfoundland and Labrador

Introduction

On top of Crash Hill, in Stephenville, Newfoundland and Labrador, is a monument to the thirty-nine victims of the crash of American Overseas Airlines Douglas DC-4 NC-900904, and a small, fenced area containing thirty-nine crosses, now broken, weather-worn and fallen. For years, this monument – a cenotaph with the appearance of a burial ground – had been a trail-end for hikers, snowmobilers, and all-terrain vehicle users, as the graveyard associated with the 1946 airplane crash. In 2013, an archaeological team from Memorial University of Newfoundland, with a local guide, endeavoured to discover the actual site of the crash on the hill somewhere below the monument, to assess the claims that the site had been buried by blasting the top of the hill. Archaeologists also wanted to attempt to locate the mass grave or graves indicated by conflicting stories circulating in the local community about the recovery efforts. The site was located, but no graves were positively identified. Since then, the monument has shifted from being the end of the trail, to an indicator as to the location of the physical wreckage of the aircraft, and many who were once content to visit the summit of the hill have been attempting to access the crash itself. This new element of dark tourism is putting visitors, the integrity of the site, and the human remains buried somewhere at the crash site, at risk. This article reviews the history of the crash and its subsequent memorialization, before discussing the challenges of dark tourism and potential future treatment of the landscape as a site of memory.

History of the Crash

AOA NC-900904, hereafter AOA 904, was scheduled to fly from LaGuardia Field, New York, to Shannon, Ireland, with a refuelling stop in Gander, Newfoundland. The aircraft departed New York at 12.14 (Newfoundland Time, UTC 03.30) on 2 October 1946 and at 16.13, Captain William R. Westerfield was informed by the dispatcher at Gander, that the weather in Gander was unsuitable for landing and not expected to improve (Landis et al. 1947; Wilkins 1946). The aircraft was to proceed to Stephenville, where it landed at 16.30 (Landis et al. 1947). There had been an alternated crew waiting in Gander, but as no crew was in Stephenville, the crew

were required to have a twelve-hour stop over to rest (Wilkins 1946). Departure was scheduled for 04.45 on 3 October (Landis et al. 1947).

Shortly before scheduled departure, the flight crew were briefed by the United States Army Air Force (USAAF) and informed about the expected weather for the duration of the flight (Landis et al. 1947). At 04.45, Captain Westerfield requested takeoff clearance, but was informed by the control tower operator that due to the fact that the winds had increased to 9 mph and were blowing 90 degrees to the runway there would be a change in runways (Landis et al. 1947; Wilkins 1946). Airfield procedure dictated that DC-4s were to take off over the water (Runway 30) if winds were less than 10 mph. Perhaps with the fear that winds might increase, the control tower operator advised that the flight be changed to Runway 7 (Wilkins 1946). The runway was cleared and AOA 904 took-off at 05.00 with a magnetic bearing of 70 degrees. Fifteen minutes later, the wind decreased to 4 mph (Landis et al. 1947). Otherwise, the ceiling was 5,000 feet and visibility was at 10 miles. This meant that the weather was clear for flying but the moon and stars were not visible (Landis et al. 1947; Wilkins 1946; Unknown Author 1946a). No one was watching the aircraft in the minutes after takeoff (McGrath 1946).

One minute after takeoff, the control tower operator requested a ceiling check, and AOA 904 advised him to 'wait for ceiling check' (Landis et al. 1947; Wilkins 1946). No radio contact occurred after this. Two and a half minutes after takeoff, witnesses reported a glow of fire directly in line with the runway in the nearby hills (Landis et al. 1947). No other aircraft was flying in the area at the time, so it was assumed that AOA 904 had crashed (Wilkins 1946). Attempts were made to contact the aircraft, but to no avail. NC 90903 departed 22 minutes later, and was instructed to leave from runway 30 (Wilkins 1946). Search operations were initiated immediately by the USAAF, aircraft flying over the site described it as a 'terrific fire' with little hope of survivors (Figure 1). The aircraft had hit the hill seven miles from the runway, in an area where pilots familiar with the runway would make a right turn shortly after takeoff to avoid the hills. The hill is 1200 feet high and the aircraft struck forty feet from the summit (Wilkins 1946). It is

Figure 1: Aerial photo of the wreckage taken one hour after the crash by navigator Robert Alber of Air France (from the collection of Lisa M. Daly).

Figure 2: Aerial view of the memorial at the top of Crash Hill taken in 1950 (from the collection of the Our Lady Of Mercy Church Museum, Port au Port Peninsula).

believed the pilot could not see the hills in the dark, and started the turn too soon or was unaware of the elevations in the area and struck the hill (Landis et al. 1947; Wilkins 1946). Helicopters used in the rescue of survivors from the Sabena OOCBG which crashed near Gander on 18 September 1946, only two weeks earlier, were requested, but deemed unnecessary and the request cancelled (Canadian Press 1946). Search parties were assembled, departed at dawn, travelled by rail to Harry's River, across a marsh, then through four miles of forest. They arrived at the site around midday and the Newfoundland Rangers arrived shortly after at 14.00 (Canadian Press 1946; Horwood 1986: 118). They confirmed the deaths of all eight crew, twenty-five adult passengers, and the six children on board the aircraft. The search party also indicated that the remains were burned beyond recognition, and later searchers could only confirm the identities of a few people. Due to these factors, it was decided that the remains would not be removed from the site, but rather would be buried near the aircraft. One of the Newfoundlanders working at Harmon Airfield and a member of the initial search party, Ronald Reardon (2012), indicated that the remains were extensively damaged, with fragments scattered around the wreckage and in the trees. Due to the fire, transporting the remains was challenging, and he indicated that not all remains were likely collected and brought to the burial area.

The remains were gathered, and according to Newfoundland Ranger T. Fitzpatrick, were 'piled up like cordwood, all burned and blackened' (Horwood 1986: 118), while they waited for a group of Americans to arrive with dynamite to blast a hole deep enough for the remains. The steep, rocky hillside has very shallow soil, so graves had to be blasted rather than dug by the Rangers. Although, the reports are a little conflicting from the Newfoundland Rangers on site, as Fitzpatrick claims there were multiple holes blasted and multiple graves, whereas labourer Reardon claimed a single grave was dug with a pick and shovel, and the official Ranger report says 'during the day, they [twenty-five labourers] buried the remains of the victims and erected crosses and Stars of David' (Figure 2; Fagan and Fitzpatrick 1946: 2; Horwood 1986: 119; Reardon 2012). Wilkins' (1946) report does confirm the graves were blasted, but no further details are given. This is not a clear description of the burial. The remains were buried somewhere near the wreckage

in an unmarked area. To bury the wreckage and remains, steps were taken to obtain permission to dynamite the hill above the crash with the goal of burying the wreckage and remains under rubble (McGrath 1946). Within hours of the crash happening and the determination that there were no survivors, steps were taken to create a memorial. A monument was air lifted to the summit of the hill, and wooden crosses with name plates were carried in. These were erected within days of the incident, with the Canadian Press (1946) reporting that 'the little rows of white crosses in the western highlands will mark the scene of Newfoundland's second fatal crash of a civil airliner'. On 6 October, a funeral service (conducted by a rabbi and priest) was held in a DC-4 aircraft flying over the site, in a similar fashion to the funeral for the victims of the Sabena crash of the previous month (Unknown Author 1946b). The service was attended by next of kin, AOA and USAAF officials, and H.A.L. Pattison, who was the representative for the Newfoundland Government (McGrath 1946).

Since the Crash

The memorial 'burial ground' was rebuilt after Dixie Knoss visited in 1989. She had brought the importance of fixing the markers and the fence around the site to the attention of the United States Defense Department who funded the replacement of the markers, using the original name plates from the 1946 memorial (Knoss 1989). The crosses had fallen once again, the nameplates and Star of Davids had fallen off the wooden crosses, and the site was in desperate need of restoration (Figure 3). The dilapidated state of the site might have helped contribute to the need for visitors to see more upon arrival. As the memorial was overgrown with plants, small trees, and the crosses had fallen, it did not afford suitable dignity to the victims of the crash. If the memorial were maintained, it would better portray the original intention of the memorial as a symbol of where the victims were buried. With the memorial restored, Knoss argued it could become the symbol of the crash once again, and thus the focus of both those looking for the trail-end marker. Meanwhile, those searching for the dark tourism element would be satisfied as the memorial would once again convey the idea that the victims of the crash are buried at

Figure 3: Local guide Don Cormier at the monument placed at the summit of Crash Hill. Note the broken crosses bearing the names of some of the victims (photo by Michelle Bennett MacIssac 2017).

the summit of Crash Hill, if memories of the rediscovery of the site starts to fade as years past.

The actual burial area for the victims of the crash has not been identified. As indicated, there are conflicting reports as to what exactly happened with the remains. Some witnesses say they were buried in a single mass grave while others say multiple graves (Fagan and Fitzpatrick 1946; Horwood 1986; Reardon 2012). Newspapers reported they were buried on site, but implied they were buried at the summit (Canadian Press 1946). This is how the site was lost as this dynamiting was thought to have completely destroyed the site. That said, one informant, Nelson Sherren (2013) said that in the 1960s he was involved in further blasting in the area to further obscure the wreckage and that archaeologists

would not find anything. It was assumed that, because the site was dynamited once in the days following the incident, and again a few years later, there was nothing left to the aircraft and it was all buried by the rubble. The local guide, Don Cormier (2013), used by the archaeologists searching for the site was familiar with the area due to his hunting activities, and told of multiple other hunters who used the area and often searched for the wreck. According to Cormier, most explorers and hunters in the area who were interested in the site often did not go far enough along the hill to find the wreckage. A landslide is visible in the landscape, and most assumed this landslide was the result of dynamiting the wreck, and the fact that there is no evidence of the aircraft reinforces the idea that the site was completely buried. However, it is now supposed that the aircraft is a little further along the hill, at one of the steepest points, an area not often frequented by hunters due to the incline (Don Cormier, pers. comm. 2013). Using a historical photograph (Figure 2) and contemporary maps, the author asked Cormier to lead the team beyond the landslide, where the group then located the wreckage.

Archaeology, Social Media, and Dark Tourism

The term 'dark tourism' was coined by Foley and Lennon in 1996, but only began being studied academically a decade later (Biran and Hyde 2013; Raine 2013). The term refers to a form of tourism where visitors travel to sites associated with death, tragedy, or suffering, or where such occurrences have been memorialized. Stone (2006: 242) better defined dark tourism and created a spectrum indicating a variety of levels of 'darkness' within the phenomenon, ranging from entertainment-oriented attractions to places of conflict or genocide. This spectrum has been expanded upon to examine not just the types of attractions, but also the consumers of dark tourism (Raine 2013), as well as the varying motivations for the commodification of dark tourism sites (Virgili et al. 2017). From an archaeological perspective, examining the materiality of death allows for a greater understanding of the performance surrounding mortality and its commemoration (Williams 2003), and uncovering death from the past continues the memory of the individual or society by the living (Parker Pearson 2001). Aviation archaeology often examines

plane crash sites, many of which involved the death of individuals on board (Daly 2015). While ethically, aviation archaeology can be confused with wreck-hunting, or a form of treasure hunting involving aircraft, the uncovering and recording of aviation sites allows for the discovery and preservation of the story of that aircraft and crew, particularly when conflicting accounts are found in the historical record. The identification and possible recovery of human remains allows them to be repatriated (see work done by JPAC; Webster 1998), buried in marked graves, or memorialized even if no physical remains are found. These memorials often mean a lot to survivors, family, and the aviation community as a whole (Hillier 2017; Legendre 2001). Human remains found on aviation sites are often commingled, highly fragmented, and spread over significant distances. Even when recovered at the time of the incident, their fragmented nature often means not everything is fully recovered and properly buried (Hillier 2017). Examining aviation archaeology sites can potentially mean recovering remains that can then be interred in formal cemeteries, or, in certain cases, can lead to 'finding' someone who has been listed as Missing in Action during a conflict (Webster 1998).

Forms of dark tourism have been present in Newfoundland and Labrador for years. From historical walks around cities and communities featuring stories of murders and hauntings, to a museum dedicated to a sealing disaster that happened in 1914, most museums feature at least one exhibit dedicated to an air or sea disaster, so there are many outlets for those interested in dark tourism. That said, contemporary tourism has been increasingly interested in both the authentic experience of history and the interest in death and suffering (Sharpley 2009: 6). Historical walks may bring people to the spot where someone was murdered, but the evidence is long gone. The mangled metal of a plane crash gives a strong visual cue through which mass death and destruction may be understood. Crash Hill has become one of these destinations. Before the rediscovery of the location of the crash itself, the memorial on the top of the hill was one such site; a stand-in for the missing aircraft wreckage and, given the individual crosses – one for each victim – was often mistakenly believed to be the final resting place of thirty-nine people. Reports about the site stated that while the remains were buried on site, the area was completely demolished,

burying all remnants of the crash (Reardon 2012; Sherren pers. comm. 2012). This removed much of the drive for members of the public to visit the actual crash site, if there was nothing to view. In fact, even when the Dixie Knoss, the daughter of one of the victims, Alva J. Marley, came to visit the crash site in 1989, there was no mention of her visiting the crash site, but simply flying over the memorial and the hill so she and her brothers could 'see where their dad was' (Knoss 1989). Research about the site has been shared with media and social media, showing potential visitors that there is more to the area than just the memorial at the top of the hill (Hurley 2013). This open sharing of research with the public is one of the new shifts in archaeology in the social media age, but can also put sites at risk from an increased numbers of visitors and subsequent damage.

Investigating and Remembrance on Crash Hill

Archaeologists rediscovered the site in 2013 as part of a documentary that was never completed, and the author reported the find to the local media in an effort to discuss the history of that and other aviation site in the area at the Stephenville Regional Art and History Museum after the expedition. The site was also mentioned, although not in depth, on the author's blog (http://planecrashgirl.ca). This has created a new interest in visiting the actual crash site, and not simply the memorial on the top of the hill. This does bring forward the ethical side of promoting archaeological work on social media. As the site was 'lost' to the community, archaeologists finding the remains of the aircraft and promoting the fact that it was found now brings a renewed interest. This did bring out stories from people in the area who remembered the aircraft, allowing for a better understanding of the site and a greater understanding of how the local community viewed the incident in terms of the town's history. It created a more community oriented story, instead of one imposed by researchers (cf. Richardson 2013). By sharing of the story of aviation sites, posted online and via traditional media, they can benefit both the research and researcher. Conversely, trying to be open about the research does not fully dissuade the public from the idea that academics carefully manage information (Bonacchi and Moshenska 2015). Another effect of sharing information is that

is has inadvertently promoted increased numbers of visits to the site. Coupled with this, as an outreach effort, a presentation at the local museum about the history of this and another aviation site on the nearby Port-au-Port Peninsula and the knowledge that researchers had been to the site, let others know that the site was potentially accessible. The research, archaeology, and even social media posts have been done with an attempt at understanding and respect, but there is always the concern that other visitors will not do the same. Since the initial archaeological visit, at least one person informed researchers that they visited the site specifically to look for the graves.

Promotion of any site, whether through social or traditional media, will potentially attract the interest of some of the general public. This is particularly true with aviation sites, since the aviation community is comprised of professional and amateur flyers, former and current military and airport personnel, amateur and professional historians, as well as others who are simply interested in aircraft. Some of the interested parties will reach out to archaeologists, especially if they have a visible media footprint, and in such cases, archaeologists can stress the importance of maintaining site integrity and can talk about the site in such a way as to encourage those interested to also be stewards of the site, making sure everything is left *in situ*. In this researcher's experience, one method that has worked has been to request photographs from site visitors as a way to monitor sites. Permission is always asked to potentially use images online or in publications, which includes the public's passion in the research and protection of a site. This added responsibility of those interested in the research area creates more of a community system of protection. This has been seen in Gander, Newfoundland, where members of the community have taken it upon themselves to help monitor sites, and to report those who are caught looting scrap metal (Daly 2015). Others will gain information about sites from social media and will not contact researchers. Some may do so after they visit the site. One way in which to mitigate this risk is to be vague about specific locations, and, if a map is used, be clear that markers are purposefully not accurate to force potential visitors to contact either the archaeologist in question or the governing

body. This allows researchers to get a 'feel' for those looking to visit the site, remind them of the associated laws, and try to engage them to help in the above mentioned monitoring and protection of sites.

Work at Gander has always been done with an effort to curb site looting, and AOA 904 is a site outside of the usual military sites that litter the landscape of Newfoundland and Labrador. Military sites were, for the most part, divested of remains, armaments and sensitive equipment. Commercial crashes, such as the Sabena in Gander and AOA 904, left much behind. Newfoundland Rangers worked hard to recover the sites, but commercial crashes tended to have more people on the aircraft, more luggage than military flights, plus items such as plates, trays, and other luxuries (Figure 4). This leaves more behind and more souvenirs that can be collected by visitors. Efforts are made to stress the importance of maintaining the sanctity to these sites, but that might increase the dark tourism appeal (Sharpley 2009: 8). There is no commercialization to these sites, possibly adding to the appeal as they represent more of an untouched tragedy. That said, sites such as the Sabena crash near Gander have been frequently visited and, according to local sources, most people in the area have something from the site, usually dishes (Darrell Hillier, pers. comm. 2008). In some cases, collecting helps preserve a site, as is the case with Royal Air Force Ferry Command Hudson Mk. VI FK690 in Gander. When the Trans-Canada Highway was mapped through the area it was going to pass over the wreckage, so the community was invited to collect pieces of the aircraft. Some parts are preserved due to that collection (Daly 2015). That said, aviation sites fifty years or older in Newfoundland and Labrador are now protected under the Historic Resources Act. The crash site itself is still largely intact, with the tail section mostly untouched and the burnt metal from the wreck still on site, giving it an untouched look and feel, plus a visual indication of the potential destruction that can happen to an aircraft upon impact.

There are those who visit the site as an act of pilgrimage or mourning. Knoss' 1989 visit to see where her father died was an act of mourning. Other relatives, typically grandchildren, have come forward wanting to visit the site if they ever visit Newfoundland. Cormier does have a connection to the site. His father was one of

Figure 4: A meal tray found at the crash site (photo by Shannon K. Green 2012).

the Newfoundlanders who helped recover the remains, although the man never really spoke about the experience and has since passed away. Cormier has been back to the site, but has said nothing about locating the burials. For him, the visit to the site is an act of pilgrimage as it was something important his father was involved in, but something too traumatic for him to talk about. This connection that Cormier feels to the site is comparable to the memory tourism discussed by Virgili et al. (2018: 66) as it allowed him the chance to 'see and understand' this traumatic incident in his father's life.

Now that the site has been located, various individuals have contacted the author to express interest and advice on visiting the crash site. Those who used to use the memorial at the top of the hill as a trail end are now looking to continue the journey to include the actual crash site as they know it is close (Michelle

McIssac pers. comm. 2017). Visitors to the site may have different potential ties, whether that is a family member who died in the crash, one who helped with the recovery efforts, or an interest in community or aviation history, and reaching the crash is now more for the adventure of it rather than an act of commemoration. This could expand Raine's (2013) dark tourist spectrum to include those who are actively seeking recreation and require any 'historic' destination. Raine points out that some who visit dark sites, such as cemeteries, are passive recreationists, who use the greenspace as an access route or open space. Raine also discusses other uses such as sightseers, hobbyists, and thrill seekers. Crash Hill is not an easy hike, so it can be argued that the thrill-seeking aspect uses the destination as a challenge, as can the hobbyist angle for avid hikers looking for new routes and experiences. The landscape around the hill is virtually untouched, on the top of a hill which overlooks lakes, ponds, forests, and in the distance, the town of Stephenville, the airport, and the ocean beyond, which holds strong appeal for sightseers. Many visitors do seen to fit best into the category of passive recreationists. Their motivation is the hike, and the crash is the goal destination rather than the route, but then there is the potential for interacting with the crash or the memorial donce they reach that goal. Some might consider it as an act of remembrance or commemoration, but many rarely know anything of those who died on the site besides what is on the monument at the summit. There is no context on the site, either at the memorial or at the wreckage. The remembrance at the site is not first hand, as without context, the incident is imaginary, left for people to create their own version of the story (Walter 2009: 47). It has added a further element of dark tourism to the visit. The new visitors, which have appeared since the rediscovery of the site, are looking to visit the actual crash, where the remains of the aircraft are visible. So instead of being satisfied with the trail end, now there is a need to view the actual crash. This shifts the emotion and physical focus from a symbol of death on the top of the hill to the actual place of death (Walls and Williams 2010: 49, 51). The exploration of the site is akin to digging around a memorial, without the training or experience to be able to identify degraded human remains. This adventure-seeking opens up the site to treasure-hunting and increases the chance that any remains

on the site, whether in a mass grave found in the wreckage, will be disturbed. This has always been a problem with aviation archaeology, as well as other forms of archaeology where artifacts may be viewed as 'valuable'. In some of the early guides to wreck-chasing, site visitors are encouraged to take souvenirs from sites. Similarly, in many tragic commercial crashes, such as the Sabena in Gander, there are often stories of riches that were on the aircraft (i.e. money and jewellery), which brought seekers out to find literal treasure (Daly 2017). At the time of publication, the author knew of no plans to erect signage at the site.

An opposing perspective is that the woods around Newfoundland are full of animals, many of which would have scavenged any remains missed by the first recovery crews and the Newfoundland Rangers. If the mass graves are shallow, they would also be accessible by animals, but, Ranger Fitzpatrick said he visited the site about a year later. He had heard rumours of people visiting the site looking for valuables, but he found that the graves had been undisturbed (Horwood 1986: 119). This would indicate that the graves were deep enough to prevent it. Given that the Rangers reported remains throughout the site, there is the potential to argue that the entire site can be considered to be a graveyard and should be treated as such. Between this and the site being registered as an archaeological site with the Province of Newfoundland and Labrador, penalties for disturbing the site could range from fines to jail time (Government of NL 2017).

The cenotaph at the summit of Crash Hill, even with the deteriorated symbolic grave markers, should once again become the focus for those looking for the adventure of visiting the crash. The shift to the actual crash as the focal point put the site and the human remains on site at risk. The memorial at the summit needs to be restored once again, with information panels placed to give visitors about the history of the site and a warning that there are remains at the crash site (Virgili et al. 2018). This would potentially give a greater sense of ownership to site visitors, the community, and family, as well as a greater sense of commemoration surrounding the site, helping to protect the wreckage (Walls and Williams 2010: 61). This may be give a better photo opportunity or a better view of success to those searching for the trail end. That

said, not all visitors go to the crash for the same reason. As we have discussed above, some people visit the site as an act of pilgrimage or memorialization, as they have familial ties to the crash.

Conclusion

Aircraft crash sites that still remain on the landscape tend to be in areas that are inaccessible. Those that are accessible are cleaned up, and have often been looted by scrap hunters. The inaccessible sites hold a certain appeal to those doing back-country hiking or driving all-terrain vehicles. Aviation sites that were created fifty or more years ago are protected in Newfoundland and Labrador by the Provincial Archaeology Office, but the fines associated with looting archaeological sites are not always a deterrent. Other jurisdictions have created regulations for the protection of aviation resources, but in Canada, each province is responsible for developing archaeological regulations, so they vary across the country. Similar to the work done in Gander to record crash sites and assess the viability for archaeology at the war-era town site (Daly 2015), other countries have been assessing and recording what remains of their military heritage (for examples see Freeman and Pollard 2001; Lake 2002; Millbrook 1998) Much of the aviation archaeology work done by the author has had the goal of recording the sites for preservation, but at the same time promoting the history of the sites to the local communities, aviation enthusiasts, and giving a resource to families looking to find out more about the sites. In many cases, the ideas are conflicting as promoting the sites puts them at risk. Being able to draw the focus from the actual wreckage will help to respect the sombre nature of the site, combined with repairs to the memorial at the summit of the hill as well as information to discourage the dark tourism trend of trying to visit the actual wreckage, would help keep the remains that are at the wreckage safe.

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Public Archaeology and Church Monuments

Carly McEVOY

University of Chester

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Abstract

Church monuments within the parish church can provide a wealth of information to the public about the history of that community as well as broader social themes. However, traditionally, publicity available on monuments can be limited and churches operate disparate levels of public access and engagement. Where such access and information is available there is a tendency to focus on the most elaborate and anthropomorphic styles, such as effigies, with a concentration on who they represent. This article will consider why church monuments may be important to communities, and the impediments the public may face when engaging with church monuments, ranging from practical reasons such as accessibility, to the provision of misinformation, selective information, or the lack of any resources being provided. Finally, the article will consider how information about, and engagement with, funerary monuments within the parish church setting is consistent, well researched, and publicly available via digital and non-digital media.

Keywords

Cheshire, church monuments, community, identity, parish church

Introduction

Researchers widely acknowledge that later medieval and early modern church monuments operated, and often continue to operate, as key components in both the secular and sacred landscapes of ecclesiastical buildings. They provide evidence of not only spiritual matters, but also support political ideologies in death (Aries 1977; Binski 1996; Litten 1991; Llewellyn 1991), commemoration (Badham 2015; Valdez del Alamo and Pendergast, 2000; Saul 2009), as well as status and lineage (Saul 2001). However, monuments can also support a sense of place and identity as part of the wider community landscape, and feature in local traditions and folklore from their creation down to the present day. In this last regard, biographical approaches to early medieval monuments and their significance as foci of community identity and traditions can be readily applied to later medieval and early modern church monuments (James et. al. 2008; Waterton 2006).

This article will look at examples of how church monuments operate as loci for identity and memory beyond their original subjects of commemoration, and will reflect on how we might further encourage the public to engage with them. For the purposes of this discussion, I will exclude external (churchyard) monuments, which can be far more difficult to read due to weathering, and already having a different history of investigation in Britain (e.g. Mytum 2000: xv). Examples will, for the most part, be taken from the historic county of Cheshire. This is because the county is the area of my ongoing doctoral research, but also the county has a distinctive tradition of folklore and choices regarding the presentation of its monuments.

Whilst public and community projects, such as those conducted by Big Heritage, York Archaeological Trust and Liverpool Museums, have successfully engaged communities with external field investigation, excavations and exhibitions, the opportunities for public engagement with internal church monuments could benefit from further development. Indeed, historically, church archaeology has concentrated on architecture and burials (Gilchrist and Morris 1996: 112), leaving church monuments to the domains of history and art-history (see Binski 1996; Crossley 1921; Esdaile 1946; Llewellyn 1991; Saul 2001 and 2009). Projects such as the Norfolk Medieval

Graffiti Survey (2018) have shown that community engagement within the parish church can be been well received, and be adopted over a wide geographical area using simple replicable methods for data collection and dissemination. Yet church monuments hold a unique position in that they not only form part of the spaces used for worship by parishioners, but also the mortuary landscape of those using the service for funerals and services of remembrance, as well as personal mnemonic acts. Further still, these monuments are part of the communal landscape and its history.

Why church monuments?

The survival of monuments, their recording over history, and the collective display within church buildings reveal how they can become of historical value to the community as well as professionals. The Church of England recognize the importance of church fabric (including monuments) and offer guidance on any activity that may affect them, such as restoration, removal or alterations (ChurchCare Guidance Note archaeology 2016; The Society for Church Archaeology ADCA Guidance Note 2013). Likewise, Historic England acknowledge the role of church monuments, highlighting the important role of monuments and human remains to both academia and the public, and drawing attention to their role in individual and collective identity, acting as a physical reminder of the dead (e.g. Bowdler 2011).

The definitions of identity given by the *Concise Oxford Dictionary of Archaeology* are 'the use of material culture to aid understanding of the definition and status of individuals and groups in the past' and 'the way in which archaeological remains are widely used in order to promote and support particular views of contemporary personal, local, regional, and national identity' (Darvill 2008: 205). This is supported by the study of the ninth-century Hilton of Cadboll Pictish cross-slab. James et. al. (2008) found not only evidence of multiple uses and reconstructions of the monument through its life-history, but also of its changing role in the construction and preservation of local and national identity. By studying its biography, they establish that through the ages the cross has been adapted and taken many forms, which contributes to its survival and numerous re-erections.

After being donated to the British Museum in the 1920s, there was protest at its movement out of Scotland and demand for it to be returned by Scottish antiquaries and politicians. This resulted to its move to the National Museum of Scotland, where it still resides. Interviews carried out highlighted that the cross-slab is important to the community's sense of social pride. It is considered as part of the identity of the village and as belonging there (James et. al. 2008: 257).

The enduring presence of church monuments in the community over generations, similarly to the Cadboll cross-slab, can evidence a shared local history, longevity and identity. Smith and Waterton (2009: 47) argue that 'memories need to be actively remembered, and thus memory needs to take root in the concrete object or site.' This concept of active remembering is shown via a concern for the survival and reverence of certain monuments. There are examples where churches purposely offer space to preserve and collectively display displaced material culture that form part of the history of the parish. For Cheshire, examples include St Mary's Acton; St Boniface, Bunbury; and St John's, Chester (Figure 1). Their significance can be encapsulated by Schofield et al.'s (2012: 302) portrayal of the relationship between the public and landscape: 'the local place is their own heritage, conceptualized in fabric, stories, and memories.' The parish church and its monuments form part of this local landscape, providing tangible, visual evidence and a focal point of a shared and established history in the parish, thus informing and perpetuating collective memory and identity. An example of this today can be found in St Mary, Kidwelly, Carmarthenshire. During the annual Remembrance Service, the names listed on two wall plaques are read out during the service, a case of the monument acting in both a visual and audial memorial role (Church Warden, personal communication, February 10, 2018). Whilst this could exclude those who are not from the local area, it does identify local narratives that visitors may relate to.

When considering the biography of monuments they can show numerous interpretations within local communities. They give meaning and memories via who they represent, their biography and the folklore surrounding them, assisting in evidence of an established and shared history and identity spanning generations. However,

despite this role, historically there appears a preference for elaborate monuments, such as effigies and effigial slabs where a human form is rendered, and particular importance given to older monuments or monuments of those who achieved significance status or fame. This may be due to their features, which are easy to humanize. Consequently, many other monuments within the church can be ignored by literature. Guides such as Pevsner (1971) incorporate only a small number of monuments recorded for each church. For example, for St Andrew, Bebington, Wirral, there are numerous wall monuments, brasses and reused grave covers in the floor and wall. However, nothing is recorded in Richards (1947) or Pevsner (1971). Similarly Pevsner (1971) only records the cross-legged knightly effigy at St Wilfred's, Grappenhall, Cheshire while remaining silent regarding its wall monuments and brasses. More specific literature on church monuments in Cheshire, such as Crossley (1924; 1939), heavily feature effigial monuments with other monuments given little attention. Is it time to encourage a systematic approach to all monuments on display within our parish churches?

Figure 1: St John's, Chester. Medieval monuments on display with information boards (photograph: Russell Cottier, 2018).

Current methods of engagement

An advantage of approaching church monuments for public engagement is that they are already situated within local communities, so those visiting local parish churches, either for spiritual means, a family association, or because of an interest in architecture or history, may have a sense of communal identity or interest with the building and its contents. Unlike museums where objects can be situated behind glass or rope, most church monuments are tangible and highly accessible. This gives an opportunity for members of the public to approach and 'touch' history, giving a physical connection to the past. Surviving monuments are also, for the most part, in their original intended context, a church. Though there may be movement within, and occasionally between, churches (i.e. the Smith monument at St Mary's, Nantwich). They form part of a wider mortuary landscape, which can include other monuments and burials both within the church or graveyard and other forms of memorials (such as plate, windows, pews, architecture). As such, context should be considered, monuments being in their original setting (if not *in situ*), and likely in the presence of other historical items, visually could help in making their function and history easier to interpret and understand. In contrast, there are examples of monuments that have been displaced and placed in museums or art galleries, such as The Duchesse de Nemours effigy situated in the Walker Art Gallery, Liverpool, alongside other sculpture. Observed in this environment, it is easy to approach the monument solely as an art form. Whilst this does ensure access to the monuments by the public, it does present the monument out of the context of their intended environment.

The Church Monuments Society, Society for Church Archaeology and Monumental Brass Society all offer events, annual journals and resources regarding church monuments. Although uptake is unlikely by those without an existing interest, such societies do ensure information is publically available to members and non-members. The Church Monuments Society offers a gazetteer, which gives a visual record of selected church monuments listed by church and county. This compilation is ongoing, and the gazetteer states that information and description is kept to a minimum: the aim is for a visual record. Whilst this ensures that interested

members of the public have access to the styles of monuments on display at regional churches, and information on the individuals or families they represent, further details such as position, inscription and history of the monument can be unavailable. However, what it does is provide a platform from which to identify monuments of interest, and support the organization of a visit, or further research. Social media also now contributes in the dissemination of information regarding church monuments. There are blogs and accounts that include information on church monuments and provides digitally accessible information (examples include Twitter accounts for Churchyard Sam, CB Newham and Sally Badham, and blogs such as Archaeodeath and Heritage Tortoise). Similarly, there are numerous recording projects, such as the Ledgerstone Survey and the Historic Graves Project. The Commonwealth War Graves Commission and War Memorials Online offer valuable online repositories for war memorials, which the public can search and suggest amendments and additions. Information submitted to War Memorials Online is shared with the Imperial War Museum's War Memorials Archive, Historic Environment Records and other heritage bodies to maximize accessibility. However, these repositories are each partial in different regards: they all exclude multiple categories of medieval and post-medieval monuments found within parish churches. It is important to consider the many monuments within parish churches that are unrecorded and those mentioned in written sources but no longer extant. Encouraging inclusive recording by both the public and researchers could ensure usually overlooked monuments are made accessible.

Possible impediments to public engagement

Baker (1999: 105) states 'the standard of presentation in many fine and interesting churches has not yet caught up with the era of the tourist as customer' and this still rings true, particularly in the case of church monuments. Whilst knowledge may be available orally to the local community, in Cheshire, information available on-site to the casual visitor can vary. What is available usually concentrate on the person memorialized, on the more elaborate or effigial monuments, those of renowned individuals or those of significant age. There are examples in Cheshire of small boards

displayed on some monuments, as at St. Boniface, Bunbury, St. John's, Chester (Figure 1) and St. Michael's, Macclesfield. Again, this information, usually only consisting of a sentence or two, has a tendency to focus on effigies. Other monuments, such as wall monuments, brasses or floor slabs tend to be overlooked. This limited information can result in the public overlooking the potential of other monuments in these buildings.

There are exceptions to this situation. St Bridget's, West Kirby, Wirral, has an on-site museum (West Kirby Museum 2018). Whilst detail and biographies of monuments are typically limited, early medieval monuments are given a visually prominent position (see also Williams 2016a). The museum gives the history of both the church and village, and includes many stone artefacts and reconstructed monuments, giving the public a view of how they would have originally looked. Further south, a later exemplar is the De Grey Mausoleum in Flitton, Bedfordshire managed by English Heritage. Tatham (2016) discusses the interpretation of this site and the need for sensitivity when displaying not only human remains but also funerary monuments. The interpretation scheme for the De Grey Mausoleum includes a mix of paddle boards, discreet display boards and a downloadable audio guide. Information focuses on the history of the family and the development in monument styles, ensuring the memory of the deceased and their lineage is continued. This non-intrusive and subtle way of providing information is effective, giving an option of both audio and written materials to visitors without impeding the intended use of space.

Research on the relationship between the public, archaeologists and the dead has discussed the ethics and sensitivities that should be addressed when dealing with human remains (see Sayer 2010; Tarlow and Nilsson Stutz 2013; Williams and Giles 2016). Whilst no human remains might be handled, and the monument is already on display, the same principles can be applied in the dissemination of information and engagement with church monuments to ensure the embodied dead are respected and dealt with appropriately. Interaction with monuments of those deceased within living memory, or those with descendants in the locality, need to be approached sensitively. Considering a monument as an educational resource could cause upset to those with an emotional attachment

to the deceased, whether that be due to a family or community connection. Whilst a monument may be disconnected from its original burial (and indeed may have originally been a cenotaph to a grave located elsewhere), they still can be perceived to represent a person. A survey undertaken by English Heritage (2009) found the majority of respondents agree that human bones should be displayed in museums, this number dropped significantly when human remains were identifiable to an individual. In the case of monuments, the commemorated person is usually identified. This potential issue could be addressed via consultation with the local community and careful consideration of the format of display.

From a practical point of view, public access to church monuments can be problematic. In theory, churches are available to the public and free to enter (Cathedral and Church Buildings Division, Archbishop's Council. Visitors and Tourists). However, in reality, visitors often come across issues with accessibility, including churches that are closed to visitors due to services, ceremonies or only accessible via prior arrangement with a key holder. This can be problematic to the casual visitor if a visit needs to be pre-arranged. In addition, due to the age and design of church buildings, changes may be required to ensure the church can be functional and accessible as demands change. Adaptation may be required to ensure access for all, providing ramps or toilet facilities. These changes may result in the destruction or movement of original features, including monuments, or result in them being moved out of public view as chapels are sectioned off for storage or other uses. A visual account of the monument before they are removed or relocated would ensure a record is available for those who are interested. In addition, dwindling congregations and lack of finances means some churches, and therefore monuments, are at risk. An example of this for Cheshire is St. Mary's Acton, where an unrepaired roof leak has resulted in significant damage to the face of the fourteenth-century alabaster Sir William Mainwaring effigy.

The environment in which church monuments are situated could also pose a challenge, due to religious sensitivities and the nature of the building as a place of worship. Unlike other historical or archaeological venues, some members of the public may be reluctant to visit a building that they view as a tangible

embodiment of religion, specifically Christianity. The 2011 census highlighted that the number of Christians in the UK are falling, despite it still being the largest religious group in the UK, with a quarter of the population identifying as not religious (Office for National Statistics 2013). More recently, the 2017 British Social Attitudes survey suggests that half the respondents identify as having no religion and approximately 6% as belonging to a non-Christian religion (NatCen 2017). Despite this, churches remain religious buildings, and often retain functions as active places of worship. Any exhibition needs to be sensitive in both use of language and spatial usage to ensure it does not cause offence or intrude on church events or those visiting the church for both spiritual and heritage purposes. Literature available to the heritage market could use secular terminology, rather than spiritual and specific religious terminology, to help avoid any issues regarding difference in beliefs.

The potential of monuments

Local stories of the monuments can give a glimpse of how they are perceived in the community and can contribute to the re-interpretation of monuments. According to Gazin-Schwartz (2011: 63) social groups 'own' folklore and that it has a role in how they maintain social identity. Local traditions and stories relating to monuments can support this, showing examples of how the community have interpreted and understood their local landscape. This is a valuable area of study. However, it may be beneficial to ensure information regarding church monuments distinguish between historical fact, past misinterpretation and folklore traditions, to ensure they are fully understood. Information provided can be factually incorrect or based on traditions that have no historical evidence to support them. A national example of this problem is the longstanding tradition that medieval cross-legged knightly effigies are taken to represent a 'crusader'. Although now dismissed, this interpretation is still occasionally referred to in church guides and information boards (Evans 1981: 292; Harris 2010: 430).

The 'Stanley boy monument' at Elford, Staffordshire offers a further example into the misinterpretation and folklore attributed to a monument. The small size, and a round object in the effigy's left hand, has led to a tradition that it represents the young John Stanley who died after being hit in the head by a ball in the fifteenth century. Its subsequent biography suggests that this may be a heart burial whose features, in this case the right hand held to the ear, may have been changed during restoration to support a local tradition (Oosterwijk 2010). Is this an example of the community trying to materialize a past inhabitant's story?

Similarly, a tradition at St Boniface in Bunbury, Cheshire states that Sir Hugh Calveley was a 'giant' and this information is included on a board next to his effigy. Cole in 1757 notes the story that locals believe Calveley ate a calf and a sheep a day due the size of his effigy (Rylands and Beazley 1917: 126). This story may be supported by his heraldry: a calf. In his biography of Calveley, Bridge (1908) also refers to Calveley likely being six foot nine inches tall, as this is the length of his effigy. Whether true or not, and no skeleton has been identified to confirm this; this is one example of a monument being active in oral tradition.

The nature of church monuments means that, on the surface, they mainly represent a selective group, with a bias towards male, gentry and nobility. They are lacking in diversity with regards to gender, ethnic minorities and the lower classes, who would not have been able to afford such memorials. Crossley's Cheshire survey (1924: 32) supports this. Ignoring those most decayed, he found twenty of the surviving medieval effigies represented the knightly class. Only eight represented women, plus four priests and two civilians. Saul (2009: 292) argues that when females are represented with a monument, the male associations dominate. Examples of this bias can be found in St Boniface, Bunbury, where a seventeenth-century grave slab commemorates Sarah Davenport. Other than her name and date of death, the remaining text relates to her husband. Similarly in St John's, Chester, an eighteenth-century wall monument commemorating Hannah Aldersey and Elizabeth Davies identifies them only in their roles of wife and daughter. In order to challenge the domination of the stories of the lives of upper class men, when researching information available,

monuments should be considered in a wider context rather than solely that of the life of the person they represent. Through the consideration of the interaction and practices of the community and surviving family, other voices can be heard from both the past and present community. This information may appeal to more diverse social groups, such as women or lower social class groups, and encourage further engagement with church memorials.

Returning to St Boniface, Bunbury, there is an example of a monument active in a narrative for someone other than the person commemorated. Situated high on the north wall of the chancel, there is a small wooden memorial board for Dame Mary Calveley (d. 1705). The inscription on her memorial board refers to money being left to 'sweep and make clean' the monument under which both Mary and her husband, Sir Hugh Calveley (d. 1648) (Figure 2), are interred. No monument to Mary and her husband remains: However in 1848 the vault under the fourteenth-century Calveley tomb chest and effigy was opened, and a coffin was found with the initials DMC attached, and which contained numerous large bones. Bridge (1908) suggests that the bones belonged to Sir Hugh Calveley who died in 1648 rather than his ancestral namesake who died in 1394. Dame Mary Calveley and her husband have become part of the biography of the older monument (Figure 3).

Those social classes not represented in church memorials may also be observed via graffiti or damage. An example can be found at St Mary's in Acton, where graffiti on the fourteenth-century Mainwaring effigy made by the boys of Acton grammar school (Emerton 2010: 33) gives visible memory not just an individual, but a collective group in the community. The damage caused to the monument leaves a lasting legacy of the boys' presence.

Moving forward with public engagement

The Church of England are clear on their stance towards public engagement with the fabric of church buildings when describing the parish church: 'They have overseen centuries of history, recording events and people of significance throughout these times. They tell our national story' (Cathedral and Church Buildings Division, Archbishop's Council. Learning and Education). This is a similar

Figure 2: Mary Calveley memorial board, St. Boniface, Bunbury, Cheshire (photograph: Russell Cottier, 2018).

Figure 3: Sir Hugh Calveley monument, St. Boniface, Bunbury, Cheshire. The Mary Calveley board is situated on the north chancel 'wall above doorway' (photograph: Russell Cottier, 2018).

approach to that of Church of England cathedrals, which promote the visitor experience (see Centre for the Study of Christianity & Culture) and regularly hold exhibitions, for example the current event at Durham cathedral 'The royal house of Saxon kings and saints'. Should churches also have an educational role, and highlight the significance and stories of their monuments and memorials? Churches are used for various communal uses and welcome visitors (Cathedral and Church Buildings Division, Archbishop's Council. Visitors and Tourists). An increase in visitors to parish churches might mean more donations, and help to fulfil any funding requirements regarding public access and visitor numbers. However, it must also not be forgotten that most churches are working buildings with a spiritual role, so any approach must consider this and be sensitive around its primary role.

To increase public engagement, clear and well-researched information should be readily available. As discussed above, currently this can be limited or not effectively available. By providing information that includes the biography of the church monuments, and how the community have reacted to and interpreted monuments over history, as well as considering the local history that can be traced through the centuries via its monuments, could ensure the public can see past them as solely a piece of sculpture representative of one individual. Whilst the majority of monuments represent the higher classes, they form part of a landscape to which all levels of society engage and react. Mapping the mortuary landscape across the church and how monuments may relate to other features within or outside the building, can add to the story bringing a dynamic element to their history. Church monuments can help narrate a local identity, to which the community may be able to better relate. This is in addition to national and international events, for example, the Sir George Beeston monument at St. Boniface, Bunbury, Cheshire, which delivers the narrative of the Spanish Armada via its inscription and imagery, to a small Cheshire village.

Richardson and Almansa-Sánchez (2015) argue that: 'public archaeology is not only a matter of working with communities or providing educational opportunities. It is about management and the construction of knowledge and the concept of heritage. Sharing your findings with the public is not 'public archaeology' by itself'.

By including the public with the initial research rather than solely sharing output, is a logical way forward in this area. With this in mind, the local community could be encouraged to share their local knowledge. This could be done via interviews, surveys or open days. Churchwardens and local residents can be a source of information regarding local history, and oral traditions regarding both the church building and its monuments. Churchwardens may have access to church documents that are not available publically. To consult and involve them with research and fieldwork would be beneficial.

What may prove useful for both the study of church monuments, and engaging the public, is to encourage systematic recording across the United Kingdom. This should aim to include not just elaborate monuments and effigies, those representing famous individuals or by particular sculptors, but a methodical record of all monuments within each parish church. Records could include digital materials such as online photographs and videos in addition to text including monument details, biography and folklore. By providing information in this format, those who are geographically distanced or have accessibility issues will have quick access to online information. There are examples of local and borough councils receiving funding for similar community projects such as a cemetery interpretation projects (Wrexham Council 2015), or recording war memorials (Aberdeenshire Council Archaeology Service War Memorials Recording Project). From a community archaeology aspect, as mentioned above, volunteer recording projects such as the Norfolk Medieval Graffiti Survey have been successful. Currently it appears that community projects run by councils and archaeological organizations are not taking advantage of church buildings and their interior monuments.

There are databases available, such as Historic Environment Records (for example Revealing Cheshire's Past and Archwilio). Community projects could work in conjunction with HER officers to ensure monuments in their local church are listed. This in turn gives opportunity for wider access via Historic England's, Heritage Gateway. Currently HERs are not being utilized in regards to church monuments: for example, a search for 'effigy' on the Cheshire HER returns only four results, each of which are scantily mentioned within a description of the church in which they reside. Whilst

other databases such as National Heritage List for England exist, unfortunately they only include listed or scheduled buildings and structures, omitting the majority of church monuments.

Alternatively, there may be a need for a database similar to the Portable Antiquities Scheme database, or a wiki platform, which encourages the continuing voluntary recording of church monuments by members of the public and professionals. The benefits of a purpose built church monument database would be that the data entry template could be purposely designed to ensure a systematic record is kept, acting as a complete repository. In order to ensure information is accurate it could be beneficial for local history and archaeology societies or universities to take responsibility for monuments listed in their area, moderating content before it is published. Whilst pressures in higher education may mean this may not be widely attainable, there are examples of universities, such University of Chester, that offer community outreach and partnership with local authorities for archaeology projects as part of their programmes (CAER). Alternatively, if the Church Monuments Society, Society for Church Archaeology and the Church of England were consulted, the result could be a nationally supported and official database. If funding is successful this could be purpose built, or alternatively hosted by an existing national society website. Visitors could access this database prior to, or during, a visit to a church for information on its monuments.

The Church of England do offer funding to parish churches for conservation and repair, in 2016 £25,750 was awarded for monument conservation (Cathedral and Church Buildings Division, Archbishop's Council. Grants Report 2016). Unfortunately, this does not extend to community use of the church, and research. If an accepted database of information on church monuments is freely available, these materials could be used by parish churches to display information alongside monuments in order to encourage visitors to engage with them as an educational resource. The Heritage Lottery Fund offers grants for community and heritage projects in addition to money for both repair and restoration. Such projects could result in the gathering and exhibiting of local information on parish church monuments, which in turn be made available to the wider public via digital means. Traditionally, notice boards are a

standard way of displaying information in heritage environments. Due to the primary purpose of the parish church it might not be viable to display numerous information boards due to lack of space or other constraints. Audio guides are another method used in heritage sites for disseminating information, which may be a useful option for churches, as they should not impose on other users of the church. Parish churches could follow the De Grey Mausoleum example and produce downloadable audio files for visitors rather than providing hand-held audio device. Meaning information can be provided that does not require costly devices and take up space. An alternative could be the use of quick response (QR) codes. These discreet barcodes take up little room so will not impose or change the environment within the church. The QR code contains data, such as a URL, and can be scanned by smartphones, taking the user to a webpage containing information on the object. Though not without their disadvantages, which are discussed below, this would be a way of solving any sensitive issues around the use of the building, whilst providing information to the interested visitor.

Rapid growth in digital technologies offer opportunities for further interaction and broaden the dissemination of materials to a wider range of learning styles. King et.al (2014) survey results found digital tools enhanced public experience in an number of ways, including 'encouraging input from visitors, and the possibility for dialogue' and 'encouraging a new type of relationship… through greater interactivity'. Augmented reality (AR) is increasingly being used by education and heritage organizations in order to engage and attract younger visitors. In June 2017 Cadw introduced the game 'Little Dragons', a game in which the public can 'catch' hidden dragons across CADW sites. In another initiative, Big Heritage successfully incorporated a heritage trail into a Go Pokemon event held in July 2017 as part of Chester Heritage festival. Such strategies are not beyond critique: Eve, for example, argues that such use of AR does not engage people with heritage sites (Eve 2016). However, if interactive attractions and games attract people to visit a heritage site, engagement can follow. A possible example of using AR technology to engage church visitors is to digitally colour situated church monuments to give a view of how they originally looked, before restoration or general wear resulted in the majority of monuments becoming colourless. Similarly, Elgin

Cathedral, Scotland have worked with Napier University to create a light projection onto a Bishop's effigy, giving the viewer a taste of how it originally looked (Morrison 2018). Norton Priory uses digital touch screens for visitors to interact with its monuments, to see how they would have looked (for further discussion see Williams 2016b), though this not be viable within a parish church environment due to space constraints. Whilst AR may presently be costly for parish churches to implement, this could be of significance in the future.

The use of digital technology can have its disadvantages. Rural areas can suffer from limited broadband connection, with Ofcom reporting in 2017 that 17% of rural areas have no decent broadband (Ofcom 2017). However, improvements are continually taking place, such as the agreement between the Church of England and the government for church spires to be utilized in areas with limited 'digital connectivity' (The Guardian 2018). It is likely that work in this area will continue to push forward. In the meantime, additional information being available via other means (e.g. paddleboards or audio guides) would be beneficial.

Richardson (2014) highlights a number of user digital inequalities relating to the public's engagement with digital archaeology, such as demographics and socio-economic factors. Ofcom currently reports that the percentage of adults' offline increases with age (Ofcom 2018). This highlights again the need for a multi-faceted approach to displaying and access to information to ensure no disadvantage to those without use of a smartphone or internet access. However this issue appears to be narrowing, Ofcom also report that 74% of adults now use a smartphone (Ofcom 2018). Regarding demographics, Woolverton (2016: 141) argues that the majority of active community projects and archaeology societies peak in the age range 51–60. So whilst there may be an issue with the older population accessing online materials, it suggests that younger generations do need to be encouraged to engage in such activities. The use of digital technologies in archaeology and heritage environments may encourage younger generations, widening these demographics.

Conclusion

There is still much work that could be undertaken regarding the collection and display of information concerning parish church monuments. It is clear that monuments form an important part of the publicly accessible historic landscape. The study of church monuments has the potential to support research into theories of identity and belonging, and their biographies can give minority groups an observable history by giving an opportunity to observe those other than the usually represented male gentry or nobility via, for example, folklore or graffiti. Communities could be encouraged to share their local knowledge and this knowledge collected and recorded.

The interpretation of monuments, their stories and associations can help establish a shared and owned history for local communities. To this end, local communities should be encouraged to share their knowledge and this information collected and recorded by advocating community volunteer projects or local history and archaeology societies. Furthermore, once this information is available digitally, it would ensure reliable, easy to source information is available for both public and church use. A database that collects local knowledge and traditions, as well as historical evidence, and goes beyond simply who the monument represents and its artistic style would be invaluable.

Despite the potential benefits of the discussed technologies, funding and accessibility may be a persistent issue. However, new interpretation strategies should be considered for when opportunity arises. Technology and public engagement has great advantages and it can only be beneficial to apply them to the monuments within parish churches.

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After Life: Engaging Museum Visitors with the Theme of Death and Remembrance

Ben PAITES and Emma REEVE

Colchester and Ipswich Museums

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Abstract

In August 2015, three pottery vessels were discovered in the River Colne in Colchester's Castle Park. After discussion with the local Hindu temple, these objects were identified as Hindu vessels used during death rites, and subsequently they were entered into the collection of Colchester and Ipswich Museums. These finds acted as a catalyst for an exhibition called After Life*, which deployed the wider museum collections, including its archaeological artefacts, to explore how people engaged with death in the past, and how they continue to do so, through the themes of Body, Soul and Mourning. This article outlines the public engagement activities conducted during the development of the exhibition, an overview of the exhibition itself, and a discussion of the 'Death Café' public event, which took place in the museum during the run of the show. As such, the article offers a case study in public mortuary archaeology in the museum environment.*

Keywords

death, exhibition, museum, mourning, Hindu

Introduction

Following Colchester Museums' acquisition of three vessels associated with Hindu death rites, curators Ben Paites and Emma Reeve created an exhibition that explored the material culture surrounding death and what follows. The exhibition *After Life* showcased fifty objects which collectively explored the ways in which people in Colchester have dealt with death in the past and today.

Due to the sensitive nature of the topic, it was important to consider all current debates on the display of human remains, which are discussed further in this article. The museum teams responsible for the exhibition drew on these studies and their findings when making the decision whether to include human remains in the display.

A key aim of all exhibitions at Colchester Museums is to engage with, and display objects from, the stored collections. The designated archaeology collection is wide ranging, with particular strengths in the Iron Age and Roman periods, due to the central role played by Colchester as the place that urban life in Britain began (Crummy 1997: 5). Many objects from this designated collection are on display in Colchester Castle Museum, but Colchester curators often use exhibition spaces in the other venues to experiment with how this collection can be interpreted in new ways. This, along with the recently created combined role of 'Collections and Learning Curator', has encouraged exhibitions that explore multi-disciplinary themes, involving artefacts from a range of periods and places in the Colchester area.

This article reviews the research conducted in preparation for the exhibition, and the display itself. It also examines how the curators considered the well-being of visitors by providing opportunities for feedback and reflection, alongside a supporting event during the exhibition's duration (5 May–30 November 2017).

Museum context

Colchester Museums are part of a local authority museum partnership between Colchester Borough Council and Ipswich

Borough Council. Colchester and Ipswich Museums (CIMS) is the largest museum service in both Suffolk and Essex and plays a high-profile role in the East of England museum sector.

The museums in Colchester are:

- Colchester Castle: Built on the foundations of the Roman Temple of Claudius, it is the largest Norman keep ever built. This popular museum displays Colchester's nationally important collection of Roman archaeology.
- Hollytrees Museum: This is a Grade 1 listed Georgian townhouse telling the story of Colchester's people since 1700.
- Natural History Museum: Housed in a medieval church, the museum focuses on the rich natural history of north-east Essex. Popular with local families, it highlights key messages about wildlife habitats, biodiversity and climate change to encourage discussion and sustainable living (CIMS 2018).

In the financial year 2016–2017, the three museums in Colchester received 169,777 visitors. The core of Colchester Museums' collections consists of field-collected material, predominantly archaeology and natural sciences. For new acquisitions, the service focuses on collecting items with a demonstrable link to the local area, as informed by its Collections Development Policy (Colchester Borough Council 2018).

Of the three museums, the Castle alone has displayed mortuary remains (see Williams 2016 for one recent discussion of the range of cremated human remains on display). Over the years, the permanent displays have changed multiple times, and in the current iteration the remains are usually situated within excavation groups to place them within their archaeological context. Less contextualized remains have been re-arranged: for example, until 2010 the Castle had an isolated Egyptian Mummy on display with little contextual information. This mummy has now moved to Ipswich Museum, where it is displayed more appropriately as part of a gallery focussing on Ancient Egypt. The mortuary displays in the Castle attempt to accurately represent the rich history of Colchester.

Hindu vessels

In August 2015, a member of the public contacted Colchester Museums stating that they had spotted several ceramic vessels in the River Colne in Castle Park, in which Colchester Castle in situated. Due to the town's rich heritage and the location of the river just outside the Roman walls, he wondered whether they may be of some antiquity, and therefore of historical significance.

Ben Paites (at the time Finds Liaison Officer for Essex) attended the site with Emma Hogarth (at the time Conservation Officer for Colchester Museums) to inspect the items. Due to the clarity of the river water, it was possible to determine that no deposits of any kind remained within the vessels themselves and so it was deemed acceptable to recover them for further inspection, without danger of losing any contents (Table 1).

Table 1: Vessels recovered from the River Colne.

Object no.	Description	Dimensions
1	A red ceramic vessel with fine grainy inclusions. The colour is likely a result of iron rich clay. The vessel is roughly circular in shape with a flat base, flaring up to the rim. The rim is pinched in five places, where there is evidence of sooting on the internal surface. There is also sooting on the internal surface of the base. A series of alternating yellow and green vertical lines have been painted around the rim of the vessel.	Diameter – 115.71 mm Height – 55.07 mm
2 - 3	Two buff ceramic vessels with very fine inclusions. Both vessels have a flat base and flare towards the rim. The rim is pinched at one point on each vessel, with sooting on the internal surface of this area. There is also sooting on the internal surface of the base of the vessels.	Diameter – 74.66 mm Height – 32.20 mm Diameter – 76.28 mm Height – 33.34 mm

Ben recognized the items as Hindu offerings (Figure 1), having encountered similar objects in his previous role working with the Portable Antiquities Scheme for the Museum of London. This was because Hindu objects and vessels are regularly found along the River Thames foreshore and were often shown to the local Finds Liaison Officer, given that the river is used by London's Hindu community for various ceremonies (Gould 2005). The context of the Colchester offerings was not yet apparent, so it became a priority to find out more about them before deciding what action to take next.

Ben contacted the Tendring and Colchester Minority Ethnic Partnership, who informed him of the existence of a Hindu Temple in Clacton-on-Sea, near Colchester. Mr and Mrs Karia, who run the Temple and Hindu Cultural and Heritage Centre out of their home, were very accommodating and agreed to meet Ben and look at the vessels. They were able to identify them as funerary items by the context in which they had been found. They explained that Hindus burn ghee (a type of butter) in vessels called *diya* as part of the thirteen day funerary ritual *sraddha,* which is also described by Firth (1997: 93–112). The Karias said that biodegradable vessels, often made of leaves (Figure 2), are used as part of the ritual and are subsequently placed into a body of water (usually a river). As the Colchester vessels were made of fired clay, the Karias believed that this indicated an individual or individuals performing an improvised version of the death rites, perhaps following a sudden or unexpected death.

These vessels represent an important part of Colchester's recent cultural history. In 2011, there were 1274 Hindus in Colchester practicing at home or at the temple in Clacton (Colchester Borough Council 2013). However, these vessels represent the first documented Hindu funerary practices in the town. In 2011, 0.7% of the town's population was Hindu (Colchester Borough Council 2013), but the museum's collection did not include any objects representative of this community. It was unanimously agreed through the Museum's Collections Working Group (a group of museum staff who make decisions on potential acquisitions amongst other collections-related tasks) that the Hindu vessels ought to be acquired into the collection. As the original owner was unknown, guidance was

Figure 1: The vessels recovered vessels from the river Colne.

Figure 2: Hindu leaf bowls.

sought from the Hindu Temple in Clacton as to whether it would be acceptable for the museum to keep the items. They agreed it would be appropriate, and that they would provide support to the museum in interpreting the items sensitively. Colchester Borough Council, as the landowner, was consulted and agreed to the items entering the museums' collection, transferring legal ownership.

The discussions surrounding these objects at Collections Working Group inspired the curatorial team to think about the ways they might be used in an exhibition. Due to their likely funerary associations, it made sense to further explore the potential of these artefacts as constituting part of a new death-themed exhibition. While all three Colchester Museums contain objects relating to the broad theme of death (human remains in the Castle Museum, mourning jewellery in Hollytrees Museum and mounted taxidermy in the Natural History Museum), the nature of this material and the emotional impact it may have on people is not addressed in the permanent displays (cf. Williams 2016).

It was decided that Hollytrees Museum was the ideal location for an exhibition of this type. This was partially due to the size of the space required: it was the largest available temporary display space of all three museums. Hollytrees Museum also has permanent displays focused around the social and community history of Colchester, making it an appropriate venue to explore the social and spiritual elements of death.

Preliminary research

As Colchester has a particularly strong Romano-British archaeology collection, this seemed an obvious starting point to explore past attitudes to death. However, we also wanted to cover a comprehensive sample of mourning traditions throughout history, so it was necessary for both curators to gain a greater understanding of approaches to death in other periods and in the present day.

This was embarked on in a variety of ways. Firstly, we revisited the Hindu temple to gain further understanding of how the vessels found in Castle Park were used and how they relate to wider Hindu

funerary practices. It became clear that Hindus living in Colchester had to adapt their usual practices to suit local availability of resources, a tendency also noted by Firth (1997: 109). We were wary of displaying the vessels found in the River Colne as an anomaly without contextualising them within the normal practice of the Hindu faith. To address this, the Hindu temple kindly loaned a range of objects that related to the funerary practices currently undertaken by local Hindus, as well as several items relating to other Hindu death rites.

Another part of the preliminary research for the exhibition included a visit to Colchester crematorium and cemetery. The curators spoke with Penny Stynes, manager of the site, who is familiar with current trends in burial practice in Colchester. Seeing the crematory (incinerator) and cremulator (a machine used to grind cremated bone into ash) in action allowed for a greater understanding of the nature of processing human remains in the modern world. As one aspect of the exhibition was focused on the body, it was important to gain an understanding of how practices persist into the modern day and how practical choices like disposal of the body are still an important factor when planning a funeral.

Exhibition development

A key purpose of museums as stated in The Museums' Association's 'Museums Change Lives' policy is to 'enhance our quality of life and improve our mental and physical health' (Museums Association 2017). This same policy also states that museums are not neutral places and thus can be instrumental in helping the public tackle difficult and sensitive issues. Death is one of these issues and is often remains a 'taboo' subject for many, as demonstrated by a 2014 poll conducted by Dying Matters. The poll found that only 21% of people in Britain had discussed their end of life preferences with friends and family (Dying Matters 2014).

As the subject is one of few universal human experiences, it was very important for the exhibition to be inclusive, academically, emotionally and culturally. This was addressed in large part by the exhibition text, a central component of any exhibition's

interpretation. At Colchester Museums all display text is reviewed in a 'text group', a selection of staff from different museum teams who work together to ensure that a consistent 'voice' is maintained across text in our venues. We aim for all text to be easily readable by a child aged twelve or older, with specialist language only included if it is comprehensively explained. With this exhibition, it was especially important that complicated and difficult themes could be discussed in clear simple terms.

Due to the exhibition's sensitive nature, a decision was made to include information about support networks for the bereaved prominently in the main introductory text. However, visitors do not always read all the exhibition text, and as a result may miss key themes and narratives. A large proportion of the visitors to Hollytrees Museum are either young families or older people (Visitor Finder 2018). For these reasons, it was considered important to ensure that the different sections of the exhibition were well defined and to make sure that each object's relevance was clear without the use of a large amount of text.

Displaying human remains (or not?)

One of the first discussions within the exhibition team was whether to display excavated human remains. The debate over whether to display human remains in museums has been ongoing for some time and continues to be a subject where public opinion remains an important indicator as to best practice (Antoine 2014: 6). The policy at Colchester Museums is to display human remains only if absolutely necessary (i.e. the narrative of the display would change significantly without their inclusion) and, if included, curators must be sensitive in the display methods chosen. This is in line with current museum best practice (Nightingale 2015: 20–25).

The curators wanted *After Life* to highlight the materiality of death (as discussed by Fahlander and Oestigaard 2008: 4), and it was felt that including human remains in such an object-focused exhibition could result in them being dehumanized. This is only one issue of a wider debate on displaying modern human remains in museums, which started in earnest as a result of the Body Worlds exhibition, and expanded to include archaeological collections (Sayer 2010).

Uli Linke acknowledges that displaying anonymous human remains can have the effect of 'negating their humanity' (Linke 2005: 18) and the remains considered for display in this exhibition (Roman cremated remains) would be anonymous. The curators were also keen to consider cremated remains in the same way as they would an intact cadaver, in contrast to a tendency identified by Williams (2016: 295) of museums treating intact bodies with more respect.

Linke also says that the shock of seeing human remains on display can have the potential to evoke 'emotional anaesthesia' in visitors (Linke 2005: 19). As one of the main focuses of the exhibition was for visitors to feel comfortable exploring emotions surrounding death, the curators decided to only use objects where human remains were integral to their physicality, for example Victorian mourning brooches made with human hair.

Colchester Museums follow Hein's constructivist museum model in which people are integral to knowledge, and as a result, each visitor will create an individual understanding of a museum object/display related to their own lived experiences (Hein 1996: 30–37). Graham Black acknowledges that 'people relate to people', so context is of utmost importance, particularly in displays including archaeology (Black 2005: 276). For this reason, *After Life* was structured thematically around the recognizable stages involved in death and mourning.

Exhibition design and production

All exhibitions at Colchester Museums are designed to reuse as much display material as possible and fabricate the design to incorporate it in to a new theme. All cases and internal display stands had been bought for previous exhibitions, along with the temporary wall structures and lighting.

It is also worth noting that all display material, including vinyl-cut lettering for wall text, titles and interpretation, mounted and printed object labels and exhibition handouts are designed and produced in-house by the Exhibition and Display Team. All installations were carried out by this team alongside the Collections and Learning team, which meant that the only costs incurred were for materials.

Exhibition structure

The exhibition was split into four sections: 'Body', 'Soul', 'Mourning' and 'Death in Hinduism.' This draws on Howard Williams's reconfiguration of Metcalf and Huntington's interpretation of Hertz' theory of death as transition involving the relationship of mourners, the body and soul (Williams 2006: 21). It was organized along the same lines as Leeds City Council's *Dying Matters* exhibition, which also contained a similar range of objects from across archaeology and social history collections (Leeds City Council 2016-17).

The first section of *After Life*, 'Body', gave a brief overview of the physical methods used on dead bodies in Colchester (i.e. inhumation or cremation) and each method's prevalence at different historical periods. This section of the exhibition functioned mainly as an objective contextual platform from which the subjective themes of spirituality and human behaviour could build upon.

As Britain's oldest recorded town and once the capital of Roman Britain, Colchester has a wealth of Roman material relating to funerary practices (Crummy 1993: 257). This includes a great number of vessels used to contain cremated human remains. The curators decided to focus on the types of container used to carry the remains of the deceased during this period. The juxtaposition of a locally produced greyware urn (an 'affordable' vessel) with an imported glass flagon (an expensive vessel) showed the presence of cremation in different social classes in early Roman Britain.

Colchester Museums has in its collection a number of Roman lead coffins, which would have been useful illustrations of Roman inhumation practices. However, the display space available in the exhibition was limited. Therefore, a Roman coffin nail was included in the exhibition, in order to represent the gradual transition from cremation to inhumation, which occurred in greater frequency during the third and fourth centuries AD (Crummy 1997: 108; Petts 2016: 669). Another object included in this section of the display was a burial ticket that dated to 1754, which invited the receiver to accompany a dead person's body from their home to the church, where the body would be buried. The exhibition text accompanying this object accentuated the links between Georgian funerary practices and the British custom of bringing a dead person

in a hearse to their former home, before continuing with the family to the place of interment, which is still prevalent today (Penny Stynes, pers. comm.).

The 'Soul' section addressed the spiritual realm of death. Although museums have for a long time been viewed as secular institutions (Duncan and Wallach 1980: 450) they can provide a neutral space where people may engage with spiritual concepts. As a theme, 'Soul' had the potential to be much more complex than its allocated physical space allowed within the exhibition, so we chose to focus on two groups of objects. The first were Roman grave assemblages, including a knife, flagon and jewellery (Figure 3). These were used to represent the idea that Romano-British people might have believed that items included in the grave would follow the person into the afterlife (Toynbee 1971: 53). These objects were also used to illustrate the tradition of feasting with the dead, and the relationship of Roman-period beliefs and practices around death to the concept of a continuation of life post-mortem. A medieval illuminated manuscript, Graduale ad usum Ordinis Sancti Benedicti (Accession number - COLEM:1932.221, p. 1R), which included the Requiem Mass (mass for the dead), demonstrated the medieval view of death as a step into another realm: from Earth to Heaven.

The 'Mourning' section of the exhibition was split into three smaller subsections; 'Mourning in the Victorian period', 'Memorials', and 'Collective Mourning.' Following his early death in 1861, Queen Victoria's mourning of her husband Prince Albert resonated emotionally with the people of Britain and the British Empire, which resulted in widespread religious and quasi-religious behaviour rarely seen before (Wolffe 2000: 196). The subsection 'Mourning in the Victorian period' showed objects relating to Prince Albert's death (e.g. a commemorative silk ribbon) alongside items which aimed to represent the widespread costume conventions and rituals of mourning which were observed at the time, such as jet brooches and jewellery containing human hair taken from the deceased.

The wearing of jewellery made with human hair, represented in the exhibition by a Victorian example (Figure 4), originated in the seventeenth century (Amnéus 2006: 64). There is extensive evidence for the use of human remains carried on the person in the form of reliquaries, including human hair, as far back as the

early medieval period (Hills 2011: 16). In fact, early Christians had a fascination with people or things that could have once been physically connected with Christ. These items were thought to be imbued with a special significance and thus were highly sought after (Klein 2010: 56). Bachmann (2017: 85) writes that hair jewellery represents a 'private communion between the wearer and the deceased' because only the person wearing the jewellery has intimate knowledge of their relationship with the dead person. There has recently been an increasing prevalence of the use of human remains, such as hair and ashes from deceased loved ones, in the creation of jewellery (Penny Stynes pers. comm.). This was referenced in this exhibition by a pendant containing human ashes in resin created in 2016 (Figure 5). Although methods of creation of such objects may have changed, the principle of keeping a part of a dead loved one close to the living has persisted.

Figure 3: A Roman grave group on display in the exhibition.

Figure 4: A Victorian brooch with Human hair.

Figure 5: A silver pendant made using human ashes encased in resin.

As Parker Pearson (1991: 124) notes, the way we choose to dispose of the dead can be both a conscious effort to remember and forget their lives. A significant section of the exhibition looked at the ways in which people in Colchester have chosen to remember the dead in memorials. The concept of a memorial is intrinsically tied to physical things, sometimes imbuing everyday items with powerful emotional charges. The inclusion of a Roman memorial plaque created a link to the tombstones of today, as well as bringing attention to the rates of child mortality in Roman Britain – to illustrate this point a plaque was included in the exhibition to commemorate a woman and her young child.

The 'Collective Mourning' subsection included a modern paper remembrance poppy with information about Armistice Day: an annual act of collective international mourning. These items were displayed alongside tributes left at Colchester's war memorial after the death of Princess Diana. These objects were chosen to demonstrate how people come together to experience loss, and not just to remember the war dead.

The 'Death in Hinduism' section of the exhibition centred on the original vessels found in the river by the authors, and other items which were on loan from the Hindu temple. This section of the exhibition demonstrated its relevance to present-day Colchester by highlighting the practices of a small local community. The case was arranged to emulate the layout of the Hindu temple in Clacton. The objects formed a powerful display (Figure 6), showing the many elements and stages associated with Hindu mourning practices. The vibrant colour in many of the items provided a stark contrast to the darker tones of other areas in the exhibition, such as the Victorian section. By drawing attention to the juxtaposition between the views of death explored in previous sections of the exhibition, and the Hindu belief in reincarnation, it was hoped that discussion and debate could be initiated with museum visitors.

Other exhibitions about death, such as Bristol Museum and Art Gallery's 'Death and the Human experience' (24 October–13 March 2016), provided visitors with a space to reflect upon what they had seen. Luckily, the temporary exhibition space in Hollytrees is in a small quiet room, already a 'safe space' for quiet reflection. We also had an exhibition journal, which we invited visitors to fill with

memories, thoughts and feelings triggered by the exhibition. Initially conceived as a similar device to an exhibition comment book, this journal soon started to take on a more personal and emotional nature. As it was not structured like a traditional comments book, with spaces for names, addresses and comments, visitors began to share their experiences and thoughts on death with each other (Figures 7 and 8) by replying to, and/or challenging other people's comments. The evolving nature of the journal led the curators to see it as an important insight into the way people visiting the museum could engage with an exhibition about a challenging topic. These insights could then be used to inform future exhibition programming, and better understand the needs of visitors to such exhibitions. Therefore, Collections Working Group at the museum will now consider the journal itself for accession into the permanent collection.

Figure 6: The display case for the "Death in Hinduism" section.

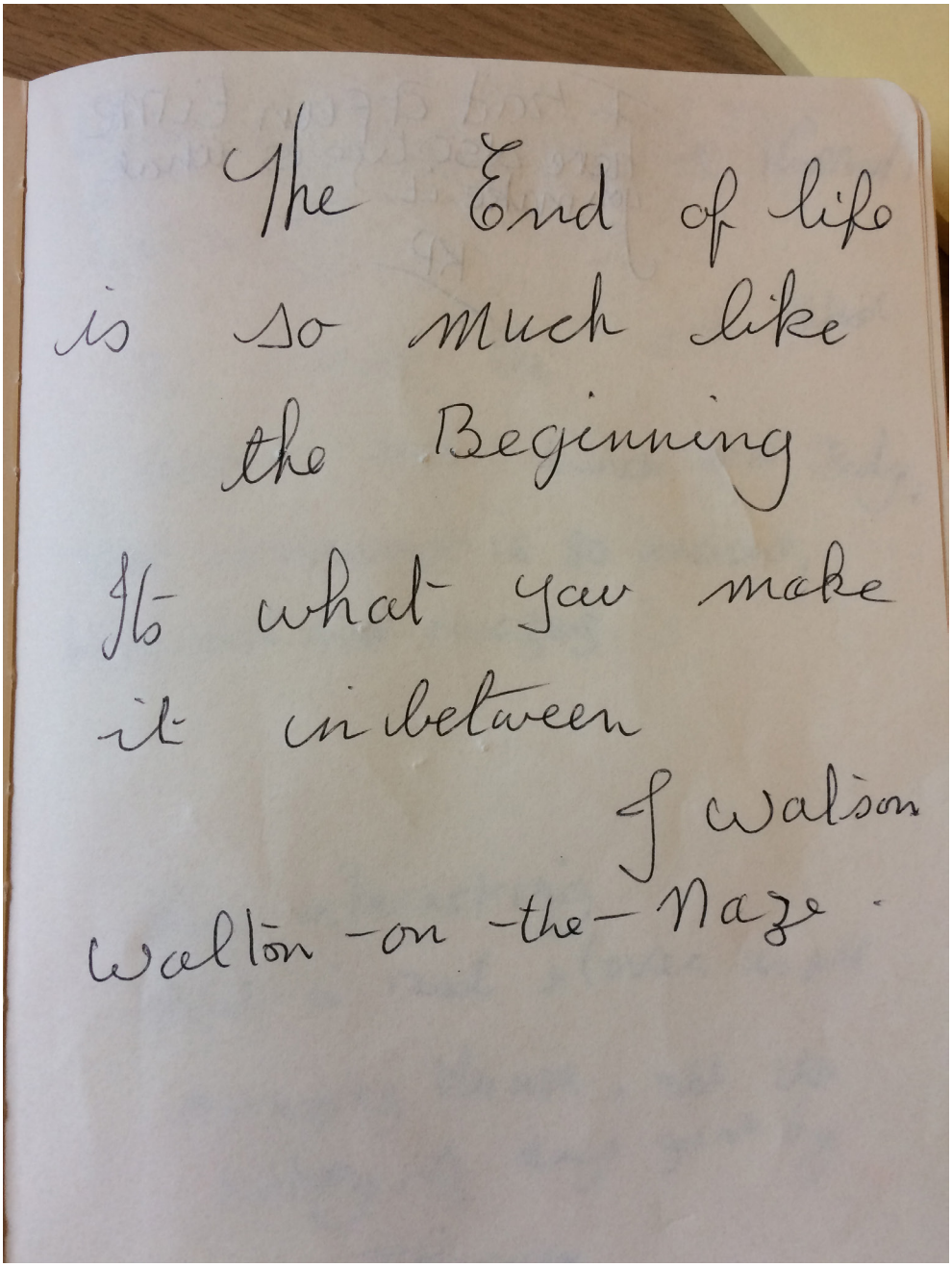

Figure 7: An entry in exhibition journal.

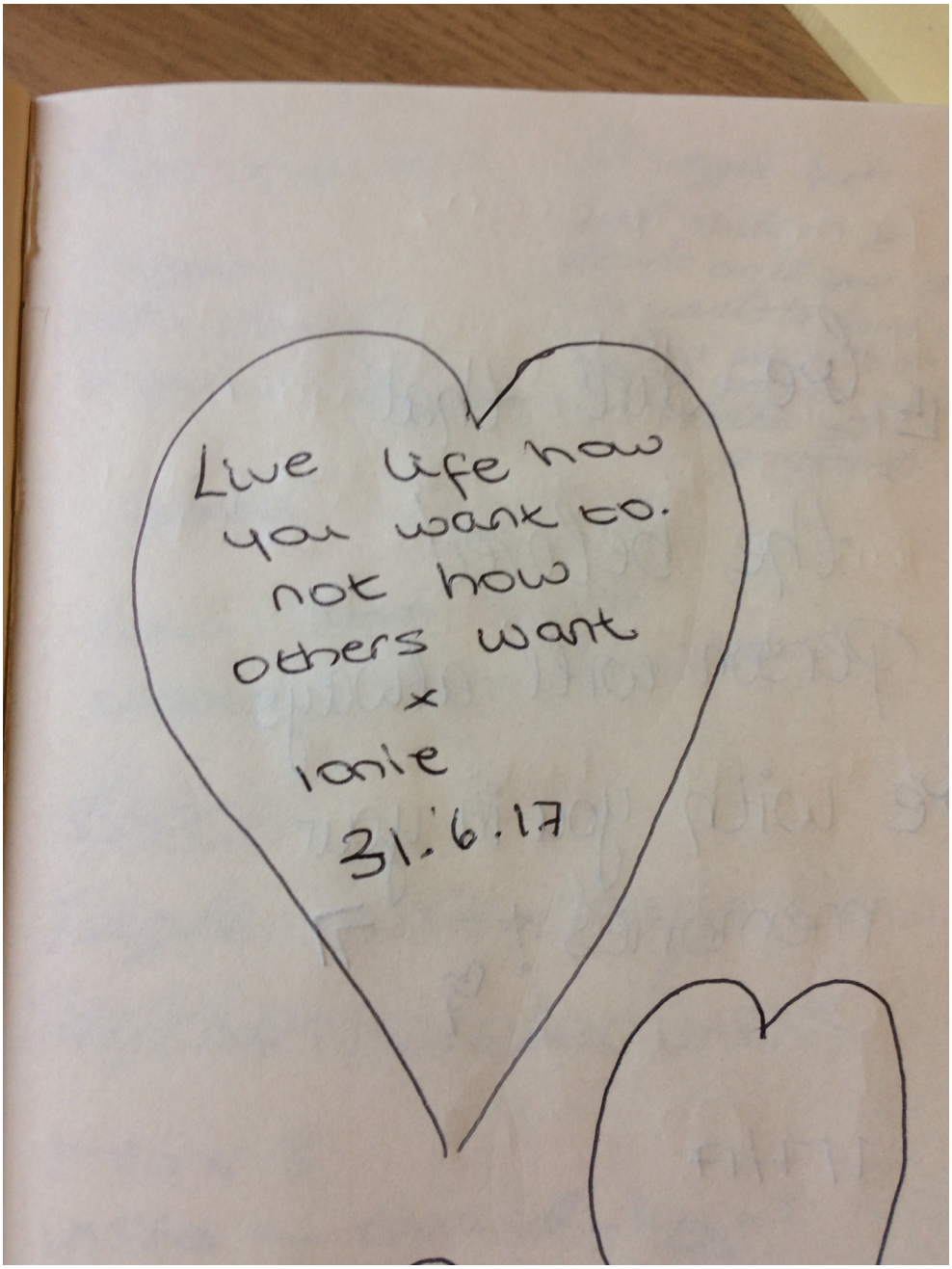

Figure 8: An entry in the exhibition journal.

Public engagement: Death Café

Lois Silverman acknowledges the importance of museums as providers of a kind of 'social work' surrounding death (Silverman 2010: 85). The 'Museum of the Mind' report by Culture Unlimited draws attention to museums as places of sanctuary and how this can underwrite mental well-being (Culture Unlimited 2010). With this in mind, it was decided that the museum should host an accompanying event to the exhibition, which would provide visitors with a safe space to speak openly about death. This approach is also aligned with the philosophy of the 'Death Positive' movement, which is spearheaded by the Order of the Good Death: a collective of death professionals from across the world. One of the key beliefs of this movement is that the culture of silence surrounding death in the Western world is damaging to society and should be challenged (Order of the Good Death 2017).

Related to this, Death Café is a worldwide movement established in 2011 in which people come together over tea and cake to start a conversation about death and dying (Death Café 2017). The curators decided that this event would work well in the available spaces at the museum. Freedom Funerals and KAT Marketing, both Colchester-based companies, ran a previous Death Café in Colchester in February 2017. Emma approached these companies for advice and support on hosting a Death Café at the museum. The event took place in June 2017, and was attended by seventeen people. Elements of the event were discussed in depth beforehand, including how to lay out the room to help visitors feel most comfortable in what, for some, could be an intimidating situation. Death Cafés are normally hosted in more informal spaces such as cafes, so a 'café-style' layout was decided on and created in the museum's education room. Cakes and refreshments were kindly provided by Waitrose Colchester, who had been sponsoring the museums' adult event programme for some time previous.

During the event, conversation focused mainly on the practicalities of death: costs of funerals, embalming, coffins and cremation. Lee Jaschock from Freedom Funerals, who hosted the session, was very happy to answer questions. Participants came for a variety of reasons, but most had in common the experience

of a recent loss of a loved one. Verbal feedback collected from attendees after the event suggested that they enjoyed having the space and encouragement to speak freely about death and people to discuss it with. Most participants had also come specifically for the event, rather than the exhibition, but many did go on to see the exhibition after taking part in the Death Café.

Conclusion

Many of the objects in the collections that relate to death on permanent display at Colchester Museums may not evoke emotional engagement. Therefore, the choice of exhibition sections in *After Life,* stemming from the human experience of death, allowed visitors to explore the collections through the viewpoint of their own lived experience. The object stories are given greater resonance by displaying them in this way, as is shown through the responses written in the exhibition journal. Moreover, *After Life* achieved dealing with death effectively and across multiple periods of the human past without the deployment of human remains.

Although many exhibitions have visitor feedback or comment books, the presence of a journal to allow visitors an emotional outlet during their visit was something new for Colchester Museums. Visitors were more willing to share their emotional reaction to the displays when provided with a specific form of recording this in the journal. The accessioning of this journal is also something new to the museum service, validating the views and reactions of visitors to the exhibition, along with their personal stories.

The response to *After Life* was incredibly positive, with a diverse range of visitors of all age groups sharing their own emotional experiences. The Death Café event added an extra layer of emotional connection to the exhibition, allowing people to supplement the themes explored with examples from their own lives.

The decision to omit human remains from the exhibition was not questioned in the visitor responses. Whether the absence of human remains allowed visitors to engage with the objects on a greater emotional level is impossible to determine. Comparing it to

an exhibition that did include human remains and had a journal to record visitor feedback would be perhaps the best way gauge the impact of presence of human remains on the visitor experience.

Future exhibitions covering similar topics could include similar means of capturing visitors' emotional responses, in order to understand the impact they have on visitor experience. As more museums do this, we will be able to revaluate best practice in relation to both the choice of displaying human remains, as well as the impact on visitor wellbeing that such decisions might have.

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Digital Remains Made Public: Sharing the Dead Online and our Future Digital Mortuary Landscape

Priscilla ULGUIM

Teesside University

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Abstract

We live in the information age, and our lives are increasingly digitized. Our quotidian has been transformed over the last fifty years by the adoption of innovative networking and computing technology. The digital world presents opportunities for public archaeology to engage, inform and interact with people globally. Yet, as more personal data are published online, there are growing concerns over privacy, security, and the long-term implications of sharing digital information. These concerns extend beyond the living, to the dead, and are thus important considerations for archaeologists who share the stories of past people online. This analysis argues that the 'born-digital' records of humanity may be considered as public digital mortuary landscapes, representing death, memorialization and commemoration. The potential for the analysis of digital data from these spaces could result in a phenomenon approaching immortality, whereby artificial intelligence is applied to the data of the dead. This paper investigates the ethics of a digital public archaeology of the dead while considering the future of our digital lives as mnemonic spaces, and their implications for the living.

Keywords

born digital, digital death, digital public archaeology, ethics, mortuary landscapes

Introduction

Our self-understanding as humans is grounded in the investigation of our past, and through reflections on our present, facilitated by culture and media. As societies change and the complexity and variety of media increases, so do the ways in which we perceive the past and present. The digital revolution has led to significant cultural change within society, which can claim to have democratized the generation, distribution and interaction of digital data. The digitization, sharing and storage of data are defining features of the Information Age. People are able to disseminate vast quantities of information in an instant. Technology can reconstruct the essence of humanity using data, artificial intelligence, machine learning, robotics and 3D printing (Eden et al. 2012). However, as more personal data are shared online, there are increasing concerns over the long-term implications of data-sharing among the living. In this light, our thoughts should also extend to the dead. The implications are significant for archaeologists, since digital mnemonic mortuary landscapes have not been extensively archaeologically investigated, and ethical issues remain regarding sharing information about the dead online. Therefore, new theoretical and practical tools are required to research the dead using information that is 'born-digital'.

This article aims to link different strands of thought on the intersection of digital technology and death to provoke a critical debate on digital archaeological practice. One strand attempts to understand how digital technology is transforming the communication and visibility of death (Sofka et al. 2017; Walter 2015). Others concentrate on the use of social platforms for community engagement (Williams and Atkin 2015), while some focus more specifically on digitizing reference material for study (Digitised Diseases n.d.; British Museum 2017). To understand the range of sources, several concepts related to digital death require clarification. Firstly, the term 'digital' reflects the transformation of the physical world into binary data. I argue here that the phrase 'digital death' may relate to any aspect of death made digital. That is, the concept may encompass both the impact of death on digital assets, as well as the creation of digital assets relating to the dead. The assets include, but are not limited to, digital memorialization and the digitization of archaeological sites or human remains

(Williams and Atkin 2015; Ulguim in press). The concept of 'born-digital death' refers to the death of those who have spent some part of their lives generating content that never existed in analogue form (content first created digitally is 'born-digital'). In contrast, those who lived and died without creating digital content are the 'analogue dead'. The deletion of digital content by living individuals removing themselves from online spaces is not considered a 'born-digital death', as the removal does not imply any actual physical death, but merely a redistribution of content (Figure 1). The 'born-digital death' has significant implications for archaeology, due to its impact on the record of the past. These fundamental concepts are addressed below, followed by a discussion on the ethics of digitising the analogue dead.

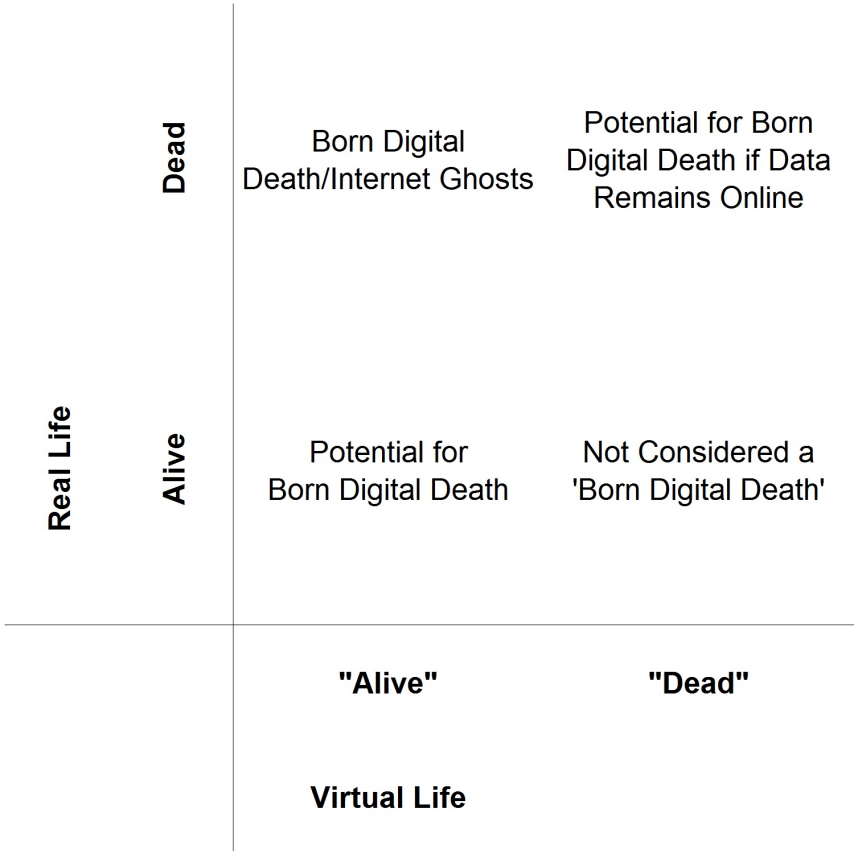

Figure 1: A matrix displaying four states of 'death' in physical and virtual life (source: after Braman et al. 2011: figure 7).

Dead mnemonic: 'born-digital death'

'When we change the way we communicate, we change society' eloquently captures how the developments in digital communications of recent decades have revolutionized human existence (Shirkey 2008). Advances in computing and networking from the late twentieth-century onwards and the popularization of the World Wide Web enabled these transformations. As adoption of 'Web 2.0' social platforms and smartphones progressed through the hype-cycle (Gartner 2017), billions began interacting online: spurring mass content generation. Social networks built a business model by digitizing real-world interactions to sell advertising, encapsulated by Facebook's 'social graph'. Hence, digital profiles became valuable assets (Leaver 2013). The outcome is a 'virtual' material culture or digital footprint of linked data including comments, likes, photos, videos, gifs, posts and emails, as well as a trail of cookies (Bowker 2007). This 'cloud' of data is linked to each user and producer and is integral to the concept of a 'born-digital death'. Furthermore, other individuals may contribute to a 'born-digital death' through post-mortem digital memorialization: creating digital presences for those who may not have created digital content during their lifetime (Hutchings 2014).

The idea of a 'born-digital death' is increasingly 'changing conceptions of hierarchy, space, privacy and property' (Gibson 2014: 221). A 'born-digital death' is a type of 'postmodern death', a public event, which is distinct from 'traditional' death within communities and 'modern' death in homes and hospitals (Walter et al. 2011). The new death combines both public and private information and audiences, creating a community of 'diverse mourners', who express 'public grief' online (Vealey 2011). Roberts (2006) found that approximately 50% of comments left in online cemetery memorial books were from strangers, and recent research into virtual church communities revealed that online groups held memorials for participants whom the congregation had never met in-person (Hutchings 2014). Online communities also stimulate physical grieving through petitions and other forms of public communication, spreading news of individuals' death to exponentially greater audiences (for example, a recent funeral in Scotland of an elderly woman with no relatives was attended by members of the community who created a Facebook page to raise awareness: BBC News 2018).

The mix of private and public, voyeurism and immediacy in digital spaces creates issues in the 'hierarchy of grieving'. For example, the family of the deceased can be pre-empted in public announcements of family bereavements, by other people posting on social media sites (Dunn Johnson 2016). The public nature of the platforms may also encourage negative reactions (Phillips 2011). In 2006 MyDeathSpace was created to link public obituaries to the profiles of dead MySpace users, and later *Perfils de Gente Morta* a Brazilian group, was set up on Orkut and Facebook (Globo 2016). These groups mixed memorial and voyeuristic elements and led to inappropriate trolling on dead users' walls alongside memorials from families (Pietras 2007). Recent suicides broadcast on social media also exemplify the darker side of the web (Dasgupta 2017). Although digitizing social interactions, such as connecting with friends, sharing imagery and organizing events, was a core tenet of new digital enterprises such as Facebook, a lack of structured thought regarding management of personal data upon death caused issues (Schrage 2017). Initially, Facebook deactivated the accounts of dead users within thirty days of notification of death, but relatives or friends often did not provide notifications, content remained live and thus the accounts became 'internet ghosts' (Cann 2014) leading to distressing encounters (Brubaker et al. 2013; McCallig 2014) (Figure 2). As the logic of human mortality revealed that the population of dead users would only continue to grow on social sites (Ambrosino 2016; Hiscock 2016) concerns over privacy, security and personal data increased, controls were improved, and new fields such as 'thanatosensitivity' were developed to approach digital design with 'consideration to death' (Massimi and Charise 2009). In one case, Facebook permitted permanent memorialization of accounts following campaigns in 2007 to prevent the closure of Virginia Tech shooting victims' accounts (McCallig 2014). Commemorative pages illustrate the desire for remembrance, to ensure atrocities are recognized, and individuals are memorialized (Figure 3). While controls over data remain at the forefront of debate (Bough 2011; Oremus 2015), the discussion is framed by more fundamental tensions regarding remembering and forgetting. The inclusion of the query: 'After a person dies, what should happen to their online identity?' in Facebook's 'hard' self-imposed questions (Schrage 2017), and the recent implementation of the European Union's General Data

Protection Regulation, to protect individual data and privacy (European Parliament 2016) exemplify some of the tensions between privacy, control and remembrance.

These examples highlight how the dead are 'more visibly present' than for much of the twentieth century (Walter 2015). Traditionally, stylized and private, informal and direct discussions with the dead now take place online in public (Brubaker and Hayes 2011 Carroll and Landry 2010; Forman et al. 2012; Kasket 2012; Kern 2013). Platforms provide a performative public space for memorialization (Veale 2004; Hess 2007), which can occur rapidly. Following a recent shooting in Parkland, Florida, USA, public memorial and support pages were set up within hours of the event (Ma and Weiss 2018). I argue that these online spaces should be considered as virtual mnemonic landscapes, which play on 'the tomb-like quality

Figure 2: An example of the impact of 'live' user accounts for deceased users – a.k.a. "Internet Ghosts" http://i.imgur.com/Pn0nYBp.jpg

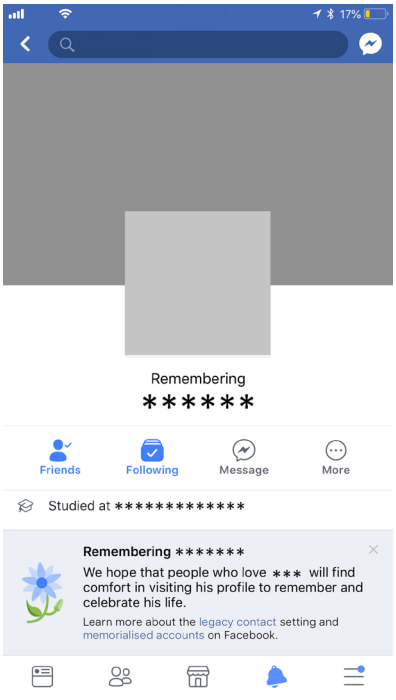

Figure 3: An example of a memorialized Facebook profile as of 2018. Anonymized by the author.

of the written word' (Lagerkvist 2013). They can be interpreted as "discursively built…symbols for remembrance and mourning" (Haverinen 2014), recalling physical funerary monuments which acted as 'technologies of memory' in the past (Lagerkvist 2013). Just as disasters and mass atrocities provoke and initiate large and imposing public memorials and monuments, they also provoke mass outpouring of grief and remembrance online. In parallel, individual deaths may be memorialized or commemorated more personally, in more restricted online social spaces. The construction of such digital memorial landscapes is indicative of the 'crossover between the public sphere of monument-building and private memorial practices' inherent in digital death (Renshaw 2013: 774). Agency plays an important role within these landscapes, as the interaction between agents and structure may be followed or subverted, and communication still needs to 'meet audience expectations, adapt to software and hardware limitations and comply with…companies' (Hutchings 2014). In an example from Denmark, Sørensen (2011) documents how the social norms of commemoration differ in physical cemeteries and online memorials. Although both enable the articulation of narratives, internet memorials often narrate strong personal emotions in an autobiographical format using images and textual narratives to contest social norms. In contrast, at least in the case of Danish cemeteries, even after an increase in more exuberant grave memorials, the physical spaces remain more modest in terms of personal photographic and textual narrative, even though the physical presence of graves may be richer in other aspects. However, this is one example of the variance between physical and virtual memorials and does not necessarily reflect a global phenomenon.

Although digital reactions to death take a new form and contest social norms, they follow many of the principles of the rites of passage and ritual theory (Van Gennep 1960 [1909]; Turner 1969). As such, the digital landscape of death, including online memorials, virtual cemeteries and social networks, may be assessed through the lens of funerary frameworks currently applied to physical mortuary mnemonic landscapes and monuments. Landscape approaches show how the landscape may embody memory (Holtorf 1997), such as how rune-stones might memorialize death in Scandinavian landscapes of the Viking Age (Back Danielsson 2015), or how

landscape features could become vital parts of a memorial funerary landscape in the Neolithic (Harris 2010). Archaeologists should now dedicate time and effort to projects focused on the digital dead, to develop valuable, reusable and ethical approaches for studying online media landscapes in archaeology.

Beyond memorialization, there is a growing discourse regarding 'digital estate planning' (Carroll and Romano 2011; McCallig 2014; Sofka et al. 2017; Walker 2011). Individual digital legacies are recorded and recalled in three ways. Firstly, content from the dead is revitalized, without the necessary intention of the deceased, which result in the creation of 'digital zombies' or the 'restless dead' (Bassett 2015; Nansen et al. 2014) examples include 'performances' by Tupac Shakur, Freddie Mercury and Audrey Hepburn (Pitsillides et al. 2013; Sherlock 2013). Other death-related technologies, or 'thanatechnologies' (Sofka 1997), may be used to pre-record content for post-mortem release (Harvey 2017; Taubert et al. 2014). In contrast to passive born-digital data, users actively curate pre-recorded content. The most basic manage online accounts as 'digital legacies' which preserve an image of the individual post-mortem (Carroll and Romano 2011; Walker 2011), while more advanced services offer complete self-documentation (Table 1). Examples include Lifenaut (n.d.) as well as MyLifeBits, an early experiment by Microsoft Research where Gordon Bell compiled a digital archive of his life. Such services provide a form of digital 'one-way immortality' (Bell and Gray 2000; Walker 2011). The concept is a variation on 'symbolic immortality', which already exists in the form of drawings, writings and photography (Lifton 1979; Walter 2015). However, digital technology can combine data with machine learning to create virtual avatars that provide a digital 'two-way immortality' (Odom et al. 2010; Bell and Gray 2000), provoking fundamental questions about the link between the person and the physical body. Such digital immortality can render humans simply as 'a pattern of data' or 'cybersoul' (Turkle 1995; Wertheim 1999). Fictional TV series and books explore digital immortality, including *Black Mirror* where AI was applied to social media data of the deceased to recreate their personality (Brooker 2013), and *Altered Carbon*, where humans store their consciousness digitally via services which load this into different bodies. Apps already exist which can apply AI to social media or

Table 1: 'When your heart stops beating, you'll keep tweeting', an example of a digital legacy service.

Service	URL	Content	Platform
Emailfromdeath	http://emailfromdeath.com/index.php	Pre-recorded	Email
Dead Social	http://deadsocial.org/	Pre-recorded	Social
Lives On	https://twitter.com/_liveson?lang=en	Algorithm	Twitter
Eterni.me	eterni.me	Algorithm	n/a
Futuris.tk	Futuris.tk	Pre-recorded	Social
Deathswitch	http://www.deathswitch.com/	Pre-recorded	Email
Great Goodbye	http://www.greatgoodbye.com/	Pre-recorded	Email
AssetLock	http://www.assetlock.net/	Pre-recorded	Email
Afternote	http://www.afternote.com/	Pre-recorded	Email
Bcelebrated	http://www.bcelebrated.com/	Pre-recorded	Email/Web
Boxego	http://www.boxego.com/	Pre-recorded	Web
Ghostmemo	www.ghostmemo.com	Pre-recorded	Social
GoneNotGone	www.gonenotgone.com	Pre-recorded	Social
Last Words 2 Love	www.lastwords2love.com	Pre-recorded	Social
Leg8cy	www.leg8cy.com	Pre-recorded	Social
LifeNaut	lifenaut.com	Back-up	n/a
LifePosts	www.lifeposts.com	Pre-recorded	n/a
Loggacy	www.loggacy.com	Pre-recorded	n/a
Meminto	meminto.com	Pre-recorded	n/a
MyWonderfulLife	www.mywonderfullife.com	Pre-recorded	n/a
MyGoodbyeMessage	www.mygoodbyemessage.com	Pre-recorded	n/a
Postumo	postumo.info	Pre-recorded	n/a
Remember-Me	www.remember-me.co	Pre-recorded	n/a
SafeBeyond	www.safebeyond.com/	Pre-recorded	n/a
SayGoodbye.Online	saygoodbye.online/	Pre-recorded	n/a
Wishes Keeper	www.wisheskeeper.com	Pre-recorded	n/a
Xarona	www.xarona.com	Pre-recorded	n/a
If I Die	https://twitter.com/ifidie	Pre-recorded	Social
Virtual Eternity	VirtualEternity.com	Algorithm	n/a
Project Elysium	-	Algorithm	n/a

data archives to create 'chatbots' for the dead (LifeNaut n.d.; Newton 2016; Vlahos 2017). Archaeologists should consider the impact of these vast stores of data on the study of the future dead. Researchers should understand data accessibility, conservation and assess the significance of algorithmic bias to gain new insights into the lives of past peoples in the future. Beyond this, the types of self-documentation and data shared in public and personal profiles require evaluation, opening new research possibilities into an in-depth understanding of public and private space and activity.

Sharing the past dead online

Beyond 'born digital death', researchers are documenting physical spaces of the dead and death online, transforming the analogue into public digital data. However, the application of digital technologies to 'analogue death' raises a series of ethical questions.

In archaeology, the term 'digital public mortuary archaeology' (DPMA), coined by Williams and Atkin (2015), refers to engagement with archaeological content concerning the dead using digital means. DPMA encompasses digital platforms for sharing content such as Digitised Diseases (n.d.), as well as blogs, vlogs and Twitter where information on mortuary archaeology is shared and discussed. Beyond these examples, crowd-sourcing platforms document cemeteries and memorials (Commonwealth War Graves Commission n.d.; Billion Graves 2017; Joods Monument 2016). The Hart Island Project (2017) uses crowd-sourcing to document unclaimed bodies in an unmarked mass grave in New York City. Another project, Facing the Nameless, creates crowd-sourced identifications of 3D scanned corpses belonging to unknown individuals, with the objective of identifying the deceased (Schneider n.d.). Such projects present the analogue dead online in an inherently public form. Within archaeology, ethical practice for the public sharing of human remains online has been subject to heated debate, for example at Higher Education Academy (HEA) events in 2013, the European Association of Archaeologists in 2015 (European Association of Archaeologists 2015) and World Archaeology Congress 8 in 2016 (World Archaeology Congress 2016;

Hassett et al. 2016). These debates stem from the intersection of different strands of thought. The broader discussion regarding the excavation, retention, analysis and display of human remains is intrinsically linked to the investigation of people's ancestors within different cultural and historical contexts and the strong emotions embodied in the deceased (Clegg et al. 2013; Giesen et al. 2013; Parker Pearson et al. 2011). For digital archaeologists dealing with bioarchaeology, the debates have converged on how to manage digital representations of archaeological evidence ethically. Arguments have also drawn on museology, where ethical practice for physical display and storage of human remains provides a close analogue for digital representation. In both cases, clear contextualizing data with scientific justification can provide mitigation in circumstances where obtaining consent is unfeasible (Antoine 2014). However, in a recent review of bioarchaeological data shared on SketchFab, a public 3D platform, Ulguim (2018) found that many models had almost no contextualizing data: a compromising situation for the publishers and researchers working with such types of data. Furthermore, some of these 3D images had thousands of views and were available for reuse, modification and public download, meaning they could be modified, reused, or 3D printed at will. Such 'poorly documented' collections pose a threat as they have 'little value as a tool for research and educational use' (Giesen et al. 2013: 55) as well as public engagement. The low value of such collections compromises general ethical guidelines, although few directly address digital matters (BABAO 2010a; 2010b; APABE 2017; ICOM 2013). Nevertheless, archaeologists are now taking steps to define best practices and ethical guidelines for digital technology. Following the WAC8 Digital Bioarchaeology Ethics symposium, participants published a resolution that outlined principles for the ethical treatment of 'digital bioarchaeological data' (Hassett et al. 2016), furthermore the British Association for Biological Anthropology and Osteoarchaeology (BABAO) aim to introduce a set of guidelines on digital imagery and human remains. The publication of related papers will provide further insight into the debate. For example, Ulguim (2018; Figure 4) has demonstrated the requirement for the assessment of how and why dead individuals or body parts are displayed online within an ethical assessment and decision

matrix. The variables fall into two broad categories: *situational* variables including consultation, local legislation, and contextual discretion; and *nature*-related variables: the identification and state of the individual, circumstances of death, and time since death. Data management, licencing and openness are also factors to consider. The framework also extends to the memorials and monuments of the deceased, for which modern examples have been anonymized in recent works (Sørensen 2011), while ancient or public figures may not be.

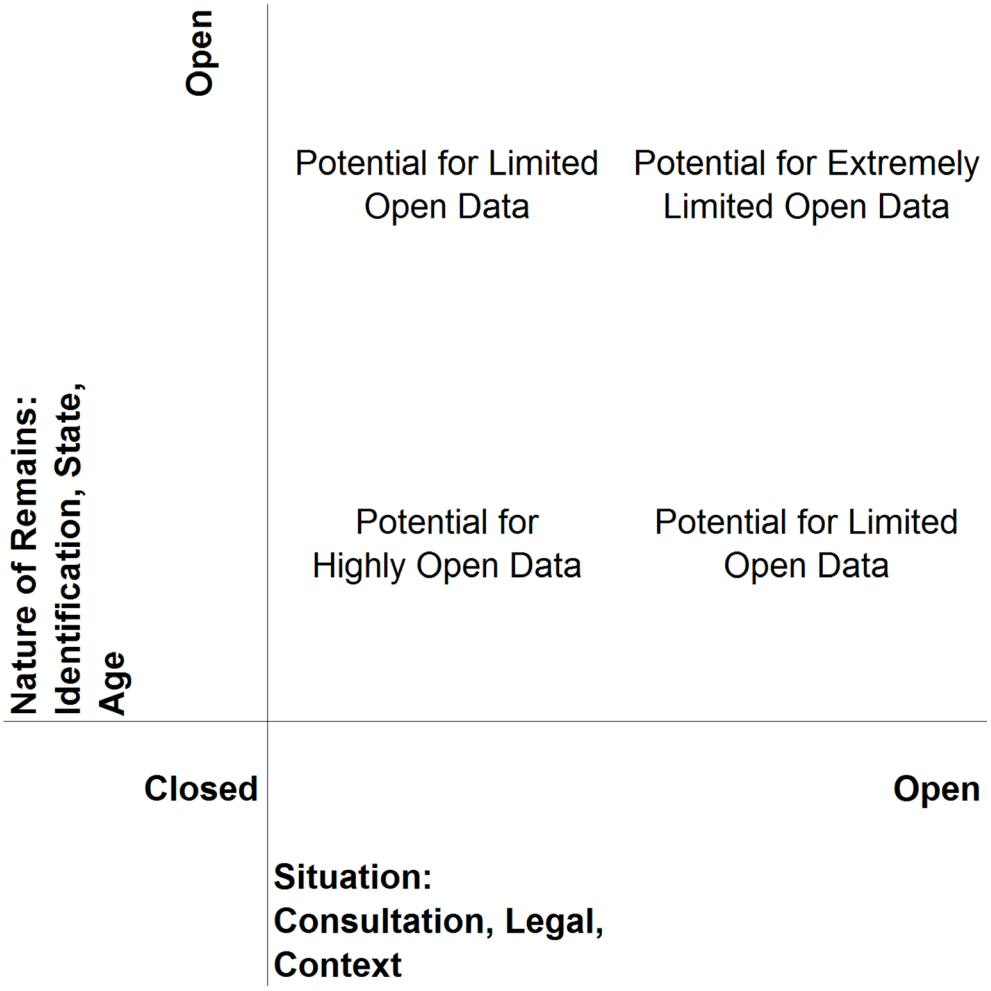

Figure 4: Ethical matrix (after Ulguim 2018: figure 14).

These remain initial efforts which should be supported by further comprehensive works as the debate regarding balancing ethical, legal and cultural concerns evolves. Proactive, collaborative engagement and design with relevant communities around the world will only enhance these guidelines. In this light, archaeologists should acknowledge that 'there are different points of view; and, if we wish to continue…be ready to show that it [archaeology] is relevant' (Clegg et al. 2013: 162) and to balance 'public benefits of display against… feelings…of a community' (Antoine 2014: 7). In addition, research by Sayer and Walter (2016) indicates that archaeologists need to consider media coverage in public displays in order to best support ethical practices, because depiction in the media actively frames the public perception of mortuary archaeology.

Implications for archaeological practice

The emergence of the contemporary 'born-digital death' and digitization of the 'analogue dead' pose challenges and opportunities for archaeological practice. Many of these challenges remain as present as those faced by seventeenth-century antiquarians, such as Sir Thomas Browne who, 'in studying the graves, cemeteries, tombs and monuments…aspire[d] to understand the motivations and choices of these past people concerning how they use[d] material culture to commemorate the dead' (Williams 2006: 2). Likewise, in the study of digital death, archaeologists should further explore the new 'discursive' mnemonic digital landscapes of the dead and the virtual material culture of commemoration. The investigation and publication of these types of data and spaces should follow similar ethical guidelines to those now developed for the digitization of our analogue dead, namely in ensuring that affected parties are consulted. Another consideration for the archaeology of future digital content relates to the 'multiple or changing identities' adopted in online spaces (Braman et al. 2011; Wertheim 1999). The idea of 'managing' the persona that humans present to posterity is nothing new: following her death, one of Queen Victoria's daughters typed up all of her personal correspondence and burned the originals. In the same way, future archaeologists must consider that only a part of the data will be publicly archived, and even then, it will be subject to recursive behaviours of agents who conduct memorial activities,

funerary practices and rituals, and affected by the knowledge that digital platforms are highly public spaces, where businesses enact types of 'social surveillance' (Leaver 2013). Archaeologists also face new challenges in the persistence of digital technology, data and infrastructure, exemplified by the fate of Geocities webpages post-2009 (Law and Morgan 2014) or the Internet Archive's attempts to catalogue and document the entire internet (Gotved 2014). Significant work is required to assure data preservation and conservation in the digital realm. Dealing with obsolete data storage formats is an important concern for archaeologists, especially given the likelihood that many digital services and software will be rendered obsolete after a relatively short period of time, particularly while they remain 'in the hands of powerful corporations and their decisions' (Lagerkvist 2013). Furthermore, interoperability between closed systems and standards is not always 'built-in' (Jeffrey 2012). There is also a requirement for the archaeologists of today and tomorrow to directly analyze devices and code to obtain access to information. Perry and Morgan (2015) physically 'excavated' a hard disk and highlighted a gap in the analysis of the code linking the physical disk with its virtual contents. As data becomes highly centralized and virtualized using cloud services, archaeologists may not even have access to physical machines, but rely on salvaging from data centres which service the cloud. The development of big data presents another issue, the simple question of volume. There is already a crisis of unanalysed material in store-rooms from a multitude of commercial and academic excavation projects. 'Big data' may pose just as significant a challenge (Marx 2013). One option is to apply algorithms, but these are not without their pitfalls. They are susceptible to design flaws and systematic biases, which may have ethical impacts. Furthermore, interpretation by algorithm could limit the agency of the archaeologist in investigations. Beyond these factors, relatively few guidelines have focused on the ethical questions regarding digital data for human remains, and fewer have considered in detail their digital remains. A new set of ethical principles can span both the investigation of digital data and the publication of digitized ancient remains. Recent guidance on the display of digital human remains notes that requirements for justification and consultation are just as applicable to the creation and sharing of imagery of human remains in a virtual setting

(Ulguim 2018), and that the addition of contextualizing data is a crucial factor in mitigating ethical issues of display (Perry 2011; Williams and Atkin 2015).

Ultimately, digital death may result in a more direct discussion with the past for archaeologists through a form of digital necromancy, where artificial intelligence is applied to individuals' 'big data'. As archaeologists connect with the information of past people and places, they should remain critically aware of the impact of human agency and culture in shaping the data, as well as the imposition and influence of rapidly changing technologies upon those data. These factors fundamentally influence our discussion regarding sharing the dead online, and how archaeologists interpret digital mortuary landscapes.

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Open Data as Public Archaeology: The Monumental Archive Project

Katherine COOK

University of Montreal

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Abstract

The value of open data is transforming archaeological practice while also introducing new concerns relating to the ethics of studying the dead. This paper uses the Monumental Archive Project, recently launched as a public database of cemetery records from Barbados, as a case study to critically examine the realities of platforms created to bring together academic and general audiences in open mortuary archaeology. Digital literacy and support structures are significant barriers to digital data within the discipline, while the impact of open data on the public(s) that archaeologists seek to engage and collaborate with is rarely considered let alone measured. Is it possible to serve diverse audiences and represent diverse people in the past with a single platform? What are the implications (social, ethical, emotional) for sharing cemetery data? When digitizing the dead, strategies in platform design, marketing and communication for public interest and use become even more complex and necessitate further attention.

Keywords

Caribbean, cemetery, digital archaeology, data, historical archaeology

Introduction

Cemeteries are a delicate balance between public and private; funerary monuments in particular are at once motivated by public retrospection and private grief and emotion (Cannon and Cook 2015; Thomas 2009: 245). For archaeologists engaged in monument studies—those whose work rests largely above rather than below ground and therefore can be carried out without lifting a trowel or collecting a single artefact—the public nature of cemeteries has long been a benefit. Large datasets are ripe for the recording, with seemingly few ethical or legal restrictions in comparison to research associated with human remains and excavation. At the same time, this work has remained relatively private; results are difficult to access outside of academic publications, raw data is rarely shared, and the localized focus often leaves these studies in isolation. The exclusive nature of this research climate, then, has long eclipsed the public dimensions of recording, interpreting and publishing monuments and their histories.

In the twenty-first century, the tension between public and private, inclusiveness and exclusiveness, seems ever more acute. With millions of popular media stories posted on social media featuring burial grounds and monuments (Figure 1), and taphophile cyber-communities and crowd-sourced web archives of cemeteries from around the world, personal grave markers can easily 'go viral'. The genealogy industry is also booming (Kramer 2011), with data brokers such as Ancestry.com cashing in on the dead (Booth this vol.). The fields of archaeology and history have similarly been transformed, consumed with redeveloping methods for archiving, accessing, and preserving digital records (Tibbo 2003: 9). The values and protocols of open science[1] have especially pushed scholars to critically reflect on the accessibility of not only interpretations, but also on data (Kansa 2012; Lucas 2012: 216)—for professionals and for the public alike. Initiatives such as Camp's (2017) experiments with augmented reality to connect historical records and narratives to a local cemetery, and Dundee Howff Conservation Group's (2017) open 3D models of monuments, demonstrate growing creativity and innovation in cemetery preservation and heritage practice. At

1 Open science is traditionally framed as a barrier-free revolution that removes traditional fees, copyright and licensing restrictions, and other economic/physical obstacles to participating in or accessing science (Suber 2012: 4).

the same time, there are rising concerns amongst communities and stewards of funerary landscapes about sharing personal information recorded on monuments, if not the monuments themselves, as potential threats to their privacy, grief and memory. The online shaming of individuals who do not show appropriate respect for

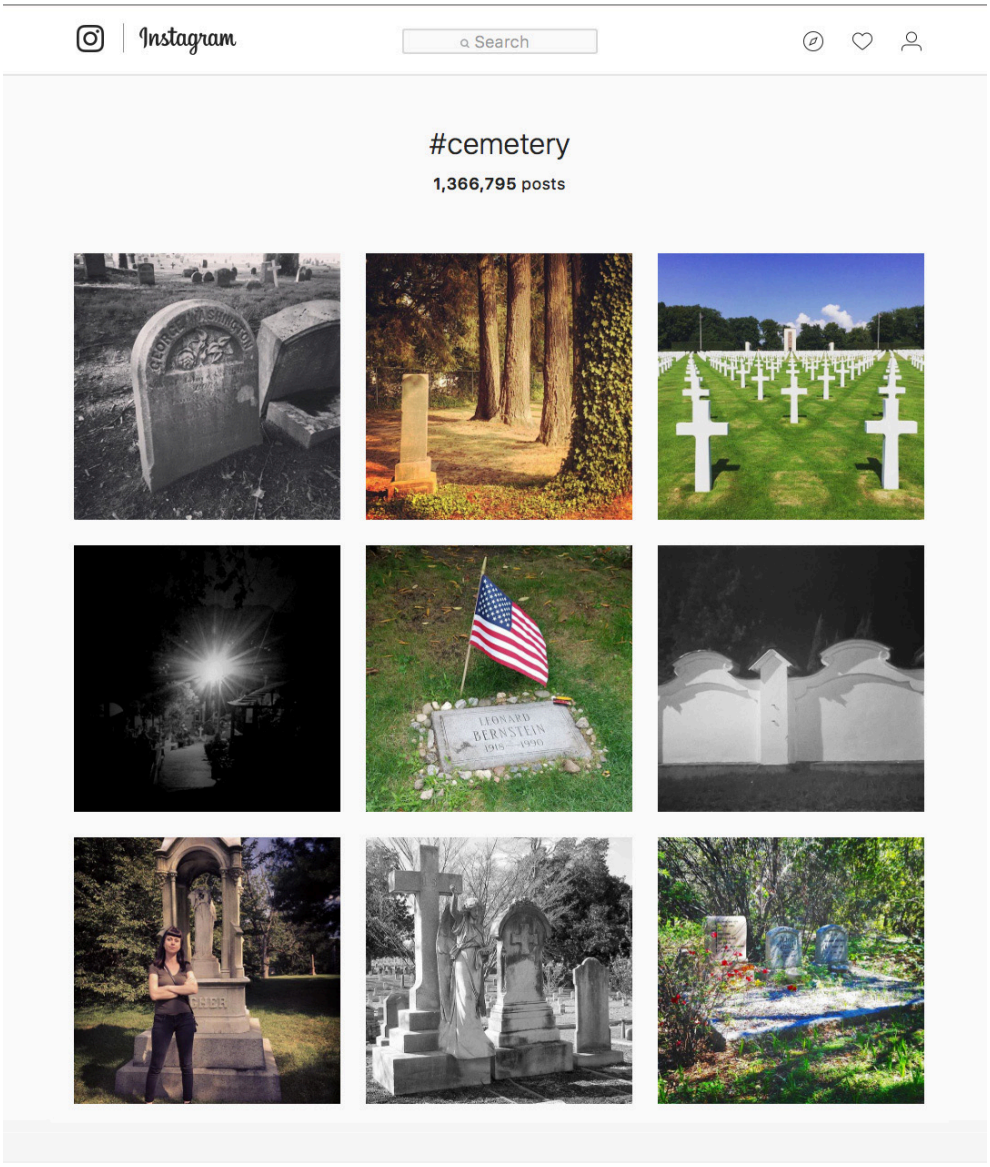

Figure 1: Screenshot of recent #cemetery images posted on Instagram.

the dead (for instance, at Holocaust memorials (Shapira 2017) or Pokémon GO users who played in cemeteries (Judge and Brown 2017)), also demonstrates, however that objections are more complicated than simply questions of rights, logistics and intellectual property, but that these objections intersect with the diverse ways in which people understand and connect with death and the dead. In many ways, professional archaeologists and historians have not fully dealt with the ethics and politics of recording historic cemeteries and monuments in pre-digital formats; and thus have no basis upon which to adapt and extend this in considering the way the web has transformed issues of access, long-term preservation, and licensing/restrictions.[2] These issues have proven extremely complex, context-specific and demand advanced understandings of ever-changing digital technology coupled with strong collaborations with informed communities.

This article uses the Monumental Archive Project (Cook 2016a), recently launched as a public database of cemetery records, as a case study to critically examine the realities of digital platforms created to bring together academic and general audiences in open mortuary archaeology. Although the growing popularity of current digital platforms which share information about cemeteries and burial sites (e.g. ancestry.com and findagrave.com) demonstrates a ready audience, unsystematic data collection and issues with ethics, access, and cost may limit their usefulness and flexibility. Meanwhile, archaeology of historical funerary commemoration, which has increasingly included outreach activities like open days, public lectures, and community training, rarely produces public research resources, limiting broader engagement, but also democratizing/decolonizing data through changing structures of power and making space for more diverse voices, expanding sample sizes and comparative analysis. This is paralleled by a divide in digital heritage (and digital scholarship more broadly) where a lack of critical evaluation of digital methods and theory continues to create tension between applications intended for professional and public audiences despite overlapping entry points, communication networks, and the social dimensions of inequalities, expert knowledge and power (Lupton 2014; Richardson and Lindgren 2017: 139–41). Altogether,

2 For more detailed discussion of the electronic distribution revolution, see Kansa 2012: 498–99.

data created through commercial, academic, and community avenues continues to be dominated by white historical narratives, often restricting the (perceived) usefulness of data and its relevance to contemporary research and understandings of the past. Cemetery data recording and sharing must become a wholly collaborative project between communities and scholars, recognizing problems of under-representation, the spectrum of digital literacies, attitudes towards digitizing monuments and sacred spaces, and historical legacies of dominance and power. This article will discuss whether it is possible to serve diverse audiences with a single platform. It will explore the implications (social, ethical, emotional) for sharing cemetery data. Furthermore, it will ask how can we gauge the impact of these resources? When digitizing the dead, strategies in platform design, marketing, and communication for digital archaeology become even more complex and necessitate further attention.

Project Background

The Monumental Archive Project (MAP) was developed to act as an open database of historic cemeteries to address accessibility and sustainability issues whilst stimulating new approaches to traditional archaeological research. Its primary goals were to:

(1) preserve and provide access to existing records;

(2) stimulate new research and engagement with historic cemeteries (an at-risk heritage resource) through data reuse;

(3) and establish collaborative networks between diverse interest groups.

To do so, the project set out to develop a web-based interface (Figure 2) structured around an open database of curated[3] collections (contributed by researchers, community members/ groups, archives), which could be interacted with in a variety of ways, could be expanded as opportunities arose, and could be used

3 Data curation is critical to creating standardized, compatible and easily reusable data (i.e. edited for mistakes in data entry, inconsistent vocabulary, etc.). For more detailed discussion of data curation and publishing standards in archaeology, see Huggett (2015), Kansa et al. (2014).

to advocate for more open data in this area of research. The pilot content used records of intramural and extramural monuments in Barbados (approximately 2500 monuments located at sixteen Anglican churches and four plantations), from previous research conducted by the author, including inscriptions, location, and material descriptions (style, iconography, font, material) (Cook 2016b). This data was selected in part for practical reasons of access, but more importantly in recognizing its representation of diverse groups of people, tackling the underrepresentation of race and gender in many historical datasets.

The platform proposed bringing together the archaeological/historical communities (academic, professional) and the 'public' (i.e. descendants, genealogists, local historical societies) to encourage collaboration, education, and research/discovery. The academic/professional side of historical cemetery research, particularly associated with monument studies, has long established practices

Figure 2: Web-based interface for the Monumental Archive Project.

for recording, but there has been very little sharing of raw data. Likely influenced largely by academic cultures of publication, career trajectories and competitiveness, data sharing has only recently shifted to become a priority in archaeological circles (Kansa 2010; 2012). As such, further examples of databases and research facilitated by open data are needed for it to gain traction within cemetery studies, and more broadly. This website sought to encourage open access to records generated by academic/professional researchers with the benefit of being able to generate larger datasets, comparative studies, and new collaborations, as well as gain exposure through citations and public interfaces. The general public also has a long history of recording cemeteries of genealogical and local historical interest (Cook 2017b: 34). As in many places, the burial grounds of Barbados have been, for example, repeatedly recorded by communities and genealogists resulting in three surviving sets of transcriptions (Lawrence-Archer 1875; Oliver 1915; Thorne n.d.). Records like these are most often text only (lacking details of form, ornamentation, and material) maintained by local historical societies and archives, but are rarely accessible through compatible, digital platforms and usually only after the payment of a fee (to assist with preservation and maintenance costs). The cost of travel to archives or to purchase access to records, however, is often prohibitively expensive, limiting accessibility and inclusivity of heritage resources. MAP therefore also made it a goal to explore low-cost options for data sharing and preservation to increase access and build more understanding of recording, interpretive and digital archiving practices.

The project was designed to use entirely free and open source software. In the face of many large-scale Digital Humanities endeavours that highlight the big, high-tech and expensive solutions, this was an exploration of what could be achieved in the digital world without any kind of a budget. The web-based platform was built on Github, using the free hosting option of gh-pages (as an alternative to high-cost web solutions). The front-end of the website was designed to be user-friendly, adaptable and scalable. The landing page includes an interactive map to explore the collections (Figure 3). The pilot data, in compatible CSV format, was used to create a searchable HTML table, where users can seek out specific family names, locations, types of monuments, and

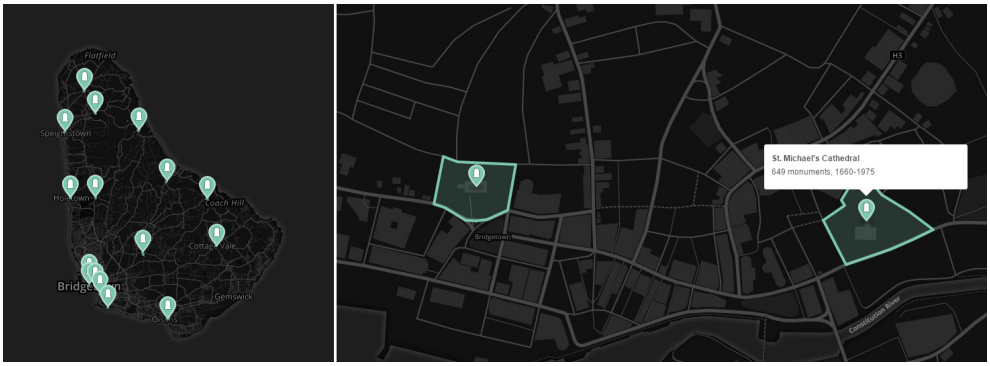

Figure 3: Interactive maps provide one method for exploring the data records available.

other dimensions. It is also available to download, which permits users to import the data directly into their own data analysis software for more intensive research. Images and maps of each monument and churchyard are supplemental resources for viewing and downloading. The website was also coded as much as possible for accessibility, including recognizing the need to be compatible with text-to-speech software, as well as options for enlarging text and images. Analytics services[4] were deployed to measure interactions with the web-platform and data downloads over time. However, this data is limited by the inability of the service to differentiate between professional and public users and identify patterns in their online practices, nor more nuanced differences in demographics (age, gender, ethnicity, etc.). This information about users was supplemented by recording and analysis of engagement evident through social media platforms and other web-based communications, however as a result it is more anecdotal than systematic. In future, further examination of website usage and experiences is necessary to refine the observations and conclusions

4 These analytics were largely collected through Google Analytics, but also through analytics embedded in social media platforms. It should be noted that there are concerns with the ethics and privacy implications of these types of data collection and who has access to this data (commercial appropriation and use, etc.). This is a concern and is one that should be further considered in anthropological and community-based settings, particularly since, although Google Analytics is something that websites opt in to, for many platforms that data is collected whether the content creators want it to be or not. How do we make choices about the capture and use of analytics? And how do we ensure users are aware of the ways their data may be collected and shared?

presented below, perhaps through more intentional surveys and engagement with users.

Discussion: An Ongoing 'Post-Mortem'

Because no precedent exists, MAP was from the outset a series of exploratory experiments in digital archaeology and public heritage. Framed by the motivation to make *publicly* funded research data *publicly* accessible, and more broadly to act as a catalyst for further collaboration between academics and communities, the launch of the web platform in August 2016, and the year since, have provided a series of lessons in digital public mortuary archaeology.

Open Cemeteries for Data Sharing

The public nature of open data platforms for cemetery research is complicated to say the least. Protocols and discourse on the digitization of the dead pertain largely to human skeletons (cf. Márquez-Grant and Errickson 2017), which likely stems from the broader trend in archaeology to focus ethical concerns on bodies rather than material culture, monuments, and landscapes. The ethics of open databases of monuments, on the other hand, falls within an ethical grey area, caught between the ambiguities of the public domain and private ownership. If monuments are too recent, there are concerns with the copyright of stonemasons and the personal information recorded on monuments. If the monuments are much older, there are concerns about the ethics of digitizing objects associated with the dead, when it would often be impossible to seek photo permissions and data sharing consent from next of kin. There is also an impact on cemeteries, churchyards, and historical societies, many of whom rely on the funds raised by selling photo rights/licenses, historical records and genealogical services.[5] However, many of these groups also rely on public funds

5 Cemetery and monument records are frequently used to generate revenue for public and private organizations, from historical societies selling records (in paper or locked digital formats) to platforms like Find-A-Grave and Ancestry.com selling ads or memberships. There is a secondary debate here that is too broad for this paper to tackle concerning the ethics and legalities of possessing or selling rights to monuments that were erected by families, exist in publicly accessible spaces, and often are maintained by public groups.

for conservation efforts and heritage initiatives, further blurring the lines between public and private rights.

Digital records, including photographs and models, inscriptions, and geographic locations, are critical to the preservation and monitoring of monuments and cemeteries, which are subject to weathering, accidental destruction and vandalism (Cook 2011: 72–82). Moreover, as Williams (2016) has argued, 'there are absolutely no theological or traditional religious or social reason why recording gravestones in any fashion, including photography, can be construed as an inherently disrespectful act' (Williams 2016). Ultimately, commemorative monuments evolved and have long been used to create and maintain public memory (Thomas 2009: 245). Given their importance to social memory, in relation to historical and archaeological studies, sharing cemetery records could be seen as a vital extension of commemorative values and practices. However, due to the breadth of attitudes and perspectives operating in different contexts, it is an act that should be pursued in collaboration with the diverse descendant and stakeholder communities that are connected to these places to ensure appropriate levels of respect and recognition are given to concerns with privacy and memory. Community consultation, fostering ongoing and open dialogue, in addition to broad digital literacy training is integral to the future of cemetery studies, tackling the complexity of ethics, access, and authority in the digital age.

Open Cemeteries for Sharing Stories

Discussions of access and distribution are only part of the digital data issue in archaeology; data *reuse* is a substantial concern. We cannot continue to push forward on encouraging or requiring data sharing without critically assessing and addressing reuse (Atici et al. 2012: 664, Huggett 2015: 10). The most important lesson learned in the MAP process was that, even if there is a strong public audience that is proven to be an active online community, if you build it, they will not necessarily utilize the resource. The launch of MAP was followed by a period of high traffic; however, analytics demonstrated that those visitors engaged very little with the data itself (including both searching and downloading), and

focused more heavily on informational pages of the website. That pattern changed through more active use of the blogging end of the MAP website, which was employed in telling stories about the research and the history behind the monuments, dropping virtual breadcrumbs leading visitors directly to the datasets. These blogs pointed to critical narratives of race, inequality and resistance that could be accessed through the data. It called out family names and individuals (with the added benefit of increasing search engine optimization for genealogical researchers). When emphasis was placed on what the data could tell about the past, that data were explored and shared.[6] The exceptional, arbitrary and nonconformist nature of archaeological data makes it complicated to archive, digest and reuse (Huvila 2017). This often discourages the reuse of data, with the expectation that few professionals, let alone the general public, will be interested in investing in new data analysis. Nevertheless, the citizen science movement, genealogy trend and crowdsourcing of archaeological tasks have demonstrated that there is an enormous aptitude and interest in contributing to archaeological research, if there are clear paths to engagement and connections to contemporary values, questions, and interests (see also Bonacchi et al. 2014).

Researchers and the public may have different needs in research; however, one thing that they have in common is that they both make many assumptions about the value of funerary monuments as historical records. During the early stages of the recording process in Barbados, many professional and community partners argued that it would be impossible to write histories of anyone except the white plantation owners and merchants on the island through monument analysis, and certainly not the African Barbadians who had been barred from Anglican churchyards for much of the island's history (Cook 2018). When a MAP blog post was shared for Black History Month outlining the important processes of colonial resistance and making space in cemeteries and communities based on monuments included in MAP (Figure 4) (Cook 2017), analytics, social media, and messages demonstrated a spike in

6 Although this was found to be paralleled by both professional archaeologists/historians and public audiences, engagement by public audiences was measured in this case through increased sharing on social media, comments sections, and 'pingbacks' or linking to the data on other webpages (most often on genealogy and local history pages/blogs).

interest in using the platform to access previously marginalized historical voices. This blog in particular generated more than two thousand independent visits in a two-week period (almost double the usual impact of the blog), with half of those visitors navigating to the data sections of the site (67% higher than other posts have generated). Reactions shared through social media were far more personal and emotional than previous posts sharing MAP, including personal stories of heritage, expressions of surprise, curiosity and self-reflection, and sentiments honouring the dead and the role that they had played. Data in isolation do not stimulate interest, or challenge conventions in archaeological practice or social memory. The more we demonstrate the potential avenues yet to be explored, the more data are valued for reuse and creative practice amongst professional and public audiences.

Open Cemeteries for Inclusive Access

Digital literacy and attitudes towards accessing raw data played a further role in reuse of MAP data. The expectations for accessible and reusable data advocated for in the open science ethos demands researchers who are trained in data management, preservation and sharing (Beagrie 2008). However, while more and more people are competent in moving through digital environments like social media, it does not mean that they are effective digital data managers or analysts, either within academia or beyond it. In academia, data reuse precipitates attitudinal shifts, including valuing collaboration and reanalysis or re-exploration of data without a sense of territorialism or competition. Outside scholarly communities (and within it), generational, cultural, and socio-economic barriers to digital literacy are a significant challenge for encouraging data reuse. MAP's first dataset of colonial cemeteries in Barbados, relevant to the island's residents but also to a global diasporic community of descendants, reflects a very complicated network of geographic, economic and sociopolitical barriers to accessing local and family history. Although access to computers and the Internet is rapidly expanding in Barbados, with 71.8% of the population identified as Internet users, this research also recognized that a web-based platform would not be the most accessible format for everyone, and hardcopies have also been shared through community archives to assist local research

Figure 4: One monument from a storytelling blog post, commemorating George Francis, "the son of Agnes Ann Bannister free Woman of colour" who died in 1816 (photo: author).

(World Bank 2018). Although web analytics do show users from Barbados, they are much less frequent than users from Canada, the USA, and Western Europe (in these regions, Internet users make up 80–90% of the population and ownership of personal computers, home Internet access and mobile smart technology is 25–50% higher). While MAP sought to increase access through providing both web- and community based records, in recognizing the complexity of colonial legacies in Caribbean heritage, it is important to critically reflect on the ways in which digital archaeology is never neutral or apolitical. Use and analysis of open data necessitates high levels of digital literacy, and even at times access to advanced computing and strong Internet access. Moreover, there are often even more complex attitudinal shifts that need to occur, including perceptions, assumptions and expectations of archaeology, heritage, and who has the right/interest to access them. Open science intersects democratizing and decolonizing practices in scholarship; however, the reliance on technology and digital literacy to achieve these goals does not necessarily remove all barriers for all communities (Suber 2012: 26–27).

Conclusion

Like many digital data projects, MAP continues to evolve, exploring solutions to ongoing challenges in digital preservation and sustainability. The successes and failures of this experiment in open data have demonstrated that digital cemetery projects must, at every level, be community projects. The collection of data itself is far from a neutral activity and needs to be framed by consultation and collaboration. Whether we record one monument to the dead or a thousand, whether the memorial was raised three years ago or three hundred, every note, photograph, 3D model, and map has the potential to impact living communities and historical narratives in both positive and negative ways. Therefore, our approach must always be thoughtful, inclusive, and respectful from the early stages of each project through to the end. The next steps for open cemetery data are to gather more systematic feedback and perspectives from users to ensure that these digital platforms continue to be developed and enhanced for ease of access and community value.

At the same time, creative open cemetery projects can only be encouraged by providing support and recognition for the effort that goes into their development, and the real impact that they have. Within academia, this means ensuring that funding, hiring and promotion reward non-traditional research outputs. For communities, this means advocating more appropriate compensation or recognition of labour, ideas, and contributions as well as honouring community voices and expertise.

The sharing of cemetery data must be first and foremost community minded, focusing on free and, as much as possible, accessible information, digital literacies, ethical practice, and motivations for accessing digital archives. Online platforms can and should be vehicles for local heritage and narratives as much as raw data for querying and analysis because together, stories and data demonstrate the value of mortuary archaeology and the preservation of historical cemeteries (in physical and virtual forms). Cemeteries have always been public spaces and meaningful places for the living, but they have also changed over time to reflect changing attitudes and experiences of these living communities. Digital cemetery initiatives must equally be adaptable places for the living to explore and engage. If they are not created from the perspective of who might use them, why and how, open cemeteries may end up equally neglected as their physical counterparts.

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Digital Public Mortuary Archaeology via 3D Modelling: The Pago del Jarafí Cemetery (Granada, Spain)

Pablo ROMERO PELLITERO, Lara DELGADO ANÉS and
José María MARTÍN CIVANTOS

MEMOLab Laboratory, University of Granada

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Abstract

One of the main goals of the MEMOLA research project's open-area excavation at Pago del Jarafí (Lanteira, Granada, Spain) was to promote knowledge socialization by means of imparting information and public participation. The site, a multi-phased rural settlement with cemeteries of different chronologies and cultural affinities, was subject to a complete 3D photogrammetric survey, a tool which served to develop virtual models both to interpret the excavation and subsequently transmit the results to the public. This method raised levels of public engagement via social networks and websites. Burials, in particular, are features that attracted the local population to the site and aroused both a demand for information and site preservation. 3D modelling of the burials were thus a digital resource bearing a high scientific and social potential when integrated in a strategy reaching beyond the technical aspects. This article therefore, considers the 3D modelling of burials as an innovative form of digital public mortuary archaeology.

Keywords

3D modelling, virtual archaeology, funerary context, general public, Pago del Jarafí, MEMOLA project

Introduction

Archaeological projects that implement digital technologies and methodologies enhance the transparency and communication of information to both scholars and the general public. Accurately recording the totality of the elements of a site, including monuments and mortuary features, skeletons, disarticulated bones, or others type of objects and processes related to cemeteries and rituals, provides a new interpretive means with multiple possibilities to bolster archaeological research and public engagement.

From a scientific perspective, a complete three-dimensional (3D) survey of the stratigraphic sequences of an excavation allows recording the site's phases of construction and subsequent abandonment, possible reuses, and other functional modifications. In the case of mortuary environments, this method enriches the understanding and interpretation of how the features were built, used and reused. In the case of cemeteries, 3D digital records assist interpreting differences in burial orientation, rituals aimed at preventing post-mortem disturbances, or post-depositional processes.

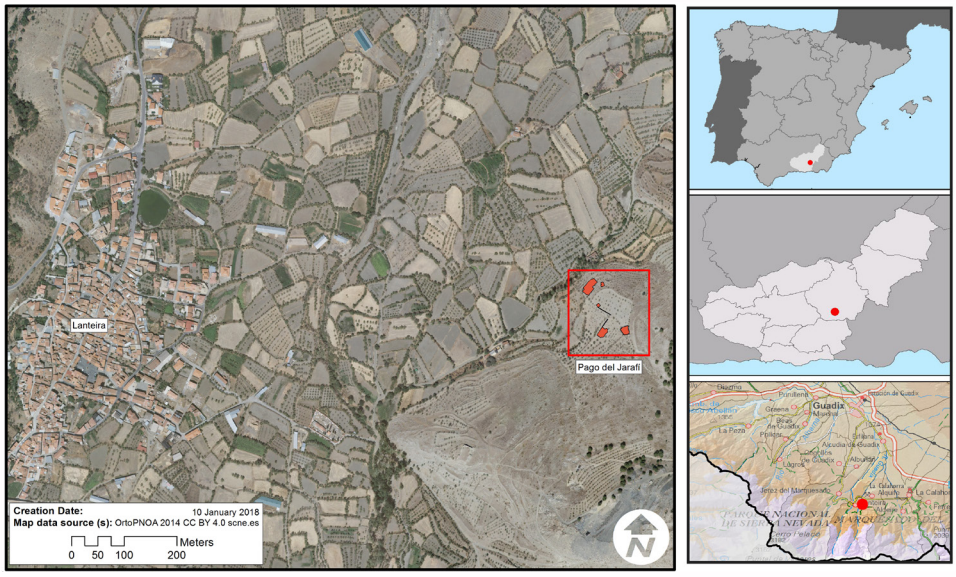


Figure 1: Location of the Pago del Jarafí archaeological site in south-eastern Spain.

The current study concerns the archaeological excavation of Pago del Jarafí (Lanteira, Granada, Spain) (Figure 1), a site benefitting from 3D modelling that was found to be very useful in interpreting the multiple settlement and funerary phases. The excavation was carried out in the framework of the multidisciplinary FP7 MEMOLA Project which focuses on mountainous cultural landscapes throughout the Mediterranean and the historical study of two resources essential to the development of agrosystems: water and soil.

Four archaeological excavation campaigns (2014–2017) were carried out in the framework of the project. The site of Pago del Jarafí, located between the northern slopes of Granada Province's Sierra Nevada and the High Plateau, comprised an Islamic village (eighth to thirteenth centuries AD) superseding a seventh-century AD settlement linked to the end of the Visigothic period. Despite carrying out geophysical surveys preceding the excavation, there was no prior indication of the presence of two cemeteries adjacent to the settlement. Although the fieldwork's main focus was to identify productive features and processes, and the relationship between the settlement and the nearby irrigated fields, the cemeteries have become a significant aspect of the excavation and have attracted considerable interest from the local population.

Although the excavation comprised a total of seven sectors, this paper focuses exclusively on two: Sectors 30.000 and 70.000. The first (S 30.000), the largest covering a surface of 442.64 m^2, brought to light the most complete archaeological sequence with the greatest number of structures. Its stratigraphic sequence ranges from a depth of 9 cm to the east to 100 cm to the west, with two well-differentiated phases of human activity. The first stretches from the second half of the eighth century AD to the outset of the eleventh century AD when the area served for production (in spite of the absence of domestic features), as evidenced by underground silos and a pottery workshop cut into the bedrock.

The second phase of occupation dates to the middle of the thirteenth century AD. After this second phase, the quarter was abandoned and subsequently transformed into an agricultural terrace. The structures linked to production, and the houses, silos, hearths and the small mosque, were all abandoned during the first phase. A mausoleum was then raised adjacent to the mosque that

probably gave rise to a *maqbara* (cemetery) in the eleventh century (Martín Civantos et al. in press).

The levels explored in the second sector (S 70.000), covering a surface of 191.31 m^2, are associated chronologically with the first two phases spanning the Visigothic (Late Antique) and Emirate (Islamic) periods (seventh–ninth centuries AD). The first is characterized by several rock-cut burials. The second, most likely from the Emirate (Islamic) period, is probably linked to iron smelting due to the presence of slag. The two groups of inhumations are grouped according to their orientation: five aligned W–E (head to the west) and five aligne S-N (head to the south). The burials in both cases were in supine position suggesting they were Christians (Jiménez Puertas et al. 2011; Román Punzón 2004: 137–40). However, it cannot be ruled out that those aligned S-N were early converts to Islam, as this orientation is characteristic of Islamic funerary rites (Martín Civantos et al. in press). The initial phases of the Islamic domination in the region must have yielded a variety of new burial rituals in terms of orientation, grave structures and corpse position.

The intention from the project's inception was to open the excavation to the public as it sparked plenty of interest in the region, especially after the discovery of the first cemetery. This resulted in a large influx of daily visitors, many curious to follow the progression of the archaeological work. The project's openness prompted reticence among some of the archaeologists who feared trespassing and pillaging outside of working hours. However, the open and welcoming approach, enhanced by guided visits during working hours and at weekends, generated a great awareness among the local population who assumed the role of caretakers when there were no archaeologists or volunteers diggers. This change of perception of a large part of the locals resulted in that many adding the site in their daily walks. In sum, throughout the four campaigns, the site received as many as 800 visitors as part of the official guided tours alone. Many travelled from different parts of the region and elsewhere in the Province of Granada (Figure 2).

Furthermore, the results of the 2014 excavation campaign were presented on 15 March 2015 to the local community. Besides information regarding the preliminary archaeological

and anthropological results, the audience viewed a documentary (MEMOLA 2014) that included 3D models of the site and the excavation process of a funerary structure. The positive comments elicited by the audio-visual material were numerous and encouraged the archaeologists to continue sharing 3D models of the excavation.

As a result, in 2016 we launched a campaign entitled *Archaeologist for a Day*. Although the initiative was initially open to everyone, access subsequently had to be limited to a local women's association. This decision was based on their willingness to book all the available days of the programme of activities and their great interest in participating in all the sessions. During these sessions, they worked with archaeological finds, and learned about medieval and Late Antiquity pottery.

Figure 2: Photograph taken during a guided tour of the Pago del Jarafí archaeological excavation.

The media, radio and newspaper also disseminated the results of the archaeological work throughout the region (MEMOLA 2018a). The combination of these activities led to widespread familiarity with the project among the local populace and an awareness that the site formed part of their social heritage. The site became an even more popular visitor attraction and many demanded it be preserved and converted into a museum (Delgado Anés 2017: 366–67). Moreover, due to this method of open communications applied by the archaeologists (Delgado Anés 2017), the locals became conscious that the individuals buried at the site were their ancestors: the founders of their village and the masterminds behind the current irrigation infrastructures.

This surge of interest and public demand for conservation and musealization is a striking phenomenon, and one of the most important outcomes of the excavation. Due to the clamour, and so as to attain an even wider audience (rendering the site more accessible to a public that cannot visit it), a number of 3D models were developed depicting some of the funerary contexts and excavation sectors. These were published in the MEMOLA project website (MEMOLA 2018b) and shared by social media (Sketchfab, Facebook and Twitter).

3D modelling therefore has become a very important tool serving to disseminate information collected on archaeological excavations. It requires, nonetheless, to be integrated in the strategic planning from the inception of the project. This strategy at Pago del Jarafí was only possible because 3D photogrammetry techniques with topographic support where applied throughout the entire excavation process (Romero Pellitero and Martín Civantos 2017). The strategy is also based on the use of virtual archaeology, which yields very precise graphic information. Another dimension of this strategy was to carry out a complete digital management of the archaeological data and develop participative approaches to dissemination beyond the excavation itself. This allowed the depiction of the stratigraphical levels and other features that were destroyed during the excavation process. As mentioned, virtual archaeology offers the opportunity to attain new audiences that cannot, or will not, be able to physically visit the site. In addition, it offers the option to apply new resources and interactive tools.

Virtual archaeology and funerary contexts

Virtual archaeology was originally the outcome of a reflective process on the suitability of 3D representations of reality, the problems faced when translating it into bi-dimensional media and on the complexity of interpretation for non-specialists (Reilly 1991). The Principles of Seville, drafted in 2011, defined virtual archaeology as 'the scientific discipline that seeks to research and develop ways of using computer-based visualization for the comprehensive management of archaeological heritage' (Principles of Seville 2011: 3). Currently, virtual archaeology is a scientific approach that generates resources and offers a higher level of engagement with heritage and instruction via virtual tools (Delgado Anés and Romero Pellitero 2017).

This discipline includes the acquisition of 3D models through photogrammetry, a technique that records the features of the cemetery. The major advantage of this technique is that it is founded on technological advances such as *Structure from Motion* (SfM). This technique, based on photography, obtains complex 3D models in a simpler, more accurate and efficient manner, avoiding the metric errors of traditional drawing (Doneus et al. 2011; De Reu et al. 2013). It is, furthermore, one of the cornerstones of the fieldwork carried out in the MEMOLA project (Romero Pellitero and Martín Civantos 2017) (Figure 3).

This technique captures a high degree of morphological details of mortuary features. These include, besides the human remains, artefacts, ecofacts and structures, and a wide range of artistic and architectural (at times monumental) memorials to the dead (Meyers and Williams 2014: 152), as well as their spatial relationships. It has the potential to create 3D models that can be displayed to the general public via the internet so as to offer additional information about the tombs and burial practices. 3D documentation thus preserves information that might be lost, or otherwise consigned only to an archive and never disseminated to a larger public. This conforms to the philosophy of the excavation and, in particular, supported the recording of its burial features since '... the essentially destructive and unrepeatable nature of excavation … makes [it] imperative to employ recording systems that are as sophisticated and accurate as possible...' (Campana 2014: 7). The technique of

3D photogrammetry is therefore currently very effective, affordable and, at the same time, accessible to the non-specialist.

However, the use of new technological tools does not necessarily imply a greater understanding of the archaeological context. In addition, the determinants of archaeology require a balance between research needs and the pace of work, limiting information collection and dissemination options, factors that likewise have to be limited to the public due to restricted access to work spaces for reasons of safety and security (Ramírez Burgos and Martín Civantos 2016).

Archaeological excavations, by definition, result in the destruction of part of the historical record. However, excavation is not the only threat, as there are also external issues that endanger heritage such as pillaging, urban development, and construction devoid of adequate archaeological oversight. Funerary contexts are especially delicate spaces due to their organic component. Their study is highly conditioned by the degree of preservation of the burials, modifications during corpse treatment, and features of the tomb itself (existence of a backfill or not, compacting, the presence of vegetable matter, etc.), the environment, and disturbances provoked by biotic elements (Ortíz 2010: 13). An accurate recording of all the stratigraphic sequences allows each burial to reveal its details (e.g. MEMOLA 2018c) (Figure 4). Many aspects can be gleaned throughout the course of the excavation and during the subsequent analyses carried out in the laboratory that offer data to reflect on aspects of the burial and on the best way of managing the information that will form the core of explaining the fabric of past societies (Ortíz 2010: 10).

Obtaining 3D models through photogrammetry does not only represent an advance in accuracy, but it also introduces greater possibilities for experimenting with the data. Furthermore, it affords the possibility of verifying interpretative hypotheses empirically and repeatedly. 3D models also offer a means of depicting archaeological features that otherwise would be far too complex to represent. 3D digitalization of skeletal remains, for example, allows the creation of replicas, and offers resources of great educational value to museums, research projects, universities and other venues (Neumüller et al. 2014; Wilson et al. 2017).

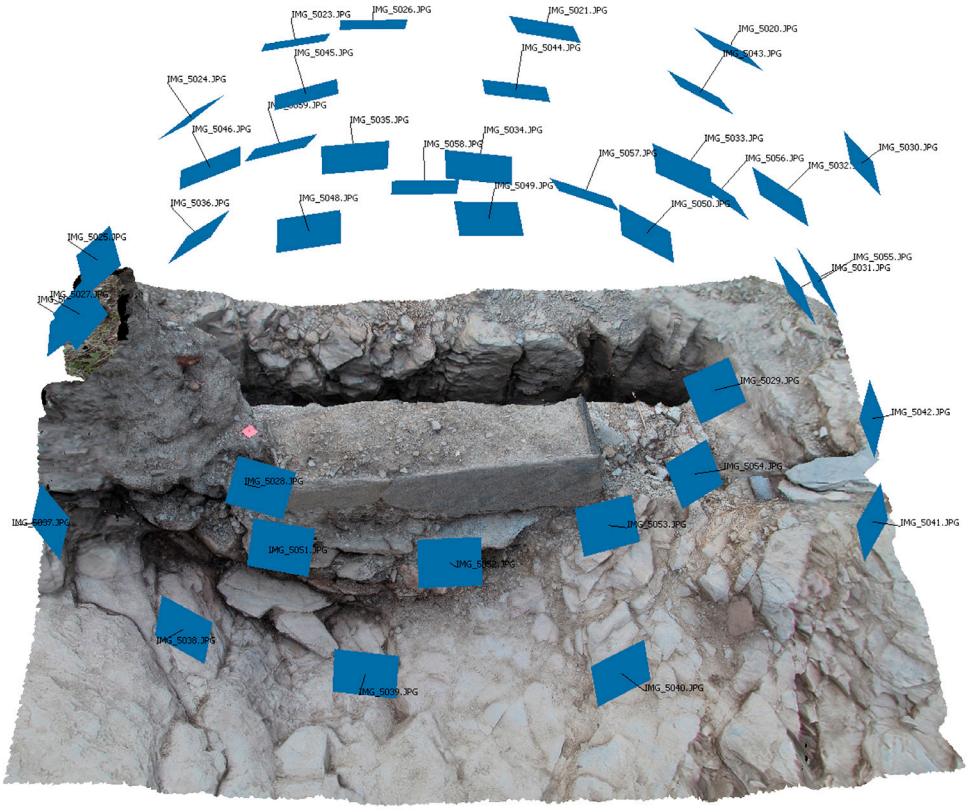


Figure 3: SfM methodology. Camera positions are in blue.

Thus, 3D environments stand out due to the simplicity of data capture and editing as well as their great potential for dissemination and communication. They allow depicting geographic, volumetric and morphologic information beyond the possibilities of bi-dimensional representations. Therefore, they can multiply the opportunities to share resources, information and comments among scholars, stakeholders and the general public. Moreover, the Internet in broad terms, and social media specifically, offer tools that link archaeologists with a much larger and more diverse public. These media, in fact, allow immediate showcasing of the archaeological advances and interpretations, and yield a more transparent workflow, which can benefit progress and knowledge socialization.

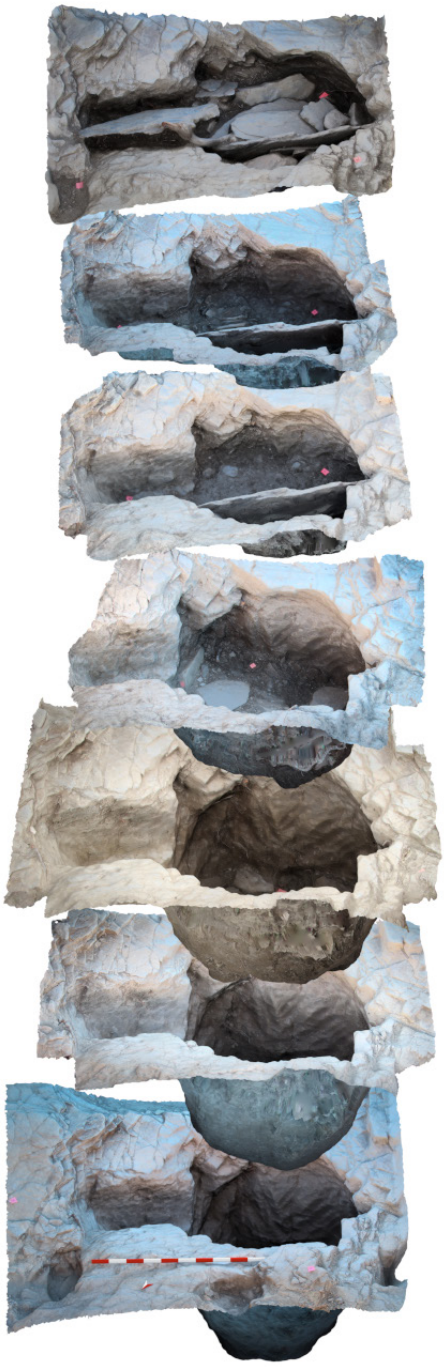


Figure 4: Stratigraphic sequence of a burial that cuts through an abandoned underground silo.

This is the viewpoint of a number of research institutions and groups implementing this discipline in their programmes, and the perspective espoused by the MEMOLA project.

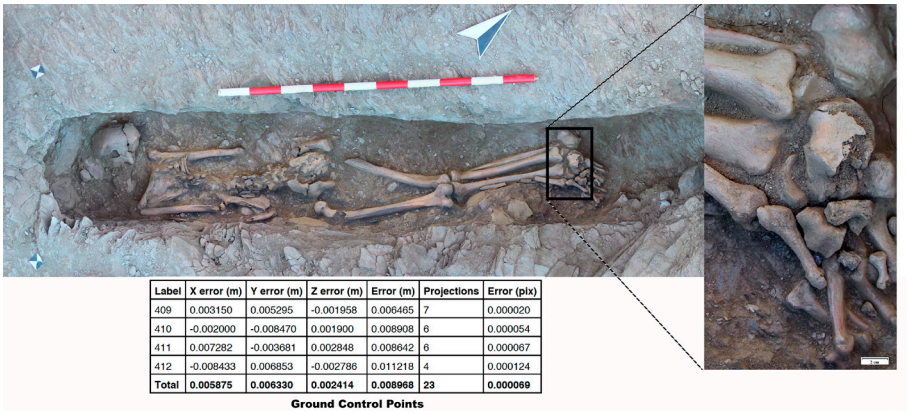
Today, the main social media network for 3D models is Sketchfab. Institutions such as the British Museum (2018a) and the National Archaeological Museum of Spain (2018) maintain a profile on this social network, as does the MEMOLA project. This platform allows these institutions to share many funerary 3D models with the public. It is noteworthy that this practice of sharing does not hinder museum attendance. On the contrary, it allows showcasing parts of their collections and creates expectations among potential audiences, improving communication beyond the museum itself.

The Pago del Jarafí archaeological record

The development of new software, algorithms and 3D modelling techniques such as the SfM simplify the task of archaeologists to obtain higher quality and more accurate digital images, attaining resolutions of more than 1 mm/pixel (Romero Pellitero and Martín Civantos 2017: 2.1) (Figure 5). This process comprises two main work stages. The first is the fieldwork to obtain the primary digital data. This phase requires a photography capture protocol deliberately designed toward 3D modelling. This stage of recording consists of an exhaustive photographic coverage of each layer (stratigraphic unit): the basic unit of archaeological documentation. Moreover, this system conforms perfectly to the guidelines of an archaeological site applying a stratigraphic excavation methodology.

This was carried out with a Canon EOS 600D camera mounted with a Sigma DC 17-50 2.8 EX HSM lens. It is essential to that the photographs be accompanied by topographic georeferencing measurements of the position of the ground control points (GCP) that serve to precisely place the successions of 3D models in space. The tool to measure the fixed points was a Leica Flexline TS02 (Romero Pellitero and Martín Civantos 2017: 2.2–2.4)

The second stage consisted of processing the photographic data with SfM software to obtain results susceptible to analyses, interpretation and dissemination. This was carried out with Agisoft



Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
409	0.003150	0.005295	-0.001958	0.006465	7	0.000020
410	-0.002000	-0.008470	0.001900	0.008908	6	0.000054
411	0.007282	-0.003681	0.002848	0.008642	6	0.000067
412	-0.008433	0.006853	-0.002786	0.011218	4	0.000124
Total	**0.005875**	**0.006330**	**0.002414**	**0.008968**	**23**	**0.000069**

Ground Control Points

Figure 5: Burial (S 073) of Sector 30.000 together with close-up image of the feet, thus illustrating the high-resolution photography deployed during the project.

Label	X error (m)	Y error (m)	Z error (m)	Error (m)	Projections	Error (pix)
581	-0.003549	-0.006925	0.001987	0.008031	32	0.000059
582	0.000066	0.001611	-0.001092	0.001947	44	0.000060
583	-0.000238	0.001374	-0.001830	0.002300	28	0.000066
584	0.002564	0.006472	-0.002739	0.007480	22	0.000097
585	0.001157	-0.002531	0.003674	0.004609	16	0.000082
Total	**0.002028**	**0.004488**	**0.002428**	**0.005492**	**142**	**0.000070**

Ground Control Points

Figure 6: Burials of Sector 70.000 with close-up image of striations on the skull of a second skeleton disturbed by the interment of a second body.

Photoscan combined with Blender, a free and open source 3D creation suite serving to edit 3D models and create elaborate infographics.

There are limitations, nonetheless, to the application of 3D models in research. In many cases, the resolution and detail of the data prevented carrying out palaeodemographic studies to determine the age of death, sex and other the information. These types of studies must be conducted in the laboratory with sterile material. It is also worth mentioning that this data is more readily observable when recording skeletal remains individually and not in groups (Figure 6).

As mentioned above, 3D recording and social networks such as Sketchfab (MEMOLA 2018d) offer the option of presenting excavation processes to the general public. This technology also provides access to a whole new means of sharing information that, until now, was restricted to specialists. Hence the MEMOLA project website (MEMOLA 2018b) and seven other social networks feature 3D images of Pago del Jarafí.

The online presentation of 3D models therefore stems from the methodology adopted for the excavation, and responds to the demand of visitors who expressed an interest and desire that the site be converted into a museum, an option that is financially prohibitive.

The intention was also not to develop unidirectional communication but to offer the possibility of receiving feedback, collate information from colleagues and clarify any doubts or queries. A case in point is the publication of a structure (S 045) that did not contain a complete skeleton, but only the skull and jaw of an adult woman (MEMOLA 2018e). The skull was clearly an intentional deposition as it was placed in the middle of the grave and featured three flat stone blocks set at its back to prop it up. In addition, the orientation of the grave, facing south, differed from most of the others. This feature, although a single event, is significant as it differs from the Muslim rite penned in the Quran that requires all members of the community to be buried whole (https://skfb.ly/67psx) (Figure 7).

Figure 7: Medieval burial S 045 is an rendered imagine that shows the possibilities of analyzing 3D models from any perspective.

In the MEMOLA Sketchfab profile, the 3D model with the greatest number of visits is the stratigraphic sequence of a burial that cuts through an older abandoned silo (Figure 4). It received 509 views and 23 likes from 26 April to 3 September 2017. An identical model on Facebook (the project's main social profile) reached 1744 individuals and has currently received 83 reactions, comments and shares (also shared by the town of Lanteira and other local institutions). Although these social networks do not allow identification of the profile of the public interested in each post, they undoubtedly help to determine the interest of the public in ancient funerary contexts. Hence this type of 3D model has attained a higher number of reactions than other archaeological models depicting pottery or storage structures. For example, the final archaeological plan of excavation of sector 30.000 received 410 views and 16 likes. This 3D archaeological plan recorded three different elements in a sequence ranging from the seventh to the twelfth century AD: four silos (three still sealed), part of a large house with three construction phases and an Islamic cemetery with twenty-two burials.

The MEMOLA project, whose main objective is the study of Mediterranean mountainous cultural landscapes, has indeed attracted a larger participation at the sites where local communities

and the general public demonstrated interest in the activities. Hence, in the case of Pago del Jarafí, social media has offered those interested in the digital projects the option of participating in the fieldwork (Delgado Anés 2017: 369). The excavation findings also indicate that the local communities are more interested in the cemetery than other aspects of the site. This factor could be explained by the ease of the general public to identify with humans. In fact, the working methods applied at the site have resulted, as noted previously, in local communities recognizing the past populations as their ancestors and the founders of their town.

Other projects related to burial 3D modelling

There are a number of archaeological projects that apply technological advances that open doors to new approaches to the study of burials and their rites. These include 3D modelling, a procedure that can be made accessible to the general public.

Projects serving as references for the notions advanced in this paper are, for example, '3D Epigraphy' (3D 2018) of the National Archaeological Museum and the National Museum of Roman Art that includes digitalized Roman funerary inscriptions. Other examples of 3D photographic recordings of funerary inscriptions are the British Museum's marble funerary cinerary chest of Marcus Pilius Eucarpus for his wife Pilia Philtata (British Museum 2018) and the burial of King Richard III (Archaeological Services (ULAS) 2018). A Canary Islands Museum project, *Mummies. 3D Biographies,* has been online since May, 2017. It displays a 3D modelling of three mummies (El museo canario 2018) combined with data from an earlier bio-anthropological study with the aim of showcasing the most relevant information of the life and death of the Canarian indigenous population. However, there are still no projects that systematically present all the data of their investigations. Most simply offer one or several funerary aspects such as the stratigraphical sequence, a single burial or the epigraphy.

It is noteworthy that museums appear to be reluctant to showcasing the deceased online. Many of these platforms, in fact, do not offer images of the dead. The number of official

entities that do publish these types of images is less than that of individual researchers. Williams and Atkins (2015) state that this could depend on unease related to de-contextualizing the human remains. Ulguim (2016), by contrast, affirms that certain organizations prefer to run their own platforms, as is the case of Digitised Diseases (2018) and the Smithsonian's 3DX (2018) rather than upload data to third party sites. As noted above, the current study has not identified any researcher profiles willing to publish models relevant to bioarchaeology and funerary archaeology. An example is Ulguim (2016) who showcases skeletal elements, their corresponding medical and archaeological reference materials, and models of remains recorded *in situ* in excavations or funerary spaces devoid of context.

Furthermore, not every published model is accompanied by information of the burial context such as measuring scales, descriptions, and supplementary photographic and/or audio material. A great number, in fact, provide no information thus limiting their communication and didactic potential, as well as their critical analysis. These circumstances require posing the following questions: what is the objective? What is the target audience? Is it ethical to showcase a burial? No specific guidelines, in fact, are available in any country as to displaying burial contexts and a common methodology and standards are needed to improve the use of new digital tools in archaeology, specifically during excavations.

The use of digital technologies and applications to record cultural heritage began to be introduced in Spain as early as the 1970s by Almagro Gorbea (1973). Since then, the use of photogrammetry has been developed significantly, rendering 3D techniques accessible to archaeologists. Despite the increase of use by scholars and professionals, no initiative can be compared to that of the UK organization Historic England that promotes a guideline applicable to the technique (Historic England 2017). In the Spanish context, the methodologies were established through scientific production and a professional educative offer. There is, for example, the possibility of acquiring an MA in Archaeology and Virtual Heritage, promoted by the SEAV (Spanish Society for Virtual Archaeology), or the postgraduate course in Digital Technologies for Geometric

Documentation and Heritage Representation organized by the CSIC (Spanish National Research Council).

Why publish 3D models of funerary contexts?

The materiality of death is perceived differently according to the identity, culture and religion of the observer. For this reason, there is extensive debate regarding the ethics of displaying archaeological remains of dead individuals in museums, on the Internet, in videos, and in other media (e.g. Meyers and Williams 2014; Sayer 2010; Sayer and Walter 2016; Williams and Atkin 2015). The benefits of digital methods in analyzing the dead are being applied increasingly to early periods. This is the case of four mummies from the Canary Islands in the National Archaeological Museum (MAN) of Madrid that were studied by 3D-scanning to gather data as to their conditions of life, cause of death and funeral rituals. The technology in these cases also led to reconstruction of their faces. Yet it is worth reflecting on what would occur if a researcher or institution created a 3D model accompanied by written and graphic information of human remains from the Second World War or the Spanish Civil War? Even bearing in mind the display's scientific or educational intention, it is possible to imagine that descendants of these individuals would object to their display in either social media or in a museum.

In the discipline of archaeology, both excavating and exhibiting human remains are considered a legitimate and integral part of research by universities, museums and other sectors when subject to correct guidelines that grant appropriate respect (Meyers and Williams 2014: 154). In fact, social researchers bear the ethical duty to disseminate the results of research to society, and, within this scope, mortuary archaeology provides an unusual amount of information about societies and their cultures.

Along these lines, many documents emphasize the scientific value of human remains in research and affirm that it is necessary to foster and exhibit the results. Key examples are the *Vermillion Accord on Human Remains* (WAC Inter-Congress 1989), *The Tamaki Makau-rau Accord on the Display of Human Remains and Sacred Objects* (WAC Inter-Congress 2005), and the *Code of Ethics and the Code of Practice of the British Association of Biological*

Anthropology and Osteoarchaeology (BABAO 2010a and b). There are also other documents espousing the same premise but focused on the professional code of ethics. This is the case, for example, of the ICOM for museums that stressed as far back as 1986 the professional responsibility of specialists concerning human remains and sacred artefacts as highlighted in paragraph 4.3 regarding the exhibition of sensitive materials:

> Human remains and materials of sacred significance must be displayed in a manner consistent with professional standards and, where known, taking into account the interests and beliefs of members of the community, ethnic or religious groups from whom the objects originated. (ICOM 1986: 25).

This subject matter is pertinent as one of the main topics of the First Museum Congress of the Canary Islands in 2016 focused on the ethics of exhibiting human remains and whether it was acceptable to showcase the corpses of indigenous Canarians. The interest of members of the general public to view these bodies besides factors of education or curiosity, could amount to reasons approaching morbidity.

Therefore, 3D visualization of mortuary contexts should demand that viewers be more than a mere spectator. This type of viewing must offer supplemental textual and graphic information to contextualize the model so that the viewer identify, learn and interpret heritage. The authors of this paper therefore concur with Ulguim (2016) who argues that without the contextual data, there is no justification or ethical value in sharing these types of models.

Taking account of all these notions, a 3D digital record of the morphology, spatial distribution, colourimetry, and volumetry of human remains requires concomitant data as to burial context, building elements, artefacts and topography (Figure 8). This last element is also important, as it is not possible to differentiate burial practices from the way in which past populations interacted with their surroundings. Hence, it is the task of professionals not only to offer visualizations of the human remains, but also to explain and describe the behaviours, living conditions, diet, rituals and beliefs of ancient populations.

Figure 8: Infographic elements of burial S 023, illustrating how 3D models can afford the fuller contextualization of human remains.

In sum, the potential of 3D models to bolster archaeological communication and engagement among the general public is beyond doubt. Digital applications and visual representations are now essential tools for communication and education as culture is now very visual. Pictures and films in numerous formats are currently the most common way of transmitting a vast array of messages, information, knowledge and values (Pérez Báñez 2017). This is a challenge for archaeology and the methods this discipline use to socialize knowledge. Certain institutions recognize the growing value of Cultural Heritage and Digital Humanities. The MEMOLA project and the research laboratory of the authors of this study have gone to great lengths to improve communication, participation and public engagement by means of both formal and non-formal educational resources. Therefore, digital tools, and particularly 3D modelling, are key elements in the strategy of the project that continues to develop and explore the potential of virtual archaeology, musealization, gamification and social networks.

3D modelling allows sharing complex visual information and reconstruction of all the information of an excavated cemetery. Moreover, virtual reconstructions can be developed and disseminated without altering the integrity of the contexts and sites (Angás and Urib 2016: 92). Digital models are tools that can serve at the site itself via mobile devices or informative panels, as well as off-site at conferences or schools, museums or digital exhibitions. They can also be embedded into online media such as MOOC (massive open on-line course), blogs and social media. They have a great potential to engage new audiences (in terms of age, gender and religious faiths) including those whose interested in the past, burial rites and death (Williams and Atkin 2015). 3D models hence represent an integral dimension of project communication strategies. In the case of Pago del Jarafí they were readily adapted to the unforeseen discovery of the cemeteries.

3D presentations of burial scenarios also allow both scholars and the general public access to data that might otherwise be less accessible or available via two-dimensional plans and stratigraphical sections that are more difficult to 'read' by non-specialists. Moreover, they offer the potential to foster debate between differing interpretations of the evidence involving

academics and professionals, as well as amateurs and members of local communities.

3D modelling and virtual archaeology are also useful tools in teaching and transmitting notions about burials to counteract morbid curiosity and foster rich and detailed arguments as to diversity of attitudes and practices surrounding the topics of death and the dead. Yet technical and ethical challenges require confrontation in this regard. Archaeologists should initiate the process by attempting to define an online collaborative culture and by considering communication as another of their everyday tasks. In a more general manner, and beyond the specific topic of burials, there are numerous ethical challenges to the field of digital public archaeology, as discussed by Richardson (2018).

The MEMOLA project has integrated knowledge socialization and transmission as one its main goals. Cemeteries are attractive for the public during the excavation. 3D modelling allows us to extend these effects and visualize an archaeological context that has disappeared. Dissemination of this data can be prolonged over time by reaching out to a wider national and international public, thereby facilitating a broader access to the findings of archaeological research.

As the use of these technologies becomes more extensive, digital 3D models are increasingly common in funerary scenarios. They represent an excellent opportunity to directly share detailed information. The challenge, however, is to focus on how to present these features, and to determine what information to include for a varied audience. In line with the argument of Ulguim (2016), this study concludes that the task of archaeologists is to find ways to share accurate three-dimensional models and, more importantly, determine why create them and for whom, as they offer deep insight into the rituals of the past and a better understanding of modern-day burial customs.

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Exploring your Inner Hades: DNA as Mortuary Archaeology

Tom BOOTH

Natural History Museum, London, UK

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Abstract

Two revolutions in using human genetics to investigate the past are beginning to have a profound effect on how the public regard heritage and their connection to it. Direct-to-consumer genetic ancestry tests (GATs) are becoming a popular way for the public to explore their familial history and ancestry. Major advances in ancient DNA methods mean that the field is beginning to live up to its early promise. Both of these analyses can be considered forms of public mortuary archaeology in how they are perceived to provide an individual an interface with their recent and more ancient ancestors, their own personal Hades, referring to the Ancient Greek home of the dead. GATs are useful for resolving genealogy and determining the origins of an individual's recent ancestors, but have been criticized for reifying differences between populations, failing to give clear guidance on how they should be interpreted, and making exaggerated links to historic groups of people that are at the heart of genetically determinist nationalistic origin myths. Recent palaeogenomic studies of prehistoric Europeans have found evidence for population discontinuity that will have repercussions for the public's perception of archaeological mortuary sites and the communities who built them. Public archaeologists are going to have to engage increasingly with these types of data to combat the misappropriation of genetic results in defining rights and affinities to archaeological heritage.

Keywords

ancient DNA, Genetic Ancestry Tests, nationalism, public archaeology, mortuary archaeology

Introduction

Direct-to-consumer genetic ancestry tests (GATs) have become a popular way for the public to directly explore their familial histories, as well as more abstract aspects of their ancestry, identity and heritage (Royal et al. 2010). At the same time, major advances in the sampling, extraction and analysis of ancient DNA have facilitated powerful palaeogenetic studies of ancient human remains highlighting, amongst many other things, population discontinuity in prehistoric Europe (Allentoft et al. 2015; Fu et al. 2016; Haak et al. 2015; Olalde et al. 2018). Both GATs and palaeogenomics may be regarded as forms of contemporary mortuary archaeology, and digital public mortuary archaeology (DPMA) in particular, in that they are represented through virtual digital media and data that encourage the public to explore and define relationships between themselves and their long-deceased ancestors (Williams and Atkin 2015). They therefore form an interface between the public and past communities (Moshenska 2017). The way in which both disciplines enter and influence societal and political discourse, whilst often being regarded as recreational or academic, as well as how they provoke tensions between authority and multivocality in narratives of populations and individuals, means that they are subject to some of the same issues that are often at the forefront of discussions in public archaeology more generally (Richardson and Almansa-Sánchez 2015).

Human palaeogenomics is mortuary archaeology in a straightforward way, as it deals directly with ancient human remains retrieved from archaeological investigations of mortuary sites. Both GATs and palaeogenomics produce rich datasets representing the individual, but also a population of that individual's ancestors (Royal et al. 2010). The data are stored in online databases such as the NCBI GenBank, producing large datasets composed of biological information from an individual and their ancestors. This adds to the growing list of types of non-corporeal or non-material forms of public mortuary archaeology (Williams and Atkin 2015). Ancient geneticists are now also 'death-workers' who have a key role in constructing narratives of dead individuals and populations, sometimes with little involvement from archaeologists (Giles and Williams 2016: 12). Unlike other archaeological scientists, most palaeogeneticists have little formal training in human osteology

or funerary archaeology. Some of the conclusions of these palaeogenetic studies have taken archaeologists by surprise, and there are still lingering tensions between the two disciplines, often fueled by misunderstandings regarding their respective research interests, methodologies and interpretations (Furholt 2018; Heyd 2017).

The ability to treat DNA data from an ancient individual as representative of a population has allowed geneticists to make bold assertions about prehistoric population movements based on what might be regarded as relatively small sample sizes (Allentoft et al. 2015; Fu et al. 2016; Haak et al. 2015; Olalde et al. 2018). Caution must always be exercised in assessing archaeological representation biases, but genetic information from both ancient and modern individuals facilitates investigation of early and more recent populations whose remains may not have survived into the archaeological record. This concept is usually taken for granted in palaeogenetics papers, but this subtlety is often lost on archaeological specialists and the public. Narratives derived from palaeogenetic studies often provoke sensational headlines in national media, and this is often how most archaeological specialists initially encounter these results. The hard science and academic papers are often difficult for archaeologists to scrutinize, and sometimes geneticists cannot fully explore the range of arguments and approaches to particular archaeological questions, which can often lead to archaeologists feeling divorced from the findings of palaeogenomics, and perhaps may lead them to consider the subject of palaeogenomics outside their area of expertise. The potential for an absence of archaeological expertise in both palaeogenomics and GATs may set them apart from other forms of public archaeology (Moshenska 2017).

This article will explore the ways in which GATs and palaeogenomics represent forms of contemporary public mortuary archaeology and the way that they affect relationships between the public and their recent ancestors, as well as their relationships with ancient peoples (including the artefacts, ancient monuments and landscapes they leave in the landscape). It will explore how these types of studies may affect perceptions of more traditional forms of mortuary archaeology, focusing mainly on Europe, and on Britain in particular. It will provide some ideas about what GATS can and

cannot be used to say about relationships between modern and ancient populations, in order to provide some guidance on how to combat the misappropriation of these data in public discourse.

GATs

There are an increasing number of companies that offer personalized DNA sequencing services for a bewildering variety of purposes, although GATs are by far the most popular and numerous (Phillips 2016). The tests do not involve sequencing of an individual's entire genome, but specific genetic variants that have been identified as helpful for discriminating between modern-day national populations and assessing relatedness between individuals (Jobling et al. 2016; Royal et al. 2010). GATs have fairly discrete genealogy and ancestry functions that have different implications to inferring relationships between the living and the dead.

The genealogical aspect of GATs involves the search for DNA sequences that consenting individuals in the company's databases may have in common (Royal et al. 2010). The abundance and length of shared DNA sequences between individuals can be used to estimate the degrees of relatedness, and identify extended family members. This information can be essential to resolving genealogical quandaries, and GATs are demonstrably useful for identifying long-lost relatives or resolving family trees (Tutton 2004). However, they also have an inherent disruptive potential, as there is always a possibility that the results will clash with the genealogical record, or even a person's own accepted family history (for example, in identifying an instance of misattributed paternity). This highlights a recurring theme of GATs, as well as palaeogenetic analyses, that is directly relevant to issues raised in public archaeology. Namely, that unexpected or unintuitive results have the potential to alter an individual's perceived relationship with distinct ancestors, ancient peoples and related aspects of identity and heritage (Lee 2013; Scully et al. 2016).

GATs usually construct representations of an individual's ancestry through two methods: sequencing of hundreds of thousands of genetic variants (usually single nucleotide polymorphisms (SNPs) – positions in the human genome that are commonly variable

between individuals) distributed across an individual's whole genome and analysis of uniparental markers (DNA sequences inherited exclusively through the maternal (Mitochondrial DNA) or paternal (Y-chromosome) lineage). Data obtained across an individual's whole genome is used to produce ancestry composition tests. These tests use algorithms to calculate the combination of SNPs commonly found in modern national source populations best explains SNP variation in an individual's genome (Royal et al. 2010). The result is usually expressed as percentages relating to the proportion of SNPs an individual has in common with particular populations. Ancestry composition tests are at the forefront of GAT marketing, and have been linked explicitly with relationships to historic groups of people intrinsic to notions of national, regional and individual identity (Nordgren and Juengst 2009; Figures 1 and 2). These marketing strategies commodify ancestry by placing it at the heart of an individual's sense of identity and heritage (Bliss 2013; Scodari 2017).

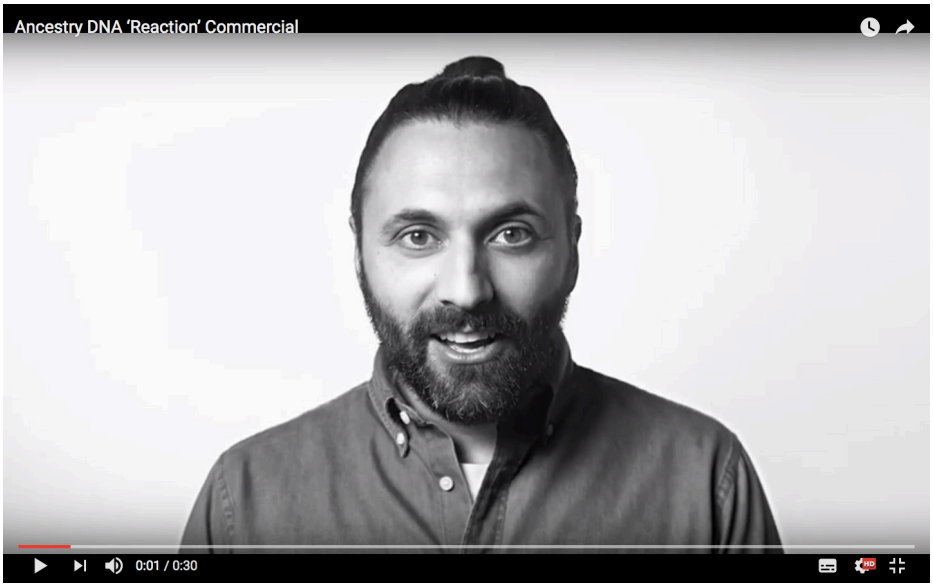

Figure 1: https://www.youtube.com/watch?v=hpJ6TFmrs1o
Ancestry DNA 'Reaction' Commercial depicting a man's reaction to being told that he 'is a Viking.' This advertisement highlights that the possibility that GATs can make connections between individuals and particular historical populations; these are often at the forefront of GAT company marketing strategies.

Figure 2: https://vimeo.com/135006750
Ancestry 'Come Find Me' Commercial depicting a Viking inviting viewers to discover who their ancestors were and 'where their story began'. This advertisement also prioritizes the suggestion that GATs can link modern individuals to specific historical populations that feed into ideas around nationhood and identity.

There is no doubt that population genetics provides tangible and effective methods of distinguishing between different modern and ancient populations. Of course, genetic variants associated with particular modern populations do relate to the population history of particular regions, and comparison of data from each can be a powerful way of investigating past demographic processes, although the nature and antiquity of the processes they capture is sometimes unclear ((Kershaw and Røyrvik 2016; Leslie et al. 2015). However, the presentation of GAT ancestry composition tests, emphasizing differences between populations supposedly reaching back into deep time and linking differences to historical populations and aspects of contemporary identity has been criticized on several fronts (Jobling et al. 2016; Morning 2014; Nash 2004; 2005; 2012a; 2012b; 2013; 2015; 2016; 2017; Nordgren and Juengst 2009; Phelan et al. 2014). The SNPs that

are studied for these ancestry composition tests represent a tiny proportion of an individual's genome, yet an individual's ancestry composition is normally presented in percentage terms, potentially giving a misleading impression of the significance of differences between populations (Jobling et al. 2016; Phelan et al. 2014; Royal et al. 2010). DNA sequences are so data-rich that even a small proportion of a genome can be used to discriminate between modern populations on a probabilistic basis. However, there is some evidence that public awareness of what GATs claim to do reifies concepts of inherent human racial differences that has been characterized as a new form of racialism (Morning 2014; Phelan et al. 2014). This is in spite of the fact that studies on both ancient and modern populations have clearly undermined traditional racial categories; therefore, this disconnect between results and interpretation may represent public misunderstandings this technology (Fujimura et al. 2007; Reich 2018). The inference by GATs that modern genetic differences have persisted through deep time, and particularly the evocation of ancient populations that are at the heart of modern national foundation myths, has been argued to encourage ethnic nationalism, building genetically essentialist notions of modern peoples that can facilitate nativist political narratives (Nash 2015; 2017; Nordgren and Juengst 2009). This situation is exacerbated by use of categories that are a mixture of genuine ethnic groups, nationalities (some of which have only existed in the recent past) and vague geographic regions of variable size (e.g. Ashkenazi Jewish, French, German, Italian). These categories are defined by the ease at which populations can be distinguished using the methodologies used by GAT companies, but the way they are labelled potentially creates a false equivalency between terms and strips them of their sociocultural and historical components. The specificity of some of these categories has been questioned on the basis that current methods used by GAT companies can only allocate ancestry at continental resolutions with high confidence (Jobling et al. 2016). The results of GATs are often perceived by the public, as well as marketed by the companies, as a way of using their ancestors to link themselves to historic populations and legitimize aspects of their identity. In doing so, GATs promote a questionable ideal that deep ancestry and connections to ancient groups are imperative to a person's individual national identity and belonging, ideas that have deep roots in ethnic nationalism.

GATs differ subtly from this popular perception, mostly because of the way they transform raw genetic data into comprehensible ancestry compositions, but also because of limitations on what modern genomes can be used to say about ancient ancestors (Jobling et al. 2016; Royal et al. 2010). The source populations used in GATs are usually composed of individuals whose grandparents were all documented to have lived in the same region or modern nation and often those who self-identify as 'white' in European countries (Durand et al. 2014). This strategy is intended to narrow down samples to individuals who are likely to have the longest ancestral legacy in a particular region, therefore taken to be broadly representative of the general population of that area over a maximal time period. GAT companies suggest that this allows them to acquire a genetic signal for particular regions which existed before more recent periods of significant migration, and which would be assumed to have been static for the last few hundred years (Durand et al. 2014). This may be true in a broad sense, but without hundreds of ancient genomes dating back over the last few hundred years, this assumption is currently difficult to test. Most individuals used in these source populations will inevitably have ancestry from other places, but the statistical techniques used by GAT companies zero in on average differences between populations. The size of the area can vary and is at least partly dependent on the degree of genetic differentiation between populations living in particular regions. Crucially, the data from these source populations are curated to some extent to produce statistically coherent groups, and are likely to represent relatively conservative representations of genetic variation in these groups.

The algorithms used by GATs apply principals of population genetics to an individual's genome and are based on robust but probabilistic models that were primarily developed for comparing populations rather than individuals (Jobling et al. 2016; Royal et al. 2010). Each company has their own source populations and algorithms, and therefore each one produces slightly different results for the same individual. In addition, the conservative construction of population groups, small or unrepresentative source populations and historic relationships between geographically close groups can mean that certain sequences are misattributed and produce results that are known (through detailed family records) to be anomalous. Therefore, GATs represent an individual's historic

ancestors defined through a prism of modern population variation and culturally derived categorizations (Jobling et al. 2016).

It is currently difficult to determine the time-depth that GATs represent with respect to past populations, but is probably no more than a few hundred years (Jobling et al. 2016; Royal et al. 2010). This is a pertinent factor for consumers who believe GATs will reveal something about their deep ancestry, particularly how it fits with the popular conception of the origins of regional and national populations. However, despite some GAT companies trading on this connection, they tend to be vague about the antiquity of the ancestors their tests represent (Durand et al. 2014). Contrary to the marketing by some companies, GAT ancestry compositions cannot provide robust insight into a modern individual's connection with distant early medieval populations that are often at the heart of European nationalist myths. Very few GATs produce results suggesting an individual has an exclusive genetic stake in a single ancestral category, even over the potentially short time frames they cover (Jobling et al. 2016; Panofsky and Donovan 2017; Scully et al. 2016). The exponential increase in ancestors every generation means that as you go further back in time, each single individual ancestor is likely to be represented to a diminishing degree. The way in which DNA is inherited in chunks means that sequences from a particular genealogical ancestor can be entirely replaced through time, leaving an apparently paradoxical situation in which an individual has genealogical ancestors that are not represented in their DNA (Royal et al. 2010). As an individual's genealogical ancestors increase exponentially with each generation, the population of a particular region is usually decreasing, and so it quickly becomes inevitable that this population of ancestors will include people from diverse places. The European genetic isopoint (the point at which everyone that lived in Europe and passed on descendants is an ancestor of all present-day white Europeans) is in the ninth century AD, around the time of the Viking colonization of Britain and well after the arrival of the Anglo-Saxons (Ralph and Coop 2013). A similar isopoint for the entire world population is estimated to be only a few thousand years ago (Rohde et al. 2004). Therefore, every present-day person with recent European ancestry from any country will inevitably have genealogical ancestors from the first millennium AD who lived in every part of Europe and could

be equally afforded early medieval cultural/ethnic terms as much as any other, such as 'Anglo-Saxon', 'Viking' or even 'Celt'. The population of genealogical ancestors from the first millennium AD and almost certainly a proportion from the second millennium AD would have lived outside of Europe. Of course, certain early medieval groups had disproportionate genetic influences in particular regions which may have persisted to some extent through time, meaning that it is likely that genetic signatures of modern populations will reflect the influence of historic groups to some extent (Leslie et al. 2015), but for the reasons described above it is impossible to make confident statements regarding the links with a modern individual. GATs can only pertain to a selection of an individual's ancestors who in most cases probably existed relatively recently.

GAT companies largely leave it up to their customers to interpret the meaning of their results when it comes to the depth of ancestry (Jobling et al. 2016). In many cases this allows their customers to mould their results to fit their preconceived sense of their own family history, ancestry and identity. In this situation, the customer always gets what they want, as their family legends or ideologies regarding their relationship with past peoples are seen to be given an objective scientific grounding (Lee 2013; Scully et al. 2013; 2016). The way GAT companies often leave their results open to interpretation has led them being labelled as 'genetic astrology' (Balding et al. 2013). Even if customers venture online to attempt to understand their results, the variety of possible websites, blogs and social media accounts available could be used to support most interpretations. The predictable interest that ethnic nationalist groups have in DNA means that they are often overrepresented amongst these sites. A lack of expertise in GATs amongst archaeologists may make it difficult for them to challenge narratives of individuals and population histories that develop from interpretations of GATs, which adds to the potentially problematic ways in which archaeological expertise may be undermined in digital contexts (Richardson 2014). The reflexive way in which a large number of people, particularly those with predominantly recent European ancestry, reflects the perception of these tests as 'low stakes' and recreational, with only a small impact on their lives beyond their perception of self. However, as has been argued in the public archaeology literature, there is a broader argument over

how far knowledge and results of tests spill over into ideas around society, heritage and identity (Nash 2015; 2017; Richardson and Booth 2017). The stakes are tangibly higher for people from other parts of the world. For instance, in North America ancestry results pertaining to Native American ancestry can be seen to affect political legitimacy (TallBear 2013).

White nationalists perceive themselves to have a more explicit high stakes investment in the results of GATs. A study of posts on the Stormfront white supremacist online messageboard suggests that many see these GATs as a way of legitimizing their 'whiteness', which in their minds is defined by a high proportion of European ancestry (Panofsky and Donovan 2017). These ideas of 'whiteness' and genetic continuity with ancient populations are often linked with determinist notions of behaviour and culture. Inevitably, GATs often subvert expectations, revealing ancestors from continents other than Europe. However, the most common response to unexpected results is rejection, either through criticism of the methodologies used by the testing companies, anti-Semitic conspiracy theories or shifting goal-posts (Panofsky and Donovan 2017: 27). This highlights that whilst GATs have the potential to be a disruptive form of public mortuary archaeology when it comes to biological essentialist notions of peoples, this is often ignored or rationalized reflexively if it contradicts a person's pre-established sense of identity (Panofsky and Donovan 2017; Scully et al. 2013; 2016). This selective reaction to GATs further demonstrates that, in spite of their disruptive potential, they are more often appropriated to support an individual's preconceived ideas. This is in common with other forms of public archaeology that are selectively co-opted and interpreted to fit particular ideologies, particularly those related to nationalism (Sommer 2017). This parallels the tensions surrounding intellectual authority and multi-vocality in Western Europe. Multi-vocal approaches, particularly in North America, can engage wide audiences, give indigenous groups agency and stake in archaeological interpretations of their heritage and produce broader discussions that are of benefit to discussions around archaeology and heritage (for example: Hodder 2008; McClelland and Cerezo-Román 2016), but this should not extend to allowing scientific analyses to be misrepresented, particularly for egregious purposes, and in these cases this requires some

acknowledgement of expertise (Grima 2017; Merriman 2004). For instance, in Western Europe multi-vocal approaches may open archaeological interpretation to fringe ideas and ideologies that misrepresent primary evidence (Merriman 2004; Richardson 2014; Grima 2017). Similar to certain fringe narratives of archaeological sites constructed by non-experts, the results of GAT tests have the potential to be misunderstood or misrepresented to prop up particular extreme ideologies (Grima 2017; Sommer 2017).

Some companies also offer to characterize an individual's uniparental markers in an attempt to explore deeper aspects of an individual's maternal and paternal ancestry (Jobling et al. 2016). Accumulated random mutation in these parts of the genome can be classified into trees of related categories, named 'haplogroups'. As different haplogroups emerge at different times and in different locations, they occur at variable frequencies amongst world populations. Uniparental genetic markers are often used on a population level to discuss maternal/paternal genetic population affinities and movements.

In relating to a specific lineage of ancestors, an individual's uniparental markers potentially provide a clearer line of descent that reaches back into the deep past. For instance, a study of modern DNA from the north of England found an association between rare Norse-derived surnames and Y-chromosome haplogroups associated with Scandinavia, which is most likely related to early medieval diaspora of Scandinavian groups around the North Sea and Irish Sea in the ninth and early tenth centuries AD (King and Jobling 2009). However, in representing a small and very specific proportion of an individual's ancestors, these markers are often not particularly meaningful in a broad biological sense, and can contrast with results from an individual's whole genome (Emery et al. 2015; Jobling et al. 2016; Lee 2013; Royal et al. 2010). Many world populations include a diversity of uniparental haplogroups, and distinguishing between them is usually based on ratios at a population level. Therefore, extrapolating the origins of a single individual's uniparental lineage on the preponderance of a particular haplogroup in other national populations can be inaccurate. In addition, defining modern identity or heritage through either of these markers is inherently gendered in arbitrarily a small group of direct all-male or all-female ancestors (Nash 2012). In sum, the analysis of genome-wide SNPs and uniparental

markers in modern populations has undeniable applications to the study of past population history, but for a variety of reasons they are limited in connecting a modern individual with ancient peoples. GAT companies have no stake in communicating these limitations to the public, leaving their ancestry tests open to interpretation and potentially abuse by individuals and groups promoting nationalist ideologies.

Ancient DNA and traditional mortuary archaeology

Major breakthroughs in sequencing technology, sampling and laboratory methods have revolutionized the extraction and analysis of ancient DNA. These methods have been applied to a range of prehistoric human remains, leading to the discovery of new groups of humans with whom our species interbred, and have gone some way to resolving the issue of the prehistoric population history of Europe (Allentoft et al. 2015; Fu et al. 2016; Haak et al. 2015; Olalde et al. 2017; Prüfer et al. 2014). Genetic evidence of inbreeding events between humans and extinct hominins such as Denisovans have also led the media and the public to reflect on the meanings of their relationships to extinct humans. An extreme example, again originating from the Stormfront message board study, is the suggestion that Neanderthal genetic variants contribute to the reduced skin pigmentation and inherent superiority of white Europeans, particularly compared to most human populations in sub-Saharan Africa, who, have no Neanderthal ancestry (Panofsky and Donovan 2017: 2). Yet research has shown that prehistoric movements of Eurasian populations into Africa mean that people inhabiting parts of eastern Africa today do have some Neanderthal ancestry (Llorente et al. 2015). In addition, Neanderthal ancestry is currently highest in populations living in East Asia (Wall et al. 2013). Genetic variants that modern populations have inherited from Neanderthals include ones linked to pigmentation, however these variants have been shown to contribute to both lighter and darker pigmentation (Dannemann and Kelso 2017). The persistent spurious association between Neanderthal ancestry and 'whiteness' provides an example of how interpretations of palaeogenomic data, filtered uncritically through an individual's pre-existing belief systems, can result in the misappropriation or misrepresentation

of scientific findings. This echoes similar misrepresentations of archaeological evidence in the service of particular ideologies that public archaeology, is in part intended to combat (Scully et al. 2013; Richardson and Almansa-Sánchez 2015; Jobling et al. 2016; Scully et al. 2016; Grima 2017; Moshenska 2017; Sommer 2017).

These examples show how multiple narratives of palaeogenetic evidence do develop, although the overwhelming authority of qualified geneticists ensures that these ideas are usually condemned to the fringes of public discourse. However, these spurious interpretations of the genetic data may enter into public discussions of archaeology and heritage, particularly on the internet, and may be particularly difficult to challenge in cases where archaeologists do not have some expertise in genetics or palaeogenomics. Ethnic nationalist ideologies are often considered at the fringes of society in Western Europe, although they are often implicit and prevalent in public discussions of migration, identity and nationality, particularly in certain parts of the media and online (Fligstein et al. 2012). These issues have come to the fore in Britain more obviously due to conversations around nationalism and identity triggered by the Brexit and Scottish independence referendums (Richardson and Booth 2017; Zmigrod et al. 2017). Ethnic nationalism is entrenched in more eastern parts of Europe such as Hungary and the Ukraine (Bugajski 2016). These ideologies commonly misuse public archaeologies, including genetics to justify themselves and have the potential to be reciprocally influential in public archaeology and public mortuary archaeology specifically, due to the way national heritage is often thought of by the public, and sometimes promoted by archaeologists themselves, as the product of an unbroken biological connection to 'our ancestors' (Sommer 2017).

There have been no direct investigations into how GATs or palaeogenomic studies are affecting the public's relationship with archaeological sites to date. However, the ability of GATs to track deceased ancestors who could not otherwise be located means that there is now potential to broaden the nature and variety of archaeological sites with mortuary dimensions to which people may conceive of themselves as 'belonging to' (including, for example, caves, megalithic tombs, barrows and cairns, as well as churchyards, burial grounds and cemeteries of the historic period). In producing

connections, or ancestry compositions, which agree with people's preconceived notions of their own ancestry, as well as an 'our ancestors' view of heritage, GATs may also strengthen a person's connection with mortuary sites with which they already had an existing relationship (Smith 2001). On the other hand, GAT results that are contrary to a person's expectations have the potential to disrupt a person's connection to specific archaeological sites (see the discussion of Stonehenge below), although the tendency for individuals to reject contrary results means that any disruptive potential may be buffered to some degree (Panofsky and Donovan 2017; Scully et al. 2013; 2016).

The public's interest in questions of their relatedness to local ancient populations has encouraged studies where DNA from ancient peoples is compared to nearby modern individuals or populations to see how they are related. The most famous example of this approach is the analysis of DNA from the ten thousand-year-old Cheddar Man skeleton from Gough's Cave, Somerset and the inhabitants of the nearby Cheddar village (Sykes 2006). This study claimed to have successfully extracted mitochondrial DNA from Cheddar Man that could be classified as belonging to the 'U' haplogroup. The study famously also found that mitochondrial DNA from a local schoolteacher belonged to the same haplogroup. The media particularly took this result as indicating that the schoolteacher was the direct descendant of Cheddar Man and that the people of Cheddar had a biological stake in the area which reached back thousands of years (Nuthall 1997). This interpretation misrepresents what mitochondrial DNA can be used to say. Whilst it is faintly possible that the schoolteacher is a maternal direct descendent of Cheddar Man, it is much more likely that they share a common maternal ancestor who existed tens of thousands of years ago. The U haplogroup itself occurs relatively frequently in most modern European populations (Sahakyan et al. 2017). If Cheddar Man has any modern descendants he would be the ancestor of almost every human alive today (Rohde et al. 2004). The Cheddar Man research and subsequent studies into modern British mitochondrial DNA suggesting British population continuity over the last 17,000 years ago have had a lasting legacy on public discourse, and have been misappropriated to promote nativist political ideals (Jobling et al. 2016; Oppenheimer 2006; Figure 3).

Analysis of palaeogenomes from hundreds of prehistoric Europeans has found evidence of several significant migrations of people from outside the Continent, meaning that modern European populations are mostly genetically discontinuous with the earliest prehistoric inhabitants (Allentoft et al. 2015; Fu et al. 2016; Haak et al. 2015; Olalde et al. 2017). These results could have implications for the public's relationship with mortuary monuments belonging to certain archaeological phases, or at least nudge people towards a more positive and grounded understanding of national heritage where ancestry is less prominent (Smith 2001). For example, a recent palaeogenomic study of the Beaker cultural phenomenon in prehistoric Europe suggests that migrations into Britain associated with the introduction of the Beaker culture (c. 2500 BC) resulted in an almost complete replacement of the local Neolithic population over a few hundred years (Olalde et al. 2017). This means that modern British populations are largely not directly descended from the builders of Stonehenge: situated in one Britain's largest Late Neolithic ceremonial and mortuary landscapes, and one of its most famous heritage sites. This kind of finding disrupts any biological essentialist or genealogical notions of British heritage that are often implicit in public discourse. However, ethnic nationalist groups by their nature tend to maintain a key interest in new results from both modern and ancient DNA, and often change, reframe or reboot their beliefs accordingly, ignoring any resultant cognitive dissonance, which is why the idea of heritage and nationhood as defined exclusively by DNA ancestry needs to be robustly challenged. The results from the Beaker study may also have important implications for specific stakeholders, such as denominations of neo-druids, for whom the religious significance of Stonehenge is dependent on the site including burials of ancient ancestors (Wallis and Blain 2011).

Discussion

There is a moral case for public archeologists challenging biologically determinist ideas of nationhood and heritage, however it is useful to be able to demonstrate that these ideologies fail on evidential grounds (Sommer 2017). Even if European prehistory was defined by population continuity, the non-specificity of a modern

Figure 3: https://www.youtube.com/watch?v=bQE0QPFoLfs
A 20-minute clip of BBC Question Time from 22 October 2009, featuring the then-leader of the British Nationalist Party, Nick Griffin. At 09:07, Nick Griffin refers to the idea of a British 'indigenous' population that has persisted for the last 17,000 years, a claim that originates in previous studies of modern DNA (Oppenheimer 2006) that have now been refuted (Olalde et al. 2018).

individual's deep ancestry means that in most cases their individual genetic stake in archaeological mortuary sites is not particularly meaningful (Ralph and Coop 2013). Individuals recovered from any European cemetery dating to before the ninth century AD will not be the specific ancestors of any local or even national community. The nature of ancestry means that modern nationally or regionally specific ancestry will only begin to emerge in archaeological individuals from the very recent past. As discussed above, GATs mostly reveal that even modern individuals rarely have exclusive recent ancestry in specific nations or geographical regions (Jobling et al. 2016; Panofsky and Donovan 2017). Informed interpretations of GATs, as well as academic studies of modern and ancient genomes, support arguments that no individual's link to a nation or national heritage can be strictly biological, but is a cultural decision that can be based in part on ancestry, which inevitably incorporates

many other cultural, social and historical factors (Clegg et al. 2013; Jobling et al. 2016).

The disruptive potential of these technologies has been demonstrated most recently and most acutely by mainstream and social media reaction to palaeogenetic analyses, which suggest that Cheddar Man (and, indeed most Mesolithic Europeans) probably had dark skin (Brace et al. 2018), a subject that will be covered in more detail by the author in future publications. However, a lack of public awareness of palaeogenetics, the vagaries of deep ancestry and the limitations of GATs mean that these technologies are often reinforcing pre-existing beliefs.

There is a distinction to be made between accidental misunderstandings of GAT results and palaeogenomics where a lack of expert guidance and the marketing strategies of the GAT companies allows the public to fall back on established historical or familial myths, and interpretations of GATs and palaeogenomics that are driven by ideologies which involve the willful distortion of genetic and archaeological evidence. The problem that public archaeologists face is that the latter often fuels the former, particularly in digital environments, meaning that simplistic biologically essentialist understandings of nationhood and heritage may become more deeply fixed and justified by objective scientific truth in the public imagination (Nash 2012; Richardson and Booth 2017). Therefore the misappropriation and reframing of GAT and palaegenetic studies within nationalist narratives could begin to impact on discourse in archaeological forums and social media where public archaeologists' expertise in genetics may be limited. These issues and tensions mirror those identified in public archaeology and highlight the need for public archaeologists to engage with these new techniques and integrate them into their discourse and strategies, or at least identify trustworthy external authorities that can be used to counter-act distorted narratives, whether that be particular academics or academic papers themselves, blogs or websites. Challenging and subverting national origin myths and their underlying ideologies that misappropriate primary evidence is a core part of public archaeology, therefore both GATS and palaeogenomics are potentially important tools for public archaeologists if they can develop some familiarity with these techniques.

Conclusion

Hopefully this article has laid out some simple notions of what palaeogenomics and GATs can and cannot be used to say about relationships between modern and ancient populations and individuals, which can be used to aid archaeologists engaging in public debate on these matters. Public scientists with specialisms in genetics such as Dr Adam Rutherford and Dr Jennifer Raff are already successfully tackling misrepresentations of GATs and palaeogenomics on social and traditional media, but it is difficult to say how far this work has yet influenced public archaeologists, and discussions of identity and heritage. The rising public profile of GATs and palaeogenomic studies mean that they will inevitably begin to influence public perception of history, society and heritage. Reasoned discussion of human ancestry and recent palaeogenomics findings show how this position is no longer tenable in an era of growing political populism and nationalist sentiment. This is a significant opportunity for public archaeologists to the ideological and intellectual arguments contained in narratives of history and heritage that misrepresent or misappropriate primary evidence.

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From Plastered Skulls to Palliative Care: What the Past Can Teach Us About Dealing with Death

Lindsey BÜSTER*, Karina CROUCHER*,
Jennifer DAYES*, Laura GREEN* and Christina FAULL**

* University of Bradford
** LOROS Hospice Leicester

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Abstract

Modern, advanced healthcare detects and monitors long-term and life-limiting illness more comprehensively than ever before. However, death is now often considered medical failure, and is a virtually taboo topic of conversation in daily life. At a time when the societal relevance of archaeology is under scrutiny more than ever before, the AHRC-funded Continuing Bonds Project – a collaboration between archaeology and palliative care – explores the potential of the past to promote discussion. Not only does archaeology illuminate the diversity of practice surrounding death, the past provides a safe, distanced platform for considering death, dying and bereavement today. Through archaeological and ethnographic case studies, health and social care professionals and students consider topics such as place, choice and identity, in both personal and professional life. This article examines participant responses to a variety of archaeological material and presents post-workshop reflections which demonstrate the success of archaeology in opening up conversations and increasing confidence in discussing this most enduring and problematic of life events.

Keywords

archaeology, bereavement, care, continuing bonds, death practices, palliative care

Introduction

Death in a modern world

> *"Death is treated by medical science as a momentary event that can be delayed until a suitable time"*
> (Quested and Rudge 2003: 544)

In an increasingly globalized and technology-driven world, advanced healthcare allows for the detection and monitoring of long term and life-limiting illness earlier and more comprehensively than ever before. People are now increasingly aware of the dying process in the weeks, months and years before death, with a host of interventions employed to prolong life for as long as possible. It might be assumed that this advanced warning has helped individuals to better come to terms with their own mortality. The opposite appears, however, to be true (cf. Kellehear 2007). Much medical and health care revolves around a series of ever more drastic interventions designed to preserve life at all costs; indeed, problems often arise in determining the point of referral to a palliative care team (e.g. Walshe et al. 2008; Luce 2010; Campos-Calderón et al. 2016). Death itself is frequently seen as medical failure (cf. Gellie et al. 2015). Thus it is often a taboo topic of conversation (Becker 1973; Solomon et al. 1998), both with those at the end of their lives, and with the recently (and not so recently) bereaved (Cox et al. 2013; although see Walter 1991 and Chapple et al. 2015 for discussion regarding the contextual nature of this taboo). This avoidance of the topic persists despite guidelines reaffirming the importance of honest and open communication (Buckman 1993; DH 2008; SGHD 2008) and recognition that dying is a normal part of life (World Health Organisation 2012). Furthermore, death has been increasingly outsourced and professionalized (particularly, in the UK, since the founding of the NHS in 1948), which has shielded society from the physical changes that the body undergoes during and immediately after death. This has, in turn, increased the workload and emotional stress of nurses, whose roles now include not just physical and emotional support of dying patients, but that of their grieving relatives too. Indeed, much recent

nursing literature concerns the emotional impact and coping strategies that nurses employ daily in their encounter and re-encounter with death, dying and bereavement (e.g. Hopkinson et al. 2005).

Manuals detail the processes needed to 'deal' with virtually every kind of death situation, in an attempt to 'bring order to the chaos of death' (Quested and Rudge 2003: 555). Where past societies acknowledged the inherent liminality of the dead and dying, an increasingly medicalized and secularized approach has today attempted to reduce and contain this ambiguity, not least through ever-more precise 'definitions' of moments and modes of death. This approach has, however, created further unforeseen ambiguities, and, in the most extreme cases, has created new 'categories' of people (such as donors awaiting organ retrieval): not quite living but not yet fully dead. This liminal category of individuals is itself subject to a great deal of recent literature (e.g. Crandall 1987; Johnson 1992) and appears globally to be particularly problematic for nurses and relatives alike.

In the face of these theoretical challenges, an aging population, and a UK health service under strain, there has been increasing reaction against this protectionist approach to death. Central to this are conversations, not just between the elderly and infirm and the medical professionals assigned to them, but involving everyone, whatever their age and health status. Bereavement has now also been unshackled from the straitjacket of traditional models which have, in the past, assumed a linear progression from grief to detachment and/or acceptance (e.g. Bowlby 1980; Kubler-Ross 1996), towards a more holistic approach which acknowledges its fluid and protracted nature. One example of this is the persistence of 'continuing bonds' (e.g. Klass et al. 1996; Walter 1996; Stroebe et al. 2012) between the living and the dead.

This new understanding of bereavement can be seen in initiatives such as *Dying Matters Awareness Week* (overseen by the *Dying Matters* coalition established in 2009; Dying Matters 2018), which encourages people, young and old, to talk more openly about death and their end-of-life plans. Others include local community-led collaborations such as *Pushing Up Daisies* in Todmorden, West

Yorkshire (Pushing Up Daisies 2018), which promote conversations around death, dying and bereavement in daily life. Meanwhile, *Death Cafés* (Impermanence 2018) – developed by John Underwood in 2011 from Swiss 'Cafés Mortels' and now held throughout the UK – provide spaces to talk informally about topics surrounding death, dying and bereavement (traditionally over tea and cake). Death is also now much more accessible in the digital world, either through news stories or online discussions via social media, including profiles and memorial pages (cf. Sofka et al. 2012). Despite this upsurge in public awareness, most people still die in hospital, without advanced care plans. This leaves doctors, and nurses in particular, to preside over difficult conversations with a diverse range of people in varying circumstances; conversations and circumstances for which they have often had little formal training (e.g. Kent et al. 2012).

How can archaeology help? : The Continuing Bonds Project

It is, in relation to big societal questions – such as coming to terms with our own mortality (from death and dying to memorialization and commemoration) – that archaeology has the most to offer. Dealing with death is one phenomenon that unites society across time and space. Not only does archaeology allow for exploration of the range and diversity of ways in which different societies understood and mediated death, and commemorated the dead, it serves as a catalyst for meaningful conversations. The benefit of using examples of death practices from the deep (and more recent) past lies in the fact that they are somewhat removed from the present in time and space, and thus create a more distanced platform from which to explore themes of death, dying and bereavement, away from the imminence of death and the proximity of loved ones. As such, the material is much more likely to prompt conversations than attempting to broach the topic head-on. This was observed in the 'What will survive of us?' exhibition in Leicester during *Dying Matters Awareness Week* 2015, which explored a range of past death practices: conversations soon turned to personal accounts regarding the experiences of close relatives and individuals themselves (LOROS 2015). A similar phenomenon can be identified with the discussion of celebrity deaths, memorials of which have in

recent times become increasingly apotheotic in nature (cf. Graves-Brown and Orange 2017). In an open letter posted to the *British Medical Journal* online blog, for example, palliative care doctor Mark Taubert (2016) notes how the death of David Bowie helped to facilitate difficult conversations with a terminally ill patient.

Methodology

Building on these promising initial reactions, the *Continuing Bonds Project* – a two-year AHRC-funded collaboration (April 2016–July 2018) between archaeologists and palliative care professionals – explored what happened when the past was used to facilitate discussions around death, dying and bereavement in the present (Continuing Bonds Project 2018 ; Croucher et al. in prep.). Despite an increasing awareness of the issues amongst the general public (see above), many important conversations are still happening too late, when people are terminally ill in hospital. As such, *Continuing Bonds* was devised as a pilot project to target those working in palliative care; individuals more likely to broach these difficult topics of conversation with those nearing end of life. Participants included nursing staff, nursing students, and other end-of-lifecare professionals such as bereavement counsellors and faith practitioners (Figure 1), though future iterations of the project will seek to expand its reach into non-healthcare settings, including schools and lay audiences more generally.

Participant recruitment criteria included volunteer, student, trainee, registered and qualified practitioners working with people at the end of their lives, together with other groups of individuals, such as counsellors and chaplains, who come into contact with the dying and the bereaved. Dying and bereaved individuals were not eligible for inclusion in the project, due to the potentially sensitive and emotive nature of the material. The research was undertaken at the University of Bradford, DeMontfort University and LOROS Hospice Leicester, with most participants deriving from these geographical locations. Participants were invited to attend multiple workshops, since this provided an opportunity to examine in detail the journey of individual participants across a variety of themes and case studies, and to ascertain whether or not certain

themes, and certain case studies, resulted in stronger or lesser reactions, or different types of conversations. All participants were given a 'participant information sheet' prior to attendance at a workshop and were required to sign and retain a consent form; this was true for each workshop, even when individuals had attended one previously. Approval for this research was granted by the University of Bradford ethics committee and the Health Research Authority, and the project was accepted onto the NHS clinical research network portfolio.

Archaeological case studies representing a variety of death practices and mortuary rituals were presented in a series of workshops, organized around four themes: 'Memorialisation and Legacy', 'Age and Circumstance of Death', 'Images of the Dead' and 'Ancestors'; to some extent these represent arbitrary divisions, and many of the case studies addressed more than one theme simultaneously. Workshops in each theme were run three times – at

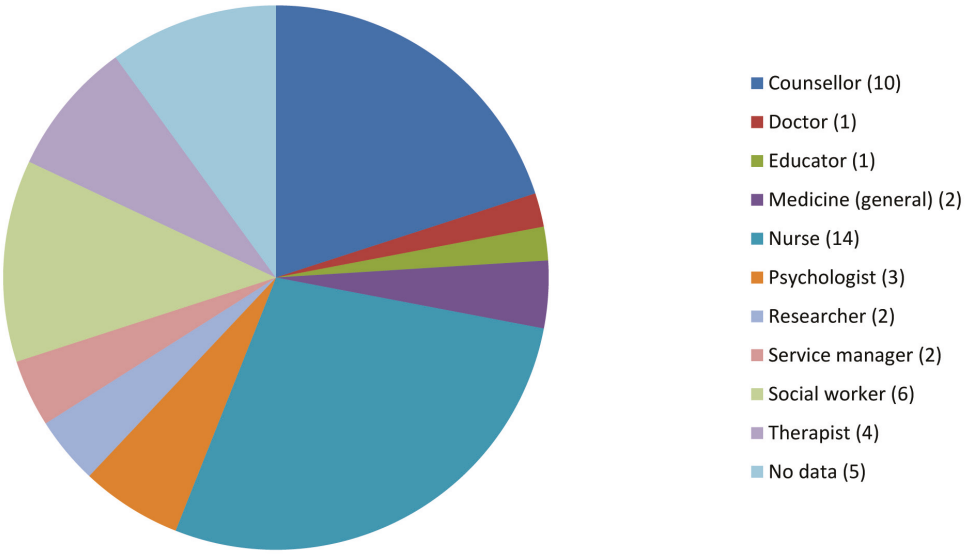

Figure 1: Professional backgrounds of the 50 unique participants who took part in workshop series 1. Of these, 33 (66%) were qualified professionals, 13 (26%) were students and four (8%) identified as 'other'. To simplify the graphic and aid visual analysis, certain categories have been amalgamated (e.g. occupational therapist and speech and language therapist have been combined under 'therapist').

LOROS Hospice and DeMontfort University in Leicester, and at the University of Bradford – to maximize recruitment and participant diversity (i.e. hospice workers, other healthcare professionals, counsellors and students). The content and composition of the case studies was fairly fluid, though each was designed to challenge preconceptions and prompt internal reflection. Each workshop was delivered using a 'thinking aloud' approach (Fonteyn and Fisher 1995; Boren and Ramey 2000) to a maximum of ten participants; this restricted number allowed participants sufficient opportunity to reflect and voice their opinions. 'Returners' formed a major component of the participant cohort, suggesting continued interest in and relevance of the workshops. Only data from returning participants' first workshop attendance is presented in this paper (see Figure 8).

The other major methodological driver behind workshop conception and delivery was that of 'action research' (e.g. Stringer 2013). Under this methodology, reflection and feedback on earlier stages of the project were used to inform the structure and delivery of later workshops. Changes included, but were not limited to, the inclusion of a greater diversity of multimedia elements (e.g. physical objects and audio-visual material), the decision to allow the participation of 'returners' in workshops (i.e. participation in more than one workshop), and changes to the four overarching themes in the second series of workshops. New workshop themes were designed to tease out greater depth of discussion on recurrent points of significance emerging from the first set of workshops. The new themes also reduced the potential for repetition of workshop content for 'returning' participants. The themes (which formed the basis for the second workshop series) were: 'Place', 'Legacy', 'Treatment of the Dead', and 'Objects and the Dead'. This paper will focus on findings from the first series of workshops only.

Reactions to the workshops, and to the case study materials presented, were captured in a number of ways. Questionnaires, filled out at the beginning of the workshop, collected quantitative demographic information such as age, gender, ethnicity and religion, as well as individuals' pre-workshop confidence in discussing death, dying and bereavement. Qualitative data included reasons for attending the workshop, and expected outcomes. The creation

of unique participant numbers ensured a degree of anonymity of data (in so far as it allowed for subsequent collation, analysis and presentation without the use of personal names). During the workshop, immediate reactions to the case studies (which participants view for around six minutes each) were captured using Dictaphones and by asking participants to write responses on large pieces of flipchart paper (Figure 2). More in-depth reflection on the materials was facilitated through group discussion (Figure 3), which was captured using both Dictaphones and video cameras; the latter was used to aid transcription during data analysis. Questionnaires completed at the end of the workshop gathered quantitative data regarding post-workshop confidence in discussing death, dying and bereavement, together with qualitative feedback on if, how and why archaeology might be used to facilitate discussions in a contemporary end-of-life setting. Follow-up questionnaires, undertaken between one and three months after each workshop, collected the same kinds of qualitative and quantitative data, and assessed whether the workshops, and the reflections they prompted, had any lasting impact on participants, e.g. whether (and in what ways) they prompted a change in behaviour within or outside of professional practice. Optional participation in a follow-up interview explored these impacts in greater depth, and provided richer qualitative data for analysis.

Quantitative data was entered into a spreadsheet and analyzed using descriptive statistics. No tests to consider significance have been applied, since the study was not designed to assess change in this way. Qualitative data in free text on questionnaires, flip charts and from focus groups was analyzed thematically.

The archaeological material

Choosing the case studies

Case study material was presented via a series of 'stations', formed from a combination of images and text on laminated posters. The first workshop theme (Memorialisation and Legacy) comprised five 'stations' (Figure 4a); this was reduced down to three for subsequent themes to give participants more time with

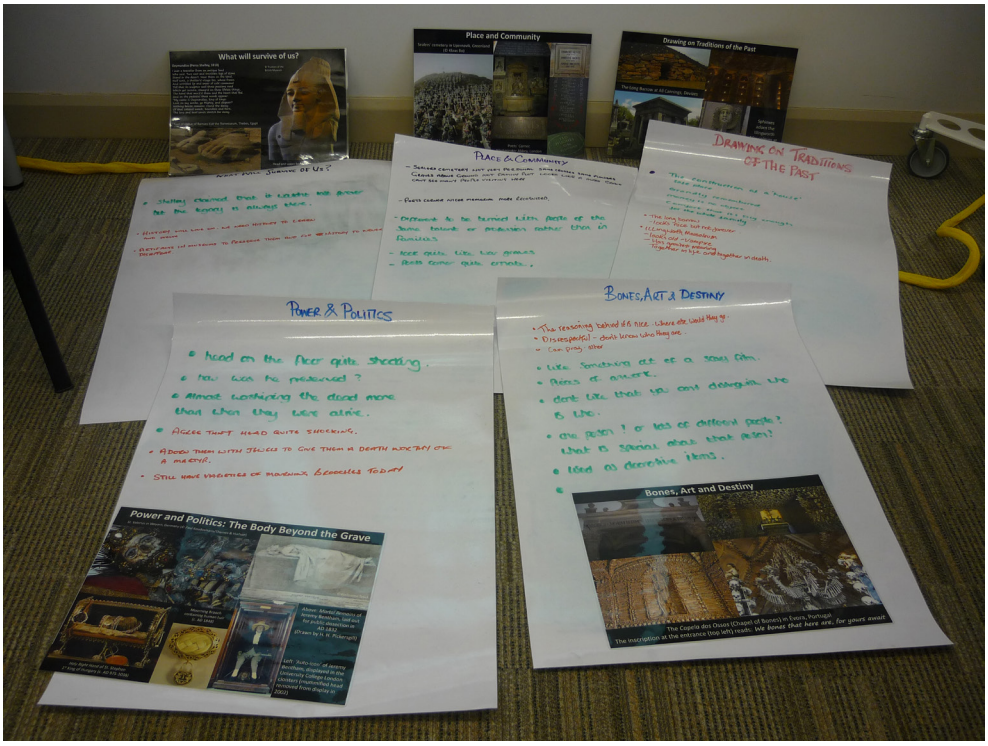

Figure 2: Case study material and participant reactions from workshop 3: *Memorialisation and Legacy*.

Figure 3: Group discussion and reflection on the archaeological case study materials in workshop 1: *Memorialisation and Legacy;* individuals have been anonymized to protect their identity.

the materials. Where possible, other media – including physical reconstructions and audio-visual materials (Figure 4b) – were included, with a view to exploring their pedagogic impact. Each station addressed a different sub-theme within the overall theme of the workshop (Table 1), though this distinction was occasionally (and sometimes deliberately) ambiguous. Each comprised between one and four individual case studies; again, reduced in number over the course of the workshops in the interests of time, as part of the project's action research methodology. Choosing successful case studies relied on a number of factors: visually striking images, a 'story' which could be conveyed concisely, and where possible, case studies in which the text had the power to augment or challenge initial reactions to the images (Figure 5). Multimedia elements, such as a 3D-printed skull and facial reconstruction, and an audio-visual piece, were added to the Images of the Dead and Ancestors workshops respectively, in response to questionnaire feedback from the first two workshops. Materials were also chosen which, together, had wide chronological and geographical coverage, and which encouraged participants to compare and contrast case studies, both within and between stations (Figure 5); the latter helped to identify common and recurrent themes which could be examined in greater depth in the second set of workshops. Ethnographic materials were also included to demonstrate that diverse mortuary practices are a feature of societies across the globe today, not just those in the past.

Case studies – which included images of human remains, objects belonging to and made from the dead, places of commemoration, public/private memorials, and less well-known rites and rituals – were designed to challenge existing preconceptions and encourage a more holistic and open-minded view of mortuary practices. It came as no surprise, however, that many of the strongest reactions appeared to correspond with those materials that challenged participants' culturally embedded concepts of personhood and identity. The aim of the *Continuing Bonds Project* was not to promote uptake of the *same* mortuary rituals and social concepts of self as those of the past, but to expose participants to the range of ways in which individuals (past and present) experienced death, dying and bereavement. Through exploration of *difference* in practice, *recurrent* themes emerged. Not least, the creation and maintenance of *continuing bonds* between the

living and the dead (Klass et al. 1996), which manifest themselves a variety of ways: from the retrieval and display of human remains, to the curation of photographs, artefacts, memorials and, more recently, digital platforms such as Facebook legacy pages. Choice (i.e. an individual's 'agency') and place of burial were also strong recurring themes in workshop discussions (Figure 5), and are likewise common foci for discussion in mortuary archaeology today (e.g. Gillespie 2001; Williams 2004; Brück 2006; Giles 2008; Finlayson 2010; Fowler 2013).

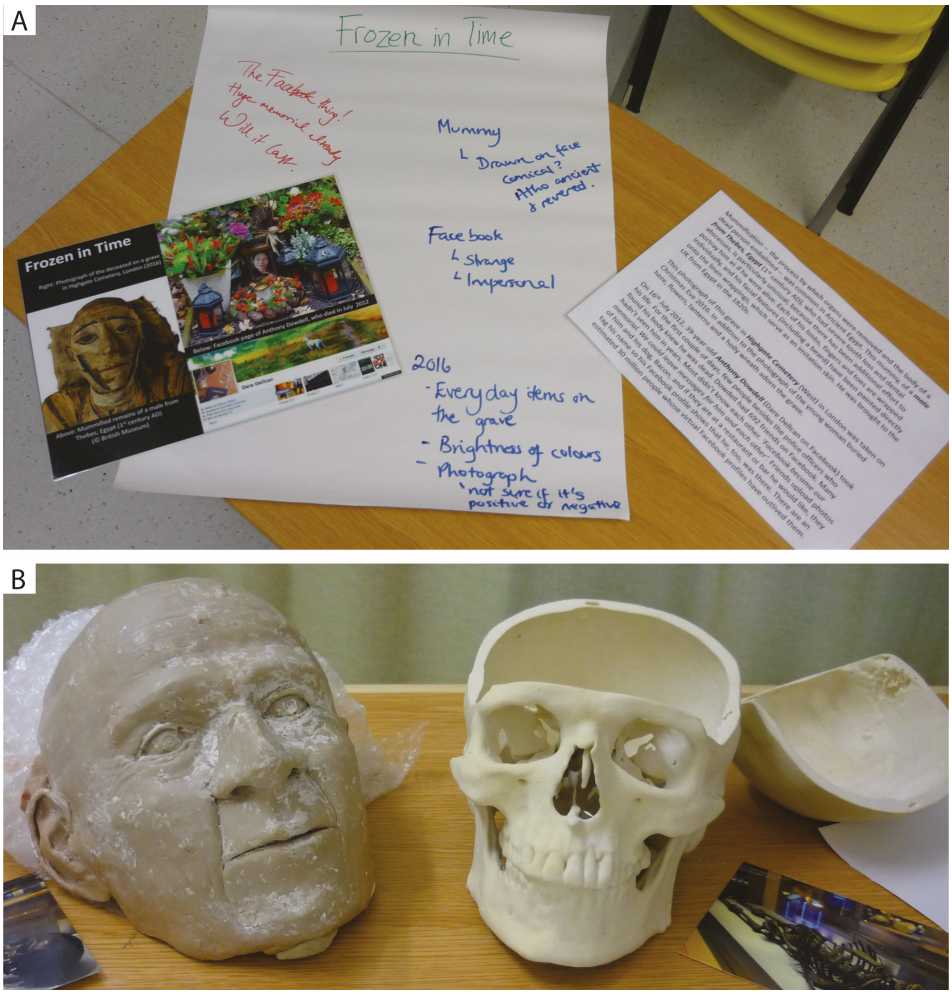

Figure 4: 'Stations' in workshop 15: *Images of the Dead*; a) conventional two-dimensional laminated poster; b) three-dimensional print and facial reconstruction of Gristhorpe Man (courtesy University of Bradford).

Table 1 Case studies used in workshop series 1.

Workshop Theme	Station sub-theme	Case study
Memorialisation and Legacy	What will survive of us?	Rameses II (Luxor, Egypt; 1303–1213 BC)
		Ozymandias by Percy Shelley (1818)
	Drawing on traditions of the past	The Long Barrow at All Cannings (Devizes, UK; modern)
		Illingworth Mausoleum, Undercliffe Cemetery (Bradford, UK; 19th century)
	Place and community	Sealer's Cemetery (Upernavik, Greenland; 20th century to modern)
		Poet's Corner, Westminster Abbey (London , UK; 14th century to present)
	Bones, art and destiny	Capella dos Ossos (Évora, Portugal; 16th century)
	Power and politics: the body beyond the grave	St. Valerius (Weyarn, Germany; 16th century to present)
		Holy Right Hand of St. Stephen (Budapest, Hungary; 11th century to present)
		Jeremy Bentham (London, UK; 19th century)
Age and circumstances of death	Untimely and violent deaths	Tollund Man (Denmark; 4th century BC) & Lindow Man (Cheshire, UK; 1st century AD)
		Flowers for Princess Diana (Kensington Palace, UK; 1997)
		Khmer Rouge *Killing Fields* (Cambodia; 1975–9 to present)
		'Ghost bike' memorial (New York, USA; 2007)
	Infant deaths	Infant cemetery at Garton Slack (Yorkshire, UK; 3rd-2nd centuries BC)
		Infant on swan's wing (Vedbaek, Denmark; c. 4000 BC)
		Mummified foetus (Giza, Egypt; 7th-6th centuries BC)
	Caring for the elderly and infirm in the past	Hohokam woman at La Plaza (Arizona, USA; 13th century AD)
		Shanidar Cave 1, Iraq (35,000-65,000 BP)
		Burial 9 at Man Bac, Vietnam (c. 2000 BC)
		The Vix Princess (Burgundy, France; c. 500BC)

Workshop Theme	Station sub-theme	Case study
Images of the dead	Frozen in time	Mummified from Thebes (Egypt; 1st century AD)
		Photo of young female on grave at Highgate Cemetery (London, UK; 2016)
		Facebook legacy page of Anthony Dowdell (online; died 2012)
	Portraits of the dead	Death portrait of young woman with parents (unknown provenance; 19th century)
		The 'transi' statue of René de Chalon at Saint-Étienne church (France; 16th century)
		Death-mask of Tutankhamun (Egypt; 1341–1323BC)
		Mummified remains of Torajan Cristina Banne (Indonesia; died 2011, image 2016)
	Gristhorpe Man	3D print of skull of Gristhorpe Man (Scarborough, UK; c. 2000 BC)
		Facial reconstruction of Gristhorpe Man (Scarborough, UK; c. 2000BC)
		Magazine article showing CT scanning of Gristhorpe Man at Bradford Royal Infirmary
Ancestors	Binding forces: communal ancestors	Composite skeleton from Cladh Hallan (South Uist, UK; c. 1600–1300BC)
		Plastered skulls (Tell Aswad, Syria; c. 7500BC)
		Dinner service *Nourish*, glazed using 200 powdered human bones (USA; 2015)
	Lines through the past: ancestors as individuals	Richard III and descendants Michael Ibsen and Wendy Duldig (UK, Canada and Australis; fifteenth century to present)
		Painted skulls at the Beinhaus ('Bone House'), St. Michael's Chapel (Hallstatt, Austria; 18th century to 1995)
		Video of Malagasy *Famadihana* festival (Madagascar; 17th century to present)
	Ancestral places	*Moai* statues (Easter Island (Rapa Nui); 1st millennium AD)
		Cranial fragment and curated gaming piece in House 4 at Broxmouth (East Lothian, UK; 1st century BC/AD)
		Stonehenge and Woodhenge (Wiltshire, UK; c. 2300BC)

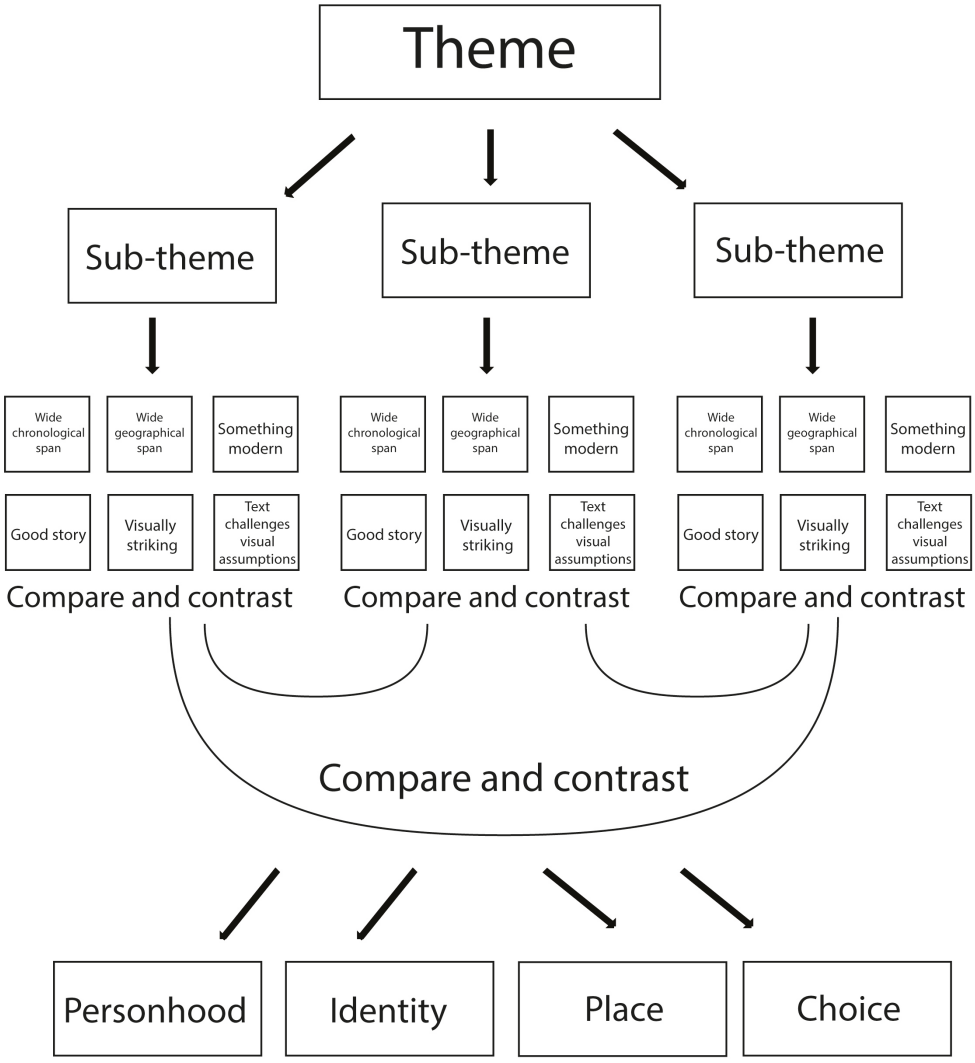

Figure 5: Structure of the workshops and station case study material, together with emergent and recurring themes in participant reactions and discussion points.

Exploring reactions

Another facet of archaeological material is its ability to act as a mirror to ourselves as individuals. Most culturally embedded perceptions and practices are entirely subconscious; what Bourdieu (1977) terms *habitus*. This is particularly so in relation to the ways

in which death is understood and perceived, since it is inherently bound up with the ways in which people understand and articulate their place in the world. Indeed, an examination of death practices not only has the potential to provide insights into the way in which a society views death, but also, how it views life. The allocation of death to specialists and the shielding of the living from the physical processes associated with death, suggests that in modern, Western (and increasingly secularized) cosmology, death is seen as very much separate from life, not a part of it (cf. Tarlow 1999). Certainly, this is reflected in the language used to describe the dead, including phrases such as 'passed on', 'passed away' and even 'lost' (Quested and Rudge 2003: 554). Yet, as we have seen, emerging practices – particularly those surrounding digital legacies – suggest something less concrete, and resonate more closely perhaps with some of the death practices of the past, which seek to maintain closer ties between the living and the dead.

Language is central to conversations surrounding death, dying and bereavement. In this regard, the *Continuing Bonds Project* workshops prompted participants to explore the ways in which society has become accustomed to talking about these sensitive topics. Terms such as 'respect' and 'disrespect' were commonplace in participants' reactions to the materials, and it was interesting to unpick these during group discussion. Through their own self-reflection, participants came to understand these as culturally embedded terms. By exploring which practices they found 'acceptable' and 'unacceptable', participants also cast light on what they wanted for themselves, and for their families, particularly regarding long-term obligations of memorialization on the part of loved ones (tending graves and visiting favourite places, for example).

As noted previously, a powerful and consistent reaction concerned perceptions of personhood. Many participants reacted strongly and negatively (Figure 6) to the *Capella dos Ossos* – a chapel and ossuary in Portugal decorated with the disarticulated bones of around five thousand individuals – with terms such as 'disrespectful' and 'scary' used frequently. For the project participants, social identity was inherently bound to their individual, physical bodies, and challenges to this integrity made for uncomfortable viewing,

Figure 6: Word-cloud generated from participants' reactions to the *Capella dos Ossos* case study. The larger the word, the higher the frequency with which it was used by participants.

with one participant commenting: *"Don't like that the[y] haven't been left whole"*. Despite the strength of the adverse reactions to this treatment of the dead, self-reflection amongst participants was still clearly evident: *"How would I feel about bones mixed in with others. Is this different from ashes? What makes it different? Would I mind?".* This suggests that even initially challenging material has a role to play beyond 'shock factor'.

Interestingly, the materials with which participants chose, and chose not, to engage appear to reveal much about their inbuilt perceptions of death and dying. One particularly illuminating example of this was the 'Portraits of the Dead' station (Table 1), which formed part of the 'Images of the Dead' workshops. Notes on the flipchart paper primarily regarded the Victorian death portrait and death-mask of Tutankhamun in some detail, whilst the sixteenth-century transi-statue of Réne de Chalon in Saint-Étienne (France), and the Torajan mummy in particular

(Figure 7), received less attention. Both of these latter images can be considered liminal – that is, they are difficult to categorize as either alive or dead; this is especially true of the Torajan mummy, who retains flesh and is dressed in everyday clothes, as if alive. Pressed further on this specific image, some participants claimed to have noticed only the living individuals, not the mummy. This reveals something very specific about the central role that categorization plays in the ways in which death is perceived and understood. Liminality is a central theme in funerary archaeology (e.g. Barrett 1988; Armit 2012; Fowler 2013), and, as noted at the beginning of this paper, could lie behind much of what nurses find emotionally challenging in the care of, for example, brain dead patients (cf. Crandall 1987; Johnson 1992; Hadders 2007; Büster et al. in prep.).

Figure 7: 'Portraits of the Dead' station featured in *Images of the Dead* workshop theme.

Assessing impact

Changing ways of thinking

In this exploratory study, we sought only to evaluate participants' own perceptions of the impact of the workshop. Participants were asked to think about themselves in relation to death, dying and bereavement, and to assess on a Likert scale: a) their levels of confidence in discussing death, dying and bereavement before and after the workshops; b) whether the case study materials made them think differently about death, dying and bereavement; and c) whether they thought that the workshop would affect the ways in which they approached the subject in their professional roles (Figure 8). In follow-up questionnaires and interviews, we will persistence of impact, actions, and reflections on changes in behaviour taken by participants as a result of attending the workshops, and explore which components of the workshops in particular had the most profound affect.

Only 10% (5/50) participants 'disagreed' or 'strongly disagreed' that they felt confident in talking about death, dying and bereavement before the workshops, with a further 12% (6/50) saying either that they 'didn't know', or that they 'neither agreed nor disagreed'. Nevertheless, despite 78% (39/50) of the participants 'agreeing' or 'strongly agreeing' that they felt confident talking about death, dying and bereavement prior to the workshops, 48% (24/50) said they 'agreed' or 'strongly agreed' that this confidence had increased after the workshops (Figure 8).

Significantly, 90% (45/50) of participants said that the workshops had made them think differently about death, dying and bereavement, while a further 50% (25/50) said that it would impact upon the way in which they approached the topic in their future professional practice (Figure 8). Only 4% (2/50) of individuals suggested that the workshop would have little or no impact on their future behaviour, with the remaining 46% suggesting that they did not yet know (i.e. checking the 'don't know' or 'neither agree nor disagree' option) (Figure 8). Indeed, it may be that some participants were unable to assess the impact of the workshop immediately. Some themes and concepts may require further self-reflection and quiet contemplation, particularly if they pressed upon

a particularly personal or emotive experience. Other individuals may have felt that the true impact of the workshop would not become apparent until the next 'real life' situation, when they were required to broach these difficult topics of conversation with a dying patient and their relatives. It is for this reason that participants were asked to complete a three-month follow-up questionnaire, in order to determine whether or not the workshops had a lasting or developing impact on them.

Impact was not only measured in terms of 'quantity' (i.e. the number of participants who noted a change), it was also measured in terms of 'depth' (i.e. the level of change, irrespective of the number of participants who experienced this). In order to examine this latter dimension, it is worth tracking the immediate pre- and post-workshop journeys of a number of individuals. One participant,

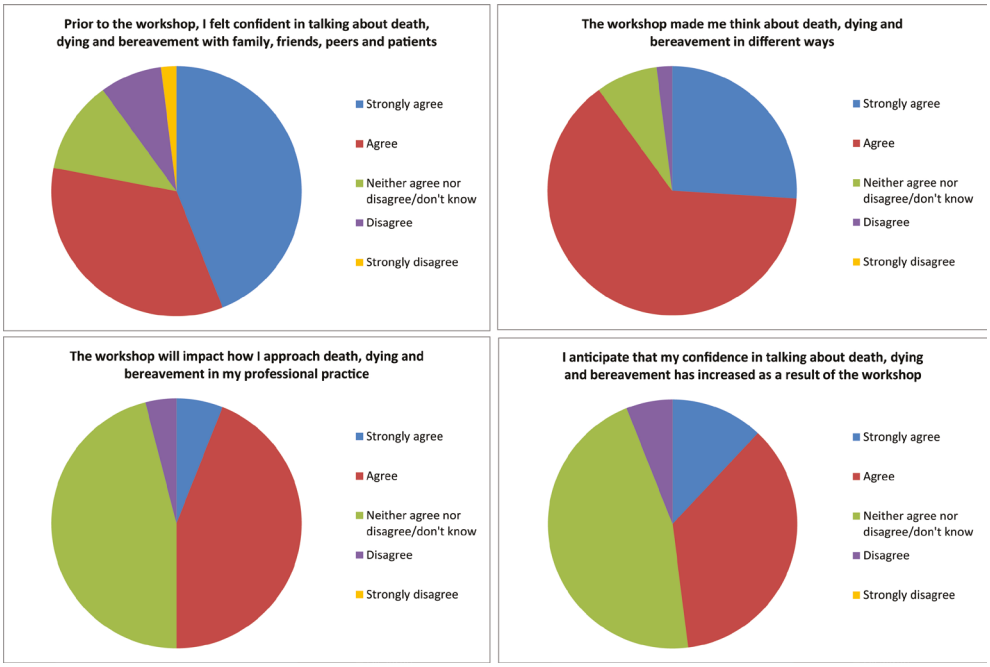

Figure 8: Analysis of responses to questions regarding pre- and post-workshop confidence of participants when discussing death, dying and bereavement, together with whether or not the workshops had an impact on the ways in which participants thought about and would broach the subject with patients.

for example, 'strongly disagreed' that they were confident in talking about death, dying and bereavement before the workshop. This same participant agreed that the workshop had both changed the way they thought about the topic and the way in which they would approach the subject with patients in future. Having said that, this person did not know whether their *confidence* had necessarily increased immediately post-workshop. Meanwhile, though another participant 'strongly agreed' that they were confident about discussing death, dying and bereavement before the workshop, and 'neither agreed nor disagreed' that this confidence had changed post-workshop, they nevertheless 'strongly agreed' and 'agreed' respectively that the workshop had made them think differently and would impact the way in which they approached it with patients in future. The two participants who disagreed that the workshops would impact on their confidence discussing death, dying and bereavement in the future, both 'strongly agreed' that they were already confident in broaching the topic pre-workshop.

What can the past teach the present, and the present teach the past?

Archaeologists are conscious not to impress modern socio-cultural perspectives onto the past, and have rightly criticized approaches that seek to 'put us in their shoes' (see, for example, Brück 2005 for consideration of the potentials and limitations of phenomenology in archaeology). The *Continuing Bonds Project* has demonstrated, however, that some phenomena (not least, the challenges of dealing with death, dying and bereavement) are recurring concepts which transcend time and space. Within a diverse range of death practices, creating and maintaining 'continuing bonds' between the living and the dead appears to be one of the more enduring practices (see Croucher 2017). This is not to deny that the strategies and nuances of how these bonds are constructed change and vary significantly over time and space, from recreating in plaster the face of a loved one, for example, to keeping an old photograph in a locket, and posting regularly on a legacy Facebook page.

The protracted nature of mortuary rites of the past – such as the mummification of bodies in later prehistoric Britain (for example,

at Cladh Hallan; Parker Pearson et al. 2005) or the exhumation and plastering of skulls in the Neolithic Middle East (Croucher 2017) (Table 1) – demonstrates that grief and bereavement are complex, long-term processes which take time to negotiate. In many societies, the physical body serves a central role, as a tangible way of charting the transition from living individual to communal ancestor. The outsourcing and medicalization of death in many contemporary societies has served to hide the harsh realities that death brings with it. This sequestering of the dead has also, however, separated the living from one of the fundamental ways in which this inevitable part of life is acknowledged. Indeed, caring for the dead is one of the final positive acts that individuals can perform for their loved ones, and increasingly, legislation is encouraging relatives to take part in these 'last offices' (Johnson 1992; Martin and Bristowe 2015).

It is not just the human body that can be used to form *continuing bonds* with the dead however. Archaeologists are well aware of the power of material culture in conveying social messages, both positive and negative. Where a photo of the deceased – like the plastered skulls of Neolithic Levant – might bring comfort to the bereaved, other objects (particularly personal items belonging to the deceased) are more problematic: these might be too embedded in their social identity to be passed on for use by someone else, or discarded like rubbish. This is an experience recalled by one of the project participants (number 20) during group discussion:

> "…my mum died very suddenly when I was [age], and just before she died, she'd bought a big tub of Horlicks which she gave to me for some reason… and I could not throw this away. It was in the cupboard for five years! And it was solid. But because she'd bought it, it became like an artefact. I did throw it away in the end, I suppose it was a symbol of my getting through the grief…"[1]

It is increasingly recognized that much of what is excavated by archaeologists represents 'structured deposits': material very deliberately assembled and buried in specific, symbolic ways (cf. Hill 1995). Querns – the quintessential everyday object – turn

1 Some details have been changed to protect the identity of the participant.

up, for example, in later prehistoric Britain, in the most unusual of places and are often deliberately fragmented (Watts 2014). Are these, like the jar of Horlicks cited above, so socially charged that they demand special treatment? Does their breakage and deposition signal a pivotal moment in the grieving process? If so, then all archaeologists—and not just those interacting directly with dead bodies—could be seen as 'death-dealers' (cf. Giles and Williams 2016, 10); the latest in a long line of individuals to curate the material remains (and tell the stories) of the dead. By extension, it is not just how we research and present the *skeletal* remains of the long-dead that is central to contemporary perceptions of mortality (ibid, 4), but arguably *all* interactions with the material past both within and outside of the 'mortuary archaeology' sub-discipline.

Conclusions

Archaeology (and mortuary archaeology in particular) has an important role to play in addressing some of the most pressing issues in contemporary society. Though the *Continuing Bonds Project* does not seek to transplant the death practices and mortuary rituals of the past into the present, it has shown that archaeology can be used to provide a safe platform from which to embark on discussions of death, dying and bereavement in the present. The workshops have prompted personal reflection on culturally embedded attitudes (and prejudices), which may in turn influence the ways in which these important topics of conversation are raised in end-of-life care settings. Future projects will expand this initial research to wider lay audiences, with particular focus on educational resources for school children, so as to help normalize these most fundamental of conversations from an early age. The power of archaeology lies in its diversity and its promotion of self-reflection on a number of contemporary issues, including the most enduring and pressing of all: our own mortality.

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