

Marcy Rockman · Joe Flatman
Editors

Archaeology in Society

Its Relevance in the Modern World



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*Joe Flatman: to Jennifer, for providing the
tenderest of care*

*Marcy Rockman: in grateful memory
of Roger M. Jacobi (1947–2009),
an archaeologist in his own class*

Editors' Introduction

Contemporary relevance of archaeology means understanding the roles that archaeology has in the present day and a sense of the contributions that it can make through those roles both now and in the future. This volume is an innovative approach to assessing the relationships between our studies of the past, present, and future in that it draws from and represents the experiences and dreams of many archaeologists in the different roles that they fulfill in the first decade of the twenty-first century. The goals of this volume are to outline a wide range of the perspectives, approaches, and problems that archaeologists are currently encountering with respect to issues of relevance in the professional roles they fill and bring together new research and thoughts on several major themes to which archaeology has the potential to contribute substantially in the future – if at least some of the current questions of relevance can be addressed.

The inspiration for this volume is a pair of personal and professional quests. We the co-editors, Flatman and Rockman, both became archaeologists through traditional academic routes with intentions of continuing academic career paths. Through a combination of coincidence, serendipity, chance, and other forces at play, we both have come to practice archaeology in variety of professional spheres – governmental and cultural resource management as well as academic. Each of these roles has placed demands on us to explain what archaeology is, why it is necessary, and what level of funding is appropriate for it. Over several years of employment, it became apparent to both of us that the questions asked by each role are different and come out of different understandings and expectations for archaeology, and that these understandings and expectations are often at odds with our own understandings of what archaeology is and can do.

This volume is a result of our efforts to reconcile these overlapping demands and make not just our lives more comprehensible but also an opportunity to create a more collective understanding of what archaeological relevance means and how it can be explained to others outside of the field and used effectively to address important present and future issues.

In overview, while strong divides in training and outlook remain between two of the substantial branches of the archaeological profession (academic archaeology and cultural resource management), these divides do not lie at the heart of the matter of the relevance of archaeology. Rather, questions of relevance stem from variations between the pursuits and interests that *individual* archaeologists bring to the profession, the multiple messages that the field presents to the outside world, and the expectations that the outside world has in turn for archaeology. These interactions are complex. For example, individuals come to archaeology to pursue specialized interests, engage in fieldwork, undertake teaching, examine history, and preserve the environment, among many other motivations. The field of archaeology itself has undergone many changes in the past 100 or so years, from the province of individual antiquarians and museum expeditions to the development of academic departments, private consulting firms, museum curatorships, and the very widespread message of Indiana Jones and other media presentations of archaeology. Expectations of the outside world appear divided between preservation (realized in multiple pieces of legislation), education (including public engagement, university-level teaching and research, and museums), tourism (such as realized in development of historic parks and monuments), and entertainment (such as films and television programs). In our experience, these sources of perspective do not always meet up directly. So questions arise – Why is archaeology necessary? What is an appropriate role for archaeology in a particular undertaking? What value will be received for support provided?

We have found that the development of answers to these questions has required a careful articulation of our training and background, the broader goals and potentialities of archaeology, and the nature of the questions and undertakings at hand. So mutual questions arose – How are other archaeologists dealing with these questions on a day-to-day basis? What specifically are they being asked? How are they responding? Is there a balance of self, profession, and project that is particularly effective?

In an effort to begin to address these questions, we organized a symposium for the 2007 Society for Historical Archaeology (SHA) Annual Meeting in Williamsburg, Virginia. The symposium brought together archaeologists from academia, cultural resource management, museums, government positions, heritage societies, public education positions, and the written and online media. Each contributor was asked to describe:

- For whom do you work? How are funds allocated for archaeology? Are you asked to justify your budgets, and if so, how?
- What brought you to the field of archaeology?
- Do you ever have to explain why archaeology is necessary and, if so, how do you do so?
- Is there information or models that you would like archaeology to have that it does not yet provide?
- What happens to the archaeological work that you do, and do you think there is more that could be done with it?

Archaeology in Society: Its Relevance in the Modern World is based on the concepts of SHA symposium, although its format is original and a majority of the contributors were invited to discuss additional topics that grew out of the symposium and post-symposium discussions. In overview, archaeology is shown to be both a deeply personal field and a means of investigating ourselves and the past with implications at the local, state, national, and global levels. Currently, there is no one answer to how and what the field of archaeology should do. Laying out the many ways in which archaeology is and can be relevant to the present day is so very important. In some respects, protection for and interest in cultural resources is increasing. An example is state legislation (SB 18) in California that requires consultation with Native Americans at the very start of the urban planning and development process in order to better protect and accommodate cultural resources. A glance at online news headlines and television shows frequently bring up a global array of archaeological items and programs. But there are also real threats. In the U.S. in the past decade, there have been serious congressional-level efforts to reduce the power of the U.S. National Historic Preservation Act, and globally problems in protecting archaeological resources in areas of conflict, such as Iraq, and ongoing trafficking in land-based and underwater antiquities. Academic archaeology is also facing new challenges as professors respond to an ever-growing student need for transferable skills, such as project management, budgeting, and legal skills. And, of course, as indicated above, there are the perennial issues of appropriate levels of funding in all corners.

The objective of this volume is to provide a state-of-the art tool for archaeologists, students, and those interested in the nature of the human condition to better integrate what is known about the past and the tools of studying it into the present. The volume is laid out in three main sections, Parts I, II, and III. In terms of orientation, these sections discuss what the field of archaeology is, where it should be, and what it may become. Rockman's opening chapter provides an introduction to some of the theory behind the modern-day relevance of archaeology with an extended example of interpretation of archaeology for use in the U.S. federal level public policy in the unfamiliar arena of risk communication and homeland security. Flatman's concluding chapter draws together the themes of the volume and situates the importance of addressing these themes in the global economic and political setting of the end of the first decade of the twenty-first century.

Part I is a sequence of 11 discussions between pairs of archaeologists in a wide range of professional roles, including government compliance archaeology, museum work, field crews, public education networks and non-profit advocacy, academia, print media, legislative frameworks, film media, and two archaeologists with different careers who found themselves facing similar difficult ethical questions regarding artifact trafficking and treasure hunting – a different but very real definition of value in archaeology.

The purpose of Part I is to identify barriers to different archaeological applications or improved relevance from the range of in-the-trenches and boots-on-the-ground experiences gathered by the Part I contributors. As developed by Rockman in the opening chapter, these discussions describe surface structure expressions or

issues in practical relevance, although clearly all point toward aspects of deep structure and deep relevance. For example, how are budget decisions made and by whom? What programs or policies determine how archaeology tends to be done? Are the form and format of day-to-day archaeology seen as changeable by the people who do it: what are the possibilities, what are the constraining realities? How much say do archaeologists themselves have in how day-to-day archaeology is done, who has designed these day-to-day practices? If effort is made to improve the integration of archaeology with contemporary decision-making and issues, what are the challenges and barriers for making such changes?

Specially commissioned for this book, the editors devised a series of debate 'themes', and then asked one or more pairs of archaeological practitioners to discuss each theme. These themes, and the individuals involved, are introduced at the start of each chapter and include:

- Cumberpatch (*UK, archaeological contractor, Sheffield*) and Roberts (*Iceland, Institute of Archaeology*):
Design and process of compliance/cultural resource management archaeological projects – what works? What does not?
- Cushman (*U.S., SRI Foundation*) and Howe (*UK, Surrey County Council*):
Cultural resource management and preservation work and legislation – how do the realities of on-the-ground work align with the visions of the legislation that requires it?
- Everill (*UK, University of Winchester*) and Young (*U.S., Editor-in-Chief [just retired] of Archaeology Magazine*):
Archaeological fieldwork and general working conditions vs. public perception of what archaeologists do – is there a connection or a disconnect? If disconnect, how much and how important is it?
- Flatman (*UK, Surrey County Council*) and Gadsby (*U.S., University of Maryland*), Chidester (*U.S., University of Maryland*):
Alternative ways of 'meeting' the past and the role of archaeology as a means of community engagement – what does 'engagement' mean and is it always positive?
- Holliday (*U.S., University of Arizona*) and Rothschild (*U.S., Columbia University*):
Research priorities and public education – how do research directions come about? What are the pressures and what are the opportunities?
- Metcalf (*U.S., Metcalf Archaeological Consultants*) and Moses (*U.S., Antigua Archaeology*):
Building and maintaining cultural resource management businesses in the U.S. – what are the constraints and what are the opportunities? What are these like now and how have they changed over time?
- Nash (*U.S., Denver Museum of Natural History*) and O'Malley (*U.S., William S. Webb Museum of Anthropology, University of Kentucky*):
Role of museum anthropology and archaeology programs in public views and understandings of the past and the general profession of archaeology – what is

the current situation? Has this changed? Who decides overall goals of museum archaeology and anthropology programs and what are the respective contributions of professional archaeologists, the public, and professionals in other fields?

- Perry (*U.S., Army Corps of Engineers*) and Stottman (*U.S., Kentucky Archaeological Survey*):
Scope of archaeological projects in compliance and non-compliance settings – how do you decide? Where and how is creativity possible or suitable? What constraints and opportunities? How do you deal with the unexpected?
- Pettigrew (*U.S., The Archaeology Channel*) and Balachandran (*U.S., University of Maryland/freelance conservator*):
Dealing with the monetary value of artifacts – how have you encountered this aspect of archaeology in your work? What questions did present? How did you decide what to do and can you see any broader solutions or means of addressing this aspect of archaeology?
- Schablitsky (*U.S., Maryland Department of Transportation/University of Oregon*) and Hetherington (*Egypt, Past Preservers, Inc.*):
Archaeology for the small screen – what makes a story and how are ideas, people, topics, and locations chosen? Who decides? What are the constraints and possibilities of archaeology in show business?
- Scott-Ireton (*U.S., Florida Public Archaeology Network*) and Gaimster (*UK, Society of Antiquaries of London*):
Role of learned institutions in the modern age and the place of public archaeology networks – what subjects work in an educational setting? In a public setting? To what subjects or topics does archaeology most effectively contribute? What innovations may be possible?

These chapters were created in a dialogue fashion. The 'lead' author wrote an initial piece addressing his/her assigned theme. The co-author then prepared his/her piece in response to the assigned theme, recognizing points of similarity or contrast with the lead author. Finally, the lead author and in some cases the co-author as well then 'responded' more briefly to both full-length pieces in a final commentary and discussion.

Part II is a series of four in-depth examinations of major interrelated topics facing the global community: energy exploration, climate change, warfare and conflict, and ethnicity and national identity, and the potential role archaeology can play in addressing them. These are deep structure and deep relevance issues, although all also note questions and issues that point to surface structures and practical relevance. The purpose of this section is to recognize that the modern world is facing many large issues that extend well beyond individual nations – issues such as rapid changes in the global environment, widespread dependence on non-renewable resources and exponential increases in the size of the human population. Each issue is a consequence of many decisions and activities by many people over extended periods of time. As such, determining how to approach each issue requires input

from many people from many perspectives. While archaeology is often cited as a cautionary tale – such as modern society does not want to become like the Maya or like Easter Island – the government and academic experience of both Rockman and Flatman indicates that archaeology is not yet widely consulted as a source of information relevant to crafting new approaches and solutions. Given the role of human behavior and time frames involved in all of these broad scale issues, it is the opinion of the editors that archaeology can and should have a seat at the table as means of addressing these issues. Indeed, due to the scale of these issues and the potential for severe consequences of not or not appropriately addressing them, it should be said that being part of efforts to address modern issues is *not* a choice of whether to participate, it can only be a question of how. If archaeology as a field does not make a concerted effort to address and participate in major issue discussions, then the field as a whole risks deserving the label ‘irrelevant’. Many aspects of day-to-day barriers to change are described in Part I. At least some of these must be addressed in order to effectively participate in contemporary major issues laid out in Part II. However, in turn, the process of focusing more effort on contemporary issues may be part of the solutions to day-to-day challenges and barriers.

It is not, of course, possible to cover all major contemporary issues facing humankind. We chose these four as a means of exploring deeply the ways in which archaeology intersects with issues on a global scale and can provide critical and irreplaceable information. Flatman addresses the growing global demand for energy and the as-yet unknown effects on and roles of underwater archaeology in fossil fuel exploration, development of different types of renewable energy sources, and the claiming of territory in which to do both. Rockman lays out current climate change policy and the application of archaeological data and interpretations to climate change science, cultural evolution, and information transmission models to plans for adaptation and mitigation, and the use of narrative in public understanding of environmental change. Snead presents his experiences in developing both the study of and courses about an archaeology of warfare and recognizes the range of issues that challenge actively and productively relating even an inherently fascinating subject to the world outside of archaeology. He notes problems of equifinality of data itself and structures within and outside of archaeology that continue to define its role in society. Kohl discusses the role of the past in constructing modern identities, with the particular example of emphasis of ethnic identity in the former Soviet Union. He also further develops a point made by Gordon V. Childe in the first third of the twentieth century that the field of archaeology has both the capacity and responsibility to use its evidence to outline the common human and cultural origins and interactions and that archaeologists can identify past material remains and still take stands against modern extrapolations from those data. Next steps are to communicate these pieces of information to policy- and decision-makers as well as the general public in forms and formats that are used regularly in those contexts.

Part III is about what the field of archaeology could look like if at least some of the issues of Part I are addressed and some issues such as those developed in Part II are tackled in all their complexity and with all that implies – that it has become something beyond what it currently is. In short, what other roles might archaeology

hold in society? How might the roles that it currently holds grow and expand? Mrozowski approaches these questions from the philosophy of pragmatism and lays out both background and examples of how the field of archaeology can, with such a grounding, take a more active role in the production of history and ending of historical silence on the global scale and in providing evidence for Native American Tribal groups seeking Federal Recognition in the U.S. Watkins also addresses relationships between the current field and practice of archaeology and Native American Tribal groups. He notes, for instance, that while the Tribal Historic Preservation Office system that is modeled on the State Historic Preservation Office system is run by Tribes, it is in fact compliance-based and in order to be certified is organized according to western scientific and legal concepts, and therefore does not 'foreground' traditional or other forms of knowledge and cultural valuation. In order to be more relevant to indigenous peoples, archaeology must recast itself as a tool for creating a shared vision of the past rather than a particular answer. Sebastian sets out how cultural resource management, which due to its funding streams is public archaeology, can return not only data but also more knowledge to the public by focusing on the process outlined in historic preservation legislation and challenging the 'we always' mindset that so often frames how projects are set up and budgeted. Little also addresses the broad scope of public archaeology as that funded by tax dollars or mandated by legislation and, after reviewing the history of the federal system of archaeology, envisions a more engaged field through expanded collaborations between practitioners, expanded attachments between historic preservation and ecological conservation, and increased advocacy for these goals by archaeologists themselves.

Washington, DC
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Marcy Rockman
Joe Flatman

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The origins of this book lie in a session chaired by the editors at the 40th annual meeting of the SHA in January 2007 at Colonial Williamsburg, Virginia, USA. Entitled ‘Contemporary Relevance of Archaeological Research II: A Reply to the SAA’, that session included papers from many – but not all – of the contributors to this book, and so those original session participants should be especially thanked: Robert Chidester, Dave Conlin, David Gadsby, David Gaimster, Bert Ho, Stephen Mrozowski, Nancy O’Malley, Richard Perry, Richard Pettigrew, Della Scott-Ireton, M. Jay Stottman, David Stuart, Edward Tennant, Jeremy Weirich, and Peter Young.

We also wish to thank all of the contributors to this book for their time and enthusiasm – we hope that they (and their families) will agree with us that the time spent on this project has been well worth it! Their names and affiliations are listed in the list of contributors at the front of this book.

In particular, the individual editors also wish to thank the following people:

Joe Flatman: I wish to thank above all my co-chairperson, co-editor, co-author, and most importantly good friend Marcy Rockman for first emailing me back in 2006 to say ‘I’ve had an idea ...’. That idea turned into a series of emails, a conference session, a book proposal, and then finally this book! Five years later I am exceptionally pleased that this volume is the outcome of what was the most unexpected, complicated, and yet enjoyable of journeys. I also wish to thank in particular my wife Jennifer Young for her good counsel and support over the years.

I wish to acknowledge here the financial support of the UCL Institute of Archaeology and the UCL Graduate School in their contributions towards the costs of attendance at the SHA conferences of 2007, 2008, and 2010, which were instrumental in bringing this project to fruition. In that light, I also thank the Director of the UCL Institute of Archaeology, Professor Stephen Shennan, for providing such a

supportive and creative environment in which individuals such as myself are encouraged to work on innovative projects of this type.

Several other people should be thanked here for keeping relevance ‘real’. They include Tony Howe, Kirsty Norman, Dominic Perring, Tim Williams, Sarah Wolferstan, and the members of the Kentish Town Yacht Club (they know who they are).

Marcy Rockman: My above-all thanks go straight to Joe Flatman in both honor and awe of all his capacities as co-thinker, co-coordinator, co-editor, co-author, and through all good friend. I remember that it was one of your emails that first said ‘what if...’ and now it is something we can all put our hands on and begin to wrap our heads around. Thank you.

My own archaeological journey has covered much ground during the preparation of this volume. I take this space to recognize PCR Services Corporation in Santa Monica, California for supporting my attendance at the original SHA symposium in 2007 and gratefully thank my PCR colleagues Amy Holmes, Kyle Garcia, Matthew Gonzalez, Ron Norton, Chris Powell, and Stephanie Gasca for helping me phrase my questions about relevance and supporting wholeheartedly my decision to go and try to find their answers. I hope this book in some small way makes your work easier. The American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellowship Program and my placement office of the U.S. Environmental Protection Agency (USEPA) National Homeland Security Research Center made possible my research on and experience with archaeology and federal policy as well as time and space to work on this volume and attend the 2010 SHA meetings, where additional coordination took place. I am unspeakably thankful for all the opportunities AAAS and USEPA have provided.

Finally, I thank my DC Fellows family for cheering me on through so much. You have patiently kept asking when we can celebrate this book being complete, so I shall stop typing now.

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Chapter 1

Introduction: A L'Enfant Plan for Archaeology

Marcy Rockman

“If you want to feed starving children in Bangladesh, you should go do that.” With that opening statement at the symposium on which this volume is based, archaeologist Dave Conlin captured what I think is the essence of discussions about the value of modern archaeology. For all its capacities to inspire, enable, teach, inform, enlighten, and entertain, in the immediate hand-to-mouth and bottom line context in which so many contemporary decisions are made, archaeology and its methods and findings often seem apologetically intangible. Irrespective of the many other fields that also cannot contribute directly when bad things happen, in the face of immediate need and urgent disaster, the costs and requirements of archaeology can seem irrelevant.

Concern regarding the contemporary relevance of archaeology is present and growing. This volume is now one of many books, articles, and symposiums about what the value of archaeology is and how it might be improved or better communicated. These include but are not limited to the forum and *Archaeological Dialogues* volume on the theme “Is Archaeology Useful” organized and edited by Dawdy (2009), Sebastian and Lipe’s (2009) edited volume *Archaeology and Cultural Resource Management: Visions for the Future*, T. F. King’s (2009) *Our Unprotected Heritage: Whitewashing the Destruction of Our Natural and Cultural Environment*, Sabloff’s (2008) *Archaeology Matters: Action Archaeology in the Modern World*, Holtorf’s (2007) *Archaeology is a Brand! The Meaning of Archaeology in Contemporary Popular Culture*, and Little and Shackel’s (2007) edited volume *Archaeology as a Tool of Civic Engagement*. I recognize that this volume adds the burden of its weight to future analyses of this topic, but also the heft of the concern it evidences to arguments in its favor.

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My purpose with this chapter is to introduce the topic of archaeological relevance for this volume and develop it further from the perspective of public policy, particularly public policy at the U.S. federal level. This perspective is useful in several regards: the U.S. federal system itself has an extensive program of archaeology and heritage preservation, legislation at the federal level including the Antiquities Act, Archaeological Resources Protection Act, and the National Historic Preservation Act (NHPA) underlies the cultural resource management system of the U.S., and funding programs via the U.S. National Science Foundation support a great deal of academic training and research both in the U.S. and in collaboration with international research partners.

My vantage point here, however, is not relevance from the perspective of identifying, managing, and studying archaeological sites and resources, but rather relevance of the aggregate information from the archaeological enterprise – methods, theories, findings – in the creation of public policy. My primary source of information for this perspective is participant observation and research undertaken during a two-year (2009–2011) American Association for the Advancement of Science (AAAS) Science and Technology Policy Fellowship with the U.S. Environmental Protection Agency (EPA), National Homeland Security Research Center (NHSRC) in Washington, DC. The role of NHSRC is to support EPA in its mission to provide decontamination following disaster events, including natural disasters and events involving use of biological, chemical, radiological, and nuclear weapons, protection of water infrastructure, and communication with the public during these activities. NHSRC coordinates extensively with other natural and human-caused disaster-related offices and agencies and enabled me to coordinate with many climate change-related offices and agencies, with recognition that current climate change models entail long lists of future natural disasters (e.g., National Research Council 2010b; Solomon et al. 2007). None of the work in which NHSRC engages is inherently archaeological. It manages no territory and does not implement regulations. However, through its roles and agency contacts, NHSRC interacts regularly with the concepts of recovery, resilience, sustainability, perception, and communication – all topics in which the need to understand human behavior is integral.

From this policy perspective, relevance means having a seat at the table. It means being recognized as having something readily useful and important to contribute to the topics at hand. In this regard, in the fields of disaster response, homeland security, and climate change, archaeology is not yet relevant. However, there is growing recognition of a need for social science and integration of the human behavior component into planning and program and policy development for a range of disaster and climate change programs. A case in point is the October 2010 *Progress Report of the Interagency Climate Change Adaptation Task Force* (Council on Environmental Quality 2010: 32). Two of the eight actions recommended in the report are to:

- Expand research on relevant social and behavioral sciences to improve understanding of responses to change
- Identify social and ecological tipping points and thresholds (beyond which change is sudden and potentially irreversible)

It has not been possible for me to determine the extent to which such interest in these topics may have been discussed previously. At minimum, it is important to recognize that currently a gap, and so therefore a window, exists. It is not a window for archaeology alone – it is a window for archaeology as part of its family of related social sciences. If archaeology can step forward and be part of addressing this gap, there may well be many follow-on benefits, including expanded scope throughout the federal system and by extension other areas of archaeology (see range of contributors in Part I, this volume) or, at minimum, maintenance of recent funding levels. I write this shortly after the U.S. 2010 mid-term elections and strongly expressed campaign intents to shrink the national deficit and balance the federal budget. There is never a good time to be considered a luxury or irrelevant; in the U.S. the effects of the Great Recession are very likely to produce yet stricter definitions of what is “worth the money.” Such decisions are already underway in the UK, as Flatman details in the concluding chapter of this volume. Therefore, in turn, if the combined efforts of the field are not able to step into this open social science space, the future scope of archaeology may be significantly curtailed or limited for some time to come.

The Structure of Relevance

It is clear from range of volumes noted above and the contributions throughout this volume that there is no one way of describing the role and meaning of archaeology. What exists and what it is that can be done better in some cases depends very much on locations and orientations within the broader field. For instance, the collected papers in Little and Shackel (2007) are directed toward public interaction with archaeology and were developed to help create “a useable, broadly conceived past that is civically engaging” (Little 2007:1–2). T. F. King’s (2009) volume is also directed toward the public, but with intent to instruct about the weaknesses and breaks in the current cultural resource protection legislation and its mechanisms. Sebastian and Lipe’s (2009) volume further addresses cultural resource protection mechanisms, but is directed toward professionals in the cultural resource management field and how practice within the field might better accomplish the overall goals of the originating legislation.

In her work on disasters, anthropologist Susanna Hoffman (1999) draws on a model originating in linguistics that distinguishes two levels of culture and society: surface structure and deep structure. Surface structure is what organizes socially specific customs and ceremonies, habits, and practices. Deep structure contains the organizing rules of reality and means by which people, space, and time are categorized. In other words, surface structure is the means of expression while deep structure is the grammar (Douglas 1966; Hoffman 1999; Leach 1961; after Levi-Strauss 1963, 1966). Hoffman uses this model to consider how communities recover from disasters and whether any social change that may follow a disaster persists or is fleeting. I have extended this model to the issue of vulnerability to disasters and the currently

widespread concept of resilience (Rockman and Jutro 2010), which is defined generally as the capacity of systems to absorb disturbance and retain basic function and structure or sustain minimal damage (see National Research Council 2010a). For instance, surface structure vulnerability may be identified as a set of buildings located in a flood plain. Deep structure vulnerability is the set of economic, social, and legal systems that have allowed, encouraged, or required buildings to be placed on the flood plain. In turn, disaster resilience at the surface structure level consists of restoration of basic services and the capacity to resume life in as close a form to “normal” as possible. Deep structure resilience may be seen as a widespread understanding and accommodation of cycles and/or processes that brought about the given disaster within multiple social and economic systems. The key of these examples is that without attention to the deep structure level – the organizing rules of reality – neither reduction of vulnerability nor increase in resilience in the visible, tangible realm of surface structure are likely to be sustainable; rather, we are likely to become yet more practiced at rescuing buildings from flooded flood plains.

In grappling with the many-headed beast that is the question of relevance, I think it is important that archaeology draw on its related disciplines and turn some of its tools on itself, such as the model of surface and deep structure. In my introduction to the symposium on which this volume is based, I proposed two types of relevance: practical relevance and deep relevance (Rockman 2007). Practical relevance means being able to provide readily recognizable financial or social benefit. Heritage tourism and entertainment/media (see Chap. 11) belong in this category, along with the less well-defined but real benefits of development organized around or incorporating a historical sense of place. Deep relevance in turn is the capacity of archaeology to identify and rediscover aspects of the past not accessible by any other means and to see long trends of both change and continuity through time. These two concepts may have some utility for future discussions and in fact underlie the organization of this volume: Part I was designed to consider issues in practical relevance and Part II to develop examples of deep relevance. However, given the policy experience of my AAAS Fellowship and having read and compared the concerns and viewpoints of the contributors to this volume and the volumes noted above, I think the surface and deep structure model following Hoffman (1999) is more appropriate and useful for addressing the relevance of archaeology in the modern world, and so the following discussion is organized in this manner.

Specifically, as with the buildings in the flood plain, thinking in terms of surface structure and deep structure has the capacity to clarify what the source of a given problem is and in turn what may be necessary to sustainably fix it. For example, concerns expressed in the papers in Sebastian and Lipe (2009) regarding the practice of cultural resource management may be the clearest case of surface structure concerns addressed through changes to surface structure. In her introduction, Sebastian (2009) lists key topics considered for the volume as follows:

- Significance, information potential, and eligibility – how can we do a better job of evaluating the significance of archaeological sites?
- Mitigation, excavation, and research – how can we learn more for the money being expended?

- Preserving sites, conserving sites, and learning about the past – where is the balance?
- Managing the past – what are the appropriate roles of agencies, reviewers, consultants, professional organizations, and tribes and other descendant communities?
- Disseminating what we have learned – who controls the data? How do we deal with the gray literature? How do we maximize public access and benefits?

Issues of curation and how to prepare students for career paths in cultural resource management as opposed to academic archaeology are also noted as important but could not be covered by the Sebastian and Lipe volume contributors. Evaluating, mitigating, managing, disseminating: these are the recognizable tasks of cultural resource management archaeology; they are a substantial part of archaeology's surface structure. Lipe (2009: 45) notes in his volume contribution that

Those entrusted with the job of protecting and managing cultural resources must take into account how conceptions of archaeological value are formed in society; how well (and whether) these conceptions are represented by laws, regulations, and policies that guide their work; which values and sites are important to which stakeholder groups; and how the interests of such groups in accessing various resource values can be met within the structure of existing law and policy.

The topic of “how conceptions of archaeological value are formed in society” certainly links to deep structure – which follows the argument here such that surface structure is based upon deep structure. The key point here is that the orientation of Lipe's piece follows the objectives of improving practice of CRM archaeology along the lines such as outlined by Sebastian (2009) and so can be reasonably classed as an issue in archaeological surface structure.

The Sebastian and Lipe (2009) example contrasts to the concerns outlined in Little and Shackel (2007) and in T. F. King (2009). As introduced by Little (2007: 1), the intent of the collected papers in Little and Shackel (2007) is to

create a useable, broadly conceived past that is civically engaging, that calls a citizenry to participate in debates and decisions about preservation and development but also, more importantly, to appreciate the worthiness of all people's histories and to become aware of historical roots and present-day manifestations of contemporary social justice issues.

This is a much different call for action, asking archaeologists not only to do something better, but to create a social context that at present, as indicated by the call, does not yet exist. In this sense, it is seeking to change a deep structure aspect not only of archaeology, but also broader social deep structure that outlines the scope and importance of the past. Although quite different in form, the contrast T. F. King (2009) notes between “bright green” environmental laws such as the U.S. Clean Air Act and the U.S. Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, also known as Superfund, which addresses clean-up of hazardous waste and contamination) that specify concentrations and penalties and the “light green” laws relating to cultural resources enclosed in the U.S. National Environmental Policy Act (NEPA) and the NHPA that require consideration of impacts by stakeholders but not specific penalties for damages, may also be a reflection of the deep structural role of cultural resources in the modern economy.

Like all recent works on archaeological relevance, this volume is a call for change. The change this chapter seeks lies in how the field of archaeology thinks about change, what in fact should be changed, and how such change might come about. It has been recognized in many places that archaeology and heritage is valued and valuable. Flatman lays out significant numbers in his concluding chapter to this volume of the contributions of heritage to the British economy. Yet further, I would argue, in line with the contributors to the Little and Shackel volume, the fact of those economic numbers and the visitation they represent indicate a substantial value and role in the outlook of the public that has made them happen. But given the many types and level of concern evidenced by the many recent publications regarding relevance of archaeology, it appears that the links between the place archaeology holds in modern deep structure and the surface expressions of archaeology it supports are insufficient.

What then to do? If, continuing the metaphor from above, the goal is to not just remodel the house on the floodplain, but address both its foundations and its very location in an unstable landscape – what next? The first step, I propose, is to examine its many relationships, to lay out the links that hold it in its current position. For the field of archaeology, Part I of this volume can be seen as a step in this direction. The contributors in this Part look at practical issues across a wide range of portions of the profession, with discussions of the complex web of decision-making processes and viewpoints across a spectrum of academia, cultural resource management, government, written media, visual media, museums, and preservation organizations. Second is to continue to explore all of the options and directions in which the archaeological house might move. Not just the known communities in which family and friends in the form of cultural resource programs currently live (after migration theory in Anthony 1990, 1997), but other nodes with fundamental beneficial characteristics of concern for or need to know about the human condition. And through such explorations, attempt to expand the assumed deep structural space that the field of archaeology can occupy. The chapters in Part II of this volume lay out suggestions that may be useful along these lines. Deep structures are by definition conservative and hard to change. Change in this sense will not happen instantly or with one program. But it may be possible to identify cracks or additional space within existing structures, grow them, and attach our surface structures more firmly to them. Following here is an example of crack widening from my experience with NHSRC and a demonstration that while archaeology as a profession may not be able to provide direct food aid when disasters such as the massive floods that have struck the Ganges delta in recent years, it does have a substantial role to play in how the modern world prepares for and responds to future disasters.

Relating Archaeology to Federal Disaster Policy and Planning

When I began my AAAS Fellowship at NHSRC, the Deputy Director for Science and Policy summed up one of the basic issues in government approaches to disaster approximately as follows: “when we give an order, I know, you know, we all know

that not everyone will evacuate. What we don't know is why. The problem is that our programs and policies still currently assume that everyone will evacuate when told. We need better models of human behavior during disasters.”

To that point, NHRSC had been working with social science research under the topic of risk communication. NHRSC was founded following the 2001 anthrax attacks that affected the U.S. Hart Senate office building and several associated post offices. While the primary objectives of the NHRSC were to continue to work with bioterrorism decontamination techniques, it was recognized that methods of communication with the public in the event that such decontamination was needed again also should improve upon the 2001 procedures (see interview data in Blanchard et al. 2005). Thus the topic of risk communication also was given to NHRSC.

In the briefest terms, the goal of any form of risk communication is for information to be rapidly understood and, when appropriate, acted upon. At its core are two processes: first, the selection, organization, and output of information on the part of the communicator, and second, reception, processing (perception), and capacity to respond on the part of the communicatee(s)/public. If these two processes do not match up, then communication should be seen to have failed.

The field of risk communication has developed considerably in recent decades, particularly with respect to the first process, and particularly with respect to the initial part of a disaster or crisis situation (e.g., Adler and Kranowitz 2005; Bruine de Bruin et al. 2000; Covello and Allen 1988; Fischhoff 1995; Fischhoff et al. 2003). For instance, a number of studies with focus groups have noted that when people are stressed and involved in a situation that is involuntary, unfamiliar, uncontrollable, and/or characterized by danger or something dreaded as dangerous, their capacity to process information can drop by as much as 80%. Therefore, messages should be constructed with this in mind, such as including not more than three points at a time and three positive, action-oriented messages for each negative one, and anticipate the tendency of media sound bites to contain approximately 27 words that can be presented in about 9 seconds (Covello et al. 2007). Also recognized as important is the role of planning, including outlining beforehand both topics that will likely need to be addressed should a given event happen and the audiences to whom such topics will be addressed, a process known as message mapping (see examples in Covello et al. 2007), as well as identifying appropriate and trusted spokespeople. These and related findings have been organized into the “Seven Golden Rules” of Risk Communication (Covello and Allen 1988; Covello et al. 2007):

1. Accept and Involve Stakeholders as Legitimate Partners
2. Listen to People
3. Be Truthful, Honest, Frank, and Open
4. Coordinate, Collaborate, and Partner with Credible Sources
5. Meet the Needs of the Media
6. Communicate Clearly, and with Compassion
7. Plan Thoroughly and Carefully

These are useful guidelines, but several knowledge and research gaps remain with respect to the roles of NHRSC. Particularly, how might communication needs change after an immediate crisis during the long haul of a decontamination and

what considerations might be needed to best communicate with the public about something it is unlikely to have experienced before, such as bioterrorism? Further, following on the opening question above regarding evacuation compliance, current risk communication guidelines do not detail how to address the second part of the communication process, which regards how to understand how information is received, perceived, and acted upon, and replicate that understanding from community to community, disaster to disaster.

It is important to note that there is growing attention within the broader field of disaster risk reduction and disaster response to vulnerable populations and to psychological information and case examples about crisis responses during disasters. Definition of vulnerable populations varies by location and disaster type; children and elderly may be especially vulnerable to diseases, communities in low-lying areas may be particularly vulnerable to floods, and populations with limited financial and social resources are more vulnerable to the impacts of nearly all disasters (Hoffman 2007; International Strategy for Disaster Reduction 2007). At a practical level, there is recognition of the need to provide risk information in multiple languages as appropriate for each community. With respect to individual and group responses to crises, assumptions such that the public will panic during a disaster are being challenged (Auf der Heide 2004; Ripley 2008; Schoch-Spana 2005). For example, while many individuals may experience panic emotion when they realize they are in a traumatic situation, the uncontrolled panic behavior that is most often feared with respect to a group response to disaster or crisis appears to occur primarily when people feel they may be trapped, helpless, and isolated from those who might be able to help (Quarantelli 1954; Ripley 2008). However, these approaches, like the risk communication guidelines above, describe more of what to do and what the public is unlikely to do, but do not develop a coherent framework regarding what a given public thinks about disasters or a means by which experience may be extrapolated from one disaster to the next. In this sense, a fuller social theory of disasters is both lacking and needed.

My work at NHSRC began by looking at population experience with disasters. My primary research focus in archaeology to date has been colonization and the individual- to population-scale development and transmission of environmental knowledge, termed elsewhere as the landscape learning process (Rockman 2001, 2003a, b, 2009, 2010). Drawing on this background, I set disasters and terrorism events as rapid changes in the natural and social environments and gathered several case examples using ethnographic, historical, and archaeological information for use in considering how they may or may not have been “learned.” For example, available evidence indicates that nearly all of the population of Simeulue Island in Indonesia survived the 2004 Asian tsunami despite being located within 100 km of the earthquake epicenter and receiving the tsunami wave within 8–20 min. This was due to preservation of and movement to high inland areas in accordance with a memory of the last earthquake and tsunami, known as a *smong*, that hit the island in 1907 (McAdoo et al. 2006). In briefest terms, this suggests that in this population, a single event generated a useful hazard memory and that memory persisted and remained effective for nearly century and beyond the average length of a single lifetime.

In contrast, in 1770, following the second of two major earthquakes in the second half of the eighteenth century, city authorities in Port-au-Prince, Haiti:

In the fear that the lesson of the frightful earthquake would be forgotten as that of 1751, after which more than half of the city had been rebuilt with masonry... established a building code specifying use of wood or wood reinforced wicker and adobe, limiting heights of masonry foundations, and the materials and spacing of building enclosures (Scherer 1912:179).

Scherer (1912) noted that low buildings built after 1770 gave the city an entirely different aspect than it had had before the 1770 quake, which suggests that the code to at least some extent had been implemented. Tragically, by the January 2010 earthquake in Haiti, this building code had gone out of use. Interruptions may have included the 1804 revolution and the force of repeated hurricanes, although it has not yet been possible to explore this further. Finally, a sequence of four Spanish settlement locations around and within Pensacola Bay that was greeted with a hurricane (1559) and punctuated by a 140-year hiatus, then a sequence of fires, raids, and French capture (1698–1719), and a battery of hurricanes in 1740, 1751, and 1752 (1722–1752), illustrates the interplay between natural hazards that for all intents and purposes appear to deserve “prime mover” status in settlement siting decisions and other external but powerful economic, social, and military forces (Laracuento 2008, 2010). Pensacola has remained occupied and become a thriving city, albeit within a hurricane-prone area.

Taken together, these examples are interesting and each alone warrants further research, but, as examples, they do not directly address the questions of NHSRC with respect to reception and perception of disaster and risk information. Extended discussions of these examples reformulated them into a question that can be summed up simply as: what makes disaster experience stick? With this in mind, research has been fractured into several redirected lines. One line is continuing to look for and at examples of adaptation to aperiodic events. Work by Walter Peacock and others (Peacock et al. 1997, 2005) has examined post-disaster behavior with emphasis on hurricanes, including patterns in such practices as purchase of insurance and retrofitting. Work by Minc (1986) and Minc and Smith (1989) with ethnography, archaeology, and paleoclimatic records among the Nunamiut and Tareumiut in northern Alaska has identified oral traditions that appear to encode survival mechanisms that accommodate extra-generational climatic cycles in coastal and inland areas. The goal is to find or, if necessary, develop research that bridges these scales – postdisaster communication that ultimately contributes to a population-wide understanding of potential dangers and how to prepare for and respond to them. Another line is addressing education for and communication around hazards other than natural hazards, such as the generational effects of the “Duck and Cover” education program that imprinted that immediate response to nuclear detonation in the U.S. from the 1950s to the early 1980s. And finally a third line is in its initial stages of assessing the role of individual experience and memory in environmental perception.

Sources of information for this research are now diverse. With respect to first line of questioning, the surface structure–deep structure model following Hoffman (1999) is particularly useful as it provides a language for outlining the socio-economic and

socio-ecological contexts through which disaster experiences are absorbed. The concept of deep structure raises issues of how it might change over time, which has lead to research into work ranging from macroevolutionary models (for example, see collected papers in Prentiss et al. 2009) to histories of disasters generally (Rozario 2007) and of specific dangerous things (radiation: Weart 1991; earthquakes: Winchester 2005). With respect to the second line, sources include histories and ethnographies of contamination events, videos and other documents of education campaigns, and surveys of current knowledge. The third of research is currently also survey-based, although collected data may be compared back to historical and, if feasible, archaeological climatic information.

Two points from this with respect to archaeological relevance. First, is this work archaeological enough to count as relevant? I think it is. It has not involved working day to day with artifacts and related site data. But archaeological information has become an integrated part of the whole. Archaeological data and syntheses have made it possible to add a range of examples to discussions that otherwise would have been based on historical data likely only from the past several decades. Examples such as the work of Laracuenta (2008, 2010) with the history of Pensacola are an important reminder that because something is one way at a certain time does not mean it is the best practice, rather it is a given solution for a particular period of time. The example of the work of Minc (1986) and Minc and Smith (1989) in combination with the Hoffman (1999) has generated much consideration about modern approaches to disasters and raised the questions: what other levels of preparedness are possible? Can and how might we get there from here? It has not been a solely archaeological endeavor, but it could not have become the endeavor that it is without archaeological viewpoints and timeframes.

Second, as implied by the point above, risk communication research at NHSRC did not start out as an investigation intending to use archaeology. Risk communication is about talking to living people in the here and now or in the future. As I have quipped during many introductions: "I study dead people." Nor has there been a direct match in the literature for information on the topics described above. It took much tacking back and forth, much discussion, more reading, more research, more questions, more discussion, and more ideas.

But as laid out here, archaeology has an important role to play in building out social theory of disasters. While as noted above building sequences of disaster experience alone is not sufficient to fully address disaster behavioral questions, continuing identification and analysis of past disaster events is critical to assessing potential range of socio-economic system processing of disasters. Along with Laracuenta's (2008, 2010) studies of Pensacola settlement, other examples include Beaman's (2010) work with hurricane traces in North Carolina, Moodie et al.'s (1992) work with memory of eruption of the White River Volcano in Alaska, Wingerson's (2006) identification of earthquakes along the New Madrid Fault Zone, Nur's (2000) study of Bronze Age earthquake swarms in the Mediterranean, and Scheffers et al. (2009) examination of tsunamis and other disasters in the Caribbean. This is equivalent to the human barometer and shifting baseline data contributions with respect to climate change developed Chap. 14. Also needed are more data and theory-building

efforts about information transmission (for example, see Boyd and Richerson 1985; Richerson and Boyd 2005), rate and persistence of change, and long-term flexibility or rigidity of social systems (after Nelson 2009). If hazards were not taken into account at the start of settlement, how might a socio-economic/socio-ecological system incorporate them later? These are similar to the macroevolution and narrative uses of archaeological data also developed with respect to climate change in Chap. 14.

The first golden rule of risk communication is to make stakeholders partners. This cannot be done fully if it is not known what those stakeholders think, what their framework is, what their experience has been. Their history and structures are part of the partnership, and better understanding of them is needed for genuinely effective preparation and communication. It may seem a long road from biological decontamination to macroevolutionary models and archaeologically supported narratives, but the final point here is that the road exists and there are offices and agencies that are interested in following it. Richard Gould (2007) in his book *Disaster Archaeology*, shows how the tools of archaeology can be of great assistance in the immediate aftermath of disaster. My experience at NHSRC suggests that other archaeological tools of data and theory can also be a contribution.

Building the Decoder Ring

As shown in the section above, relating archaeology to disaster policy is not a one-to-one match. Rather, it has required translation on both sides. On the archaeology side, it took grasping the question, determining whether a population-level human behavior component and time component might be useful, and then identifying appropriate sources of archaeological information to contribute to the larger endeavor. On the homeland security policy side, it took a willingness to listen to multiple new ideas and examples, consider an approach larger and more complex than might otherwise have been considered, and rephrasing of the questions as necessary. In other words, it was rather like spinning an old-fashioned two-sided decoder ring – altering both sides of a conversation until the words in the middle made sense to everyone. Other policy areas in which I have become aware of similar level of interest in individual- and population-scale human behavior include energy efficiency (see behavioral wedge in Dietz et al. 2009) and disaster mental health (Yun et al. 2010). It is highly probable that many other lines of inquiry such as developed above can be developed in other policy areas.

This type of interpretation process was possible in the NHSRC setting through the framework of an AAAS Fellowship. It provided the opportunity and reason to develop questions and research face-to-face. A unique and wonderful chance. But how might archaeology go about decoding for improved relevance for policy throughout the rest of the profession? While there are likely at least as many pathways as there are policy-makers, two general approaches need mentioning here: first, how research is phrased and second, where findings are published.

During my time in Washington, DC, if one publication has been mentioned by non-archaeologists with respect to social science issues, it is Jared Diamond's (2005) *Collapse: How Societies Choose to Fail or Succeed*. Clearly, this book has been read, enjoyed, and is remembered. From discussions about it that have followed, one of the reasons why I think this is so, in addition to his engaging narrative writing style, is that in his approach and discussions Diamond "got" a very important question: what do we do with the society that we have? Regardless of political or other social perspectives, it is difficult not to look at gathering climate model data, pollution and depletion of natural resources, teetering global economic systems, rates of poverty and population growth, and wonder: what do we do with all this? Can all these issues really be addressed? What options do we have and is there a point beyond which we will not have them? Are we alone here, or have others answered these questions before? In *Collapse*, Diamond lays out arguments that strongly suggest that while there may be a point beyond which we will have fewer ecological and social choices, modern society is not there yet and we have wealth and strength of a multitude of past social examples from which we can try to learn and draw relevant lessons.

In the archaeological world, Diamond's *Collapse* has generated a fair amount of angst. Concerns range from his use or lack of specific data to overall perspectives and interpretations. One of the most recent expressions of this sentiment is the volume edited by McAnany and Yoffee (2010a) *Questioning Collapse: Human Resilience, Ecological Vulnerability, and the Aftermath of Empire*. The volume gathers together specialists from a range of regions and topics to address points and perspectives made by Diamond. It does not mirror the organization of *Collapse*, which moves from a modern opening to past society examples, modern society examples, and practical lessons, but rather begins with discussion of the concept of collapse and modern fascination with apparent absolutes of success and failure, then characterization of people who live in former empire areas, and finally a discussion of relationships between past and present climatic and environmental issues. The lead-off point for the volume is that collapse is actually a rare phenomenon and describing societies as "collapsed" does a disservice to modern indigenous descendants (McAnany and Yoffee 2010b).

It is responsible scholarship to attempt to correct errors noted elsewhere, which the contributors to McAnany and Yoffee have done, and it is certainly legitimate to express dissatisfaction with others' interpretations, which is what I am also going to do here: from a policy point of view and a communication point of view, *Questioning Collapse* fails. It does not address the question that Diamond, and by extension the public and policy-makers that find his work so engaging, pose: what do we do with the society that we have now? Rather, by beginning with weaknesses in the concept of collapse and organizing the discussion in a different manner, the overt message of the volume is that this vast public is asking the wrong question. As noted in the tenets of risk communication above, communication involves not only gathering and organizing and publishing information, but ensuring that it is received, perceived as intended, and that it carries a message upon which the receiver can act. For instance, the issue of continuity of populations in areas identified as past empires is

very important and deserves to be recognized. The fact of these populations and their transitions from the very visible forms of past lifeways of which the modern public is most often aware – temples, vast acreages – to the social, ecological, and economic relationships in which they now live should be the bridge between public-oriented questions and archaeological phrasing of them. Were the transitions relatively quick? Were they slow? Were they piecemeal or do they appear to have happened in a more grouped fashion? Can we tell? If not, what other information or models are needed? This phrasing addresses both the public concern of what to do with the social system that we have now and our growing recognition of the complexity of some of our issues and the capacities and scope of available archaeological information. In McAnany and Negron's (2010) review of the Maya in *Questioning Collapse*, as one example from the volume, this decoding process, acknowledging the original question and then building from it, is not complete.

In contrast, an example of advanced decoding is work ongoing at Arizona State University in coordination with the Resilience Community, as described by Nelson (2009) as part of the "Is Archaeology Useful?" volume (Dawdy 2009). The originating question draws from efforts of the Resilience Community to identify social and environmental policies that contribute to resilience, which they define as "flexibility in responding to uncertain future conditions and avoiding catastrophic transformations" (Nelson 2009). Pulling on the concept of flexibility, archaeological investigations have looked at the effect of rigidity on social–ecological change, the contribution of social and subsistence diversity to resilience, and how resilience to some conditions can create vulnerabilities to other conditions. Working with data from the Hohokam civilization in central and southern Arizona and particularly the Hohokam irrigation network, conclusions to date are that social rigidity can develop in an absence of social options, with attachment to traditions, and as a trade-off with respect to robustness, while diversity also brings its own complement of costs as well as benefits (Nelson 2009). As Nelson (2009:162) notes,

Any one of the insights might be obvious to archaeologists, given our understanding of the long term. But they are not obvious to many ecologists, policy-makers, and other environmentalists seeking ways to understand human–environment dynamics and contribute to the resilience of our contemporary social–ecological systems.

Charles Redman, in his (1999:195) volume *Human Impact on Ancient Environments* eloquently detailed a similar idea, noting that

The results of archaeological research are a rich and objective source for lessons from the past, appropriate to almost any question and tied closely to almost every region of the world. This resource is one of the great potentials of archaeology and cannot be ignored if archaeology is to take its place among the essential social sciences. However, there are risks inherent in the use of archaeological record in this manner. The interpretation of past events as models for contemporary behavior is a subjective endeavor that relies both on a firm knowledge of the past events and an explicit recognition of the objectives guiding the application of this knowledge. The point of this book is not to provide goals for using the past, but to provide an empirical basis for interpreting the past and to highlight the key relationships and processes involved in human–environmental interactions. I cannot prevent the misuse of the past, but I can make the past more accessible to those who want to use it rationally.

Together, these statements are the essence of the goals of the archaeology decoding process, to be a rich and objective source of insights about the human condition to those seeking to understand that condition but not accustomed to working in the extended time and expanded regional space archaeology has in its view.

Redman's work raises the final question, however. Why is not a volume like Redman (1999) enough? It lays out very cogent points about history of human interactions with the environment, what archaeology can contribute in terms of data and interpretation, and useful discussions about how such information tends to be categorized at broad social scales. It is well-organized, and accessibly written – cannot the archaeological community put out such books and consider its work done?

The answer to this question has to be no. And evidence for this answer is the company this volume now keeps, as introduced above. In the past 11 years since Redman (1999) was published, the literature about making archaeology more relevant and incorporating archaeology into modern issues has only grown. Clearly, as shown by the work described by Nelson (2009), valuable connections with other research and policy-accessible organizations is happening. But as developed with respect to climate change (Chap. 14), archaeology is not yet integrated into policy at the high federal level. This lack is not for archaeology alone; the role of social science in climate change adaptation is just now getting underway. In this sense, it is not that archaeology is not an “essential social science” after Redman, above, but that social science itself is just now being recognized as essential at this scale.

So the next and final question is – where else should archaeology be? In the absence of archaeologically minded AAAS Fellows in federal policy offices (though I advocate for more), how might archaeological information flow more smoothly into the hands of policy- and decision-makers?

As recommended above with respect to the surface and deep structures of the archaeological field, flow of archaeological findings and information is another area where archaeology could productively turn the tools of its related field of ethnography on itself to learn more about who reads what and where. The internal structure of archaeological information, such as the “gray literature” and compilation of site and project data, remains a significant issue unto itself, as shown in the recent overview by J. A. King (2009). My emphasis here rather is the outer reaches of the outward flow of findings and summaries, such as those described by Nelson (2009); how and where might someone learn about rigid and flexible social structures if he/she would find the topic interesting and potentially useful (that is, relevant) but was not specifically looking for that information?

As a thought model, I suggest a least-cost path approach. Meaning, if archaeological information is readily available to those who do not have the time to look for it, then it is much more likely to be available to many others who are looking for it. In the policy world I have had the chance to experience in Washington, DC, those with the shortest average amount of time to conduct research and the most rapid turnover in information needs are those in Congress. So I conducted a brief survey among AAAS Fellows who staff Congress. While it is clear that much research is done through the Congressional Research Service, which would be an important

Table 1.1 Research Sources Regularly Accessed by Sample of AAAS Congressional Fellows

News Source	URL	Focus
Science Daily	http://www.sciencedaily.com/	Wide range of science
E&E News	http://www.eenews.net/	Environment, energy, climate
CQ Daily	http://moneyline.cq.com/corp/show.do?page=products	Capitol Hill schedules and related notes
Roll Call	http://www.rollcall.com/	Capitol Hill
Politico	http://www.politico.com/	Political news
Newspapers: Wall Street Journal, New York Times, and Washington Post	See individual paper pages	Wide-ranging
Non-governmental Organizations (NGOs)	Not provided	Not specified

focus for additional research along these lines, responses also clearly showed that a key source for information on a daily basis is select set of Web sites and news clipping services (Table 1.1). The *ScienceDaily* site includes a “Fossils and Ruins” tab which includes an archaeology link, as well as anthropology link and an ancient civilizations link. According to its editorial page, *ScienceDaily* gathers its stories “from among dozens of press releases and other materials submitted to *ScienceDaily* every day.” The E&E News sites contain original reporting. As often as I have checked them over the course of several months, their stories do not tend to address or include human behavior or archaeologically based information.

What then makes a news story? Part of this question lies within the purview of archaeologists: where to publish, how to publish, what to publish? Part of it lies in the surface structure of the news cycle: what will engage, what will sell (see Chaps. 4 and 11)? And part of it lies in the deep structure of modern social understandings of what is important, what matters, what is – in a word – relevant? This volume is directed toward better understanding all of these parts.

A L’Enfant Plan for Archaeology

In 1791, Major Pierre L’Enfant was engaged to design the array of streets, open spaces, and monuments that became Washington, DC. With only minor modifications, his plan was built out and has remained as the underlying pattern of the city today (National Park Service n.d.). At a map view (Fig. 1.1), the plan provides a relatively predictable grid arrangement of numbered and lettered streets arrayed outward from the Capitol Building, cross-cut with diagonal avenues named for states, with the many of the meeting points of these marked by parks and monuments. At a pedestrian level, it provides a navigable space, sometimes bewildering,



Fig. 1.1 Andrew Ellicott's "Plan of the City of Washington," based on the plan prepared by Pierre L'Enfant, engraved by Thackara and Vallance, Philadelphia, March 1792 (photo courtesy of the Library of Congress)

sometimes breath-taking. At the level of idea, it organizes a functioning city to showcase its monuments, open space, and architecture that in turn embody the arrangement of government and the ideals and history on which that government is based.

In an ideal world, archaeology would have a similar arrangement. At a relatively practical level, it would be organized so that information flows to and from all parts. As with the real L'Enfant plan, this flow might not be direct and states might meet at odd angles; in places it might pool and mix with other information, in other places it might spread across wide open space. But pulling this idea up to a metaphysical sort of level, the surface forms of archaeology would be clear expressions of its underlying potential. And from this, a different idea view: for all grumblings that may come up about its traffic or the workings of the Washington, DC Metro subway system, the L'Enfant Plan underlies and orders how decision-makers move around the capitol city. This then is my vision for archaeology – that it underpin and help to guide high-level decision-makers. Not that it should hinder or add burden to deliberations, but be such an integrated part of understanding of what has been and what could be that the chairs around the table would not be full without it.

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Part I

Dialogues in the Practical Sides of Archaeological Relevance

Introduction

Joe Flatman and Marcy Rockman

Setting up the “research agenda” – the need for both a practical as well as a “deep” understanding of the relevance of archaeology debated in the following two parts of the book – this first part discusses “real world” case studies, where there is no one simple answer to any given question. In short, “from the gut” essay-style debates, a series of professional archaeologists drawn from across the U.S. and the UK debate, compare and contrast their experiences and the questions that are regularly asked of archaeology in different professional venues: CRM, government, academia, museums and the community. The archaeologists involved respond professionally, but above all *personally*. All too often, archaeologists subsume their opinions underneath a professional veneer, especially in print; a cool, calm and rational third-person “scientific” persona in which the dread term is “I think...”. But part of demonstrating the “contemporary relevance” of archaeology is breaking through this veneer, hearing from the archaeologists themselves about how they go about their daily lives and what their opinions are, as professionals but also as *people*. This part of the book is thus about capturing some of the many different voices that together demonstrate the relevance of archaeology “of the moment.” In this sense, this part is as much a record as a debate; the individuals involved may well have changed their views and jobs by the time that this book is published, and in many cases the actual archaeological sites they discuss will be long-gone, lost to development, and surviving only as records and archives.

Specially commissioned for this book, the editors first devised a series of debate “themes,” and then asked two or more archaeological practitioners to discuss this theme. These themes, and the individuals involved, are introduced at the start of each chapter of debate. In many cases, the authors of the debates had never before physically met each other, as most debates took place through extended email exchange, moderated by the editors. But their collegiality and willingness to engage with both ideas and each other is clear throughout.

The result, we hope you agree, is a unique and engaging assessment of the current “state of the art” of archaeology, a “virtual conference” if you will. This part records both the archaeology of this particular moment in time, but also and perhaps more importantly, the *archaeologists* of this particular moment in time.

Chapter 2

Life in the Archaeological Marketplace

Chris Cumberpatch and Howell M. Roberts

The Topic Our understanding of your backgrounds is that you have both worked in multiple roles in different places. So, we would like you both to discuss your experiences with different projects and generally describe what works and what does not. In your experiences, what aspects of archaeological work tend to go smoothly and where do problems come up? Who decides how archaeological work is designed and how much flexibility is there in cost, time frame, and approach? Are archaeologists the primary decision-makers, or do clients or other administrators also have lead roles? Are there situations where you have known –“if I was in charge I would do this differently/better?” If you are able to compare/contrast large-scale vs. small-scale projects, that would be great.

The Realities of Life as a Freelance Archaeologist: Chris Cumberpatch

Introduction

Since 1991 when I completed a Ph.D. on the production and circulation of late Iron Age pottery in central Europe, I have worked as a self-employed finds specialist based in Sheffield in northern England. My work has been in three main areas. The first and principal area has been in the preparation of reports on pottery assemblages from sites excavated in northeastern England by commercial archaeological units. This has involved mainly medieval, postmedieval, and later assemblages although

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in recent years I have taken on more work on later prehistoric material as older colleagues have retired from the field.

A minor but interesting area of work has been in the preparation of preplanning application “desktop” assessments. These documents, which usually form part of a broader environmental impact assessment, are designed to enable a developer to prepare a statement pertaining to the archaeological implications of proposed work on a site and are required as part of the planning process set out in a quasi-legal guidance note Planning Policy Guidance Note No. 16 (1990), better known simply as PPG 16 [since replaced by Planning Policy Statement No. 5 (PPS 5): Planning and the Historic Environment, 2010]. Archaeological curators, who work within the planning system, use the information in these documents to prepare briefs that will structure subsequent archaeological investigation on a given site.

Abroad I have worked as a finds manager on projects in Lebanon, Syria, and Turkey, dealing with the processing and preliminary recording of finds of all types and the creation of documented archives which can later be used by specialists to gain access to complete or part assemblages during the reporting stage of the projects.

In Syria and Lebanon I dealt with sites dating to the later Hellenistic, Roman, Byzantine and Islamic periods. The Lebanese experience resulted in a number of rather speculative papers (Cumberpatch 1996, 1998, 2000a) and on a co-authored conference paper dealing with some of the problems encountered in bringing modern British methods to bear on sites in the Middle East (Cumberpatch and Thorpe 2003).

In recent years, I have worked less abroad, in part because of the enormous increase in the volume of work in Britain which resulted from the housing boom which ended only with the recession of 2008–2009 and in part because of my belief that air travel represents a major contributory factor in climate change and should thus be avoided unless absolutely necessary.

Alongside the housing and retail boom and the associated expansion of commercial archaeology there has been a growth in the funding of local archaeological and history societies through the funds raised by the National Lottery. Local societies have undertaken parish and area surveys that have included excavation and field survey. The best of these have involved close co-operation between professional archaeologists and the amateur and voluntary sectors. My involvement with such groups has been both stimulating as well as archaeologically productive.

Between 2003 and 2008 I served as Secretary of RESCUE – The British Archaeological Trust, an unpaid position within an organization funded only by its membership and sales of publications that seeks to campaign actively for the interests of archaeology in the UK and abroad. This enabled me to comment directly on government and quasi-governmental initiatives pertaining to the historic environment. These have included the reshaping of English Heritage by the Labour Government (Jowell 2001, 2004, 2005, English Heritage 2000) and interventions by politicians (noted below) which have convinced me that culpable ignorance and a willful refusal to listen to informed opinion are the chief characteristics of government ministers, or at least those appointed to positions within the Department of Culture Media and Sport (DCMS) under whose auspices archaeology and the historic environment fall.

Throughout the 1990s, together with my colleague Paul Blinkhorn, I wrote and published a number of papers which sought to examine the organization of archaeology in England following the introduction of PPG16 and to produce a critique of what we see as the negative aspects of the commercialization of archaeology (Blinkhorn and Cumberpatch 1998, 1999, 2008, Cumberpatch 2000b, Cumberpatch and Blinkhorn 2001). Some of the points made in these papers will be discussed below but briefly, my position is that while it is entirely right that those who profit from the destruction of archaeological assets and resources should pay for the steps that must be taken to mitigate the effects of their behavior, the system as it currently exists gives far too much power to the developers (and their hired consultants) to decide the scope and scale of the archaeological interventions undertaken under PPG 16. The lack of a deeply embedded research culture within both the curatorial and contractual archaeology sectors and the unexamined dominance of the principal of preservation in situ means that there is a tendency to opt for minimal intervention, even when this means that the information obtained by excavation and subsequent analysis is of limited value in terms of addressing broader research-orientated questions.

Commercial archaeology currently accounts for the majority of excavations and surveys undertaken in the UK and while the number of projects has been dramatically reduced since the onset of the recession, it seems likely that should a recovery take place (as predicted by economists and politicians) then in a few years time this situation will be back to something approaching that of the later 1990s and the period up to 2008.

The following notes are based closely on the brief given for this paper and I have chosen to interpret this as a “question and answer” format in an effort to provide an alternative perspective to the one presented in earlier papers. I shall not deal here with the foreign projects mentioned above but will limit myself to my work in the UK. I am unable to cite my informants by name and have chosen not to identify specific projects, other than in those cases where these references are positive. The reasons will, I think, be obvious to anyone who has worked in commercial archaeology, at least in the UK. The situation I describe is one known to me from my day-to-day work and from my conversations with colleagues throughout the country. There are honorable exceptions to many of the points I have made in this paper and there are many people who are striving within their own situation to make things better but they seem to be fewer by the day while the iron grip of the audit culture, enacted by managers and consultants grows ever stronger.

Project Experience: What Works? What Does Not?

I have been involved with few projects that have failed entirely to produce an outcome and some of those that have are still officially “active” even if it is hard at present to see how their completion will ever be funded other than by unpaid work by myself and others.

The conduct of archaeological excavation and survey was, in principal, governed by a document entitled *Management of Archaeological Projects II*, better known by its acronym, MAP II (English Heritage 1991). This has recently been superseded by a similar document known as MORPHE, but the projects I shall be referring to were all undertaken under the MAP II regime. Although there is room to quibble with individual aspects of MAP II, in general it offers a comprehensive breakdown of the process of archaeological fieldwork, postexcavation analysis, archive creation, and report production which aims to yield usable archives and publications within a research-driven environment. Unfortunately, it is often more honored in the breach than in the observance and effective enforcement of its principles is rare.

In a paper presented to the Society for Medieval Archaeology in 2008, Paul Blinkhorn and I described the typical role of freelance pottery analysts (few commercial archaeological organizations have in-house specialist staff) as follows:

A client will email or ring to say that they have an assemblage of pottery from an excavation, and can we produce spot-dates, an assessment or a report, and how much will it cost. Occasionally, a courier will appear on the doorstep clutching an archive box or two, or a large padded envelope containing pottery sherds will drop through the letterbox. [These are usually accompanied by a] ... letter saying where it is from and who the contractor is. Once in a blue moon, a contractor will ring up before a project starts for a quick chat regarding what we think may come up and how they should deal with it, and about once a decade, we are asked to attend a formal pre-project meeting with all the other staff involved to help with the formal formulation of the Project Design.

In the usual scenario, the pottery is assessed, and the assessment report sent off to the contractor, then a few weeks, months or years later, an email will arrive asking for the report to be written. This is sometimes accompanied by a copy of the full Project Design, but rarely by a comprehensive site narrative. The stratigraphic matrix, where such a thing exists, usually has to be requested, and it is not unusual for this request to be received with a little puzzlement, as there are definitely some project managers out there who cannot conceive of why someone who is studying the pottery from the site would need such a thing.

Next the report is written, sherds are sent off for illustration ... Occasionally, copies of illustrations are sent back to the pottery analyst to check their accuracy, and the edited version of the report also sent to allow checking that no major alterations have been made to the sense of the text. The latter is ... a rare occurrence. In the case of "grey literature", the analyst seldom ever sees a copy of the final product. I [PB] once asked a client if it would be possible to have a copy of a "grey" client report in which I had had written the pottery report as the site was relevant to a field of study in which I have a personal interest. I was told I could, but it would cost me £15. One positive in this area is the availability of some Grey Literature on the ADS [Archaeology Data Service] via the OASIS project [an online index to archaeological "grey" literature in the UK], but coverage there is still by no means universal (Blinkhorn and Cumberpatch 2008).

In one sense the system can be said to work in that reports are produced and deposited with the local Historic Environment Record (HER) and the site archives are deposited with the appropriate local or regional museum. The question which I believe remains unresolved is how far are we actually investigating human life in the past and how far are we merely undertaking a routinised set of procedures which result in outcomes which fail to contribute to any broader interpretative endeavor. All too often it seems that we are largely engaged in the latter and the scope for the investigation of issues and areas of concern within the wider framework of historical discourse is so limited

as to be nonexistent. This is largely a result of the uncritical adoption of a model of practice derived from the civil engineering industry that is wholly inappropriate for a research driven, investigative enterprise such as archaeology (see Cumberpatch and Blinkhorn 2001 for a more detailed discussion of this). The attitude taken by many Unit managers and particularly by consultants is that archaeological investigations undertaken within the commercial sphere should all be considered as “stand-alone” projects and that any comparative work or attempts at synthesis should be left for others, even though the actual identity of these “others” is never defined or specified. On more than one occasion I have been specifically instructed not to compare a pottery assemblage from one site with that from another as that is an activity which constitutes “research,” something which is actively proscribed under the commercial regime.

So what works is very much a matter of one’s perspective on the nature of commercial archaeology (see, e.g., Aitchison 2007; Tarlow and Pluciennik 2007 for contrasting perspectives). To the consultant, concerned above all to limit the financial obligations of his or her client (cf. Fenton-Thomas 2006) what works is an archaeological evaluation which produces results that can be dismissed as worthy of no further work or an excavation that can be written up and consigned to the shelves of the local HER with the minimum of expense. To the unit manager, what works may be a project which comes in under budget and ahead of time, allowing staff to generate a surplus and move on to the next project, thus fulfilling annual turnover targets. To some of us, particularly perhaps those specialists for whom new sites mean new potential for expanding our understanding of specific aspects of material culture, what works is a project with an explicit research element that leads to the publication of a monograph or Web-based archive which materially advances our understanding of a specific situation or contributes significantly to our broader perspective on a particular issue, period, or problem. There is, therefore, no real agreement on what constitutes a successful project and the principal divisions are between those (including many archaeological curators) who see the practice of archaeology as essentially an exercise in the mitigation of damage to a “resource” the nature and purpose of which is undefined, those who see archaeology as a service industry, facilitating the work of property developers, civil engineers, and planners (exemplified by the attitude of the IfA; Aitchison 2007) and those who see archaeology as an investigative, research-driven, and problem-orientated discipline concerned with the nature of human society and human life in the past, as preserved in its material traces (Cumberpatch and Blinkhorn 2001; Tarlow and Pluciennik 2007). It is difficult to see how these different perspectives can ever be resolved, given the fundamentally different predicates upon which they are based.

From the point of view of the pottery analyst, it is perhaps easier to define what does not work. In terms of pottery studies, this is principally the production of stand-alone, purely descriptive reports which fail to engage with fundamental issues such as the nature of the deposits constituting the site (including, e.g., the investigation of site formation processes), regional issues around the organization and chronology of production and distribution and the investigation of particular site or region-specific issues such as those identified by research agendas (e.g., Cooper 2006) and problem-orientated surveys (e.g., Mellor 1994).

On these grounds, it has to be said that a large number of projects, particularly in areas such as the archaeology of eighteenth- and nineteenth-century cities in northern England which are still at the stage of data gathering and the development of appropriate methodological tools suitable for tackling emerging questions, are not delivering all that they might. The reasons for this lie both in the scope and scale of the project designs which govern the conduct of field work but also because of the fact that the working practices and institutional hierarchies which have emerged and become fossilized since 1991 generally preclude interaction between the specialists themselves and between specialists and the project managers, project officers, and supervisors who undertook the excavation. The failure by both unit managers and archaeological curators to engage fully with specialists and to understand both what they require in order to answer the critical questions raised by the character of the archaeology and what they can offer if permitted to interact in the ways envisaged in MAP II inevitably leads to inadequate and partial reports which fail to maximize the potential offered by the data. The role of the unexamined and highly linear management structures that govern this process are considered further below.

Archaeological Work: The Smooth and the Rough

If one accepts one's role in the "sausage machine," producing descriptive report after descriptive report with no aspiration to interpret what one sees and records, then the system can be said to run smoothly but this is not to say that it works well or even adequately. Like the rhetorical sausage machine, ejecting identical anonymous frankfurters devoid of both texture and flavor, the system as it stands produces the standardized grey literature reports destined for the HER shelf and often inaccessible except to those with the time and money to travel, like medieval monks, across the country to examine the rare and expensive volumes. Routinisation of practice is a relatively easy state to achieve so long as the goals are limited. This was particularly so in the years of the property boom with one site following another often so fast that project officers who ought to have been researching and writing up their most recent site were rushed from project to project and specialists were processing and recording pottery (and the whole range of other artifact categories) as fast as possible.

The problems inherent in the system were, to some extent, concealed by the demand for our services during the boom years but, ignored and dismissed, particularly by those who saw archaeology as merely another service supplying the needs of the construction industry, they have continued to grow. These problems are numerous. They include a wide range of practical and logistical problems including the crisis in facilities for storing and curating the archives produced by fieldwork operations (particularly acute in local and regional museums), the loss of local knowledge within individual Units and HERs and an almost complete absence in investment in training and career development (particularly pronounced in areas such as pottery studies) as well as the adoption of contentious, unsubstantiated, and

formulaic sampling strategies to reduce the cost of excavation. These problems also include the nature of what we produce. While informative and academically useful monographs are produced (examples that I have contributed to include Roberts 2002; Brown et al. 2007; Lightfoot et al. 2008) on certain projects, the vast majority of reports remain as grey literature, irrespective of their wider importance to the research community or the growing numbers of individuals in the amateur/voluntary sector. While such reports have an obvious relevance to curatorial archaeologists in giving them an appreciation of the nature and character of the sites in their own particular regions, one has to ask what wider relevance they have if they are not made widely available, given the known and well-attested range of popular interests in archaeology, local and family history, quite apart from the needs of the academic sector. As mentioned above, the OASIS scheme, together with the grey literature library maintained by the ADS, are valuable indicators of what could be done, but neither seem to be systematic in their approach or comprehensive in their coverage.

Common factors in the fragmentation of the scope of archaeology include the failure to provide for both the continuity of the profession in human terms and to allow for the need to increase physical capacity in other areas, including archiving, dissemination and the opportunity for informed discourse and debate. At the practical level, cutting costs to the bone in an effort to win the next contract and to maintain a good relationship with the consultancy sector leaves no scope for investment either in skills through opportunities for training or in the dissemination of results. Nor does it allow investment in necessary logistical resources or the application of the latest analytical techniques. I have built from scratch in a Syrian brickyard better finds processing facilities than I have seen provided by some professional archaeological units in England (albeit a minority). While legal firms (for example) regularly take on trainees and provide them with practical experience and intensive mentoring by experienced senior members of the firm, there is rarely any provision for similar training in archaeology, specifically in the area of specialist services. By outsourcing most specialist skills, archaeological units divest themselves of the responsibility for bringing on the next generation of specialists. As most pottery specialists are self-employed and work alone or at most in pairs, there is insufficient time and no money to allow them the space to train their successors and very little scope to participate in training schemes, even where such schemes are, in theory, available. I have frequently been told “You should take on a trainee” when I cannot begin work on a project immediately but no one has an answer to the fact that this would immediately involve an increase in my fees by two-thirds simply to pay the trainee plus additional costs to cover insurance, national insurance, holiday pay, and the rest of the inevitable costs of providing employment. Nor is it possible to take the time to step back and to reflect on the results of a series of projects in a town or rural area with the aim of producing a synthesis of one’s recent work which will contribute to a wider understanding of a particular locality or a particular issue.

Methodological development is also restricted under the present system. As Paul Blinkhorn and I identified many years ago (Blinkhorn and Cumberpatch 1998), the management of archaeology is dominated by those who have a background in excavation.

While there are a small number of individuals in senior positions with a background in finds analysis, they are a tiny minority of the total. The result is that there is little or no recognition of the fact that most areas of artifact study are dynamic and continually evolving as new discoveries change the picture, sometimes radically. To deal adequately with this projects have to be seen as more than “stand-alone” interventions. There has to be room for the cross-funding of projects and sufficient margins for studies that cross-cut individual projects and operate between them. We seem to lack the managerial tools and structures, including accounting procedures that will allow such investment in the future of our profession. The system that existed before 1991 that depended on the core-funding of archaeological units, usually by local authorities was one with many serious drawbacks and was probably unsustainable in the long term. Its strength was that there was the possibility of core-funding which offered a degree of continuity and the possibility of inter-project funding. This was entirely lost in the rush to the contract-tender system in the early 1990s and today it is only support from English Heritage that offers the possibility of undertaking such work. With the imminent prospect of further deep cuts to English Heritage budgets as the costs of the collapse of the banking sector are met by central government, it is likely that this support will be weakened even further in the coming years. As it is already inadequate to meet the demand, this is a prospect that must be viewed with considerable alarm.

Design, Cost, and Flexibility (or Not) of Archaeological Work

From the perspective of the finds analyst, decision-making lies entirely in the hands of consultants and project managers who take the major decisions generally following a brief drawn up by the curatorial archaeologists. The input of consultants into this process appears to be a largely negative one; seeking to cut costs by limiting work on specific aspects of a project, whether in terms of the areas excavated, the sampling strategy employed on site or the scope and scale of postexcavation analysis is hardly a positive contribution to the production of an adequate report, yet it is the *raison d'être* of the consultancy industry. By the time a project reaches the specialists there is very little room for flexibility in any aspect of the project other than in the narrow parameters of how long it will take to “do” the pottery report. All the essential elements of the project will have been established before the project design reaches the specialist—the entire process is routinised and standardized which eliminates any contributory role for the specialist over and above the cataloguing of the material. The key phrase is “can you do the pot from this site” by which is usually meant “produce a report which emphasizes chronology and description above interpretation.” The end result is that specialists may have to contribute to the costs of a project through unpaid and entirely unacknowledged overtime which can involve days or weeks of unpaid work, simply to produce a report which conforms to the standards set by professional organizations and study groups. Paul Blinkhorn and I have discussed the almost complete ineffectiveness of such “professional guidelines” in more detail elsewhere (2008).

It is of particular concern that a generation of field archaeologists is emerging which knows no other system than this one and, without a background in research, perceives the problem to be how to get on and off site as quickly as possible rather than how to investigate the range of issues thrown up by a particular site and the information (including finds) that constitutes the results of the investigation.

Decision-Making in Archaeological Work

While curatorial archaeologists are, in theory, responsible for setting the brief for specific archaeological investigations, they are hedged around by competing interests. Local councilors and economic planners have interests that rarely include archaeology. The completion of a particular development project may be actively supported by a particular elected member because it is a prestige project or will bring jobs and/or facilities to a particular locality that will have a bearing on their re-election. A property developer has obligations toward investors and shareholders and will transmit these concerns to his or her hired consultants who will then seek to influence the content of the brief and the conduct of the subsequent excavation. While it would be naive to assume that archaeological criteria must always override other considerations, the nature of archaeology is such that it deals with a finite and limited resource that is uniquely vulnerable. Plant and animal communities can be relocated to alternative places. The natural environment will, to a large extent, regenerate itself, albeit as secondary growth. In contrast, once destroyed or compromised (e.g., by drainage) an archaeological site, by its very nature unique, is gone forever, together with all the information that it contained. Inevitably the costs of either extracting this information through excavation or preserving the site undamaged are the factors which are raised by developers, local politicians and consultants but these are, in a real sense, relatively low when compared to other components of a development. Archaeology in the UK is notoriously the lowest paid graduate entry profession in the country and its practitioners are by conventional standards, highly overqualified for the remuneration that they receive (IfA 2009). The costs of archaeology are dwarfed by those of other parts of the typical development project. Nevertheless, cost is regularly cited as the overriding reason why a site will not be investigated fully and why restrictions will be placed upon any proposed scheme of investigation. Attempts to justify such attitudes tend to be dismissive of archaeological priorities and to represent those who question them appear unreasonable or naive (e.g., Strickland 1993, see Cumberpatch and Blinkhorn 2001 for a response).

The fact that commercial archaeology exists only through the agency of two quasi-legal advisory documents (PPG 15 and PPG 16) means that archaeological curators have little in the way of statutory power to invoke in defense of archaeology. Much depends on negotiation and compromise, with most of the latter on the part of the archaeologists. Added to this the fact that curators are, by necessity, generalists and, though no fault of their own, are often out of touch with current issues within particular areas of specialization and have no formal means of consulting with specialists. The result is that the significance of a particular site may be entirely overlooked.

The same is often true of the project managers who will decide upon the specific investigative strategy once it has been agreed that a site will be investigated archaeologically. This inevitably means that the project design will stress the general over the specific with little or no scope for addressing issues of detail.

If I Was in Charge, Would I Do This Differently or Better?

Like most of the papers that I have written on this subject, this one gives a gloomy view of the prospects for archaeology as it is currently organized. Perhaps writing a Ph.D. in the late 1980s when skepticism regarding the Thatcherite/Reaganite economic project was virtually taken for granted in academic circles was a bad education for working in the last decade of the twentieth century and the first of the twenty-first century by which time this economic model had achieved such general dominance as to be both unchallengeable and unchangeable. The shift in political thought after the fall of the Berlin Wall and the liberation of central Europe from one in which ideological argument was central to politics to one in which the major decisions were reduced to issues of management, (even when they concerned matters of individual liberty and conscience) has ramifications which reach even into archaeology (see Hobsbawm 1994: Chapter 19 and McKibbin 2008 for a broader perspectives). We have accepted, virtually without protest, a situation in which we allow and in some cases even welcome, managerial structures which are essentially top-down and authoritarian, these having been naturalized not only by their apparent success in other professions but also by their incarnation as a substitute for political discourse (see Wolpert 1997 for a parallel in the biological sciences). The “line-management” system, in which the individual has a place only in a hierarchy and not in a Web of mutually informative interconnections, has come to be accepted as the norm within archaeology. While there may be situations in which such structures of practice work effectively, archaeology is manifestly not one of them. The necessity for input from a diverse and changing group of individuals bringing particular skills, perspectives and goals to a single project, throughout the life of that project, requires far more than traditional management structures can offer, as was recognized in MAP II (1991: Sect. 2 (2.2), Appendix 1 (A1.1.1)). We need, urgently, a new model for the management of archaeological institutions that will succeed where line-management has signally failed. This must recognize that the very heart of archaeology is a diversity of information and that the flow of information through a project and its participants must be full and open, not one-way and linear. Structure is required but it must be structure driven by the character of the discipline, not one imported, partially understood, from local government, the civil engineering industry or anywhere else. There are indeed methodological priorities within day-to-day practice and these have to be central to the structures of management around which the creation of archaeological knowledge is itself organized. In practical terms, these include specifically archaeological constructs such as the Harris Matrix and the site narrative, the latter conceived on one level in written terms but also as databases

of graphical and photographic representation. In more abstract terms they include the information flow within what MAP II defines as the project team. That it is impractical and grossly inefficient in terms of the quality of outcome to expect a range of specialists to proceed to the analysis of archaeological data without a full (if necessarily provisional) Harris Matrix and site narratives is on one level obvious, yet such a procedure is enshrined in the working practices of the majority of archaeological units within my experience. Specialists are expected to work in isolation with the full picture known only to the project manager or project officer whose attention will in any case usually be split between several different projects, all running at the same time and at different stages in their life cycle. While networks of informal contacts between specialists certainly exist, these are at best ad hoc and exist largely outside the structure of individual projects and are certainly not facilitated within the overwhelming majority of projects.

This critique raises more fundamental questions that may well have already been addressed outside archaeology. What, we might ask, is the purpose of management in the rigid and self-sustaining form within which it exists in archaeology? Is it to facilitate the investigation of a particular set of problems through the application of a range of appropriate methodologies? Or is it to implement a pre-established and non-problem-orientated methodology to attain the aim of vacating a specific area of land by a particular date and time? The latter is certainly the case under the present system and as a result has come to dominate archaeological practice, to the detriment of both our understanding the past and emplacing it within the fabric of our society. Rather than facilitating the creation of knowledge through the investigation of the physical traces of past human lives and activities, the management of archaeological projects has become a matter largely of extracting a bare minimum of information from the wealth with which we are presented when a site becomes available for investigation.

Conclusions

In the earlier paper cited several times above, Blinkhorn and I posed the question “who is the client” (2001: 40)? Our aim was to subvert the standard assumption that our clients are those who pay for archaeological mitigation and specifically for the removal of archaeological impediments to the process of capital accumulation. We hoped to reinstate archaeology as a social practice that aims to write accounts of the past based upon the interpretation of the diverse material traces of the past (or pasts) that survive to the present day. The question is also central to the issue of relevance. The relevance of archaeology is a subject that can be debated at many levels. As a discourse operating at the interface of “hard” science (through its deployment of analytical techniques which depend on the physical properties of objects), the social sciences (through its crucial relationship to history, anthropology, sociology, and economics) and the humanities (through its status as a subject in which narrative, discourse, and the production of texts is central to its very existence), archaeology

has a general relevance which it is hard to overestimate. This is relevance of the highest order and places archaeology as central to the investigative and self-reflective discourse which can be traced back at least as far as the Enlightenment; the relationship of humanity to its own past and the material traces of that past can scarcely be considered as anything other than relevant, given the central place of the past in the present and the increasingly uncertain relationship of the present to a viable future for the human race. Such grandiose claims perhaps require consideration at greater length and in greater detail than is possible here, although cases studies undertaken in postconflict situations (e.g., Cumberpatch 2000a; Bevan 2006) amply indicate the extent to which the past, and specifically the past as represented materially, is centrally implicated in the ethnic, religious, and racial conflicts which have come to define the post-Cold War era.

At the more local and personal level, as a collection of individuals united under a conventional disciplinary banner, we no doubt pursue archaeology and archaeological knowledge for a variety of reasons both personal and collective. But is the type of knowledge we are producing relevant to the variety of audiences that exist in our heterogeneous and diverse societies? We can, and increasingly are, producing accounts of the past aimed at different audiences. The physical recreation of full size ancient structures; roundhouses, Roman forts, Anglo-Saxon villages can, for example, provide schoolteachers with a means of engaging children in a conception of history that offers more than simply the type of chronological framework which is no longer deemed enough to form the core of the history syllabus. Nor do we have to stop at providing authoritative texts, either written or three-dimensional. Participation in excavations not only attracts widespread popular interest (Ellis 2005; Redhead 2005), but can lead to unforeseen benefits such as a drop in petty street crime (HLF 2009) as young people are engaged in a process of knowledge creation through their own participation. One major English university now uses participation in archaeological fieldwork as a means of demonstrating to children and young people from a wide variety of backgrounds the possibilities and potential offered by higher education (HEFA 2009). While architects and planners may seek to sweep away the material traces of the past through the destructive redevelopment of town and city centers, popular resistance to such inherently modernist projects and, indeed, the failure of the modernist project as a whole, can be traced in part to a reluctance on the part of significant sections of the population to consent to the erasure of class, regional, and ethnic biographies through the eradication of the physical traces of those lineages.

The question for those of us engaged in commercial archaeology has to be how far we are contributing to the production of pasts that facilitate engagement with the nature of the present. I would suggest that we are failing almost entirely in this respect. While many community and educational initiatives, including those mentioned above, represent successes, they lie largely outside the sphere of commercial archaeology and are barely informed by it. While many of us have participated in these successes, we have also failed and failed on a large scale. Commercial archaeology as it is currently practiced in Britain is unsustainable.

We are failing, at the most basic level, to provide for our own reproduction, and we are failing to adequately present the results of our work to the variety of audiences who we know exist from the evidence provided by opinion polls (English Heritage 2000: 4), television and radio audience figures and visitor figures from heritage open days and similar initiatives. At a strategic level we are also failing to communicate the benefits of our work to government, both national and local (Cumberpatch 2001). Evidence for the latter is abundant and can be seen in the progressive attacks on provision for heritage within local government (as reported regularly in *Rescue News*) and the systematic failure by government ministers to recognize the importance of archaeology as a component of the historic environment (Jowell 2001, 2004, 2005; cf. Cumberpatch 2001, RESCUE 2005a) and the nature of archaeological research (DCMS 2005; paragraph 44, cf. RESCUE 2005b). Artifact hunters continue to loot archaeological sites for their own gain, whether merely for the solipsistic pleasure in ownership or financial gain through participation in the international trade in looted antiquities and are hailed as “unsung heroes of the UK’s heritage” by the Government Minister charged with the care of the nation’s cultural heritage (Lammy 2007). In 2008, in spite of intensive lobbying by a confederation of archaeological and heritage bodies at the highest level a Heritage Bill with cross-party support was dropped by government at the last moment on the thin excuse of a lack of parliamentary time (RESCUE 2008, DCMS 2009). An updated Planning Policy statement, designed to replace both PPG15 and 16 with a more integrated system was not only delayed but the content of the draft text was withheld from all but a few individuals within the heritage community.

This is indeed failure of the most profound kind, particularly in a country where the central government is increasingly obsessed with the micromanagement of decisions down to the regional and local level and seeks to enforce this through increasingly authoritarian and intrusive techniques. But even more broadly than this, we are generating data that lies unused and unused data might as well not exist. The grey literature mountain, however beautifully adorned with company logos and “snappy” summaries, is a testament to our failure; a failure of nerve, a loss of self-confidence, an open admission that we lack the courage of our conviction that understanding our past is crucial to our future. This at a time when historical fiction, written and cinematic is an overwhelmingly popular genre, when elegantly written social history and biography (e.g., Adams 2009; Holmes 2008; Jardine 1996) is a prominent feature in bookshops and libraries, when interest in family history and local history have never been greater. Rather than seizing the moment and engaging with the diverse range of social groups who make up our societies, we would rather pose as the servants of the development industry or even doctors who will provide a cure for the sickness represented by the presence of archaeological deposits on a site (a disturbing metaphor discussed in greater detail by Chadwick 1998) in order to let developers sweep away thousands of years of history and culture merely to raise grotesque monuments to hubris that will last 30 years before being cleared away as an embarrassing eyesore, the result of a planning failure. In these terms we are

largely irrelevant and deservedly so for in a rush to claim a niche within the development industry we have thrown away our wider social relevance and have largely failed to contribute our unique perspective on the world at a time when such a perspective is sorely needed.

The Realities of Life as an Archaeological Project Manager: Howell M. Roberts

I have worked as an archaeologist since 1993, beginning as a site assistant on commercial projects in the UK. Since then I have progressed through various roles, organizations and countries – in both commercial and research-driven contexts. Today I am Head of Excavations for the Institute of Archaeology in Iceland (a private nonprofit group active in both research and development driven projects), and work both as a site director and project manager. On occasion I still excavate, which remains my joy and privilege.

I accept many of Chris's points about the limitations of and bleak prospects for commercial archaeology in the UK. It is for these and similar reasons that I left the UK a decade ago, to pursue hopefully more satisfying opportunities elsewhere. I have come to terms with my complicity in the "tyranny of the site director" and continue to seek amends. My initiation into professional archaeology in the UK was at a time when the impacts and implications of PPG 16 and the MAP II documents were beginning to be understood, and at a time when archaeology was just emerging as a fashionable topic for the popular media. In the years that have passed, public awareness of archaeology (and its relationship to development) has grown ever stronger and more widespread. Despite a number of reservations, this surely must be seen as a positive progression. Unfortunately, I cannot honestly say I feel the same about the progression of commercial archaeology in the UK as a workplace. Issues concerning professional standards, career structure, remuneration and so forth do not seem to have been usefully addressed, and little, if any, improvement in these areas is evident.

The introduction of the "polluter pays" principal for the funding of most archaeological work in the UK was a huge advance and a most vital step. However, the failure to adequately disseminate, synthesize, and "make relevant" the results of this huge body of work is rightly a matter of widespread concern. Chris has described the UK experience in harsh terms, and I can only hope that others have had a more positive experience in recent years. But I am familiar with the problems he has faced, and he is by no means alone. Site directors and project managers also find themselves caught between many competing pressures and constraints, from their own site teams, from specialists, from the curator, from the developer and from the developer's consultants. An overriding financial imperative dominates the decision-making process all too often, and we have all been obliged to work in environments far from the ideal. When a principled stand against poor standards or conditions equates directly with imminent unemployment, few people have a wide range of

options. Poverty and/or compromise are the archaeologists' reward. But this does not excuse inadequacy – and an excavation project unable to provide a credible outline of its stratigraphy, as Chris describes, is failing to meet a very basic requirement.

For developer-funded archaeology to function as it might it is essential that the design and commissioning of archaeological projects is carried out within a robust and sympathetic curatorial framework. Unfortunately, as Chris discusses, an ambiguous legislative position and competing agendas in the planning department may conspire to compromise the curatorial role, despite the best efforts of those concerned. The adequacy of an archaeological project, its adherence to professional standards and the adoption of best practice are all items that must be reviewed and where necessary enforced. I think we all know that our curatorial regimes and professional bodies could do better in this regard.

But these concerns are not unique to the UK – limited resources constrain both the quantity and quality of archaeological work everywhere. Before we turn aside the developer-funded model, we must remember how much more archaeology would be destroyed without any intervention whatsoever, were it not in place. We should also consider the situation in nations where such a principal is either not in place, or not adhered to. Public sector monopolies in archaeology must also prioritize according to their available (and limited) resources, and may not always be the most efficient or effective bodies to implement mitigation.

We often describe the archaeological resource in terms of a precious, unique or finite, threatened and dwindling asset, and base our claims to priority around this. We might alternatively view the evidence of past human activity as ubiquitous. There is little, if any, of the world's surface that does not have some anthropogenic imprint, whether in terms of archaeological sites as usually conceived of, or perhaps landscapes that have been deforested, grazed, and eroded. The pace and scale of our impact increases all of the time – we have changed the atmosphere and the oceans too. We have truly entered the “anthropocene” era. As archaeologists we seek to study, record, protect, and hopefully understand certain, variable (and ever growing) aspects of the record of that impact. How we prioritize this limitless endeavor differs from region to region, institution to institution and from individual to individual.

Archaeology is a costly pursuit, and it is vital that archaeologists are willing and able to justify their own work – to developers, planners, curators, and research funding bodies and not least to the public at large. That we sometimes fail in this regard is not remarkable. That this is sometimes not attempted is unforgivable.

I have had the good fortune to spend much of my time working in a mixed funding environment. The Institute in Iceland receives research grants from a broad range of local, national and international bodies and we actively collaborate with colleagues from the U.S., the UK, Scandinavia, and elsewhere in Europe. We have also enjoyed a positive relationship with the Reykjavik museums authority, and many other museums and interest groups around the country. In Reykjavik, the products of our relationship can be seen in an award winning new museum “871±2 – the Settlement Exhibition,” built around a Viking Age hall preserved in situ in the

heart of the city center. Although the excavation was occasioned by development, an enlightened and sympathetic curatorial regime within the city granted us the necessary flexibility and support to maximize the results. The potential of the archaeology as a resource for tourism and education was recognized and the opportunity this presented was taken up whole heartedly. The development of a new museum also meant a lengthy process of discussion, negotiation, and clarification. For me, this was an admittedly steep learning curve. Adapting and developing our views and our knowledge for different media and audiences was challenging, novel, and satisfying.

Iceland is a country innately fascinated by its history. Many landowners and residents are proud of their connection to the land, and of their knowledge of its past. Our fieldwork priorities in the north eastern region of Thingeyjarsysla are developed through a dialogue with the local archaeological society and this is both informative and fruitful. Local knowledge should never be underestimated. There are countless remote sites we would simply not know of otherwise. Trying to explain what I am doing and why (and why there exactly?) is invigorating, especially as a foreign interloper. It is a small price to pay for the opportunity to excavate, and to pursue our own agendas.

The local society has also initiated an exceptional educational program together with the local schools system, and this has garnered support from the Ministry of Education, the local museums and other local interest groups. The “Fornleifaskoli Barnanna” (Children’s Archaeology School or Kids Archaeology Program) now forms part of an important outreach collaboration with colleagues from CUNY (City University of New York) in the U.S., and is also supported by the U.S. NSF (National Science Foundation). The program is now growing to include groups across the North Atlantic and also in the Caribbean. In north eastern Iceland, archaeology is at the forefront of scientific outreach. Children have the opportunity to observe and learn about the international and multidisciplinary nature of research within their own community, and to learn about and investigate their own heritage.

It has been refreshing to often work away from commercial pressures, and even small projects with limited budgets generally produce satisfying and useful results. This happens where committed and experienced archaeologists have the strongest input into the terms of their own research and are funded, if modestly, to carry out such.

So, I inhabit some kind of archaeological utopia? Of course I do not.

To secure such funding as we do achieve requires a considerable effort in mobilizing a broad constituency of local, national, and international support. I wish I could claim that funding for archaeology in Iceland is distributed purely in terms of research merit. It is not – personal, political, and social factors within a small (and fractious) archaeological community also figure in the decision-making process, when and where archaeologists are even present in that process.

But this is not a unique problem, and we must come to terms with it. In recent years – years of growing opportunity despite any difficulties – it has become increasingly vital that we demonstrate strong support from the local community, and engage with local museums, schools, and also the tourism industry. And we should not shy away from this engagement because it is in these collaborations that we educate

ourselves about the relevance of archaeology to the wider community, and it is there that we begin to justify the funding which reaches us, ultimately, from the taxpayer. Here we touch upon questions of “whose archaeology?” but that is beyond our remit here. Suffice it to say that “ownership” is spread over a much wider constituency than archaeologists alone.

Our participation in commercial archaeology has raised all the difficulties and conflicts one might expect. It is perhaps the inevitable baggage of development constraints and competitive tendering. Iceland does have a “polluter pays” concept to a greater or lesser degree, and the relevant legislation recognizes all material remains older than 100 years as archaeology. The application of this framework is variable. Just as in the UK and elsewhere the effectiveness of such arrangements relies upon a robust and influential curatorial regime, and just as in the UK external pressures sometimes conspire to undermine that regime. Unlike the UK, in Iceland archaeology does not have a history of high levels of media interest. Public awareness of the archaeological endeavor is less, and the archaeological implications of development are often poorly understood. Despite the 100 year rule, it remains challenging to justify significant expenditure on the remains of the nineteenth or twentieth centuries. As this represents two-elevenths of the nation’s archaeology, this is a challenge we must vigorously face.

A key problem is a lack of appreciation for the unknown archaeology. Iceland is a large country with a small population, and neither desk-based nor pedestrian surveys approach universal coverage. It can prove extremely difficult to persuade a developer, or sometimes even the curators, that as yet undiscovered remains might prove costly and time consuming to address. Large-scale evaluation procedures are rarely undertaken and when we then discover “more than was expected” this entails a predictable series of negotiations. These are usually, but not always, easier to resolve with a public sector developer. A full appreciation of the scope of postexcavation work remains difficult to convey. Furthermore, in a small archaeological community the lines between curators, consultants and contractors may become somewhat blurred, roles become confused, and personality may intrude. When a curatorial body intervenes on behalf of the developer to proscribe comparative work or some aspect of postexcavation analysis we are forced to consider their motivations, and also the terms on which we wish to be involved, if at all.

Further Thoughts on Life in the Archaeological Marketplace: Chris Cumberpatch

There is clearly a good deal of common ground between Howell and myself. I too have worked abroad and recognize that in contrast to the situation in some of these countries, that in the UK is significantly better. Like Howell I have worked (and continue to work) with amateur and voluntary groups and with school and college groups. Such work is frequently very rewarding even when budgets are small and the deficit has to be made up with the commitment shown by volunteers.

I also agree with Howell in his comment that for all its problems, the “polluter pays” model does at least ensure that archaeology at least occupies a place in the planning process; without PPS 5 it is clear that we would be losing far more archaeology than we are at present and scenes common in the early 1970s when a handful of volunteers, university staff and students raced to salvage what they could from beneath the blades of bulldozers would still be the norm. No one with any concern for archaeology (or issues of basic site safety) would wish for a return to those days. Nor is a model predicated entirely upon state funding realistic as the competing demands upon central and local government funds would rapidly squeeze archaeology as much or more than local and regional museums are currently being squeezed. The demands of equity too require that those who stand to make enormous profits from speculative building projects face up to their wider civic responsibilities whether these lie in the broad field of environmental conservation or more specifically in archaeology. One can feel considerable sympathy for the individual who wishes to extend his or her house or to build an annex for an elderly relative and finds that in addition to the building costs they must also pay for an archaeological excavation. It is here, perhaps, that the case for the imposition of a development tax that would share the costs of archaeology equitably is most persuasive. The fact is that for good or ill, the unpopularity of taxation among the population generally and particularly among the least responsible and loudest of the newspaper columnists and editors makes such a tax almost unthinkable, irrespective of its merits or the relief it would bring to individuals.

I have perhaps expressed myself in harsh terms, as Howell points out, and I could perhaps have moderated some of my comments. I certainly acknowledge that the majority of archaeologists whether working in a curatorial or a contractual context, give their best to the projects on which they work. Many, to my certain knowledge, habitually go “the extra mile” to ensure successful outcomes, all too frequently at their own expense. Far too often their work is compromised by the management structures that have grown up around the premises of PPG15 and 16 and PPS 5 rather than by any ill will. The lack of any effective enforcement of the principles enshrined in MAP II or the standards documents compiled and published by the various subject-specific study groups and the growth of the consultancy sector in the gap between contractors, curators, and clients both present serious problems. It is, in addition, profoundly disturbing that the outcome of many months of meetings and discussions between archaeological organizations and the government culminated in a replacement for PPG15 and 16 (PPS 5) that has proved unacceptable to many of us (RESCUE 2010). Persuading politicians to listen to informed opinion is not, of course, a problem unique to archaeology (as recent debates over drug and alcohol policy have made clear) and it is perhaps time for a more unified campaign to persuade our elected representatives that they should be paying attention to the views of those with a more informed perspective than media magnates, newspaper editors, ideologically motivated columnists, and hired lobbyists.

Final Thoughts on Life in the Archaeological Marketplace: Howell M. Roberts

We still need to clarify the role of the curator, consultant, and contractor, and the expectations one has for them, if we hope to sustain and improve the “polluter pays” principal for funding archaeology. While the archaeologist will (and should) seek to maximize their results, and further study (and cost) is always possible, the developer has a right to know that their obligation is finite, predictable, and well justified. Negotiation is necessary and the developer is entitled to their own advocate – the much maligned archaeological consultant.

It is a commonplace to hear the archaeological consultant described as a “parasitical growth” on the “real work” of archaeology, but this is of course unfair and unreasonable. This view emerges because of some of the contradictions inherent in the role. Ultimately, the archaeological consultant is paid to save his client money, and while there will be cost savings resulting from informed forward planning, quality assurance, and performance-related efficiencies, this truth inevitably introduces a pressure to “talk down” the merit of additional research, minimize days worked, and to seek the lowest possible price from contractors. This scenario may then be exacerbated by the need to reduce costs such that the outlay in employing the consultant is also “recovered” and it is the consultant himself who is very likely to be the most expensive archaeologist involved in the process. The consultant will often be charged with managing the appointment of archaeological subcontractors, who – in a shrinking and competitive market – are obviously keen to retain favor in the hope of future work. The net trend, unsurprisingly, is to drive down contract prices still further. The effect this has on all the problems described above is predictable.

As night follows day, poor pay and conditions and appalling career prospects for the typical archaeologist will encourage some of the brighter and more eloquent to seek a better life in consultancy – where their primary task is to cut costs for their client, and hence perpetuate the penury of their erstwhile colleagues. This is of course a grotesquely simplistic generalization, and most individuals genuinely seek to do their very best for the archaeology. But these pressures are nonetheless very real. A well-qualified and experienced project officer will struggle to modestly house and feed a family on any wage they might expect in archaeology, especially in areas where development is focused. If archaeological consultancy offers employment conditions closer approaching societal norms, then any sane individual has more than one crisis of conscience to consider.

The growth of archaeological consultancy is perhaps a symptom of our malaise, and not its cause nor its cure. The developer has a right to advocacy, but this perceived need would be much reduced within an improved legislative framework and a stronger curatorial regime. The gaps Chris alludes to are genuinely problematic – the grey areas of interpretation where any room for maneuver is and will be exploited. The archaeology (and the archaeologist) also has a right to advocacy, and it is here that we are failing to make our voices heard to those in authority.

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Chapter 3

National-Scale Cultural Resource Legislation

David Cushman and Tony Howe

The Topic How do the on-the-ground realities of cultural resource management and preservation work relate to the visions of those in charge of the legislation that require such work? What aspects of cultural resource regulations, in your view, “work”? In turn, are there aspects that basically make you crazy? Are there things that you would like to do in your current positions that the arrangement of cultural resource management just does not allow? Alternatively, have you found opportunities to do things with archaeology that you did not or would not have expected to?

Vision and Reality of Cultural Resource Management and Preservation in the U.S.: David Cushman

In the U.S. there is a disconnect between what legislators intend to achieve by the laws that are designed to protect archaeological sites and what the public gains from those laws. This disconnect strikes at the heart of the issue of relevancy, in my opinion.

I have formed this opinion based on over 25 years of experience in cultural resources management (CRM) and historic preservation as a professional archaeologist and preservation planner working for private contracting firms, museums and universities and government review agencies at the state and local levels. For 9 years between 1989 and 1998, I worked at New Mexico Historic Preservation Division (HPD) in Santa Fe, New Mexico, becoming the Deputy State Historic Preservation Officer for the archaeology programme in 1996. During these years,

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I developed expertise in local, state and federal preservation law, engaged in extensive public outreach and education, and was an instructor in the Division's Section 106 training programme. In 1998, I joined the Pima County Cultural Resources Office in Tucson, Arizona. While working for Pima County, I conducted historic preservation in the context of the county's administrative, planning, zoning and capital improvement programmes. Since 2004, I have been with the SRI Foundation, a private non-profit consulting firm dedicated to advancing historic preservation through education, training and research.

There is a long history in this country of laws being passed to protect archaeological sites dating back to the Antiquities Act in 1906. Legal protections that have evolved since then typically come in the form of either stand-alone laws that apply specifically to archaeological sites or, more commonly, general preservation laws that apply to a wide range of heritage resources, including archaeological sites. In either case, there are usually declarations at the beginning of the statute to the effect that these resources have value, that due to the exigencies of modern life they are threatened with loss, and that protecting them is in the public interest.

The intent of these laws is well meaning, and over the last 40 years a patchwork of legal protections on the federal, state and local levels has replaced an era marked largely by indifference to the effects of government funded or licensed actions on archaeological sites. In execution, however, I find most of these laws fail to live up to the preservation values they profess. As a body, these laws typically work by imposing a set of requirements that are triggered when development proposals fall under governmental review authority. In such cases, archaeological investigations are conducted as a condition of development approval prior to construction. What gets preserved is not the archaeological record itself, however, but the story of the past that is contained within that record as interpreted by archaeologists. All this is done in the public's name, pursuant to public law, and often funded at the public's expense.

In my experience, however, despite the best intentions of the legislative framers, the public does not often benefit in any meaningful way. Anyone who has worked within the field of cultural resource management (CRM) in the U.S. knows how the process works: Investigations are conducted, artefacts are analyzed, reports are written and reviewed by the appropriate authorities, permits are issued and construction begins ...until the next project at which time the whole process is repeated. Lost in the hustle and bustle of meeting the demands of the future is the story about the past, or more precisely, a public accounting of what we are learning about the past. Citizens may be exposed through the media to a story about an archaeological investigation in their town, but rarely if ever does the public hear what is being learned about the past after the investigation is completed. There is too little time and funding for this purpose. Attempts have been made over the years to address this problem by various private and governmental institutions through education and outreach programmes for school children, public lectures and site tours, archaeology appreciation months, and the like. These programmes have filled the gap to some degree and are always popular with the public. I have personally participated in many of these kinds of activities and believe in their worth. For instance, for many years, I helped organize the New Mexico Archaeology Fair as part of the

Historic Preservation Division's public outreach programme. This annual event was held throughout the state and was well attended by the public curious about archaeology and interested in learning about the past. By in large, however, efforts like this are *incidental* to the laws that protect archaeological sites in the public interest.

A related phenomenon that hinders collecting the information needed to convey knowledge about the past to the public is the lack of any real opportunity to synthesize information gathered through multiple archaeological investigations over many years within the same region. Because of the way the laws and regulations are written and enforced, archaeologists focus their energies on the level of the development project and not on the level of the archaeological phenomenon being affected by that development. Prehistoric people did not confine their activities to conform to modern property lines. Questions about the past that can only be addressed on larger scales are stymied by the narrow focus of compliance driven archaeology. As an example, years ago, I reviewed energy development proposals to construct oil wells on federal lands in southeastern New Mexico. The federal preservation requirements forced archaeological investigations to concentrate on just the well pads and access roads, ten acre windows on an archaeological landscape. The effect can be characterized as "looking at the elephant with the microscope." The kinds of comparative analysis with other investigations that can provide a bigger picture understanding of the past rarely get done because that is not what archaeologists are being paid to do. The objective is to get clearance for the project from the governmental authorities and often what CRM firms provide their clients is what is minimally required to achieve this goal. While there are many examples of CRM firms that do exceptional work, in general, time and financial pressures on the archaeologists militate against comparative or synthetic research. As a consequence, a lot of information gets generated through many individual archaeological projects over time without any real knowledge being gained in the process.

I find this disturbing at a number of levels. First, huge investments in time and money are being made for these clearances without any way of assessing whether or not we are learning anything useful or if we could be doing something more cost effective to produce a better understanding of the past. Second, the public is getting the bill, either directly in the form of tax expenditures for archaeology or indirectly in higher construction costs, without a return on their investment. Lastly, neither the archaeological research community nor resource managers are learning much and thus cannot say much to the public who I believe would welcome an update now and then. The laws, regulations and business practices of CRM in the U.S. are structured in such a way as to force archaeological investigations to focus on too small a scale to either manage the long term threat to the archaeological record or learn something from the record that adds value to peoples' lives.

Government preservation laws lack as a central purpose the collection, synthesis and dissemination of knowledge about the past, and more importantly, the funding and institutional mechanisms needed to achieve this goal. Consequently, the public is largely unaware of the work that is done in its name. In my opinion, preservation laws only live up to their legislative promise if there is a product that benefits the public in some way that the public can appreciate. In the absence of this, archaeology and

the study of the past has little relevancy for the average person in the U.S. The consequences of this are sobering if one considers that the public, in whose name the present legal structure for CRM archaeology has been built, has little at stake in CRM's future. In a world where competition for resources is intensifying and priorities are shifting in response to economic strain, the public could easily do away with the legal mandates that are the foundation for much of the archaeological profession in the U.S., especially if it perceives no real benefit. Without a constituency to actively support legislation protecting the archaeological record, that record is endangered.

I think that in light of the difficulties discussed, it is incumbent upon the archaeological profession to address the structural and financial limits of the present system of cultural resources management. I see an opportunity for addressing these problems in what has become known as "community archaeology", an approach to the past that is designed to educate the public about the past at the local governmental level. Local governments in the U.S. control land use and development within their jurisdictions. Incorporated towns and cities control taxation as well. Every community is concerned about its image and quality of life; it is important to attract and retain good citizens and to build vibrant and growing communities. The powers that local governments wield and the close proximity between the government and the people it serves means that concepts like "history", "culture" and "heritage" can have an immediate resonance in a way that is much harder to achieve on the state and national level. Archaeologists, using the legal and political processes available to them as citizens, voters and taxpayers in their own communities, can put in place programmes that are more responsive to the public's interest in its past while enabling the development that is needed for the future. Preservation programmes such as those in Alexandria, Virginia; Pensacola, Florida and Pima County, Arizona demonstrate that community archaeology can reconnect the public with the pursuit of the past.

Vision and Reality of Cultural Resource Management and Preservation in England: Tony Howe

I am a Development Control Archaeological Officer, working for Surrey County Council. I provide planning-related archaeological advice to a number of parties – principally the eleven District Councils that make up the administrative structure of the County as well as the County Council itself – roles I share with another Officer who has the same remit. Together, we also provide similar advice to the private and commercial organizations and individuals who carry out archaeological work throughout the County, including the units that undertake the work, consultants engaged by developers to administer their planning-related archaeological obligations, as well as non-archaeological staff working through the application process prior to and following submission. Our aim is to ensure that the national and local archaeological policies and guidance are interpreted correctly and practically on a site-by-site basis so that the archaeological resource is

adequately provided for through the course of a process that can be, and usually is, detrimental to its survival.

I have come to this position in archaeology through a practical route. I completed a degree in History and Archaeology and joined the profession in 1993, employed on a short watching brief on the peat deposits of the Somerset levels. From there, I worked as an itinerant digger around England in Oxford, Wantage, Maldon and London, before decamping to the Middle East for a two-year stint in post-civil war Beirut. In 1997, I returned to the UK and worked on a pipeline in Bristol and a number of sites in and around London, before I succumbed to the lure and warmth of the office and joined Surrey in 1999.

The Position

There are a number of pieces of legislation and guidance that affect cultural resource management and archaeology in England. It is not necessary to list them all out; this would most likely be an entire paper in itself. In effect, the system suffers from the same “patchwork” approach that David has highlighted earlier. However, there are a few documents that deal with the specifics and require mention.

The Ancient Monuments and Archaeological Areas Act works to protect the most significant and Nationally Important archaeological sites in the country. These are set out on a national list (“The Schedule”), which is administered by English Heritage – the Government’s designated heritage-responsible organization. The first List of Monuments was published in 1921 as part of the Ancient Monuments Consolidation and Amendment Act of 1913, and for Surrey, comprised a single entry (Guildford Castle). The present Act dates from 1979 and the County now has around 200 sites of designated National Importance, ranging from properly “ancient” Prehistoric features, through to the perhaps less obvious sites such as Brooklands, the world’s first banked motor-vehicle racing track.

A later specifically archaeological document of note is the Government’s Planning Policy and Guidance Note No. 16 – Archaeology and Planning, commonly referred to as PPG16. This dates from 1990 and deals with the non-designated archaeological resource of England (Scotland, Wales and Northern Ireland having their own documents). PPG16 was a response by the Government to a gap in the protection of archaeology during the planning process that developmental pressures during the 1980s economic situation had starkly exposed. As a policy guidance note, PPG16 had no legislative basis, but rather set out the official Government position on the importance of the archaeological resource, and how this should be balanced and accommodated within the planning process. The implementation of this policy was required locally rather than coordinated nationally, and was undertaken at County and District Government levels. It began a process which largely regulates the overwhelming majority of all the archaeological work undertaken in the Country today, and that has enshrined the current practice whereby the developer is required to mitigate the loss of archaeological information their proposals may cause, through providing

the financial resources for it to be professionally investigated and recorded. To facilitate and implement this regulatory process, Local Authorities employ dedicated archaeological planning officers (such as myself) and other historic environment specialists to oversee the practical work, and maintain publically accessible lists of the many archaeological and heritage sites, features and finds recorded within their areas. Known as Historic Environment Records, these (lists) ensure that the process is not an uniformed or ad hoc search for material, but rather is based on current knowledge and known or demonstrable potential.

It will no doubt have been noted that the two documents mentioned above are, in legislative terms, rather old. More recently, in 2000 the Government ratified the 1992 *European Convention on the Protection of the Archaeological Heritage* (commonly referred to as the Valetta Convention), whilst a review of the current system was undertaken by English Heritage and published in 2000 under the title *The Power of Place – The Future of the Historic Environment*. After considering the findings, the Government's response was published in *The Historic Environment – A Force For Our Future*. This reaffirmed the Government commitment to the importance, protection and enhancement of the historic environment, the provisions of the Valetta Convention, and outlined proposals for a series of changes to the legislative and guidance regimes, in a promise to homogenize, modernize and simplify what is a complex area of concern. Detailed outlines of these proposals have been set out in a Heritage Bill, which was due before Parliament in 2009. However, economic circumstances have derailed its progress and it was omitted from the legislative programme when this was announced in late 2008, and it has been omitted from the forthcoming 2010 programme also. It remains to be seen whether these proposals will resurface in the future or whether they will be abandoned. Proposals for the revision of PPG16 were not tied to a need for primary legislation however, and in March 2010, while this paper was in preparation (just prior to the dissolution of Parliament prior to the General Election), PPG16 and its sister PPG15 (Historic Buildings) were replaced with a revised Planning Policy Statement No. 5 – Planning for the Historic Environment.

PPS5 deals with all features of the historic environment rather than simply archaeology or standing remains, as well as including issues such as the setting of features and artistic value for the first time. It also outlines an approach based upon establishing significance at an early stage in development proceedings which is a positive step, although early criticism of its language and terminology has been apparent. It would be reasonable to suggest though that currently the Historic Environment profession is rather tentatively feeling its way around the new PPS, looking to ensure that its implementation is carried out as smoothly as possible.

In Practice

It has to be grudgingly and reluctantly admitted that archaeology is a secondary issue in the legislative concerns of the national and local Government bodies.

Many other concerns within the planning process will be accorded precedence and have correspondingly stronger protection regimes. Preservation of Listed Buildings from adverse development is a long-established practice and is governed by high-level planning legislation, while the natural world and green agenda has rather overtaken heritage concerns in the more recent past. Nevertheless, the Historic Environment is fully integrated within the system, and archaeological policies and statements are required to be included within the documents that set out how local implementation of the Planning Process will be undertaken.

My advice must be given within this framework. Does the recognized importance of an archaeological site or feature override the need for regeneration or development of a larger site? Or can the concerns be effectively accommodated? Perhaps if I interpret the guidance fully to the letter, I might achieve full investigation of a site. Alternatively, if I embark on such a course of action and the site is barren, would I be committing the planning equivalent of crying wolf, perhaps resulting in the unnecessary loss or destruction of evidence elsewhere? It is also the case that I must curtail my own instincts. As an archaeologist, I *want* to investigate the past. I *want* to excavate sites, and retrieve artefacts. I *want* to show the results of this work to the public. As a *Development Control Archaeologist* however, I am bound to the guidance, which clearly states that preservation of archaeological remains in situ is the preferred response and that excavation should be seen as a last resort and an unsatisfactory second-best. Furthermore, the changing and wider uses of the term “archaeology” blur the lines of where my responsibility lies. In any given day, I could find myself offering suggestions and advice on the best way to mitigate the possible destruction by development of a Bronze Age field system, while simultaneously being asked to comment regarding the importance of a large piece of industrial archaeology such as the remains of an eighteenth century train line.

The Reality

It is clearly intended by Government that the planning and regulatory archaeological system should integrate with the rest of the elements that make up the planning process, and that this system should provide accessibility for the public and acceptable working practices and standards for the profession, while simultaneously providing value for money for the developer. It is demonstrably the case however, that in practice, the current system satisfactorily fulfils none of these goals, and that there is an increasing gap between the intentions of the central legislative framework, and the implementation of policy on a practical level.

To take the points in turn: I outlined above how the implementation of Government policy on archaeology and planning is undertaken locally. In the early days of the system, this resulted in the establishment of archaeological officer posts within local planning departments. These posts evolved into historic environment teams, as the role and significance of such work increased. However, the lack of a statutory footing for these services has meant that in recent years, the focus locally has become more

diverse, which has resulted in local authority implementation of the guidance deviating from the fundamentals and pursuing a less proscribed agenda. With continual budget pressure, local government is constantly looking for savings and cuts. Each non-statutory service is required to justify its existence and if possible, self-fund, and heritage has found itself mired in this process on an increasing basis. It is often no longer the case that planning and regulatory concerns to protect and conserve the historic environment are of paramount importance to local managers, as they look to “streamline” and provide only “core” services. In some extreme cases, local authorities have dismantled the archaeological advice system in its entirety, and no longer provide adequately for the implementation of Government policy. More common however, has been a worrying trend towards shifting the focus of importance away from protection of the historic environment, toward its exploitation as an income stream and publicity-friendly educational asset. Across the board, local authority publicity will highlight the attractive nature of the locale through images and articles that demonstrate the significance of the historic environment of their area. Yet simultaneously, the same authorities will slash provision for the protection of this resource from development threats and concentrate on marketing and education programmes that will attract funding. This is not an uncommon move, and while such programmes provide obvious mouth-watering opportunities for publicity regarding the commitment of the authority to the importance of heritage, the reality is considerably different and results in a clear lack of heritage concerns being adequately fed into the wider planning agenda.

From this central organizational flaw, other issues flow. One of the upsides to the integration of archaeology within the planning process has been the professionalization of the discipline. There are now many thousands of professional archaeologists working within local authorities, independent contracting archaeological units, university departments, consultancies and environmental assessment companies across the country. All work within a framework of standards and guidance that do not enforce compliance however. English Heritage provide copious advice documents regarding best practice, while bodies such as the Institute for Archaeologists (IfA) produce a number of minimum standards papers which it expects and requires its members to agree to and follow. In addition, the IfA administers a scheme whereby professional organizations can officially register with the Institute – in effect providing an accreditation scheme to allow service users such as developers an assurance that the organization they are contracting is professionally competent. Measures to continue the full professionalization of the discipline – in a way similar to architects that would result in chartered status for archaeologists – are ongoing. But in the meantime, it is not a requirement of practice that organizations or individuals are registered, nor that the best practice guidance is adhered to.

Within the profession this leads to cynicism and disenchantment. Issues such as differences in the quality of various organizations become clearly apparent to members whose role it is to monitor and regulate the work such as myself, yet the absence of statutory provisions or an adequate professional regulatory framework means we lack the authority to take significant measures to address this. Similarly from the perspective of site staff, it is reported that the quality of work suffers, with budgets

devised to accommodate the minimum acceptable standards rather than the best practice, leading to poor site practices and an inherent lack of professionalism. Of greatest concern perhaps is the snail-like pace of professionalization, meaning that even after the best part of 20 years of mainstream planning archaeological integration, excavation staff remain underpaid and undervalued in relation to their academic qualifications and skills, while a recognized archaeological career structure and a coherent programme of continuing professional development remains frustratingly elusive.

The public perception of archaeology is largely blissfully ignorant of these issues. Thanks to popular television programmes such as *Time Team*, and the publicity generated by finds registered under the provisions of the Portable Antiquities Scheme (PAS) (a voluntary reporting mechanism ostensibly for all finds but in practice mostly implemented for the purpose of registering the significant quantities of material recovered each year through the actions of metal detectorists), the public's interest in all things archaeological has been largely stated. Interestingly, support for archaeology and public awareness and interest in the discoveries made has almost certainly never been higher, which is somewhat in contrast to the indifference David has highlighted in the U.S. Yet this interest is based on a media-led perception of the discipline: knowledge of the realities of the day-to-day practice of commercial archaeology is threadbare at best, and there persists an overriding belief that there is a central fund which the Government (or "someone") provides to enable important archaeological works to continue. Similarly to the situation David described also, programmes to better involve the public in archaeology such as Heritage Open Days or National Archaeology Week are largely incidental to commercial archaeological practice, and are generally unaffected by any national legislation in this area.

This is a shame, as real in-depth widespread knowledge of the reality of developer-led commercial archaeological practice could benefit both the discipline itself in its quest for greater professionalization, and the quality of the information which is passed on to the public in general. David has suggested that a lack of synthesis of the archaeological information gathered through multiple investigations is a problem in the U.S., and that this exacerbates the problems regarding public involvement. I would concur to the former – it is a problem here also, but would suggest that in the UK this becomes more of an issue with regards the perception of developers towards the discipline. It is obvious that the many discoveries of the past 19 years have proven that the policy of the implementation of a formal archaeological programme within the planning process is a successful one. Yet on the whole, developers who are paying for this continue to lack confidence that they are achieving a tangible return for their outlay. Many view the process simply as yet another of the expensive planning hurdles they must overcome to get a development underway, rather than a positive opportunity for engagement with the public. Similarly, the results of the work, the finds, archives and reports, are usually hidden away once academic publication is achieved. Little worth is placed on the discoveries made beyond the intrinsic value of certain particular photogenic or valuable objects, and there is a general distrust that the process actually provides any beneficial results beyond data collection for its own sake.

Where Next?

As with all multifaceted problems, there are multifaceted solutions, and the profession needs to address them all for real progress to be made. Moves towards full Chartered status for archaeologists should be more rigorously pursued than at present, while the current self-regulation regime needs to be strengthened and enforced more rigorously. Archaeologists themselves need to evolve also – the old ways of the itinerant anarchist intellectual, furiously railing against the system are not conducive towards progress in areas such as professional respect, appropriate wage scales or betterment of working practices. As a profession, we must recognize that where we demand improvement, we need also to accept change – not just of others but ourselves also. This change needs to extend to the wider public too, and the members of local and national archaeology societies who also demand involvement, but who need to temper their opposition to regulation so as the disciplines can evolve.

However, the root cause of most of the problems lies with those at the crux of this paper – those in charge of the legislation. In bringing archaeology and cultural resource management into the mainstream, Government has initiated a process of integration that now needs to take the next steps into full statutory requirement. By ratifying the Valetta convention in 2000, it appeared that this might be close to happening. However, the Government has so far failed to implement some of the major provisions of the convention, particularly those measures that outline enforcement: requirements for special authorization of archaeologists, formal monitoring and regulation of archaeological investigations, procedures for the authorization of metal detectors and their use in archaeology, and mandatory reporting of archaeological discoveries are of singular mention. Self-regulation of any discipline can only achieve so much and it now has to be recognized that in order for further progress to be made, and heritage management to remain effective, there must be sufficient teeth within the official systems for the appropriate regulatory regimes to be monitored, and in particular be enforced. The profession has reached a position where it is demanding this, but there is central inactivity and the processes continue to degrade. Threats from unregulated excavation, metal detecting, commercial salvage, ploughing, neglect and unenforceable development provisions are ongoing and commonplace, and cannot be contained within the present system. This has to be recognized at the highest level, and addressed in the near future, or else the progress of the last two decades will not continue.

Final Thoughts on National-Scale Cultural Resource Legislation: David Cushman

I am fascinated by the differences and similarities between the British CRM system and ours here in the U.S. The national government in England directs local governments to adopt archaeological resource planning as a matter of policy, but not statute.

We in the U.S. have adopted national laws and regulations but these do not extend to the local level, unless there is a federal nexus. Ironically, what I see as a solution to our problems in the U.S. is the very kind of local government planning involvement that has already been achieved in England. Tony in turn is looking for the kind of authority that can only come from federal legislation like the U.S. National Historic Preservation Act. It looks like that we could learn a lot from each other.

Despite the structural differences, Tony and I agree that while the intent of those who enacted our respective preservation laws was certainly noble, the public interest has not been well served in either country. We also recognize that an uninformed public is a big part of the problem. A lack of public appreciation for and outright ignorance of what archaeology is undermines the practice of archaeology that is conducted in the public's name. Another problem that I think we both see relates to how the preservation laws have been, and continue to be, implemented and enforced. CRM archaeology is conducted according to regulations that spell out the steps that must be taken to achieve compliance. In my experience, the confines of the regulatory framework and constraints on time and funding tend to focus CRM archaeology more on process and less on outcome. An unaware and underserved public combined with an adherence to by-the-numbers bureaucratic procedures leaves all parties dissatisfied. To address these problems, I believe there must be real, substantive changes in how and why we do CRM archaeology. The goal must be to shift the emphasis away from resource management per se and toward producing and disseminating knowledge about the past that meets larger public needs. To improve the state of CRM archaeology, I have a couple of recommendations.

First, I believe that we need to forge a new relationship among governmental agencies, private CRM contractors, and the various publics that have a stake in the outcome of CRM archaeology. This can be achieved structurally by legislative means or procedurally by working with the responsible governmental authorities to change the way in which the legal mandates are met. Both are needed. In the present political and economic climate in the U.S. and the UK, legislative changes are not likely any time soon. Nonetheless, I believe that as archaeology professionals it would be wise for us to think about what CRM archaeology should look like in the future and to identify the legislative, financial, organizational, and procedural changes that are needed to achieve the desired end. Then, when the climate is more favourable, an agenda can be formulated and advanced. In the U.S., several recent reassessments of historic preservation in general (King 2009), and CRM archaeology in particular (Sebastian and Lipe 2010) indicate that this kind of thinking has begun.

Second, the archaeological community needs to understand what the public values about the past and why. This kind of inquiry has begun in the U.S., especially with Native Americans and other traditional communities; however, I am thinking of the public writ large. All archaeologists understand that archaeological sites have value, even multiple values that relate to science, education, economics, religion, etc. Does the average person share this view? What about the past is meaningful to the public? What does the public want to know? How can archaeology provide this knowledge? What role can CRM play in meeting the public's interest in archaeology and the past? These are questions that need to be asked.

Third, I think that as archaeology professionals, we can and should do a better job of engaging the public on why we think archaeology, as defined by us and not Hollywood, is important to society. If my second point above is about listening to the public, this third point is about effectively communicating with the public. It takes two to have a dialogue and I believe a dialogue is needed. As previously noted, many governmental agencies and private organizations are engaged in public outreach and education, but I am not sure its working. By in large, I think the public is still largely ignorant, misinformed, confused or hostile to scientific archaeology. Tony, I believe, would agree. This brings me back full circle to ignorance. An ignorant public that does not share our view of archaeology and the relevance of CRM is, potentially, a threat to both the archaeological record *and* CRM. Effectively engaging the public and continuing to make the case for why the public should care about what we care about remains a priority.

Lastly, as Tony noted, we have only ourselves to blame for much of what frustrates the archaeological profession. In the U.S., the Register of Professional Archaeologists (RPA) is a fledgling, but growing equivalent to the UK's Institute for Archaeologists. The RPA was founded to provide archaeologists with a set of professional ethics and standards that communicates to the public that a registered archaeologist is a qualified professional. While this effort at self-regulation is laudable, ultimately I think some form of licensure will be needed for archaeologists to be viewed by the public in the same light as, say, engineers and architects. In the U.S., one has to be licensed to be a nail manicurist, but anyone can be an archaeologist! This cheapens CRM archaeology and more importantly the public's view of archaeology's worth as a profession.

In my opinion, CRM archaeology can only live up to its promise as a vehicle for historic preservation if it reinvents itself. This means returning to the original intent of the legislative framers as expressed in our preservation laws. As justification, the authors cite the public interest in learning about and celebrating our diverse heritage. In implementing these mandates, however, we have built a system that sacrifices knowledge in favour of expediency. The intended balance between honouring the past while serving the needs of present and future generations has been lost. I believe that it is time go back to the beginning, to the original ideas that laid the foundation for what we do, and articulate a new vision of CRM that restores this balance.

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Chapter 4

Archaeological Working Conditions and Public Perception

Paul Everill and Peter A. Young

The Topic How do the on-the-ground realities of archaeological fieldwork mesh with how the process and findings of archaeology are presented to the general public in print media such as *Archaeology Magazine*? Do you feel that most aspects of field archaeology are described accurately? Are there aspects that aren't? What do you think the reading public thinks about archaeology? In your experience, what makes a good archaeological story?

Stories of the Invisible Diggers: Paul Everill

Apart from brief periods in my youth when I considered being a journalist or joining the Royal Navy, I have always wanted to be an archaeologist and I'm happy in hindsight that I made the right choice. I say that it was me that made the choice, but there persists in me a peculiar, underlying feeling that somehow archaeology chose me. I don't recall precisely the moment that I knew I wanted to be an archaeologist, but vague childhood memories of finding a cow jaw in a vegetable patch and visiting historical sites with my parents seem key to my developing interest. As I grew older and pursued the subject more vigorously I can even say, in all honesty, that I was not swayed by the Indiana Jones films. Though it might sound somewhat unlikely, it wasn't the exotic adventures of Dr. Henry Jones, Jr. that inspired me, but photographs of archaeologists working on grimy city centre sites in the mid 1980s. Somehow, among the warnings about low pay and the difficulties of finding and retaining employment, there was a sense that these excavators

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were able to physically engage with history in a way that very few people could. And perhaps, more than that, there was a boyish fascination with the idea of being one of those “authorized personnel” who could work on the site sealed off from the outside world – the normal world – by wooden hoarding or mesh fence.

That fascination and enthusiasm remained with me when I went to work in commercial archaeology, though of course I’d be lying if I said there weren’t some days when the prospect of the cold and the mud, or a hangover, made it harder to get out of bed. And yet, throughout it all, I remembered the daily dread I faced when I used to work in a factory. I still recall that early morning nausea of realization that I would rather be doing pretty much anything else. How different it felt to wake up and actually look forward to getting to work, getting back to a feature I was working on, looking forward to the satisfaction of hard physical work that also often challenged my mind. Largely, of course, I was also looking forward to the camaraderie that underpinned much of our enjoyment of the job.

The gulf between the public perception and the reality of archaeology is never wider than when one considers the commercial, contract sector. Whenever I met someone with an outside interest I often found myself fending off the same set of questions, normally demonstrating a very particular view of archaeology, i.e. where’s the most exciting place you’ve “worked?,” what’s the most exciting find you’ve “had?,” etc. I suspect my answers, like those of most commercial archaeologists, were of a great disappointment to the questioner. However, when I described the thrill I got from finding a complete Romano-British pot with the potter’s thumb prints round the rim I was, to their surprise, being serious. For me, and I suspect most archaeologists, the enjoyment of excavation is more about revealing the mundane, everyday activities of ordinary people – people like us – than it was ever about gold and kings.

When I left the commercial sector to start my Ph.D. it was a move borne out of a frustration with the pace of my career. By then I was almost 30 and wanted more financial security and more responsibility. I had also become increasingly interested by the factors that kept “diggers” (the equivalent of “shovel bums” in the U.S.) in the profession when everything seemed so stacked against them – i.e., the lowest graduate wage in the country; poor career structure; short, fixed-term contracts; hard physical work in all weather; etc. – and so my doctoral research became an investigation of those issues. It demonstrated that British commercial archaeologists (and I have no reason to suppose it is any different across the globe) remain in the profession, despite its many problems, solely for the love of “the archaeology” – by this I mean the remains themselves as well as the physical engagement with them. However, the camaraderie that many experience is also a huge factor in their enjoyment of the job, as is the feeling that archaeology somehow occupies a liminal place in society, far removed from 9 to 5 office jobs and assembly lines.

Images of commercial, contract archaeologists such as those that appear on Dave Webb’s British “Diggers Alternative Archive” website, and those that were published in a short article on “shovel bums” in *Archaeology* magazine in Spring 2008, represent very useful reminders to those external to, and on the periphery of, the profession – by which I mean largely, with all due respect, those with an amateur or

passing interest in archaeology – that “construct,” “command,” “developer.” Archaeologists often make a huge number of sacrifices to pursue their vocation. Weeks spent in Bed & Breakfast accommodation hold some appeal, largely in towns where the daily subsistence bonus can be spent on cheap beer, but many archaeologists soon tire of this and begin to wonder why they are paying rent at their home when they are hardly there to enjoy it.

I now teach archaeology to the next generation of “diggers” and am quite happy to talk to them about the difficulties of gaining and retaining employment in the contract sector. Personal experience and recent statistics in the UK suggest that only 10–15% of each graduating year will pursue a career in archaeology, and perhaps they, like those before them, do so with a full appreciation of the sacrifices they need to make.

I doubt that anyone who lacks experience of commercial, contract archaeology fully understands the hardships of working in that sector. Perhaps they also don't understand what it is that attracts people to a life as a “digger,” or a “shovel bum.” My research suggested a number of positive aspects to the job, but perhaps also indicated that it was certain types of people that were predominantly attracted to it. Either way, the huge drop-off in numbers after five years in the job demonstrated by my survey shows that very few see a long term future for themselves, and one can only imagine that this reality will become much harsher during the current global economic crisis. However, it seems entirely possible that the low wages and poor conditions of employment experienced by many archaeologists would be inconceivable if the general population – particularly those with a professed interest in history and heritage – really understood and valued what goes on behind those wooden hoardings and mesh fences.

In Praise of the Storytellers: Peter A. Young

The twenty three years I served as editor in chief of *Archaeology* Magazine were marked by working friendships with some of the best storytellers in the business: archaeologists and specialists with gripping tales and a willingness to share them with the world. No one was more passionate about archaeological discovery than the late Mayanist Linda Schele, who once exclaimed, after discovering the celestial origins of the Maya creation myth, “It was like being able to read Genesis in the heavens.” Linda's flair for communicating the excitement of translating Maya glyphs convinced me early on that the past has the power to surprise and delight, and in the hands of adept professionals it can offer some powerful stories.

In my first few years at the magazine, readers learned that Custer was whipped not by overwhelming numbers of Lakota and Cheyenne, but by superior strategies and firearms, that the Dark Ages were not so dark after all, but rather were alive with merchant adventurers laying the foundation of modern Europe. And that slavery was prevalent in the north on the eve of the American Revolution. Who knew that the first Israelites were actually Canaanite herders turned farmers after the demise of the big city states, that the Exodus was more likely a trickle of enslaved Israelites

fleeing the bondage of Egypt and that the Conquest of the Promised Land was not about a rampaging band of desert nomads wiping out everyone in their path; the story was rather a powerful political metaphor for a profound social transformation in Canaan. These and other stories led me to conclude – erroneously, according to one historian – that our magazine could actually pre-empt the historical record with discoveries that illuminated the actual rather than the imagined past.

My introduction to archaeology was far different than that of my British colleague Paul Everill. At the time I was hired, I knew absolutely nothing about archaeology, a fact that raised eyebrows among some of the first scholars I encountered. Even close friends would ask: “Why archaeology?” Actually, I had been looking for an editorial position with a publication that would allow me to be an intermediary between a scholarly community and the general public. When I saw just such a position at *Archaeology* advertised in the Sunday *New York Times*, I jumped at the opportunity. In hiring me, the magazine’s publisher, Phyllis Katz, made it clear that her interest was in making the magazine a more readable one, that I had the experience to pull that off, and that, as far as archaeology was concerned, I’d simply pick that up along the way.

Not all that easy, as I soon discovered. Covering my first annual meetings in search of promising story ideas was like wandering through the Tower of Babel. What to make of processual paradigms and hypothetico-deductive models? What was the “New” archaeology all about? And those unabashedly arcane papers with titles like “Rock Art as an Indicator of Early Upland Aggregation Sites in the Northern Great Basin,” “Anti-Passive Constructions in Glyphic Texts,” and “Technotypologic Patterns in the Levantine Mousterian?”

Running into Linda Schele early on at a conference of anthropologists was serendipitous. Here was a scholar, I thought, with a flair for communicating the excitement of research and discovery; whose intelligence, acute intuition, and long hours pouring over Maya glyphs had allowed her to conceive of the world like a Maya. A born storyteller, Linda once confided: “The job I seem to have now is to provide a public voice – you know, give people access to things scholars learn from the archaeology, combine it with the interpretations of the glyphs and imagery, the work of people who study the modern Maya, and the approaches of many disciplines, and say to the public, ‘Listen, folks, let me tell you a story about a great king!’”. When Linda died of pancreatic cancer in the spring of 1998, colleagues mourned the loss of her scholarship. I would miss her stories.

I was soon meeting a host of terrific storytellers: Egyptologist Bob Brier, whose tales of mummy making and how the Great Pyramid at Giza was really built became major feature stories; University of Florida’s Jerry Milanich, whose excavations at Spanish mission sites in the American southeast had rewritten that state’s colonial history; and nautical archaeologist James Delgado, whose underwater adventures included a dive on the remains of a thirteenth century wreck from an invasion fleet sent by Kublai Khan to conquer the Japanese, as well as a dramatic personal encounter with *Titanic*.

Contract archaeology became a special concern of ours simply because there was so much of it. Alan Pastron introduced our readers to the field of cultural

resource management (CRM) with his extraordinary excavation of a general store, entombed in 1851 by a devastating waterfront fire, and which lay beneath the streets of San Francisco on a plot of land to be occupied by a new bank; one of our editors tracked the progress of an enormous excavation of poorhouse burials along the New Jersey Turnpike, in advance of a highway interchange project. Fascinated by contract archaeologists with whom she had once labored, freelance photographer Lauren Lancaster spent a week recording their every move in an essay titled “Shovelbums”, a poignant, sometimes melancholy collection of photographs showing the employees of Panamerican Consultants Inc. working on a years-long CRM project at Fort Benning, Georgia. Lancaster spent a week with the team, capturing them both in the field digging test pits in 110 degree weather and in the dreary motels where they spent their downtime. “There are many angles I could take to the story”, Lancaster wrote in her proposal. “The anthropologist in me is drawn toward an excavation with interesting characters. Going back into that world as an outside observer, I was struck by how much the CRM experience seemed lonelier than I remembered.”

Were the archaeologists as surprised as I by what they were discovering? And could I get them to communicate that excitement to our readers?

“Archaeology is all about surprises”, David Hurst Thomas, curator of North American Archaeology at the American Museum of Natural History in New York City, told me. “We remember well those rare moments when we set out looking for evidence that might significantly alter our understanding of human history – and actually found it.” Milanich confide: “if scholars rarely share their personal stories, it’s probably because they aren’t invited to. In fact, we’re eager to convey the thrill of what we do. And why not? It’s our emotional involvement with the past that drives archaeological discovery.”

But getting archaeologists to be evocative and personal about what they do was not always so easy. Many found archaeological journalism beneath them – that writing for the public was time-consuming and otherwise useless in advancing one’s status or enhancing an academic reputation with one’s peers. One critic went so far as to say that the academic use of impenetrable jargon might impress one’s colleagues while keeping one safely aloof from the curious masses, but it contributed nothing to the public’s understanding of the archaeological process. Was that so bad? A classics professor who had made an on-camera appearance in the *Time-Life Lost Civilizations* series on NBC warned that those who thought that way, who preferred to be consigned to antiquarian isolation, would wake up one day to find that Greece and Rome had really become lost civilizations.

We have also been criticized for publishing more glitz and glamour than hard archaeological data, particularly of the kind gleaned from long hours in the trenches, about which we allegedly report far too little. My response has been that where the fieldwork was not only important but also interesting in and of itself to our readers, we gave it ample space. An article we published on dating of the Great Pyramid (September/October 1999) went into great detail on the pure fieldwork that led to both evidence of age as well as clues to the fabric of Egyptian life. If, however, the fieldwork became tedious in the telling, we trimmed it or risked losing readers.

Our editorial guidelines make it quite clear: “it is important to remember that less than one-half percent of our readers are professional archaeologists. Your proposed article must clearly spell out why the other 99.5% of our readers – bank tellers, doctors, librarians, corporate raiders – would be interested in your story. Some research – say, the variance in arsenic levels of metal objects produced in the Near East from the beginning to the end of the Assyrian period – is a hard sell for a popular publication.”

This book is devoted to the relevance of archaeology. Let me close with this anecdote.

A middle-aged investment banker approached me at a cocktail party not long ago. In an attempt at polite conversation, he asked whether our magazine had ever been first to break a really big story. I explained that while a bimonthly rarely beats out the daily or weekly press, we did, on occasion, publish provocative new theories, one of which, I noted, had revealed how archaic *Homo sapiens* in Europe evolved into Neanderthals, even though they were isolated from populations in Africa and the Near East – hardly a King Tut tale or the latest take on the Dead Sea Scrolls that he might have been expecting. After dutifully listened for a moment, he excused himself and slipped away.

This encounter often came to mind when I was deliberating over a tempting story pitch. More often than not, I was compelled to ask this: Why should our readers care to know about the topic? How does this new piece of information relate to them? Had the banker known that according to some theories he might well be part Neanderthal himself, or that we intended to publish a piece about cloning Neanderthals, he might have rallied and stuck out the conversation – and opened his mind to the relevance of the countless discoveries presented in this magazine, issue after issue.

Archaeology is as much about today as it is about yesterday. A friend once asked, “When does something become archaeological?” “Now!” I replied.

Final Thoughts on Archaeological Working Conditions and Public Perception: Paul Everill

It is impossible to read the previous two essays without being struck by the apparent disconnect between the daily working life of an archaeologist (particularly those employed in the commercial/contract sector) and the public face of archaeology. Peter Young’s long involvement with archaeology has brought to the public a wealth of exciting discoveries. His and other magazines have no doubt provided an essential vehicle for the work of archaeologists to be read and enjoyed by people who have a right to learn about the work that is being done, in effect, in their name. As archaeologists, for whom are we working? Are we simply working for the developer who pays the invoice, or the funding body that provides the grant? Or are we working to illuminate our past for the benefit of everyone? One might argue that if the answer to that last question is no, then why is the work important enough to warrant funding at all?

However, there remains a disconnect. For every one of the great archaeological storytellers, who are able to excite their audience with tremendous, ground-breaking excavations, there remain thousands of ordinary excavators who are literally doing the ground-breaking. These people – the diggers and shovel bums – work in all weather, for poor pay and often on short-term or insecure contracts. The vast majority of archaeology undertaken across the globe, let's be honest, is not glamorous. It won't feature in a magazine, and is even unlikely to feature in a local newspaper. Does that mean it is worthless? Of course not. It is an academic endeavour, founded on an ancient belief that the past is worth studying and learning from.

It is true, of course, that stories in popular magazines lauding the application of sound archaeological practice for its own sake, or the development of new excavation methodology are not going to sell magazines – and this is ultimately the prime concern of editors. At the other extreme, you could argue, academic journals are unlikely to publish articles that are particularly accessible, let alone exciting, to potentially interested members of the public. So commercial archaeologists in particular fall down the crack between the two camps, and find themselves very often misunderstood by those that are paying the bills – developers and public bodies. I choose to focus here on the commercial/contract sector, because this is where the disconnect is most important. How can someone employed within developer-led archaeology (and I include all levels of the profession, many of whom could earn more in a comparable sector) expect public support for their campaigns for better pay and working conditions when the public simply have no idea about the nature of their work? Ultimately, one could argue that the public is actually not that interested in the nuts and bolts of archaeological fieldwork and general working conditions. They want the big stories, summarised into well-written, accessible articles on topics to which they feel a connection. And there's the irony. When I found that a complete Romano-British pot, with the potter's thumbprints round the rim, I had a tangible connection with someone who lived 1,800 years ago. At the time they made that pot, they were going about their normal work, developing strategies for survival. Perhaps they were trying to raise a family as best they could, while faced with daily worries about putting food on the table, illness and the uncertainty of the future. Not exciting or glamorous, just human and priceless.

Chapter 5

What Public Engagement in Archaeology Really Means

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The Topic What does public engagement in archaeology really mean, and is all engagement always positive? If not, then why not? Are there aspects of archaeology that are particularly conducive to public involvement? Are there aspects that aren't? Have you encountered situations where your role as a professional or scientific archaeologist has been at odds with public inquiry or requests? Are there things you would like to do with public engagement that have not yet been possible? If so, what?

Things That Go Ping in the Dark: Joe Flatman

Archaeology witnessed interesting times in early 2009. The spring saw a series of debates around the issue of whether there are absolute “rights” and “wrongs” of public engagement in heritage – how the average “person on the street” passively and actively engages with the past through thoughts, words and deeds. February saw the publication of the “nighthawking” survey assessing the damage to British archaeological sites caused by the illegal search for and removal of antiquities¹, March an article in the magazine *British Archaeology* suggesting that recent salvage work on the presumed wreck of the vessel HMS *Sussex* is comparable to development-funded

¹ See <http://www.helm.org.uk/server/show/nav.20434>.

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archaeological work on land², April the publication of the ground-breaking global academic study *Metal Detecting and Archaeology*³ and May a wide-ranging debate about the ethics of marine “treasure hunting” in *British Archaeology* magazine again.⁴ June then saw the momentous decision by the U.S. District Court (Middle District of Florida, Tampa Division) that the alleged U.S. \$500 million worth of specie recovered from a wreck site in the Atlantic thought to be that of the *Nuestra Señora de las Mercedes* should be handed over to the Spanish government.⁵ All of the above effectively relate to the same issue – access to, and thus control of, materials and sites. Should access to archaeological sites, and activities on such sites, be controlled? If so, how should control be exercised – by whom and under what terms? What are the rights of public access? The broader question at stake is then that of the issue of this debate section: *is all engagement always positive*? If a citizen – professional or amateur archaeologist or person on the street alike – damages, either by accident or design, an historic site during their explorations, is such engagement nonetheless still “positive” in that they have “engaged” with heritage albeit in a destructive capacity, and who is, or should be, the ultimate judge of that question?

As a government-employed heritage manager (the county, administratively equivalent to a U.S. State, archaeologist of the county of Surrey on the south-west fringe of London) I am constantly pulled in different directions in relation to this question. Keen to encourage and enable the understanding of as well as access to historic sites, I struggle daily to encourage only sufficient numbers of people to engage with heritage without destroying sites through overuse, be this accidental erosion or deliberate vandalism. This is an extremely difficult equilibrium to reach on just a case-by-case basis, let alone across an area covering over 600 square miles that has over one million permanent residents and contains thousands of historic sites dating from the Mesolithic to the mid-twentieth century, the sites which are managed by my team of only eight heritage professionals paid for by the county council. As an archaeologist, a member of the IfA (Institute for Archaeologists, equivalent to the U.S. RPA) I then ascribe to a broad but ill-defined set of “professional ethics” defining mainly what I personally should *not* do rather than what I corporately *could* do to promote understanding and engagement on historic sites. Under such circumstances, conflicts of opinion are likely and compromise almost inevitable. This is the point of the sword of public engagement in, and thus the contemporary relevance of, archaeology. Attempting to meet the overlapping needs and demands of the public and private sectors, individuals and groups, young and old, left and right leaning, every single person living in or passing through the county is a potential “heritage stakeholder” who I could conceivably come into contact with. And this is all in an environment of relative affluence – Surrey is one of the better-provided counties of Britain in terms of local authority heritage staff,

² See <http://www.britarch.ac.uk/ba/ba105/spoilheap.shtml>.

³ See <http://www.boydell.co.uk/43834154.HTM>.

⁴ See <http://www.britarch.ac.uk/ba/ba106/feat1.shtml>, <http://www.britarch.ac.uk/ba/ba106/feat2.shtml> and <http://www.britarch.ac.uk/ba/ba106/letters.shtml>.

⁵ See <http://www.flmd.uscourts.gov/notableCases/Opinions/07cv614-ReportAndRecommendation-Odyssey.pdf>.

many other locations in the country having far fewer staff. Meanwhile, the majority of nations around the world have simply no heritage laws and or government archaeologists at all.

Taking one example that I deal with professionally on a daily basis, many archaeologists will admit in private at least that they have a fundamental disagreement with the entire practice of “metal detecting” – those members of the public who choose to engage with the past by using metal detectors to search for modern and historic buried metals, especially coinage. What it comes down to is that many archaeologists *simply don’t get it* – in the same way that other people *simply don’t get* activities that many millions of individuals clearly *do* enjoy and participate in, from motor-racing to fly-fishing to ultimate fighting. If pushed for detail, archaeologists will admit that they *simply don’t get* why anyone would wish to metal detect, either as a way of “engaging” in heritage (because they can think of alternative ways to “engage” that do not seem to combine the tedium of often fruitless searching with the sometimes harmful impact on archaeological sites of metal detecting) or more cynically as a way of simply making money (because they can think of better ways to get rich quick than this, both legitimate and illegitimate). However, both personally and professionally the archaeological community in Britain has long accepted (or pragmatically dealt with through turning a blind eye to) the many people that *simply do get* metal detecting, including the government, which tacitly supports the activity through the voluntary Portable Antiquities Scheme (PAS) that records the types of discoveries particularly common to metal detecting.⁶ As pragmatists (for such both by inclination and experience are most), the majority of archaeologists, if not formally in approval of metal detecting, are equally not virulently “anti” – understanding as they do that many metal detectorists *are* responsible, *do* report discoveries to the scheme, *genuinely* care about heritage, and that much data of use has resulted from the scheme that would not otherwise have been accessible. But the sad thing is that even to question the basis of metal detecting as little as this is professionally risky, a challenge to accepted wisdom in a world where a senior politician (the then Culture Secretary, the MP David Lammy back in 2007) called metal detectorists “the unsung heroes of the UK heritage” without ever mentioning the hard work of thousands of other “professional” and “amateur” archaeologists alike. And anecdotally, no one seems happy with the current situation – neither archaeologists nor detectorists. Archaeologists tend to feel that as a voluntary scheme the PAS does not have sufficient power (many would like to see the mandatory rather than voluntary reporting of discoveries, as already occurs for marine finds made under the terms of the 1995 Merchant Shipping Act under the remit of the Receiver of Wreck)⁷; detectorists often harbour a suspicion that the PAS is the thin end of the wedge of state control – and eventual banning of – their hobby. All concerned are clearly upset about how this is managed, even as everyone still engages in their own way with heritage.

⁶ See <http://www.finds.org.uk/>.

⁷ See <http://www.mcga.gov.uk/c4mca/mcga07-home/emergencyresponse/mcga-receiverofwreck.htm>.

Taking another example, it is possible to turn to the related issue of treasure hunting. Here I would make clear that I perceive of a profound distinction between, on the one hand, the individuals and clubs of metal detectorists who regularly recover materials from sites on an effectively ad hoc basis and, on the other hand, the professional organisations that have turned historic wreck salvage into a multi-million-dollar industry. If there is a sliding scale of things that I personally *simply don't get*, then I “get” the arguments in defence of the former much more than those of the latter. The arguments of the former are at heart about a form of democratised access to the land in a manner that I may disapprove of as an archaeologist concerned with the stratigraphic integrity of historic sites but with which I sympathise as a private individual, in the same way that I approve of public rights of access to privately owned buildings and landscapes. The arguments of the latter are effectively the opposite, attempting to justify private control of not only heritage sites but also all materials from such sites under a spurious claim of “free enterprise” on the one hand and previewed “risk” on the other, that since wreck sites are “at risk” from a variety of threats both cultural and natural, there is a case to be made for such sites to be salvaged, and that only the initiatives of unregulated free enterprise can afford to undertake such work. Such activity is often given the sobriquet “commercial marine archaeology,” implying that it is somehow akin to commercially funded fieldwork in advance of development on land paid for under long-established “polluter-pays” principles. But I contest that this is simply wrong – it is both factually incorrect and more profoundly, morally wrong. Are such sites under threat? Quite possibly. Should such sites be prioritised for exploration in relation to their cultural significance as well as the severity of those threats? Indisputably. Should the “public” be involved in such analyses? Without question. But “commercial marine archaeology” is none of, does none of, these things. It isn't even “archaeology”, the theft of the term demonstrating the hollowness of the arguments of those who promote such work as well as showing disrespect for the “public” that they suggest they serve better than an alleged “cabal” of self-serving archaeologists. The sites explored are cherry picked for the “guesstimated” financial worth, not their significance or risk; the data from – even the locations of – such sites, remain hidden from everyone, scholar and person on the street alike; the “results” of such work can only be accessed through payment, by the purchase of salvaged materials or admission charges for touring exhibitions. This isn't public engagement and it is not “archaeology” either – it is control, worse, theft of, common cultural property (see Flatman 2009).

In closing, what does this all mean in terms of public engagement in archaeology, and whether engagement is always positive? What it comes down to for me is how to mediate between what I see as, on the one hand, our *corporate* responsibility to protect and enhance sites “for future generations,” through controlling – in some very rare cases denying general access to – archaeological sites and, on the other hand, my *private* political outlook which is left-leaning, socially inclusive and pro-access in all its forms, even those forms that might be damaging. That is, how to reach an equilibrium of state control: accepting that there are plenty of activities that individuals may dislike but that society deems acceptable, and which society does

not directly legislate or even indirectly manage because a functioning democracy should in general take a dim view of state control, be this of “luxuries” such as archaeology as much as fundamental human rights such as free speech. And yet I would argue that at present no nation in the world is even close to achieving this balance, the disgruntled circumstances of the different groups discussed above making that clear. What solution, if indeed there is any, exists, is equally unclear.

The current situation has occurred as much as anything because governments both central and local have at best a passing interest in heritage in general, public involvement in this especially so. As a consequence, heritage law and policy alike tend to be marginalised, dealt with quickly and cheaply. As one example, in the 13 years of the Labour administration in Britain between 1997 and 2010 there were five Secretaries of State for Culture, Media and Sport (the most senior heritage-related cabinet minister in Government, in charge of the department of the same name that is responsible for national heritage policy and practice). This is an extremely high turnover for a cabinet post in comparison to other ministerial appointments in Britain, and a reflection of how insignificant the post is perceived to be, either a promotional stepping-stone for politicians on the way up or else a form of semi-retirement for those on the way down the ministerial hierarchy. That Britain does not have either a specific heritage minister or department explicitly using the term in the title is another reflection of how unimportant heritage is perceived to be by government – and perceptions at the central government level tend to be mirrored by those at the local level. As a consequence of the relative insignificance of heritage in government thinking, in Britain as in most other countries heritage policy has tended to be developed on an ad hoc basis, with minor ongoing change of long-established policies (many dating back to the early mid-twentieth century or even earlier) rather than any wholesale reform – witness here the recent debacle of the “Draft Heritage Bill” and the wider “Heritage Protection Reform,” expensively and extensively promoted in the early 2000s before being unceremoniously dropped from the legislative agenda in late 2008, and in any case a piece of legislation that once again proposed (albeit extensive) reform of the existing system rather than any profound and significant change.⁸ While the reasons for this are clear, the consequences are, frankly, often dire – a muddle of well-intentioned but ultimately contradictory policy and advice that is at least partly responsible for the discontent witnessed across arguably all sectors of society with heritage policy and practice. What is needed, surely, is a wholesale, *comprehensive* change in heritage policy reflecting the new realities of the twenty-first century world, how, why and where that world “engages” with heritage, and taking note of how such engagement has been theorised by professionals and “amateurs” alike. Archaeology is a young science of an old species; heritage “management” a bare infant-in-arms of that science. There are likely to be growing pains along the path to maturity, and this process will take time, a long time, two or three more generations at the very least, each needing to make as profound change as before. The underlying culture of timidity in heritage policy serves no purpose here; boldness does.

⁸ See http://www.culture.gov.uk/reference_library/publications/5075.aspx/.

The Spectre of Irrelevance:

Robert C. Chidester and David A. Gadsby

Joe Flatman raises the spectre of *too much* engagement with heritage in Great Britain. The problem he describes is that the legislative and planning framework for heritage management is simply inadequate to the task of dealing effectively with the current level of public interest in heritage in Britain. We share with Flatman an understanding of the dilemma. Protecting archaeological resources means balancing a corporate responsibility to preserve sites and structures for future generations with a socially inclusive approach to conducting archaeology that values multivocality above other, more traditional concerns of the discipline. Where we differ, however, is in our experiences of public engagement with heritage. In the urban U.S., historic and archaeological sites are more often than not merely considered to be impediments to economic development by those who have occasion to think about them; most people simply have no engagement with heritage at all.

For the past five years we have co-directed the Hampden Community Archaeology Project (HCAP) in Baltimore, Maryland. We both graduated from the Master of Applied Anthropology programme at the University of Maryland in 2004 and immediately entered Ph.D. programmes (Chidester at the University of Michigan, Gadsby at American University). We were not, however, interested in pursuing the kind of research typical of most doctoral students in archaeology in the U.S. Rather, we both wanted to participate in a project that was structured around the principle of community collaboration, and we were driven to conduct archaeological research that is politically and socially useful to a modern-day community. Since there are simply not that many projects like that in the U.S., Gadsby decided to create one of his own in Hampden, a community to which he had moved a couple of years previously. Chidester, as an expert in working-class communities in Maryland, joined him in short order.

Hampden is a community in transition located in a city that, like many others in the U.S., struggles to find a viable, sustainable plan for economic growth. Located near the geographic centre of contemporary Baltimore, Hampden's origins, growth and development have been intimately tied to the larger city's economic fortunes. Gristmills were first located along the banks of the Jones Falls River in the vicinity of modern-day Hampden as early as 1803; several of these mills were converted to steam-powered cotton duck mills in the 1840s, and small villages grew up around them. By the 1870s these villages had coalesced into suburban Hampden and its sister village Woodberry. Hampden and Woodberry's populations boomed as mill owners built housing for their ever-increasing workforce. An oligarchy composed of several wealthy families controlled the mills for more than half a century. Because mill owners also controlled the housing, they were able to exercise almost feudal control over the lives of their employees. Despite the enormous success of the mills, these villages, located as they were outside the boundaries of nineteenth century Baltimore, lacked paved streets, clean water and sewers among other amenities – expenses that the mill owners believed unnecessary. In response, local

workers created or participated in several political movements to improve their working and living conditions and secure their rights as citizens during the 1870s and 1880s, with mixed success.

The northern belt of suburbs that included Hampden and Woodberry was annexed by the city in 1889, leading to some moderate improvements in local infrastructure and utilities. Working conditions, however, remained dismal, marked by low wages, child labour and frequent workplace injuries. During and immediately after World War I local workers once again exercised their political voices by joining unions and staging a series of successful strikes that resulted in concessions from the mill owners (now largely absentee corporations). However, when the largest mill company in Hampden and Woodberry, the Mt. Vernon-Woodberry Cotton Duck Corporation, defeated a lengthy strike in 1923, the mills began shutting down as companies searched for cheaper locations in the American South. By the 1950s, the local textile industry was mostly moribund; the last mill closed in 1972, leading to two decades of economic and social decline in Hampden. At the same time, beginning in the 1930s an active group of local middle-class businessmen and professionals began reshaping the neighbourhood in their own image. By the 1980s, Hampden's working-class heritage had been all but erased from local memory.

Hampden's current economic upswing began in the early 1990s when some of the old textile mills were refurbished as upscale artists' lofts and office space, and entrepreneurs began transforming the Avenue, Hampden's main thoroughfare, into an upper-middle-class shopping district anchored by the "Café Hon." Upper-middle-class families began buying homes in Hampden in large numbers, sending property values (and thus property taxes) skyrocketing, to the detriment of long-time working-class homeowners. The owner of local restaurant Cafe Hon, Denise Whiting, subsequently organised the now annual street festival HonFest, which draws tens of thousands of tourists from the greater Baltimore region and beyond. Based on the image of the Hon, a cartoonish stereotype of working-class women, HonFest has become something of a divisive issue in contemporary Hampden. Whiting claims that she is celebrating working-class culture, while many of the working-class residents who remain in Hampden are insulted by the stereotype that is being promoted and feel that Whiting (and other community leaders) leave them out of the loop when it comes to planning HonFest and other community development initiatives.

Indeed, it is this division that attracted us to Hampden in the first place. It seemed a community ripe for the kind of collaborative, activist archaeology that we wanted to practice (our collaborative methodology is described in more detail in several publications; see Gadsby and Chidester 2007a, b and Chidester and Gadsby 2009). Hampden is rich in history, and a substantial portion of the contemporary population consists of descendants of the people who worked in the now defunct textile mills. Furthermore, the major issue confronting the neighbourhood today – the division between long-time working-class residents and newer middle-class residents – is one that seems uniquely suited to be addressed by archaeological research into the neighbourhood's history.

When we initiated HCAP in 2004, however, we failed to account for one thing. The difficulty is not, as we had supposed, one of finding research questions that can

be addressed archaeologically and that hold some relevance for the contemporary community. Rather, the primary obstacle for those of us doing this kind of work (at least in the U.S.) lies in the need to convince local residents of the relevance of history and heritage for their lives.

HCAP began auspiciously enough, with a series of well-attended public history workshops organised by Gadsby during the fall of 2004. We used the discussions that arose during those workshops to construct a preliminary research design for archaeology in Hampden, and even found three landowners who were willing to let us dig up their yards. Gadsby created a web site for the project, on which we posted the preliminary research design in the hopes of soliciting public comment, as well as a blog to chronicle our research and fieldwork. We failed to receive any public feedback on the research design, and while the blog has been moderately successful (registering over 15,000 hits from its launch in early 2005 through the time of this writing in late 2009), we have been disappointed in the relative paucity of public engagement in the form of comments about our posts.

In addition to these web-based activities, we have continued to hold periodic public history workshops, tours, and presentations, many of which have been well attended. From 2005 to 2007 we conducted 6 weeks of fieldwork each summer, working with a local charter school and a city agency to hire neighbourhood teenagers whom we trained in excavation methods. During these three summers, however, we consistently had problems attracting visitors for “Public Dig Days” and other events that involved excavation or lab work. Furthermore, even when we did have visitors at our sites, they were mostly middle-class residents who have only lived in the neighbourhood for relatively short periods of time. Long-time working-class residents have been conspicuously absent from most of our public outreach activities. Even when we developed oral history and ethnography components of HCAP in 2007, we experienced much difficulty in finding working-class residents who were willing to be interviewed.

We share with Flatman a view of the engagement dilemma; we must consider how to best balance public access while protecting archaeological resources. We are, however facing the problem from the opposite direction. Flatman sees overly “engaged” metal detectorists damaging archaeological sites to mine them for their treasure; we see ignorance of material heritage as a danger to sites because developers, builders, and community planners can and do obliterate them without a thought, mining them, in a sense, for their commercial value while ignoring (or occasionally exploiting) their heritage value. Without public outcry, which can only arise with public awareness, they will continue to do so. We also see this ignorance as a danger to the cultural sustainability of working-class Hampden and a difficult problem to surmount, given the reticence of many individuals to participate in public culture.

Thus, the problem in Hampden is not how to deal with too much engagement, but rather how to foster meaningful engagement at all. The residents of Hampden are not likely to be metal detecting in their own back yards; they have much more pressing problems to deal with, such as figuring out how to keep their homes after the new upscale condominium nearby doubles their property taxes, or how to keep their children in school. While a number of our individual events and initiatives have been successful, we have simply been unable to translate the success of these

events into any kind of long-term public engagement with neighbourhood heritage. While we are tempted to be discouraged, we would rather take heart from our successes. When we have well-attended workshops, we can see the potential for a truly critical dialogue about local heritage and its contemporary implications.

The nature of our involvement with archaeological resources differs somewhat from Flatman's. Flatman, a government employee, is charged with stewardship and protection of archaeological sites as well as their public promotion. As interested graduate researchers, we have no government mandate, no official capacity and, therefore, do not occupy the tense space between public access and preservation that Flatman does. It is worth noting, however, that many heritage management agencies in the U.S. charged with similar responsibilities have chosen civic engagement as a protective strategy for resources. For instance, the National Park Service works to surmount its resource protection challenges by fostering stewardship for archaeological sites through public education.

Additionally, the cultural resources we deal with are already unknown and unvisited. Some bottle hunters are active in Baltimore, but for the most part, people are unaware that archaeological resources even exist in their city. Under these circumstances, visibility, public education and dialogue are nearly always positive, and may, in fact, be the best way to protect Baltimore's archaeological resources.

This does not mean that the issues that Flatman raises in his essay are not real, or that as archaeologists we should not bother with them. Indeed, our experiences with one landowner who wanted to keep all the really neat artefacts (i.e., intact bottles) while donating the rest (charcoal, nails, etc.) to the state demonstrate the fraught nature of archaeological engagement with the public. However, it is essential that archaeologists understand that there are different kinds of public engagement that operate on sometimes quite different social terrain. We need to have broad toolkits to deal effectively with the varied kinds of public engagement we might find ourselves enmeshed in. From our perspective, the answer to the question of whether all forms of engagement are always positive is yes. Engagement is always positive, if only because some – any – kind of engagement is better than no engagement at all. Engagement is surely a sticky issue and requires a lot of patience, understanding, and willingness to compromise, but it is a far better alternative to ignoring the various publics who, whether they realise it or not, have much at stake when it comes to the ways in which their heritage is used in the contemporary world.

Final Thoughts on What Public Engagement in Archaeology Really Means: Joe Flatman

Chidester and Gadsby raise several issues in their paper that make clear to the author how much the two ostensibly very different communities of Surrey and Hampden actually have in common as regards public engagement in heritage. Ultimately however, it is clear to me that this discussion comes down to one key issue: that of class engagement.

Chidester and Gadsby discuss how their Hampden Community Archaeology Project has had problems in finding “long-time” working-class residents of the community to become involved in the project, with in some ways an “over-interest” in heritage among newer, mostly middle class residents. The very fact that I did not think to discuss this issue in my own paper is an indication of how pervasive a problem this is among the heritage community around the world. The demographics of “heritage engagement” in Surrey (indeed in almost all cases in Britain), are understudied but extremely clear in general if not case-specific terms – “engagement” feeds a virtually insatiable but almost entirely white, upper and middle class appetite for heritage [i.e., primarily UK social demographic National Readership Survey indicators A and B (upper middle and middle class) and to a lesser extent C1 (lower middle class)], a situation that is exasperated by the almost total lack of both working class (originating) and ethnically non-“white” archaeologists at work in Britain (see Benjamin 2003; Everill 2009: 14). Put simply, as a curatorial archaeologist I am mainly reactively curating heritage on behalf of this upper and middle class sector of the community (the sector which can most easily afford to live in the county which, with its attractive, often historic, housing stock close to London is one of the most expensive places to live in the UK), and am also proactively engaging with that same community which pays most attention to heritage outreach initiatives with which I am involved – a cycle of engagement that it is extremely hard for others to break into. The problems of engagement in Surrey are, consequently, essentially the same as for Chidester and Gadsby – it is just that I have simply so many more enthusiastic white middle class participants that this well-meaning group so very easily crowds out other classes and also ethnic groupings in terms of both access to housing stock in the county as well as participation in heritage outreach. Meanwhile, despite the efforts of myself and in particular my colleagues in the council to engage with other sectors of the community – most notably in Surrey through the pan-European ACCU (“Access to Cultural Heritage”) initiative, which in Surrey focused on the under-appreciated and frequently maligned “traveller” community of the county⁹ – it remains, as Chidester and Gadsby highlight in Hampden, hard to easily engage with “non-traditional heritage consumers.” And what, I suspect, all this comes down to in Hampden as much as in Surrey is a question of trust: such communities simply don’t easily trust such engagement initiatives, even if well meant, when this engagement looks suspiciously like just another piece of social control by yet another patronising “posh” person, be they from government, the university sector or even simply a volunteer.

Ironically, I was already essentially discussing this issue *passim* throughout my initial paper by raising the issue of the appropriateness of “alternative” heritage engagement, especially through the use of metal detectors. Here, anecdotal evidence suggests that while the majority of “traditional” heritage participants are the previously noted white upper and middle classes, the majority of metal

⁹ See <http://www.cultureforall.info/front> and http://www.communityarchives.org.uk/page_id__596_path__0p3p17p.aspx.

detectors are drawn from the other end of the social scale (i.e., primarily UK social demographic National Readership Survey indicators C2, D and E – skilled working class, working class and “subsistence”). This unsubstantiated model of heritage “alter-engagement” in Britain was highlighted in September 2009 by the announcement of the discovery of a large hoard of Anglo-Saxon precious metal from Staffordshire, central England. The discovery, while likely to transform the academic understanding of “Dark Age” communities in Britain, was made by a Mr. Terry Herbert, an unemployed, partially disabled 55-year-old metal detectorist who found the hoard using a second-hand metal detector that he had reputedly bought 14 years ago in a car-boot sale, and who lives primarily off disability benefits in a council flat¹⁰ (see Pitts 2009). The discovery of the find under such circumstances, while widely acclaimed among many period specialists and in the press, also led to a considerable backlash against what were variously called “thieves” and “plunders”, amid fears that the high-profile and unknown but likely high-value discovery (in the millions of pounds sterling range) would lead to a huge rise in both “licit” (i.e., reporting finds made to the authorities on land where the owner has given detectorists permission to search) and also illicit (i.e., “night-hawking” which is unreported and not allowed searching) detecting.¹¹ This included the accusation by the landowner of the find-spot, Mr. Fred Johnson, that: “I’m not happy with Terry—I think it is more about the money for him and I’m going to have to confront him about that” (Adams 2009); this despite the fact that Mr. Herbert had followed “licit” practice for metal detecting in the UK, getting permission from the landowner to access the site in advance of his visit and immediately reporting his discoveries to the UK’s Portable Antiquity Scheme local Finds Liaison Officer¹² – hardly the actions of an individual entirely driven by pecuniary motives, especially one who had been metal detecting without notable success for over a decade prior to the discovery.

In closing, therefore, I would echo Chidester and Gadsby’s conclusion and call-to-arms: engagement is always positive, if only because “some—any—kind of engagement is better than no engagement at all”. How individuals like Mr. Herbert came to engage in heritage hardly matters: examples such as the case of the Staffordshire hoard make clear that trusting people to make their own judgements as regards how, when and who to engage in heritage with will reap rewards such as that

¹⁰ For an example of some of the numerous media reports on the find, see <http://www.timesonline.co.uk/tol/news/uk/article6847081.ece>; the find’s official web site is <http://www.staffordshirehoard.org.uk/>.

¹¹ See for example <http://www.telegraph.co.uk/news/6259437/Archaeological-sites-face-ruin-from-treasure-hunting-nighthawkers.html>, http://news.sky.com/skynews/Home/UK-News/Staffordshire-Hoard-Terry-Herbert-Glad-To-Get-Rid-Of-Anglo-Saxon-Gold-Items/Article/200909415388702?lpos=UK_News_Article_Related_Content_Region_1&lid=ARTICLE_15388702_Staffordshire-Hoard%3A_Terry_Herbert_Glad_To_Get_Rid_Of_Anglo-Saxon_Gold_Items_, <http://www.guardian.co.uk/commentisfree/2009/sep/25/alexander-chancellor-staffordshire-hoard> and <http://www.guardian.co.uk/commentisfree/2009/oct/08/response-metal-detectorists>.

¹² See <http://www.finds.org.uk/>.

extraordinary discovery. That not all individuals may choose so “licit” a route as shown in Staffordshire or Hampden is beside the point: an antisocial minority exists in all communities in relation to all social encounters, and has done, as shown by archaeology, for millennia. To not bother to engage in heritage because of that negative minority is to ignore the positive majority. As demonstrated in Hampden and in Surrey, the ultimate issue for those working within heritage is not to decide who to engage with, but rather to explore broader mediums of engagement in which trust is built up and communities and individuals respond in their own terms and at their own pace.

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Chapter 6

Archaeological Research and the Academic Process

Vance T. Holliday and Nan A. Rothschild

The Topic We are interested in your own experiences and views of the relevance of archaeological research in an academic setting. What opportunities have you experienced, and what constraints? What are your primary considerations as you develop your research? What is expected of your research in your respective academic positions? Have you faced university pressures with respect to research, fieldwork schedules, grant income, number of publications, and types of publications? To what extent, if any, have such pressures influenced how you have crafted or presented your research? Alternatively, has your university setting provided unexpected or unique research opportunities or directions?

An Academic Path in the American Paleoindian West: Vance T. Holliday

Little did my first boss in archaeology know what he was saying when he described me as a “Texas dirt archaeologist.” It was a compliment (an important one at the time, when I was first starting out after I received my BA in Anthropology), but it was meant to mean a competent field archaeologist. But I really did become a “dirt archaeologist” (inspired, in fact, by that first boss), more commonly known as a geoarchaeologist. And since arriving at the University of Arizona I have been fortunate in being able to focus most of my research and teaching on the geoarchaeological aspects of my other interest, Paleoindian archaeology. Although my career path

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wandered a bit, in my mind there is a fairly clear arc, and for the most part I have been able to do what I want to do in both teaching and research.

I have often said that until I was in college about all I knew of archaeology is what I saw in old Mummy movies. That is not far off. I have always been interested in the past and at all time scales: my parents' personal and family histories, the U.S. history, military history, prehistory, human evolution, and dinosaurs. But not until I was finishing junior college and planning to go to The University of Texas that I realized that people were trained in and employed in archaeology. The epiphany came when I happened to watch an old television special called "The Man Hunters" focusing on an interdisciplinary study of a rockshelter in France. When I saw it I realized THAT is what I wanted to do. And then I quite literally entered a whole new world. After receiving a BA and working in the very early days of what became CRM archaeology I was at Texas Tech University working at the Lubbock Lake site. It was research-oriented work and the focus was on Paleoindians. I was anxious to get out of the contract world and its many constraints, and I was always interested in the "oldest" or the origins: the oldest fossils, the earliest hominid, and the oldest sites in North America. Further, the interdisciplinary work at Lubbock introduced me to soils and geology. Because of the focus of the research, that experience was a wonderful entree – via conferences, field trips, field work, lab work, and report writing, as well as my thesis – to geoarchaeology, zooarchaeology, and Paleoindian archaeology, especially on the Great Plains. And I finally realized that I was more interested in the sediment surrounding the artifacts than I was in the artifacts themselves. That led me to study soils from a geologic perspective (along with Quaternary geology and geomorphology) as my Ph.D. in Geology from the University of Colorado. My soils research began at Lubbock Lake, which (along with some consulting) maintained my connection to archaeology.

My first academic position (as a Visiting Professor) introduced me to Geography at the University of Wisconsin (UW). As soon as I entered Geography I felt like I was "back home" even though I had little formal training in that field. Geography and Anthropology are so similar to one another: both are broad disciplines that include both social and physical sciences. And there are long historical ties between subdisciplines on both sides. Being immersed in Physical Geography was also important because the various subfields (geomorphology, soils, climatology, biogeography, and remote sensing) have so many applications in Quaternary geology and geoarchaeology. Indeed, many geoarchaeologists came out of Geography programs. The UW position helped land me another visiting position: a joint appointment in Geography and Anthropology at Texas A&M University. That was important because it brought me back directly into archaeology and my first teaching of geoarchaeology and Paleoindian archaeology. I ended up settling down in Geography back at the UW at Madison. I was hired to teach courses on soils and geomorphology, but also ran seminars that dealt with geoarchaeology and attracted a few graduate students who pursued geoarchaeology. I also had students from UW Anthropology in my classes and served on graduate committees over there.

As in most academic departments at large research-oriented universities, I was completely free to pursue my own research. The thread of it included both geoarchaeology and Paleoindian archaeology. I suspected that the National Science Foundation

(NSF) would not be interested in funding Paleoindian geoarchaeology, in part based on my lack of training and experience in (and therefore grasp of) archaeological method and theory, and because geoarchaeology seemed to fall between the disciplinary cracks. The major funding for the work came from NSF, but was out of the Geosciences Directorate. The work focused on various settings of late Pleistocene and Holocene sediments and landforms on the southern Great Plains and their paleoenvironmental record (valleys, dunes, and lake basins), spinning directly out of my Ph.D. research. These were also the settings for intact archaeological sites and so I was able to “bootleg” my geoarchaeological research into Paleoindian landscapes and environments and included most major and minor Paleoindian sites in the research. I am not sure why I was able to secure NSF funding for my work. In part I think the timing was good. I was asking questions about landscape response to environmental change and also asking questions about late Pleistocene and Holocene environments. I also worked with sympathetic program directors. I am not sure what direction my research would have taken without the NSF support. I think I would have tried to keep working on the southern Great Plains, but at a reduced scale. Pressure to provide funding for graduate students (not a lot of pressure from above, but a fundamental feeling of obligation to try and support students) may have forced me on an alternative research path.

Throughout those years at UW I had a disconnect of sorts between my teaching and my research on the Great Plains. Though I was heavily engaged in archaeology in the field, I did not teach archaeology *per se* because (1) I was not in Anthropology; and (2) I had my hands full with the classes I was teaching in Geography. The teaching was OK; I enjoyed most of my classes. Service courses took up a lot of time, however, and my more advanced courses rarely touched on my research. The work was very satisfying, but during my 17 years at UW there was little direct interest in my work anywhere on the UW campus with the exception of one or two faculty and a handful of students. Overall, however, UW was a great place to build a career. There was considerable support for and emphasis on research, and I had considerable leeway in developing courses beyond the emphasis on service courses. We also attracted top-notch students.

Everything changed in 2002 when I took my current position at the University of Arizona (UA). C. Vance Haynes, the eminent Paleoindian scholar and geoarchaeologist, retired and his position was open, advertised for a Paleoindian archaeologist/geoarchaeologist at the senior level. Over the years at UW, Haynes’ position was about the only one I ever thought I might leave for. But I never seriously thought that would happen. One of the first things I noticed after moving was the number of people across campus and off of campus with a keen and direct interest in my past and upcoming work on geoarchaeology and Paleoindian archaeology, along with an interest in my teaching in these areas. Both topics have a long history at UA. This was exciting and encouraging; invigorating, even.

The position is in both Anthropology and Geosciences. Most of my classes are graduate-level and draw from both departments (plus a few from Geography and other environmentally oriented departments on campus). I also teach a service course on World Prehistory and developed a course for undergraduate majors on Environmental Archaeology. My primary graduate courses in archaeology are

Geoarchaeology (newly developed) and Paleoindian archaeology (inherited from my predecessor). Both are fun but I admit that I am never terribly comfortable teaching a class specifically in Geoarchaeology. The subject is so broad and varied; it is more of an approach to research than it is one thing that can be adequately addressed in one semester (but I realize that many course topics can be similarly described). More importantly, the class invariably includes archaeology students with little geoscience background, and some geoscience students with little archaeology (this problem is universal in geoarchaeology classes in the U.S.). So choosing a particular “pitch” to my audience is very difficult and often, I feel, not successful.

Being back in association with a geology department, after all of those years in geography, reminded me how much of geology has no ties directly or indirectly to my fields of interest/research. UA Geosciences has a long tradition of ties to archaeology, however, so my “fit” there has been seamless. But my path as a geoarchaeologist usually working on my own or with a small team of archaeologists with a modest budget stands in sharp contrast to the “big science” that is common in many geology programs where big grants are used to pursue big questions (e.g., in tectonics or paleoclimate). Moreover, beyond hydrology and low-temperature geochemistry, few geology programs deal with surficial geology (geomorphology, Quaternary geology) of any kind, much less geoarchaeology. Though there are exceptions (UA being one), I have found geography departments to be more open to archaeology.

But research support at the scale of most U.S. archaeology and geoarchaeology has been a very different issue. Along with the position came a research endowment. It was set up by a wealthy donor to investigate the early peopling of the Southwest U.S. and Northwest Mexico. The amount of money is not huge but can nicely fund fieldwork plus provide some limited student support and analysis. After 8 years, however (i.e., since my arrival in 2002) the value of the fund has declined, especially in terms of student support. The State of Arizona significantly increased the portion of tuition and fees for research assistants that must be picked up on grants. Hiring a research assistant for the academic year is now difficult because of the bite it takes out of field-focused funds. Beyond Paleoindians and geoarchaeology I have related interests in the history of paleo-lakes in the Southwest and how they were utilized by and in turn affected Paleoindian populations. Three attempts at NSF Geology and one attempt at NSF Archaeology to secure broader student support and analytical support have been unsuccessful in furthering the goals of the endowment. In part this was due to large budgets. However, several of the proposals to NSF Geology were highly ranked and one proposal was recommended for funding by the panel. So besides falling between the disciplinary cracks, part of our problem is lack of support by program managers.

On the up side, and in a remarkable bit of good timing on my part, a few days after arrival at UA Anthropology we learned we had been awarded a 5-year NSF Integrated Graduate Education and Research Traineeship (IGERT) grant to support training in archaeological sciences. Geoarchaeology was an important part of this training so for the run of the program we had ample student support and attracted a remarkable group of talented students. We are now suffering from post-IGERT let-down!

I feel very fortunate to have the career I have. Over the years I have been relatively free to develop and teach courses that I wanted to offer (and that students were interested in) beyond the demands of service courses. The only constraints have been in (1) course sizes, and (2) team-teaching. I have found it aggravating to teach literally hundreds of students in one section of a service course, and then feel “heat” from above because I was teaching an advanced course with only six students. Team-teaching always raises the issue of who gets “credit” for the class. I understand the problem, but the issue always seems like another example of bean-counting taking precedence over effective teaching and training. I have also been privileged to work with an array of talented, enthusiastic, and hard-working students from a variety of disciplines (Anthropology, Geology, Geography, and Soil Science).

In terms of grant-getting I also feel fortunate that I never felt the pressure for that. It was never an issue that came up while I was working toward tenure at UW. In part I think that was due to the relatively low level of grant funds available in Geography. I think the pressure was also mitigated by the grant-getting success of UW as a whole. Ironically, I had better grant-getting success during my UW years than I have since arriving at UA; but fortunately that was mitigated by the research endowment I have. But a big part of that, I think, is that programs in Geosciences at NSF simply are not that interested in what colleagues and I want to do in the paleo-lake basins of the Southwest. So timing of research interests to NSF programs is very important.

I have also been entirely free to publish as I see fit. This includes my tenure-track years in Geography at UW. I had good advice from colleagues at the time, but, frankly, the tenure process seemed very obvious and “all” I needed to do was get some good papers into leading journals. What also helped is that in my early years as a Visiting Professor I discovered that I enjoyed writing scientific papers and sharing my research. Since then, keeping the publishing going has been as much habit as it has part of my professional duties. And I still enjoy it!

At the outset of this essay I noted my early career in the beginning days of CRM archaeology (it was not even called that when I started out). When I had the chance to pursue a more traditional path in research I took it. The research opportunities offered by work at Lubbock Lake fit my interests almost perfectly and I was allowed to run with them. The CRM work was limiting and rather haphazard, especially in those days. But I hasten to add that I got an amazing variety of field experiences, in all kinds of sites and all kinds of settings. I maintained ties to the CRM world, however. I did some consulting over the years; initially to make some money and to just take on different kinds of projects, but in more recent years I confine that work to projects I have a specific interest in. Tensions between the world of CRM archaeology and academic archaeology are well known. I was never directly caught up in these tensions in the field, perhaps because of my role on the “geo” side of things. The CRM archaeologists seem to appreciate having a geoarchaeologist around who would talk to them. In Anthropology departments the message has been more varied. Some would not and maybe still will not offer any sort of training pertaining to CRM work. Others, like my home at UA, regularly offer courses and we just started an MA in Applied Archaeology.

My Geosciences colleagues never seem to care about distinctions between “pure” and “applied” research, probably because there is so much applied geology being done (in the petroleum and minerals industry, for example). Anecdotally, I have heard that some old-timers in geology thought that consulting work was a kind of prostitution! But more broadly, my limited experience is that academic researchers in geoscience fields that are readily applied, work seamlessly with geoscientists on the private/industry side. This is likely because (1) the latter includes such a broad and diverse group of subfields (many as old as the field of geology itself) and (2) because many subfields of the geosciences are economically and environmentally significant. In my view, tensions between academic and applied archaeology are because (1) sloppy and even unethical applied archaeology was relatively common, especially in the early days of CRM archaeology, and (2) some academic disdain for the profit motive. To a certain extent, I see this as ironic given the almost mythical status of “salvage archaeology” (e.g., the River Basin Surveys). Ultimately, however, salvage archaeology was academically based.

The big question here, however, is the relevance of archaeology in my career. This has just never been a problem in archaeology, or in geology for that matter. I have been much more comfortable explaining archaeology than I was trying to explain geography. Explaining what geography is and what geographers do has long been a problem in that discipline. I simply have not faced the issue in archaeology. As we all know, archaeology is very popular with the public (distorted though their image of archaeology may be). We are fortunate here at UA because of the long tradition of archaeology on campus and the visibility, literally and metaphorically, of archaeology in the public realm in Arizona. Archaeology (both prehistoric and historic) is all around us: in state and national parks, and regularly in the news media. Broadly speaking, the citizens of Arizona seem to be aware of and appreciate our cultural heritage and seem to take academic archaeology for granted, certainly more so than any other state I have lived in (Texas, Colorado, and Wisconsin).

An Academic and CRM Path in Urban Eastern North America: Nan A. Rothschild

One's life path is often affected by random chance rather than careful planning. In my case two kinds of circumstances over which I had no control dominated my career trajectory (and I suspect this may be true for students in many fields). The first was the inspiration of two faculty members along the way, one when I was an undergraduate leading me to major in anthropology; the second when I switched my allegiance to archaeology. The other important element was the appearance of eclectic opportunities and my ability to be flexible and take advantage of them. Because of my own experience I believe that one must allow students at all levels the freedom to find their own paths and take advantage of unexpected opportunities. I also think that there needs to be more re-connection between anthropological subdisciplines – they

have become too separate. I consider myself an anthropologist, yes an anthropological archaeologist or an archaeological anthropologist, but see one of the strengths of our discipline as the ability to connect to and incorporate insights from other elements within anthropology or other disciplines. I have been particularly influenced by history and geography.

I had never heard of anthropology as an undergraduate but my first course in it was intellectually compelling. I began graduate school planning to be an urban anthropologist and study cities within socio-cultural anthropology. However, rather late in the process I became totally intrigued with the archaeological approach at New York University (NYU), studying under Howard Winters, Bert Salwen and Bob Bettinger. For example, Howard gave us six projectile points at the beginning of the semester, telling us on which terrace above the Illinois River they had been found, with the assignment of determining the group's settlement system by the end of the term. I was hooked! I evolved from a socio-cultural anthropologist to pre-Columbian archaeology and ultimately to historical archaeology, incorporating all that urban theory into archaeology. My theoretical orientation has also altered through these subdisciplinary shifts and continues to change as I learn from students and junior colleagues. Research issues have also evolved although a core of concerns remains throughout my work. I continue to focus on connections between people as members of society and as they reciprocally affect and are affected by the material elements of their lives and the landscapes in which they live.

When I wanted to acquire field experience I was able to do so in New Mexico with Pat Watson, Chuck Redman, and Steve LeBlanc. However, my dissertation made use of collections rather than excavated material, another aspect of my education that I think was important. I continued my fieldwork education by doing some fairly standard CRM right after getting my degree: sewer surveys and similar projects in areas around New York City. At the same time, one of my mentors, Bert Salwen, involved all of his grad students in the emerging field of CRM with its legislation and rules. Regardless of whether one does fieldwork in CRM or in the academy, certain core requirements – planning, understanding the demands and restrictions, budgeting time and money while being adaptable – are all essential. Field archaeology has always been an important component of my teaching but the type of fieldwork has varied considerably. When I taught at Lehman and Hunter, within the City University of New York (CUNY), the field projects were done within the academic year, often on weekends because these students frequently had summer jobs; therefore these were projects in the city or close by. At Barnard/Columbia, students were more likely to be able to take 4–6 weeks off and I returned to New Mexico taking students first to the Zuni Reservation and then the Rio Grande Valley. I believe field experience is crucial to archaeology because it is the only way to understand the sometimes fragile basis on which a distinction between one stratum and another are drawn, and the tower of conclusions that may be based on a relatively small and sometimes contested observation. These experiences yield respect for the field process but can also provide understanding as to how challenges to seemingly solid conclusions may emerge.

My academic experience has been quite varied. Being married to someone who could not leave NYC meant that I taught in a variety of places (a year at Jersey City State College, 4 years at two branches of CUNY and a year at NYU) before finding a job at Barnard. The other aspect of being geographically restricted for a time and having young children meant that I was more willing to consider local urban fieldwork than others might have been. Some of the pre-Barnard positions were part-time and I had the opportunity to co-direct some large urban excavations in lower Manhattan at the Stadt Huys and Seven Hanover Square blocks. These were CRM projects on a large scale.

I have had two priorities structuring my research: my own intellectual interests and giving students the opportunity to experience fieldwork. The academic institutions in which I taught did not make specific demands on me for research; the demand was for publications and grants. The field work experience was my own requirement. And yes, types of publications were important. The large urban projects took a long time to complete and write up and CRM reports were not the kind of thing Barnard/Columbia valued. So once I was in that setting I only undertook small projects, incorporating graduate and undergrad students so they could understand this branch of archaeology. I thought and think it important for students to have varied experiences during their training so they have a greater range of opportunities when they finish school. Columbia and Barnard together have only had four to five archaeologists since I have been there so we encourage students to have a strong theoretical core, including socio-cultural anthropology; we encourage them to acquire specific skills in other settings. The most essential skills for students to learn are to think and to write.

Let me discuss the ways in which archaeology connects to other elements of intellectual practice. Collections research, which I used in my dissertation, makes use of existing archaeological data and objects. It is often challenging because of the diverse ways in which these collections were accumulated and recorded. It requires creativity to make use of them but offers much potential for new information as analytic techniques and research questions may have changed since the collections were amassed. And often, large collections compiled during CRM projects are under-analyzed and offer rewarding opportunities for graduate student theses and dissertations. The analysis of these sets of things connects to issues of materiality that have been emerging in theoretically exciting ways in archaeology and socio-cultural anthropology. We all know that anthropology and museums were once intimately connected, but for quite a while socio-cultural anthropology was not interested in objects; I believe this is changing and that archaeology has instigated this trend and is due credit for it.

Historical archaeology has opened the world of history to us; historical archaeologists need to examine a wide range of documents prior to excavations. It is important to clarify to the world at large that an anthropological/archaeological view of historic times will involve different perspectives than those offered by historians, although there are overlaps between anthropologists' and social historians' viewpoints. This offers an answer to the question of relevance; we are often asked why we need archaeology if we have documents? This issue is raised especially in reference to the nineteenth century. The answer is that there are many kinds of behavior (food consumption, just to name one) that are not recorded in documents

and that a material perspective offers a different vantage point on the past than that afforded by documents. We have seen that the recent past is also a valid subject of archaeological inquiry, as seen in work on archaeology of the contemporary past. An anthropological orientation has also brought forth a concern with descendant communities, requiring the use of interviews, and asking contemporary descendants for their input in designing research. Thus oral history and techniques used by socio-cultural anthropologists have become significant to archaeologists in specific settings. A meaningful difference between pre-Columbian archaeology and historical archaeology is the latter's ability to examine small-scale units: an individual or a household, and this forms another bond with socio-cultural anthropology through the life-history approach. Public-oriented interpretations of individual's lives have developed as another form of outreach that is appealing to a broad audience.

In sum, archaeology keeps expanding and reaching out to other audiences and other disciplines. It makes this an exciting time to be an archaeologist, regardless of one's specific niche.

Further Thoughts on Archaeological Research and the Academic Process: Vance T. Holliday

Given our very different career tracks I am struck by several common themes in Nan's essay in mine. She hits an important (if unsettling) point in her opening sentence: the role of luck (or serendipity or opportunity) in our career paths. I did not even get into that in my comments! It should not come as a surprise, but it is rarely discussed in "career planning." There is not a lot that can be said about it. Some have commented that "we make our own luck." I do not fully believe that, but we what we can do is be open to new opportunities, and be as broad-minded as possible. That is how I ended up in Geography.

I am very unsure how or whether the tension between "pure" and "applied" research in archaeology will be fully resolved. Certainly CRM archaeology will not and should not go away. For that reason alone I think academic archaeology should embrace it as another aspect of research. And it will continue to be an important source of employment. Dealing with the publication of CRM or other sorts of consulting reports in terms of "counting" in academic careers is trickier. There are good reasons why so much emphasis is placed on peer-reviewed publications. But that tends to apply to journals rather than books and monographs. We all know of CRM reports that are more useful and informative than some traditional academic volumes. Ultimately, Anthropology programs will need to establish guidelines for assessing "applied" publications. I have no direct experience with this, but many other fields (e.g., geology, as mentioned, but also soil science) routinely confront this issue. In the harder sciences, however, it may be easier to "translate" data derived from applied research into peer-reviewed publications. One thing that is needed in academic archaeology is a tradition of incorporating CRM research in to more traditional academic outlets. There is no shortage of good data out there.

That raises another good point that Nan mentioned: the use of existing collections for research. In one of my publications I pushed for more of this sort of research, noting that there are entire field seasons of work awaiting us in extant collections. I was referring to old research collections of Paleoindian artifacts and faunal remains, but clearly the comments could be applied to any collections.

I strongly agree with Nan's comment (first paragraph) about maintaining or re-establishing connections between anthropology subdisciplines. In my experience the best departments for both faculty and students are those where cross-disciplinary research and teaching are encouraged, valued, and respected. I have seen disdain for and jealousy of other subdisciplines tear departments apart. My wife, Diane Holliday, is a bioarchaeologist who was first encouraged along this path as part of an MA in a heavily interdisciplinary and collegial Anthropology program, but suffered through a Ph.D. program where students who wanted to cross subdisciplines were, quite literally, viewed with suspicion by archaeologists. At one point, she was verbally accosted in a main public hallway by one faculty member because she did not have requisite signatures on a piece of paper that "allowed" her to work on a dissertation that included both archaeology and bioanthropology. Such a thing would be unthinkable in my present department.

I probably did not address "relevance" and "the public" in my original comments as directly as I should have. My basic philosophy about studying the past (all aspects) is that it will always inform us about our present condition (be it, e.g., our physical evolution, our behavior, or the environment) or the future (especially the future of the environment). Most broadly stated, this could apply to organizations that want to make money from our knowledge, such as the petroleum and minerals industry, but also book authors and publishers. Regarding the more traditional concept of "the public" as our local community, archaeology has fairly high visibility here in Tucson, in Arizona, and in the Southwest, as I noted in the first essay, I have started taking advantage of opportunities for outreach, explaining what I and my colleagues do. As many of us have found out, a lot of people are interested in the past. I have never had a bad experience trying to explain what I know.

Final Thoughts on Archaeological Research and the Academic Process: Nan A. Rothschild

I will write this in a kind of stream-of-consciousness mode, considering some ideas that Vance's "professional autobiography" has raised for me. First, I note that right at the outset he says he was interested in geoarchaeology and the Paleo-Indian period. And I wondered how he acquired these interests so early on? Often a first field work experience is what establishes research interests for life; that was the case for me when I worked at Zuni, so I wondered if this were the case for him. In the next paragraph Vance notes the influence of an old movie on his career choice and I wonder how many people (shudder) have been influenced by Indiana Jones! I too was attracted by Paleoindian studies at the beginning and of course we

are all attracted by “the earliest” incidence of everything. I liked the concept of having a few artifacts that get analyzed intensively but of course have ended up in historical archaeology that sometimes yields literally tons of material.

In the next paragraph, I wondered why at the outset he was eager to leave CRM; later on (third paragraph from the end) he mentions that it was limiting and haphazard but I would like to hear more about his experiences with CRM. I have had quite a bit of experience with this kind of archaeology and have learned a lot from it. Not just in the realm of fieldwork but it has provided an education on the “real world,” and the workings of government. I was a consultant for a while to the U.S. Army Corps of Engineers and learned that their projects were conducted only because a senator or congressperson had recommended them (talk about politics!) And at that time the Corps always was required to take the lowest bid, often producing low quality archaeology. Having followed the development of the various codes of federal regulations that impact archaeology and then seeing how a series of federal budget cuts have eviscerated state historic preservation offices’ ability to protect sites has been another set of enlightening experiences. As in any other discipline there is a range of practitioners, from those who follow the notorious practice of low-balling on a bid and then “needing” more funds to finish the job, to really outstanding firms that encourage their archaeologists to follow the best research practices. I think that there need to be connections between academic archaeology and CRM because often the large firms have the kind of equipment that departments may not be able to afford. Since graduate students may often wind up doing some form of CRM, internships with good firms might be a useful opportunity for those who want the experience. A number of years ago, Professional Archaeologists of New York City (PANYC) held a conference on graduate education. Some speakers felt that the academy was not providing an appropriate education, given the number of students who worked in CRM, but the academics did not think that there was a way to include courses on topics that might be basic in running a business. But internships seem like they could bridge this gap. I believe the Applied Archaeology MA at UA incorporates these.

Vance raises some important issues (paragraph 4 and then later on) about getting funding for projects. We were able to take advantage of a no-longer extant program at NSF for “Systematic Collections” and get funding for properly housing some museum collections held by Columbia. Funding priorities change with trends as well as politics, but many of our students have been able to get dissertation funding from NSF or the Wenner-Gren Foundation for Anthropological Research, and one of my graduate students used Earthwatch as a resource for fieldwork support. Grant getting in archaeology is more significant among archaeologists than socio-cultural anthropologists at the faculty level. And we all try to make use of small grants available in connection with the university as a strategy to test a fieldwork project, or get one set of data analyzed.

Elsewhere, Vance notes how happy he was to get to the University of Arizona and that resonates strongly with me. Working in the “right setting” is very important for everyone, if you can find it. I was very happy to land at Barnard where I have been in a small collegial department (as the only archaeologist) but also connected

to the larger Columbia department where there are additional archaeologists. Both the Barnard department and the archaeology subdiscipline have been extremely cooperative and supportive units. On the other hand, one does get the feeling at times that the university (not the college) administration is oriented toward priorities other than simply education. I recognize that these are difficult times, but this perception has not appeared only recently.

Finally, my last point relates to relevance, only for me the issue is the relevance of archaeology in the wider world, not the relevance of archaeology to me. I think it is essential that all of us do what we can, whether it is public outreach or cooperating with more “applied” specialties, to encourage understanding of the utility of archaeology: as fun, as a way of knowing the past, as productive of insights into the present. I am sure I sound like a Society for American Archaeology brochure, but if the public does not understand this, much of our support for research and for the protection of sites will be endangered.

Chapter 7

Building an Archaeological Business

Michael D. Metcalf and Jim Moses

The Topic How do you determine appropriate project design and evaluate archaeological needs for cultural resource management projects? Are there constraints or opportunities that you encounter frequently? We would like Mike to approach the question from the perspective of big infrastructure projects, such as some long (trans-Wyoming-Colorado-Texas) pipelines, and Jim to approach the question from the perspective of relatively small projects – things such as cell phone towers and other smaller-scale surveys.

Resources, Potential and Energy: Michael D. Metcalf

Cultural resource management (CRM) is both an industry and a set of practices that have developed over the last 40 years in response to changes in federal legislation designed to protect historic and archaeological resources. Primary among the laws that support CRM is the National Historic Preservation Act first passed in 1966, and since amended. A complex set of laws, regulations and guidelines designed to interpret and implement Section 106 of this act provide the mandate for most of the CRM work done in the U.S. CRM as an industry composed primarily of private companies developed during the 1970s as implementing regulations clarified the intent of CRM laws, and the demand for CRM services became important. The inability of traditional archaeological institutions (universities and museums) to adapt to operating in a business context provided an opportunity for entrepreneurial-minded cultural resource specialists (archaeologists, historians, architects) to develop service businesses to meet the new demand. Some CRM

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service providers were environmental companies that added CRM to their existing services; other companies were newly founded around CRM specialties like archaeological, historical, or historic architectural services.

My name is Mike Metcalf and I am the former co-owner and a co-founder of Metcalf Archaeological Consultants Inc. (MAC) (<http://www.metcalfarchaeology.com>). MAC is classified as a large CRM firm with a full-time staff of around 32 people, mostly prehistoric archaeologists, and we provide services in about 15 western and mid-western states. After obtaining BA and MA degrees in anthropology from Colorado State University, I detoured to the Museum of Northern Arizona (MNA) in Flagstaff for a field season prior to a planned entry into the Ph.D. program at the University of Arizona. After once deferring entry at U of A in order to gain experience and earn some money by continuing as an archaeologist at MNA, I made the decision to “drop-out” of the Ph.D. track in order pursue a career in what evolved to be CRM. I left MNA in the spring of 1974 and spent the next 4 years doing archaeological contract work based out of Western Wyoming Community College in Rock Springs; 2 years as a private business and 2 years helping to found and develop the cultural resource management program at the college. After a brief stint as program manager for a larger firm, the company that became MAC was founded by a small group that included my wife Sally, Chris Zier and his former wife, Ann Hummer, and a couple minority partners. We started without work in hand, and with meager resources, but with solid training, a list of potential clients, and a lot of energy.

I think the story of the founding of MAC is fairly typical of CRM firms that got their start early in the development of the CRM industry. Recently graduated, with several years of institutional experience under our belts, and exposed to business enterprises with a new need for services, we found ourselves employed by entities that did not have a clear understanding about how to blend archaeological expertise with the needs of business clients. A new industry need for CRM services existed without there being an established base of service providers to serve this need. In my case, I had developed relationships with a number of coal and natural gas companies and it became clear that their needs for services could best be met by creating a company with services specific to these needs. At the same time, we had a strong commitment to doing high-quality, academically sound archaeology, and this commitment, as much as business skills, has been an important factor in the long-term success of the company. It has been fun, but it has not been easy. The fledgling company almost went under during the economic downturn of the early 1980s; the company split up, not out of any rancor among partners, but simply as an economic necessity. Principals of the old firm, Metcalf-Zier Archaeologists Inc. (MZAI), now lead three separate and successful CRM companies, each with its niche and each with its own story.

My interest in archaeology developed out of a love for the outdoors and exposure to anthropology through classes my mother took while earning a teaching degree during my early teen years. I veered into archaeology from an early undergraduate goal of becoming a fisheries biologist due to frustration at the rigid curriculum of the College of Forestry, and searching the course catalog for the major with the most elective classes. Upon discovering that there was actually a major in anthropology and that it was among the least restrictive in terms of required courses,

my path was chosen. A committed interest in archaeology developed through classroom exposure and field opportunities. The natural science base provided by 2 years in the forestry program, however, has proven quite valuable.

My formative experiences in field archaeology took place with hunter-gatherer sites in the interface between the High Plains and the Rocky Mountains, and though I spent a year doing fieldwork in the American Southwest, my primary research interests drew me back to Colorado where there was opportunity to work with the archaeology of foragers and forager-farmers in the greater Rocky Mountain and northern Plains regions. One might say that my archaeological interests drew me to an area that turned out to be a great place to base a business as well.

At this writing, I am in the process of retiring from the business side of CRM, though not contemplating retirement from being an archaeologist. CRM is a maturing industry with numerous career alternatives supported by an infrastructure composed of government agencies, private companies that range from small sole-proprietorships to multinational corporations and an array of museums, academic programs, and specialist firms that provide laboratory and other services. Working in CRM today is certainly different than it was 20 or 30 years ago, yet the basic things that draw a person into archaeology remain much the same – interesting subject matter, opportunity to be outdoors and in the field, participation in a discipline of interest to many people, intellectual challenges to name a few.

There are many things that were not enjoyable along the way, and each could be the subject of its own essay – personnel issues, working with confusing regulations differentially interpreted, projects that were underbid, employment regulations, insurance hassles, lean years with little or no income, difficult clients, and the need to lay off good employees during tough times are examples. Yet the rewards far outweigh the drawbacks.

Many niches need to be filled in CRM and there is plenty of room for small, medium, and large companies. From the outset, my interests have been with larger and more complex projects for two basic reasons. One is that there is a satisfying challenge in being part of the multistep process involved with an undertaking like opening a strip mine for coal or building a long electric transmission or natural gas pipeline. The second is that large projects, especially those with a set footprint, more often include in-depth research that involves large-scale survey areas and sometimes archaeological excavations. Such work entails large field crews, and necessitates a company size large enough to support the work. In exchange for the rewards of conducting interesting and challenging archaeological projects, one is faced with dealing with more employees, more regulations, safety and liability issues, inherently higher overhead costs, and higher financial risk. Small projects are generally lower in risk, higher in profit, include fewer people, require less support, and allow a company to operate at a lower level of overhead costs. But, the jobs need to keep coming in at frequent intervals if one is to survive long-term. At the same time, every project, large or small, has certain permitting, administrative, tracking, and close-out steps, so the administration of multiple small projects has its own costs and problems. MAC tries to conduct a blend of projects of all sizes, and one of the biggest challenges we face is keeping our overhead low and our efficiency high.

Because of our geographic location in a region with abundant public lands, much of the need for our services is driven by the permitting process for companies using or developing federally managed lands. We commonly do a wide range of projects ranging from a drive-way easement just a few feet in length, to 20,000 acre tracts slated for open pit mining. Projects may last from one day to several years; project types include surveys, predictive models, evaluative testing, and large-scale excavations for data recovery at important sites threatened by development. We are often engaged with Native American communities, local and regional planners, State Historic Preservation Offices, and archaeologists and managers from land managing agencies like the Bureau of Land Management, USDA (U.S. Department of Agriculture) Forest Service, National Park Service, and U.S. Fish and Wildlife Service. Working with the people from all of these entities can be challenging, rewarding, fun, or frustrating on any given day.

The key to success in private sector CRM is flexibility and adaptability, and I think this need helps define the attributes one looks for in prospective employees. Much discussion goes on about what kind of training prospective CRM archaeologists should have, and what kinds of course offerings Anthropology departments should provide to ensure adequate student training. Courses in CRM law, basic archaeological survey and excavation skills, use of geographic information technology, and the like all have their place, but no specialized courses can take the place of good writing and communication skills, the ability to analyze situations and make good decisions, the ability to get along with other people, and a willingness to work hard.

Size, Agility, and Responsiveness: Jim Moses

My name is Jim Moses and I am the owner and senior archaeologist of Antigua Archaeology LLC (<http://www.antiguallc.com>). We are a small archaeological and environmental consulting firm located in northern Arizona with easy access to most of the state. I started my company in 2005 after working for several cultural resource management (CRM) companies over the previous 12 years mostly throughout the southwest. I did work for three seasons in the mid-Atlantic region, as well as a survey in the Chugach National Forest south of Anchorage, Alaska. I graduated from the University of Arizona in 1993 with a BA in anthropology and a minor in business. I spent the next five years or so working as a cultural resource management field technician/crew chief from September to May and commercial fishing for salmon in Alaska from June to August. This proved to be a pretty comfortable rhythm. In 1999 I took a 27-month hiatus from this routine and served as a community development volunteer for the U.S. Peace Corps in the Republic of Panama. Since returning from Panama in 2001 I have worked full-time in CRM.

I became interested in archaeology when I was 15 while looking for arrowheads and potsherds on a friend's ranch east of Prescott. Like most people I had a natural

interest in anything prehistoric. My interest has now expanded to the business side of archaeology and specifically helping guide clients through the compliance process. Being self-employed did take a little getting used to though. For example, when the phone does not ring, we do not get paid. I have learned that the key is to keep your seat at the table and have faith that things will work out and that the work will come. I think this relative uncertainty is what keeps most people from going out on their own. Obviously there is an attractive level of comfort in drawing a steady paycheck from a company and getting your health insurance and days off lined up in front of you. When you work for yourself a day off comes when work dries up, and dealing with insurance companies is a constant battle. It can be a little bumpy at times but I would not trade it for anything. A couple of years ago another company offered to buy out Antigua and bring me on as a project director at a pretty good salary. However, after giving it some thought I realized that it would be very difficult to work for someone else after being independent for this long. I enjoy being able to work any hours of the day (as opposed to 8–5 business hours). If I get inspired to complete a report at 5:00 am on a Sunday morning I hop on my bike, take the short ride to my office, and finish it.

In my view, the most important part of doing a CRM project is to make sure that all historic properties are correctly identified, recorded, and managed per agency guidelines in order to ensure a smooth compliance process for the client. If I do my job correctly I have found that there exists a good balance between client needs and agency requirements, and that the process works well as long as these are the priority. I enjoy archaeology and there is still a large amount of interest in it for me after all these years. I have often thought of starting another type of business, however, and could see myself satisfied doing so.

Antigua personnel include myself, my wife Sarah Luchetta (also an archaeologist), several part-time field technicians, and two associate biologists/environmental compliance specialists. We conduct Class I–III archaeological surveys, tribal consultation, archaeological monitoring, and testing projects, as well as a wide range of environmental compliance services including preliminary initial site assessments, native plant studies, and environmental assessments. Our company has grown from doing all small (less than 10-acre) archaeological surveys to tackling 5,000+ acre surveys, archaeological monitoring, excavation, as well as environmental work.

Our goal for Antigua Archaeology is to stay small, agile, and responsive to our clients. Having worked for several larger companies, like many people, I have experienced inefficiencies that come with the territory of being part of a larger firm. As long as we stay small I know that the quality of the work we do will remain high and that our clients, and agencies, will be more satisfied for it. Our mission statement, which we include with our formal Statement of Qualifications is “to provide archaeological and environmental services to our clients in the most timely and efficient manner possible.”

The Antigua name is both archaeological and serendipitous. My wife Sarah and I spent several months in Guatemala before we were married. Sarah was involved in a University of Arizona excavation of a large temple site in lowland Guatemala (Aguateca I believe). We spent a lot of time in Antigua, which is the capital located

about 45 min west of Guatemala City (if you have never visited Antigua I suggest you do). In thinking of a name for our company we wanted to make sure it would be something that meant something to us, and that it would be listed first in the phonebook. The name Antigua met those criteria.

As with any business we receive our projects mostly through word-of-mouth. I would say that over 90% of our business is either repeat business or a result of a reference from a current client. We tried a variety of more “brick and mortar” type of marketing like a Web site, yellow pages ads, mailing out fliers, etc., and found that word-of-mouth is the way things really work. Scoping archaeological survey projects is a pretty straight-forward process for us. We generally charge a per-acre fee for anything over 100 acres. If work requires significant travel or overnight we add mileage and per diem at the standard rates. This has worked well for us. Monitoring projects are on a per-day basis, and excavation jobs require a bit more thought. So far we have simply followed agency guidelines and have kept projects scoped within what the agency expects.

Getting Antigua up and running was technically a pretty simple process. What was difficult was gaining the courage to believe that I could actually pull it off. Letting go of the 40 hour paycheck was the hardest thing to do. Before I started Antigua I was working at Pima Community College in their archaeological field methods program as an assistant instructor. This was a very steady, fairly well-paid position with the full quiver of benefits. Feeling unchallenged and uninspired I simply walked away from that position one day. I never once looked back.

We recently moved Antigua from Tucson to Prescott and have become a lot more integrated with the local archaeology scene as a result. We are active members of the local archaeological chapter. We have met, and have worked on projects with, two local archaeologists here in Prescott.

To date, we have not yet had a chance to prepare publications other than technical reports or undertake other forms of public outreach and interaction. However, Sarah will teach an archaeology course at Prescott College beginning in spring 2010.

Because we are a small company we are extremely efficient. No big store front, no big office building, and all that goes with those. We work via email and cell phones and are able to complete projects very quickly and efficiently. After working for other large companies I am still surprised how quickly and well we can complete our projects. I believe that the traditional business paradigm of hopping in your car, driving to an office, and sitting at your work desk just to email your co-worker two cubicles away will eventually fall away as the business landscape becomes more of a network of associates working independently on specific projects for a time and then re-forming with other associates to tackle the next project.

What I enjoy most about running my own business is the challenge. I also enjoy being able to conduct projects the way they should be run in the absence of the bureaucracy and drama that seems to plague even the smallest companies. In fact, I see our small size as an advantage over larger firms. We are much more responsive than most companies, and are able to deliver the same high-quality reports in a much more timely and efficient manner (now I am sounding like our mission statement). I cannot think of any challenges that are specific to CRM archaeology and particularly small CRM business owners.

Most of our clients are professional developers and realtors who understand the permitting process. As such, they view what we do for what it is; a necessary step to meet agency requirements. Individual clients (those looking for legal access across state land to reach a privately held parcel, for example) sometimes struggle with the financial burden of doing the compliance work and will use us as a pipeline to vent their frustrations.

In sum, I think CRM might be better off if there were more small companies like Antigua and I believe the business world in general would be better off if there were more small companies. I see a time (and it seems that it may be happening already) when the “big box” company paradigm will no longer be able to compete. The office business model that we currently use (that is, where people drive for miles to arrive at a single location to work) has been around for a long, long time and is becoming less and less efficient. This model was created before cell phones, fax machines, internet, and reliable communication. Today, with cell phones, on-line fax services, hand-held internet and email capabilities, I can run my business from anywhere in the world and my employees can perform their job largely whenever, and wherever, they choose.

Final Thoughts on Evaluating Archaeological Needs in Cultural Resource Management Projects and Building an Archaeological Business: Michael D. Metcalf

My best advice to a young person contemplating a career in archaeology (or any discipline) is to do the best one can to become a good writer, to learn good researching and interpersonal skills, and to do some real soul searching about one’s long-term objectives. As I mention above, there are many niches in modern CRM. The road to a long-term career often begins with seasonal field experience much as Jim describes for his early career. Is one willing to spend six months or more a year for at least several years living a relatively nomadic existence and working hard while learning skills that will transfer to office-based jobs of various sorts? Most successful archaeologists in the private sector, as well as in government and other agency jobs spent time in field situations early in their careers. Those of us running private sector CRM firms or programs have built a life around this sort of pattern. Other successful people in CRM jobs have chosen paths that allow more stability for various reasons – family, economics, and personal preferences with regard to life style. The message is to know yourself, and to shape your skills to the direction you choose.

One of the main challenges CRM archaeology faces, whether it is being done by small or large companies, by institutions, or by individuals, involves relevance. Historic preservation, and all the activity that goes into it is both time consuming and expensive. It is supported in one way or another by our fellow citizens – either through taxes or consumer costs for things like fuel and electricity. The public is inherently curious about the story archaeology can tell – but does CRM do a good job of telling this story and making it relevant to this public? The answer to this question is, sometimes...but not nearly often enough. Progress is being made – various

kinds of educational and public outreach are now built into data recovery projects. Publication of popular reports, field participation with local archaeological societies and educators, field trips for local schools, monetary and professional support for local museums, and classroom visits and public speaking engagements are all examples of activities built into some of our projects. Professional associations like the Society for American Archaeology and trade associations like the American Cultural Resource Association recognize this challenge and are devoting resources to solutions.

A big challenge to CRM companies today is one of competition and consolidation within the industry. A trend for the last several years has been for larger CRM companies to expand, and for multiservice engineering and environmental companies to create or acquire divisions to provide CRM services. Like Antigua, MAC has had overtures for being acquired or for mergers with other companies. We have to face questions about the optimal size for our business and whether it is in the best interests of our employees to remain independent, to try to grow, or to court being acquired by a larger company. There is no simple, or one size fits all solution. Small companies like Antigua can likely find, and hold onto a niche. Companies the size of MAC (large by CRM standards, but tiny in terms of general business classification) also enjoy a cost and efficiency advantage over traditional large businesses, but finding and holding niches is more difficult now than in the past.

A large part of success lies in the motivation of the firm's principals. In order to create a long-term succession plan that leaves MAC in the hands of motivated owners, we created an employee ownership program in 2002. MAC is now 100% employee owned – every employee is eligible to participate in the ownership program, subject only to length of employment and vesting policies. There are no majority owners. The long-term welfare of the company is in the hands of its employees who will share in its success or failure. MAC is not unique in being an employee-owned CRM company, but the general concept of employee-owned businesses is relatively new in CRM. I believe that companies owned and managed by dedicated resource specialists can remain true to a value-driven mission. Currently, most CRM firms are committed to quality work, fair treatment of employees, and have a service ethic that includes their clients, the profession, and the public. I also believe that CRM will remain strong and maintain its relevance only so long as this remains true.

Chapter 8

The Changing Mission of Museums

Stephen E. Nash and Nancy O'Malley

The Topic What are the current “missions” or goals of anthropology and archaeology museums today and, in your experience, how have they changed during your career? Are there organizational or funding obstacles that have been overcome? Have new organizational and funding challenges taken their place? Who decides on the overall goals the museum? Have you been able to accomplish what you have wanted to accomplish in your position? What and how?

A View from Denver: Three Decades, Three Institutions, and Lots of Fun: Stephen E. Nash

On July 7, 1967, under the headline “Chicago Twins Meet Yoruba Twins,” my twin brother Peter and I, then almost three years old, appeared in a photograph published in the *Chicago Sun-Times* (Fig. 8.1). Our father was the managing editor of the *Field Museum of Natural History Bulletin* and engaged in the public relations effort to introduce a new temporary exhibition (*Yoruba Twin Figures*) of 68 recently acquired *Ibeji* statues. Thirty-three years to the day after that photograph was published (i.e., July 7, 2000), I received a \$14,490 grant from the Museum Loan Network to photograph and research the *Ibeji* (Fig. 8.2). I was then serving as head of collections in the Department of Anthropology at the Field Museum, and part of my job was to garner resources to pay for work on the collections, about many of which I had little or no

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Fig. 8.1 Stephen and Peter Nash with *Yoruba Twin Figures* in 1967 (photo courtesy of Stephen E. Nash)



Fig. 8.2 Stephen and Peter Nash with the same *Ibeji* in 2000 (photo by Mark Widhalm, courtesy of the Field Museum, negative no. GN89822.5 C)

expertise. In hindsight I would like to say that following in my father's footsteps and closing this familial and professional loop was part of some grand plan, but this is not the case. As with many archaeologists who find themselves working in museums, my career trajectory was, and is, due as much to happenstance as circumstance, to dumb luck as grand design, and to hard work and perseverance as contingency.

This chapter examines the contemporary relevance of museum-based archaeology through my personal lens and a structured professional framework. The personal lens is that of my own career, which includes employment as a tour guide at the Museum of Science and Industry (1980–1988), a postdoctoral research position at the Field Museum (1997–1999), the aforementioned service as head of collections (1999–2006), and service since 2006 as chair of the Department of Anthropology and curator of archaeology at the Denver Museum of Nature & Science (DMNS).

The professional framework through which I examine the contemporary relevance of museum-based archaeology is the fact that many museum professionals are responsible for making contributions in five broad realms: (1) research (typically, though not exclusively, in the field), (2) exhibition and outreach, (3) collections acquisition and curation, (4) administration, and (5) service, the latter to both the discipline and one's home institution (see Nash 2010). Although the time, effort, and resources that any one museum archaeologist invests in these realms will shift according to changing institutional priorities, idiosyncratic historical moments and opportunities, and new personal and professional trajectories (see Haas 2003), these realms nevertheless provide a common framework on which to discuss the challenges facing museum-based archaeology and archaeologists.

Public Views and Understandings

As a museum-based archaeologist, I would like to think that museum anthropology and archaeology programs play a critical role in developing public understandings of the past and the general profession of archaeology, but I remain skeptical. Museum employees and administrators tout attendance figures. The DMNS, for instance, attracted more than 1.3 million visitors and served more than 300,000 school children in 2009. While impressive, these numbers pale in comparison to pop culture presentations of "archaeology." For instance, the population of 1.3 million people directly served by DMNS in 2009 constitutes less than half the number of people who viewed *Indiana Jones and the Kingdom of the Crystal Skull*, the latest installment of this archaeologically ignominious series, on the day it opened to the public, May 22, 2008. The similarly ignoble, if not ignominious, *Naked Archaeologist* television program on the History Channel reaches more viewers on a bad day than most museums can hope to reach in a year. Billed as "fast, funny, irreverant (think Ali G. meets Indiana Jones)[!]," how can museums compete? The fact remains that most of the public gets, and will continue to get, its "information" about archaeology from TV and movies, not museums or books. The question is, what can, or should, we do about it?

The obvious answer is that we cannot compete with these mass media, and arguably should not try to, unless it is to correct glaring errors of fact or apparent violations

of archaeological laws and ethics. In lieu of taking on these big guns, we should nevertheless insist on the production of ground-breaking, provocative exhibitions with excellent material culture and intellectual content, and we should continue to engage an interested public. When I state that I am an archaeologist or curator, I am almost never told "How boring!" Most often, my conversants say, "I always wanted to do that, but never knew how I could make a living doing so." Public interest is there. As threatening as the sheer numbers reached by cable TV and hit movies may be, many, many people still seek compelling contact with authentic artifacts and intellectually sound interpretation.

Overall Goals: Who Decides?

Many museum-based anthropology departments, particularly those in medium-sized and large institutions, are structured like university departments, with a department chair and any number of curator (e.g., faculty) positions. Beyond those, there are usually professional staff positions, in variable numbers, filled by collections managers, conservators, the occasional repatriation specialist, and their assistants, volunteers, and interns. In this environment, some decision-making occurs at the department-head level, but these tend to be administrative and budgetary decisions. Research decisions made by curators, particularly those who enjoy tenure, are made at the individual level and can be (sometimes disturbingly) free of restriction from the home institution's strategic planning. Nontenured museum curators face more stringent restrictions, production requirements, and annual performance reviews, but often still enjoy a great deal of freedom to pursue their own research, for the ideal of academic freedom ranges far and wide in the museum community.

On the exhibitions and outreach front, the era in which museum curators can make independent decisions about content are long gone. Exhibit developers and educators have over the last three decades come to assume a greater role in the development of these programs, often at the expense of curatorial input (cf. Terrell 1993). The standard model in which a curator comes up with an idea for an exhibit and then enlists exhibition departments for assistance in producing that exhibit simply does not happen very often. The vast majority of temporary exhibitions (e.g., *Benjamin Franklin: In Search of a Better World* and *Titanic: the Artifact Exhibition*) I have worked on are traveling exhibitions, developed by external parties, contracted by the museum administration, to which a curator then gets assigned *ex post facto*. The curator's role is then to work with the exhibitions and programming staff to embellish the exhibit, develop content around the exhibition, maintain intellectual quality control, and train various outreach personnel.

On the collections front, departments may have acquisitions and loan committees that serve as generalized, if occasionally rubber-stamp, gatekeepers for curatorial activity and provide polite ways of saying "no" in potentially awkward situations. The primary limitation for collections acquisition has often been a lack of funding for new acquisitions, as well as space and personnel constraints. Although some museums use targeted deaccessions to create acquisition- and collections-care funds,

and have used these to good effect, most museums do not have long-term collections plans in place to guide acquisitions, which then become more a function of individual curatorial research interests than institutional goals per se. This is not to say that individual curators do not represent the interests of the institution; they often do so admirably. It is to say that there are numerous examples of mission creep, in which one individual, in the absence of appropriate checks and balances, uses her or his curatorial authority to acquire a large and basically redundant collection of, say, industrially produced kitchenware that has little to do with the institution's collecting history or collection plan. Once accessioned, said collection then becomes the burden of the staff, the department, and the institution long after the curator of record is gone. This situation can be mitigated through the adoption of, and adherence to, a formal collecting and collections plan, but most museums have not codified these.

Museums receive offers of donation on a regular basis, often from potential donors who merely seek a tax write-off for a relative's beloved collection of trinkets and souvenirs made while on a grand tour many years ago. Objects and collections of questionable provenience have been left, literally, on museum's front steps because people are too embarrassed to talk with museum personnel. As we get further and further away from the passage of the 1970 UNESCO Convention on the Means of Prohibiting and Preventing Import, Export, and Transfer of Ownership of Cultural Property (<http://www.culturalheritage.state.gov/unesco01.html>), it will become harder and harder for museums to ethically ensure that archaeological collections remain in the public domain. I categorically do not lament the fact that municipal, local, state, national, and international laws and conventions exist that protect graves and antiquities (Brodie et al. 2006; cf. Cuno 2008). Rather, I lament the unintended consequences these laws hold for museums that seek to acquire and steward collections in the public trust.

Museum-Based Archaeology: All That It Is Cracked Up to Be?

When I was a graduate student at the University of Arizona, in about 1992, I remember saying to one of my advisors that I wanted to work at the Field Museum, recognizing that it is one of the world's premier natural history museums. The advisor replied "Why would you want to work there?" I was shocked, particularly because that advisor had once worked at the Field Museum and had made important methodological and theoretical contributions to archaeology while doing so. How could a respectable archaeologist *not* want to work in a museum?

Museum work has proved to be even more interesting than I expected, and I am involved in a great many activities that colleagues in college and university settings simply never get to experience. I am surrounded by the world's great material culture; I share those collections with myriad other people, and I get to continue my research on the history of archaeology and museums (e.g., Colwell-Chanthaphonh et al. 2010; Nash 1999; Nash and Feinman 2003) in an institutional setting where histories matter. The flip side is that I do not often get to teach at the university level; this has very real ramifications if I sought to develop a large research program (see Nash 2010: 117).

Major Challenges to Museum-Based Archaeology

The greatest challenge to museum-based archaeology today, as in the past, is funding. The recent recession has caused many museums to drastically cut staff, and some to close permanently. Economic crisis notwithstanding, the funding environment for museum-based work became more challenging in 1998 when the National Science Foundation canceled its archaeological systematics program, one of the few sources of support for archaeological collections processing. In the horrible aftermath of Hurricane Katrina of 2005, the National Endowment for the Humanities and Institute for Museum and Library Services, among other entities, turned their funding attention to disaster mitigation in the south. This is as it should be—those collections were, and still are, in greater danger than unaffected collections in, say, in Denver or Chicago. There are nevertheless still pressing needs in the rest of the country, where more and more museums are competing for fewer and fewer resources. Whereas *Save America's Treasures* once funded 20% of the applications it received, recent funding rates are in the single-digits and the entire program was canceled in 2011. Curation fees may provide a revenue stream that partially offsets funding challenges at a select few repositories, but I do not know of a single situation in which such fees come close to making a real dent in long-term curation costs. The American Recovery and Reinvestment Act of 2009 led to a small, temporary burst of funding opportunities through various federal agencies, but these were insufficient to affect long-term change. Stay tuned.

As a result of these challenges, archaeologists must look elsewhere for funding opportunities. I am struck by how often I am told by others that I have a great job, and how many people tell me that they wished they had followed their dream to become an archaeologist or museum curator. Often these people have charitable hearts, disposable incomes, and a need for tax deductions that could be used to fund many museum internships or even full-scale field projects. The museum archaeology community needs to embrace this enthusiasm and creatively re-engage the private sector as a fundraising source. Although the heyday of named collection expeditions may (and arguably should) be long gone, there are more civic-minded people with resources in this world to engage and support the museum community than ever before. Some museums have experimented with adopt-an-artifact type programs, but these are expensive to administer and maintain. Others have enjoyed success with various types of “friends of anthropology” groups, but these too are expensive to maintain and require a critical mass of wealthy and interested donors in the surrounding region, not to mention dedicated museum employees, to administer. Some museums emphasize travel programs to raise funds, but these are the first to suffer in economic downturns, and suffer they have, indeed.

I have enjoyed appealing to the donors who can make small but substantive donations that allow me to hire students as summer interns. One of the great joys in this business is watching the wide eyes of an interested and enthusiastic student intern on the first day of her or his internship, when they have first gained access to a priceless

and irreplaceable collection that was once, to them, off limits. Once trained, these students make ideal employees for the entry-level collections management assistant positions that are necessary for a museum-based Department of Anthropology to properly care for, and develop, its collections. Although they may leave after only a year or two, hopefully for graduate school in anthropology or museum studies, they will have made a tangible contribution to that museum, will never forget their museum experience, and will go on to become ambassadors for the museum and its programs. The donors who fund these programs enjoy knowing they have made a difference in a young person's life and in caring for important cultural resources.

Conclusion

It is indeed an interesting time to be a museum-based archaeologist, but I suspect this has always been the case. One need only look at the length of time that museum-based archaeologists have often remained employed at a single institution to recognize that these are plum, if often undercompensated, jobs. It is nevertheless curious that more archaeologists do not strive for employment in museums, and lack of geographic and institutional overlap between the top graduate archaeology programs and the few museum studies programs in this country is noticeable and defies easy explanation. That said, the lucky few of us who have gainful employment in active museum settings should consider ourselves lucky and enjoy every minute of our precious opportunities. I sure do.

A View from Kentucky: Three Wishes, Two Would Do, Pick One to Start: Nancy O'Malley

I have always been a fan of fairy tales and one of my favorites as a child was *Aladdin and the Magic Lamp*. Three wishes offered unconditionally! Thinking about the problems and opportunities that museums face today, I think a lot could be accomplished with just two wishes. First and foremost, I would magically change the attitude of many people in my field concerning the function and purpose of museums. A change in attitude would make wish number two much more effective. For my second wish, I would ask for enough funding for museums to fulfill their missions, be adequately staffed and work toward innovative and exciting engagement with the future.

I am the Assistant Director of the William S. Webb Museum of Anthropology at the University of Kentucky in Lexington. I have been employed fulltime in this capacity since 1999 but my association with the Museum extends for a much longer period of time, beginning in 1990 when I helped create a computerized accessions system for the museum collections under a National Science Foundation grant and continuing on a part-time basis as curator/collections manager. I served as Acting

Director from July 1997 to August 1998, during which the time the Office of State Archaeology was combined with the Museum. I have also contributed many collections to the Museum and utilized older collections as a result of my archaeological research that began when I moved to Kentucky in 1979. I think it would be safe to say that little has happened at the Webb Museum over the last 30+ years in which I was either not involved or unaware. Having said that, my museum experience is largely confined to work in a university-based institution that is large in terms of collections but quite small with regard to budget, exhibits, physical space and public presence. In this respect, my situation is quite different from Stephen's.

The Webb Museum was begun by physicist William S. Webb and biologist William D. Funkhouser in 1931, just 4 years after the pair had gained approval for the establishment of the Department of Archaeology and Anthropology. Prof. Webb's service as head of the archaeology program in Kentucky for the Works Progress Administration during the Great Depression led to large-scale excavations whose assemblages formed the core collection of the Museum. The department's responsibilities increased in 1962 when the Kentucky Antiquities Act was passed, giving the department the responsibility of maintaining the state site files and issuing excavation permits for research on municipal, county or state land. Administrative duties were fulfilled by various faculties until 1976 when the Office of State Archaeology was officially established and a fulltime director hired. A fulltime director for the Museum was not hired until 1984. The Office of State Archaeology and the Museum remained separate entities until 1997–1998 at which time they were combined under a single director who was also a member of the faculty with reduced teaching duties.

Looking back over newspaper coverage of the museum and its activities, internal memos and other clues, it becomes evident that the Webb Museum quickly became known as the largest repository in the state for an ever-increasing quantity of archaeology collections while also offering undergraduate and graduate training, exhibits, and educational programming for primary and secondary grades. Many archaeologists who went on to become very well known in American archaeology – William Haag, John Cotter, Don Hardesty, Douglas Schwartz, to name a few – as well as notable cultural anthropologists spent time in the anthropology department at the University of Kentucky. The addition of the Office of State Archaeology to the Museum's responsibilities made it possible for the records of each to be better complements of each other. The Museum continues to focus on curation of its collections and its role as a research institution for professional researchers. The museum's role as an exhibit and public education venue has waned recently, a victim of inadequate funding and staff. Currently, our exhibit space is limited to the vestibule of our departmental building and public education is served by a loan case of artifacts that teachers check out for use in the classroom. The diminution of our public education programming promises to take our museum off the radar of local educators.

Inadequate funding is largely to blame for the contractions in the Museum's mission and capabilities over the years. With the combination of the Museum with the Office of State Archaeology, what once was two full-time 12-month jobs became one 10-month tenure track faculty appointment with teaching responsibilities added

to it. The addition of the Assistant Director's position was a welcome one but it came at the expense of a lower level staff position whose budget line was tapped to contribute to the assistant director salary. Despite the chronic understaffing and inadequate budgets, however, the dedication of the various directors and other staff (and I include myself among this group) kept the museum vital and active, if not always thriving at the level we would have preferred. Exhibit tours for school groups were regularly given by our graduate research assistant, and the establishment of curation fees in 1991 helped the financial bottom line although by no means made up for an inadequate budget. Additionally, all of the professional staff conducted high quality archaeological research of their own and so contributed positively to the museum's public persona. Although it is undeniable that the Museum has been very much affected in a negative way by lack of adequate financial support, and we have been forced to give up programs as a result, it remains also true that we have a world-class collection of artifact assemblages, a small but impressive ethnographic collection (both within computerized systems) and state site files that are managed in a Geographic Information System. Given our size, staffing and available resources, these are impressive accomplishments.

Looking forward, I see some critical challenges ahead for the Webb Museum, ones that are shared by many museums across the country. Perhaps most critical is the curation crisis. Contract archaeology produces a staggering amount of archaeological artifacts and documents every year. The federal government has guidelines for proper curation facilities but few places, Webb Museum included, meet the criteria. Insufficient space to expand as collections grow and inadequate environmental systems are just two of the shortcomings of the Webb Museum and many others institutions.

Another issue of concern is the use of the Museum's holdings measured against the expense and effort required to maintain them. The expense of maintaining archaeological collections is primarily borne by the institutions within which they are housed with little support from federal or state agencies that rely on us to keep their collections safe and make them available for research. As budgets contract, the rationale for spending tens of thousands of dollars on staff, facilities, utilities, and supplies to make available archaeological collections for research can seem pretty unconvincing to University administrators who are trying to retain faculty in absence of financial and professional incentives, manage escalating undergraduate enrollment with no increase in instructional personnel, and find funding to replace shrinking state government support. How many researcher visits per year are necessary to justify the outlay of scarce funds to keep our doors open? The combined resources of the Museum and the Office of State Archaeology attracts on average 300 users every year. When our exhibits were open, we hosted numerous school groups per year.

All recorded archaeological sites in the state are assigned permanent site numbers here and their information managed by our staff, making us an essential component of conducting contract archaeology. We are the largest archaeological repository in the state and home to all of the New Deal Era collections, many of which attract researchers from all over the country. While some of our collections, such as those

from the Archaic Period Indian Knoll Site, are frequently accessed by researchers, others have not been reexamined since they were curated and many are unlikely ever to be reanalyzed again. It is anathema to many archaeologists to even consider deaccessioning collections of negligible scientific value but limitations of space and resources push this problem to the forefront again and again, there only to be hotly debated for a time, then allowed to subside. Having begun my career when the "New Archaeology" was still new, I understand the rationale that has led to comprehensive and near total collection of artifacts from excavations but 30+ years of this practice without any significant assessment of what is most valuable for research or the adoption of rigorous sampling strategies that reflects our gains in knowledge (and thus allows us to NOT collect everything) has brought us to the crisis that all curators and collections managers deal with everyday.

Another challenge lies in the realm of public education and the role of the museum in providing accurate, relevant information to a nonprofessional audience. For many years, primary and secondary school teachers have relied on the Webb Museum to provide guided tours of its exhibits. Repeated attempts to secure funding from the college to update our exhibits met with no success; as a result, the decision was made to close two of the three rooms we use for exhibits. The closing of most of our exhibit space has eliminated our guided tour program and constitutes another lost opportunity to explain archaeology to the public. We have recently established a relationship with the university art museum to collaborate on exhibits in their beautiful exhibit space, using our ethnographic collections, and I am optimistic about the possibilities for the future.

But museums like the Webb Museum should be the go-to institutions to provide public information about archaeology. There ideally should be support for outreach education programs that offer opportunities for people to get involved in archaeology, encourage the protection of significant archaeological sites, and become more knowledgeable about what the past can tell us. It would be very nice to put to rest the "Fred Flintstone" mindset in which archaeology is equated with paleontology and geology. The recent success of the Creationism Museum in northern Kentucky highlights this problem. I would love to see museum programs that disseminated information in many different formats, whether it be printed matter, Web sites, visual media, etc.

So what is to be done? While lack of sufficient financial support is certainly a major problem, I do not think it is our only or even our most pressing problem. If, in a perfect world, there was enough money to support all the museums who curate archaeological and anthropological collections, we are still dodging the question of relative worth. Material culture is the archaeologist's *raison d'être*, our claim to uniqueness within the social sciences. But most of us understand that not all artifacts or other objects of material culture (such as documents) are equal, particularly among the mass-produced classes of historical artifacts. Yet our collection strategies continue to function as if they are. If we do not do something about the problem, I am fearful that the decisions will be taken out of our hands and handled by people who do not see why we have to keep "all those bones" (a quote from a former dean but increasingly echoed in the political arena). Conducting worthy and informative

research, disseminating our research through many media and to many audiences, presenting a convincing and compelling argument for the importance (i.e., relevance) of archaeology to the rest of the world – all these goals are interconnected and related to the problems of funding, space, and justification.

In sum, archaeology and anthropology museum programs have many challenges. Virtually none of them are adequately funded and they will not be until their parent institutions, funding agencies, or other powers that be recognize that they are more than repositories for artifacts. We have a bad PR problem. And the problem begins at home with our own practitioners. Museum collections have a great potential for our profession to conduct cutting-edge analysis and to apply innovative and creative techniques that will greatly enhance our ability to interpret archaeological data. I am happy to report that our departmental faculty encourage our students to use museum collections for course papers and even thesis and dissertation topics. Our human skeletal collections attract researchers all over the world. But we can do much better.

I have often reflected on the cumulative nature of archaeological interpretation, both in my own professional life and for the discipline as a whole. I feel more competent as an archaeologist now than I did 10, 20, or 30 years ago. But I also anticipate that I will continue to hone and refine my ability to understand our human and cultural past and that this journey will involve revisiting evidence and reassessing my interpretations. John C. McEnroe (2002) expressed this tension beautifully:

Archaeology is not simply the finite body of artefactual evidence uncovered in excavations. Rather, archaeology is what archaeologists say about that evidence. It is the ongoing process of discussing the past which is, in itself, an ongoing process. Only recently have we begun to realize the complexity of that discourse. ... [T]he discipline of archaeology is a site of disputation – a dynamic, fluid, multidimensional engagement of voices bearing upon both past and present.

Museums and their collections are the storehouses of the evidence that we need to make this ongoing discourse possible.

Final Thoughts on the Changing Mission of Museums: Stephen E. Nash

My experience differs from Nancy's in many ways, most notably the fact that I have never worked for a university-based anthropology/archaeology museum. Having had the blessing of working at two of the largest natural history museums in the country, my experience is certainly less than typical. I suspect that the challenges Nancy has faced in her career are more similar to those experienced by most museum-based archaeologists than are mine. Whereas I got into the museum world when the National Science Foundation still funded systematics work on archaeological collections, and have had the privilege of working with undeniably world-class collections in well-established institutions, Nancy has worked on remarkable collections in her own right, but while fighting state and university administrators who may not understand the value of archaeological and museum collections.

I am glad that Nancy brought up the issue that not all artifacts are created equal. In cocktail party conversations, as well as more serious contexts, I have often stated that I can easily solve the curation crisis, if the discipline would consider deaccession (there, I said it), in any meaningful, mature, reasonable, and rational fashion. Unfortunately, most archaeologists flee from the topic while conducting more and more destructive excavation, and museums are left with a greater and greater burden of un- or poorly analyzed collections. The madness must stop.

With regard to exhibition development, Nancy has enjoyed more freedom than I, budget constraints notwithstanding. Smaller museums enjoy much greater autonomy in exhibition design and development, and much of it is indeed curator driven. Larger museums in search of blockbuster exhibitions typically consider audience interests over those of the curator; perhaps this is as it should be, for a large exhibition has to be many things to many different people, and curators often focus too narrowly on their own research, not their audience's interests.

As should be clear from my paper, I disagree with Nancy's assertion that we "have a bad PR problem." I certainly have not experienced this. Yes, we face many challenges, but I have been blissfully unaware of bad PR, unless we have proposed changing an old, beloved exhibition, no matter how worn. The old adage seems to hold true in museums, too – everyone wants reform, but no one wants change.

If I could change anything in this business, I, like I suspect Nancy, would align three currently disparate entities toward a common goal for museum-based archaeology: (1) the public's inherent interest in our subject; (2) the often unseemly amounts of disposable income produced by Western-style capitalism; and (3) a preservation, conservation, and (most importantly) dissemination ethic amongst archaeologists such that museum archaeology again returns to a central position in the discipline and in society. We need to continue pushing our intellectual boundaries to engage that substantial segment of the public that we know, for a fact, is interested in our work. We need to be more inclusive in a rapidly diversifying America. We might also do best by simply avoiding direct competition with pop culture. The *Naked Curator* simply does not have a nice ring to it.

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Chapter 9

Scoping Archaeological Projects in Relation to Specific Regulations

Richard Perry and M. Jay Stottman

The Topic How do you decide the appropriate scope for projects? Where and how are you able to be creative, and when (if ever) do you find a more “standard” approach is better suited to the task at hand? What constraints do you face when determining the scope of a project? And what happens when you find something unexpected? What latitude do you have in changing projects and doing the job you would like to do?

Unexpected Results from a Base Realignment and Closure Project at the Sierra Army Depot in Herlong, California: Richard Perry

Unusual situations can bring unusual opportunities. Development and implementation of the archaeological research design for Honey Lake is a good example of this. Beginning in April 2003 the Sacramento District, U.S. Army Corps of Engineers (Corps) contracted with Statistical Research Inc. (SRI), to conduct a field survey of 3,554 acres for the land transfer of Honey Lake back to the state of California. The overall transfer of 62,119 acres of Honey Lake and the adjacent East Shore Reuse Parcel to the State of California and Lassen County was the U.S. Government’s first ever conservation conveyance under the authority of Base Realignment and Closure Act of 1990 as amended in 1995. The Base Realignment and Closure Commission,

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commonly known as BRAC, ordered the conveyance. Honey Lake was administered under the authority of the Sierra Army Depot (SIAD).

The conservation conveyance of Honey Lake was an atypical project for both the Corps and me. Traditionally, the Corps's mission is maintenance of the Nation's waterways, and military construction. Typical projects for those of us in Planning Division are the flood damage reduction type of feasibility studies. The average length of time from the inception of a study to construction is 20 years. Construction alone of some of the larger, more complex projects, such as the Santa Ana River Main Stem project, can take over 20 years to complete. The BRAC office required the Honey Lake Transfer project to be completed by September 30, 2003; the end of the federal fiscal year. The compressed five-month project schedule facilitated my ability to secure the appropriate funding to conduct out of the ordinary archaeological studies.

I have worked for the Corps for 20 years as an archaeologist. I was fortunate to get my job as a result of my former wife's work-study position with the teachers union at California State University, Los Angeles. In the spring of 1989 she delivered some union documents to Dr. Fred Reinman, the CSULA archaeology professor, who informed her that there was an opening for an archaeologist at the Corps to replace his wife who had just given her notice. I filed an application and was hired that August. Prior to working at the Corps, my interests in archaeology were purely research oriented. After I started working with Section 106 of the National Historic Preservation Act I began to understand the value in preservation of historic properties. I am tasked with evaluating various prehistoric and historical period sites for their potential for National Register eligibility. My position involves working with contractors, both from the Corps and permit applicants, and conducting my own background research and field surveys.

The State of California had loaned Honey Lake to the U.S. Army for gunnery practice in 1933 with a right of reversion to retake possession of the property if the U.S. failed to continue to use it for "aerial training, military camps, and other Federal purposes" (U.S. Army Corps of Engineers 2003). At the time of the BRAC decision to transfer Honey Lake, the State of California was not interested in reacquiring it. An interim transfer agreement was made with an ad hoc team called the Honey Lake Conservation Team, which was comprised of elements from the Trust for Public Land, Michael Baker, Jr. Inc., The Center for Urban Watershed Renewal, and the Bioengineering Group. The East Shore Reuse Parcel was transferred to the Lassen County Reuse Authority, with a small percentage of acreage going to the Susanville Rancheria.

The archaeological aspects of the project were complex on a number of different fronts: working with the BRAC office, internal Corps issues, the field survey of 3,554 acres, and compliance with the National Historic Preservation Act and related coordination with the State Historical Preservation Office (SHPO). As it turned out, one of the potential complications of the project generated something of a windfall. Since the transfer had to be completed by September 30, 2003, the BRAC office was not hesitant to provide full funding for the cultural resources aspect of the project. I expect many readers know just how rare this sort of funding situation can be.

Honey Lake is located at the intersection of the northwestern Great Basin and the eastern Sierra Nevada Front. The western boundary of the lake, adjacent to Highway 395, is the remnant shoreline of Pleistocene Lake Lahontan. When I developed the

first scope of work for the archaeology survey, I assumed that Honey Lake would have a fairly high site density along the shoreline perimeter because it had the potential to have hosted 10,000 years of lacustrine occupation.

I defined the Area of Potential Effects (APE) for the project as an approximately 100 m wide band around the lake based on the distance from the Lake bottom and the meander line as defined by the Government Land Office in the 1860s. Known impacts to the APE included rampant looting from the local ranching population, and steady insistent erosion from a relentless wind, and the raising and lowering of lake levels. Other than illegal artifact collecting there was no recreational use of the lake.

I decided to contract with SRI because I had already worked with them for more than 10 years in the Los Angeles District. On numerous occasions they had demonstrated they had the personnel and technical capabilities to handle the rapid schedule, the high site density I anticipated for the APE, and the research capacity that might be required to identify Pleistocene-aged sites along the shoreline. These capabilities were quickly put into practice as initial survey results found a site density three times higher than I had originally predicted.

With this site density in mind, Jeff Altschul, then President of SRI, and I took a good look at the expected complexity of the project. We decided that the work SRI was to do would have a dual purpose (Wegener et al. 2004: 3). The principal purpose of the survey was to document the archaeological record to a degree that the Corps would have enough information at hand to make determinations of eligibility, and to adequately develop plans for the management and treatment of historic properties at Honey Lake. The second purpose of the research design was more research oriented. The goal was to understand how humans adapt to life in a great basin wetland and how it affects their economic practices, social system, and worldview.

By using landscape anthropology as a frame of reference, SRI's research focused on a series of themes: lithic technology, source material, assemblage composition, and site function for prehistory. Historic period themes centered on homesteading, ranching, water control, transportation, military activity, and casual land use for recreational purposes. Additionally, this part of California had had very little archaeology done in it, and certainly nothing of this magnitude. I was able to secure adequate funds to have SRI do an exhaustive background search, write a thematic culture history section, hire paleoenvironmental experts Manuel Palacio-Fest, and Dr. Peter Wigand, send out three teams to insure a thorough 100% survey coverage of the APE, conduct X-ray fluorescence on obsidian artifacts, carry out lithic analysis, and process a limited number of radiocarbon dates.

As I mentioned in the opening paragraphs above, this type of project was not at all typical for the Corps. This was the case for both project type, and level of archaeological studies. I determined that with the level of funding available and the importance of the archaeology of the area that advanced research was possible and necessary. As the project archaeologist, the decisions were left up to me and I remained supported by the project manager throughout the year for my funding requests. On two occasions I was provided funds that I had not requested. This, however, was an unprecedented opportunity to conduct levels of analysis that are not usually done in a Corps study, at least not in the Sacramento District.

The results of the research were beyond our expectations. A total of 116 sites were recorded within the 3,554-acre APE, including 75 prehistoric (18 Paleoarchaic, 14 Early Archaic, 38 Middle Archaic, and 36 Late Archaic), 9 historical period sites, and 32 multicomponent sites. Additionally, 149 prehistoric, and 24 historical period isolates were recorded. Seventy-five of these resources were recommended as eligible to the National Register of Historic Places. Other results included a pilot pollen analysis program to determine future paleoenvironmental reconstruction, and obsidian sourcing to determine the lithic procurement strategies of the Honey Lake inhabitants.

Thanks to the comprehensive research design that SRI developed, they generated enough high quality data to fill a 617-page report. The resulting report was distributed to most of the top academic researchers who work in the Great Basin. Consistent with Corps policy I had multiple copies of the report printed for distribution to serious researchers. SRI produced 100 copies of the report as specified in their contract. I had decided to send the report primarily to academics, and other professionals who conduct extensive research in the Great Basin. I culled the list of recipients from people that I knew were active in the Great Basin, report bibliographies, and recommendations from others. Comments I received regarded the report as a significant contribution to Great Basin Prehistory (Donald Grayson 2004, personal communication; David Hurst Thomas 2005, personal communication).

As with many cultural resource management projects, results of this project have not extended far beyond distribution of the report. Three conference presentations were made about the project, including one at the Great Basin Anthropological Conference in Sparks, Nevada, one at a Corps workshop preceding a Society for American Archaeology meeting in Salt Lake City, and the Society for Northern California Archaeology, Northern Data Sharing meeting in Redding, California. To date, there have been no efforts made to produce other types of publications, or spin off journal articles.

Success in the field also had a price, however. Private property owners, who over the years have increasingly encroached on the federal property, owned land on two side of Honey Lake. The property owners are mostly cattle ranchers who took advantage of lax government oversight of the property and had been allowing the cattle free reign over it. In addition to the rampant vandalism of the sites by the locals, and the destruction caused by cattle, the property owners did not allow SRI access on their property to conduct their survey. They were apparently concerned that the Government would reset their property lines thereby diminishing their usable acreage. Accordingly, an inordinate amount of time was spent/wasted getting in and out of the survey area every day. This also drove the cost of the survey up measurably.

And there were other down sides. First of all, dealings with the SHPO were quite arduous. For whatever reason, they unnecessarily complicated the compliance process. Compliance with Section 106 was barely completed in time for the transfer to take place. Second, there is no evidence that the Honey Lake Conservation Team developed any measures or procedures to manage the cultural resources, or take any steps to protect the Early Holocene sites on Honey Lake that were badly eroded. Fortunately, the sites were all recorded, and we were able to retrieve the immense

amount of data that we did. The situation at Honey Lake is probably more dire now than it was before the project. The sites were suffering from extensive erosion and vandalism long before the transfer, and after ownership and management of the lake has changed twice since the Federal Government's involvement ended, those impacts remain unchanged. With the serious budgetary problems that the State of California is currently having, there is little reason to assume that funds will ever be allocated toward the proper management of the lake, and its valuable cultural resources.

This is one of the greatest challenges of compliance projects. It took an unusual scheduling situation to generate funds and support (or at least, a lack of objections) to do a sizeable research-based project. However, in spite of the quality of research that was done and nature of the resources that were found, funds were not continued to protect and maintain those resources. While I am committed to high research quality and look to ensure that projects under my supervision not only comply with historic preservation legislation but contribute back important information to the field of archaeology, many projects with longer schedules can face major problems of funding and support throughout. Perhaps the contract between the Government and the Honey Lake Conservation team could have, or should have been written to require a certain expense of funds to mitigate or halt the continued damage being done to the early Holocene sites. Unfortunately, without additional funds the rich archaeological landscape will be left to fend for itself. Fortunately, with the funds I did have we were able to retrieve and properly document immeasurable amount of high quality data that otherwise probably would have never been gathered.

Archaeology in the Cracks and Seams of the Regulatory and Contract Archaeology Culture: M. Jay Stottman

Over the last 40 years, archaeology in the U.S. has largely been a product of cultural resource management performed by contractors within a regulatory framework. Since the enactment of the National Historic Preservation Act (NHPA) in 1966 and its accompanying Section 106 Process, archaeology was legitimized as a necessary and important service with a preservation and salvage mission. At this time there was literally a boom in the field of archaeology, due to the regulatory mechanism that created and funded archaeological research on a massive scale (King 1998; Neumann and Sanford 2001). The benefits of this system are undeniable, hundreds of thousands of sites have been recorded, important sites have been investigated, many contributions have been made to research of the past, and thousands of archaeologists are employed. It has been so successful that most archaeological research and archaeologists are either products of or have been associated with this system at some point. However, with this system that has produced so much, comes its domination of archaeology that emphasizes standards, procedures, compliance review, and mitigation. Much archaeological work in this context has become routine, using standard methods to address standard research questions, because it is necessary to ensure that the work contributes to the mission of salvaging

archaeological data and preserving knowledge of the past. The result of this process is that many archaeological opportunities are overshadowed by the dominance of the regulatory contract world.

Archaeologists have become so accustomed to the process of the regulatory contract system that they often only think that it is the only way archaeological projects are created and the only opportunity to deviate from the process is a product of unusual circumstances. It can be remarkably difficult to break the routine, yet still complete the obligations dictated by the system. To do so, many archaeologists, regulators, and contractors have had to find and open the cracks of the regulatory contract archaeology system.

Richard Perry's Honey Lake project is an example of such efforts. The situation created by the regulatory process presented an opportunity for a regulatory archaeologist to work with contractors outside of the normal procedures and develop an interesting project that not only fulfilled the mandates of the system but also paid great research dividends. He also demonstrated that working outside the norms of the system is extremely difficult and daunting, and may not always have a happy ending. Perry and the many other archaeologists who work creatively within the world of contract archaeology should be applauded for their efforts and desire to get the most out of a routine system. However, there are many more ways to realize the opportunities lost in the regulatory contract system.

My position within archaeology is very different from that Perry's, as my work exists outside of the regulatory contract world associated with the NHPA. That is not to say that I do not work within regulatory frameworks, in fact, I often actively work to create such frameworks. However, I have discovered that there are a great many unrealized archaeological opportunities within the dominant culture of contract archaeology. Because of that dominance, we tend to think that archaeological research is only devised within the bounds of the system. But we do not need unusual circumstances to develop archaeological opportunities outside of the norm. There is a great deal of archaeology out there that is not required by Section 106 or part of the contract world. This archaeology is not a product of a break in the routine, it is what has been forgotten, ignored, or just not even considered within the dominant system. This archaeology is not about our ability to adapt to the atypical project, it is about creating and finding archaeological potential where we may not expect it. Whether it is archaeology within the local development processes, a school fieldtrip, or an archaeological birthday present, there are a many great unusual opportunities to do archaeology.

Like all archaeologists, I have my own archaeological story. Since my first field tech job for a contract firm while an undergraduate at the University of Louisville 20 years ago, I have been a professional archaeologist. I took the route of many archaeologists, working as a field tech, crew chief, and project supervisor doing contract archaeology. As I was finishing up my graduate degree at the University of Kentucky, I began working with an organization called the Kentucky Archaeological Survey (KAS). KAS began as an agreement between the Kentucky Heritage Council (KHC), which is the Kentucky State Historic Preservation Office (SHPO) overseeing the federally mandated archaeology in Kentucky, and the University of Kentucky.

Archaeologists within KHC recognized that many archaeological opportunities were being lost in the regulatory system, especially the development of public archaeology. However, the agency did not have the capabilities or the facilities to develop these opportunities, so a partnership with the University of Kentucky was created. The goal of this partnership is to provide service to state agencies, work with private landowners to protect archaeological sites, and educate the public about Kentucky's rich archaeological heritage. I have been a staff archaeologist with KAS since its inception, specializing in historical archaeology, particularly urban and plantation sites, and public archaeology.

KAS was initially funded purely on soft money by conducting salvage projects associated with state-funded developments that threatened significant archaeological deposits and creating sustainable archaeology education programs. Presently we do receive limited funding from KHC, which covers a small portion of salaries and enables us to visit schools and conduct some unfunded salvage, service, and research projects. However, the majority of our funding is generated from the projects that we develop. While funding is by no means consistent, KAS has been able to sustain itself and expand its programming over the last 15 years largely because there is no profit motive and by creatively developing the archaeological opportunities that fall into the cracks and seams of the regulatory contract world.

My work with KAS has led me to many interesting and unique projects, as well as interesting perspectives on the more mundane projects instigated through the regulatory process. The bulk of the projects that KAS conducts are service projects for state government and public archaeology. Through our association with KHC, we have been able to establish relationships with various state agencies to provide technical assistance and services concerning cultural resources. For example, some of our projects are developed in response to state-funded development projects that threaten significant archaeological sites, but which exist outside of the federally mandated regulatory structure. While Kentucky has an antiquities law that is intended to protect archaeological resources on public land, there is no regulatory structure like the Section 106 process to identify and mitigate them. However, the Office of State archaeology, which administers the mandates of the law, along with KHC and KAS has helped state agencies comply with their responsibility to publicly owned archaeological resources. For instance, we are able to work with the Finance and Transportation departments to survey, research, and excavate significant archaeological sites, such as the Old Frankfort Cemetery. This cemetery had long been forgotten and built over by the time that construction began on the Kentucky Transportation Cabinet's new office building in Kentucky's capital city. KAS provided the expertise and facilities for the state government to exhume and analyze over 200 graves dating from the early to mid 1800s (Pollack et al. 2009). Further, we frequently assist state agencies with cultural resource management, such as surveying property for the Parks Department when new lodges or golf courses are developed or conducting surveys for Fish and Wildlife or Forestry to help them properly manage their cultural resources.

Public archaeology and educational outreach have been a major part of KAS's mission since its beginnings, as most projects have a public or educational component. For example, we have developed a sustainable 15-year public archaeology project at

Riverside, the Farnsley–Moremen Landing, a historic house museum site in Louisville, Kentucky through a school fieldtrip program. Nearly 5,000 schoolchildren a year participate in the Building Blocks of History program, which features a participatory archaeological excavation, historic house tour, and a brick-making activity. The fieldtrip program is nearly self-sufficient and funds a long-term archaeological research project focused on plantation outbuildings and slavery (Stottman and Prybylski 2005; Stottman and Watts-Roy 2000; Watts-Roy and Stottman 1995).

KAS also serves as the State Coordinator for Kentucky's Project Archaeology teacher education program, which is focused on developing archaeology education materials and teacher training (Moe 2002). We develop archaeology education lessons, resources, and booklets, Web sites, and videos featuring our research projects (Henderson 1995; Linn and Stottman 2003). We also provide technical assistance on public archaeology to contractors, who are increasingly being required to develop public components to their projects.

The emphasis that KAS has on public archaeology and seeking archaeological opportunities just about anywhere has enabled us to develop projects with private landowners interested in archaeology, to aid local development regulatory agencies with cultural resources, develop community archaeology projects, and to become civically engaged with the communities where we work (Little and Shackel 2007; Stahlgren and Stottman 2007). We have found archaeological opportunities with the interested public, such as a wife who hired us to conduct a survey of a historic plantation property as a birthday gift for her husband. The result of that project was the discovery of intact deposits associated with a nineteenth century slave house, including a pit cellar, which at the time was one of the few that had been investigated in Kentucky (Stottman 1996). Through my position at KAS, I have been able to serve on local Landmarks Commissions and help draft guidelines for preservation of archaeological resources. KAS routinely assists local governments with cultural resource issues, such as helping Metro Louisville identify and research historic cemeteries threatened by development. Because of our research and public focus, KAS has been involved in developing a community archaeology program within an activist framework to advocate for the development of a park dedicated to the rich history of the Portland Neighborhood in Louisville (Prybylski and Stottman 2010; Stottman 2010). KAS also has used archaeology to benefit contemporary communities in creative ways, such as helping a neighborhood deal with a litter problem though our expertise in material culture studies and community collaboration (Stottman et al. 2007).

The success of KAS over the last 15 years and the variety of archaeological projects that we have developed demonstrates the potential of the archaeology that gets lost in the contract world. While our existence is always a tenuous proposition because of limited funding and the low minimum cost required of our projects, there are vast untapped archaeological opportunities that are simply ignored by or not feasible to the contract world.

Prior to the rise of modern contract archaeology, the types of archaeological projects that now often slip in between the cracks of the system were the norm. Archaeological projects were developed and conducted through the interests of

faculty and staff of local universities and museums, as well as amateur societies. These archaeologists surveyed and documented archaeological sites when the public brought them to their attention. They salvaged sites being destroyed by development. Students and faculty took on research projects at the well-known sites in their area. Large-scale research projects were often part of government programs such as the WPA. While these kinds of archaeology have been more recently overshadowed by the dominant contract system, there are many archaeologists who have found great opportunities in them.

There are a variety of institutions, organizations, and individual archaeologists who have found opportunity in the cracks and seams of the dominant regulatory contract world. They work within the system to create unique and interesting projects, as well as looking for opportunities outside the norm, such as within state and local development processes, research at cultural sites, and community archaeology programs. University-based programs, such as the South Carolina Institute for Archaeology and Anthropology and the Arkansas Archaeological Survey, for example, do cultural resource management (CRM) contract archaeology, but also have components that develop projects outside of that system. Community programs, such as Alexandria Archaeology and Archaeology in Annapolis are two that find archaeological potential in local development regulations and public archaeology. Many small CRM contractors, city archaeologists, and researchers at cultural sites work in many contexts to develop archaeological opportunities outside of the federally mandated archaeology of the Section 106 Process.

While KAS shares many similarities and is in large part inspired by these organizations, what distinguishes KAS is our relationship with the SHPO, focus on public archaeology, and our willingness to take on projects and partnerships that would otherwise be risky monetarily for most CRM contract firms. Every organization or archaeologist that does this kind of work is unique within the context of their own goals and focus. Some participate in both the dominant contract culture and develop projects outside of it, some focus on developing their own niche within their own local context, and some primarily focus on public archaeology. Regardless, there are many archaeological opportunities outside of the dominant regulatory contract archaeology culture, we just have to be creative enough to find and foster them.

Final Thoughts on the Vision and Reality of Scoping Archaeological Projects: Richard Perry

Jay Stottman's essay on the values and virtues of not-for-profit archaeology celebrates other aspects of archaeology that are markedly different from cultural resource management (CRM) compliance archaeology. While on one hand it appeared to be an indictment of the world of Section 106 fueled archaeology, it was more importantly a showcase for a vast alternate universe of academically intriguing, and civic minded archaeology whose primary limitation is adequate funding. Stottman's paper

focuses on two points, (1) is that the world of compliance archaeology has largely become ossified through almost predefined, or cookbook procedures with only few occasions to conduct interesting and intellectually challenging research, and (2) the limitless opportunities afforded volunteers. It is true that there are a number of archaeology contractors that operate within a very narrowly defined world of compliance archaeology. I preferentially refer to CRM-focused archaeologists who have strong research interests as consultants as compared to their invoice driven colleagues whom I refer to as contractors.

I agree with Stottman's first argument in a somewhat limited fashion. Based on my experience working in a regulatory framework with the U.S. Army Corps of Engineers (Corps), I am in agreement with Stottman on the projects that merely meet the lowest levels of compliance and by doing so, fail to add anything of value to the archaeological record. Contractors frequently do archaeology solely to clear a piece of property thereby allowing some developer, or utility company to move ahead with their projects. To some degree there is also a corollary between Stottman's arguments and the tireless debate over the value of academic research archaeology and CRM. These arguments remind me of a telephone conversation I had in 1990 in with Jeff Altschul, founder of Statistical Research, Inc. (SRI) (Jeffrey Altschul, personal communication 1990). I had called him to comment on the high quality level of research his company had done for the Corps on a survey of the Alamo Reservoir in western Arizona on a fairly limited budget. He told me that he did not see a relationship between thinking and dollars. He also commented that CRM archaeology should produce better results than so-called academic archaeology, because it is better funded, and the consultant is required to deliver a final report. The point is that the level of interest in doing quality research-guided archaeology is more reflective of the skills of the researcher, and less on the regulatory framework or funding mechanism.

However, I am in complete agreement with Stottman on the use and value of volunteer archaeology and how it can lead to interesting projects and discoveries. I especially enjoyed his use of volunteers by engaging university students to clean up litter in their neighborhood using archaeological techniques (Stottman et al. 2007). The development and evolution of the Kentucky Archaeological Survey (KAS) is certainly a success story in many ways. They apparently still do mainstream archaeology, presumably under the Kentucky Antiquities Act of 1962. In my eyes, the areas where they shine are in public awareness, education and the introduction of archaeology and State history to schoolchildren. Especially, laudable is that they are largely a self-sustaining organization.

One of the key issues behind this exchange of archaeological experiences, Jay Stottman's, and mine is the availability and sources of funding. A question that been posed is would an organization like KAS be useful as a post-conveyance overseer for a project such as Honey Lake? They very possibly could, but it is not very likely. The reasons are that being a site steward requires people living nearby than can visit the property on a regular but random basis. It would take a lot of education to convert lifelong pothunters to not only change their ways, but also protect the resources

from their friends, neighbors, and possibly family members. It is more feasible from a California organization known as CASSP, or California Archaeological Site Stewardship Program. They are exclusively site stewards with a large number of Native Americans in their ranks. Using Tribal members from the nearby Susanville Rancheria may prove to be useful. However, overall, a volunteer organization that specializes in historic preservation would certainly be ideal for site stewardship, and perhaps excavating some of the early Holocene sites that are being imperiled by vandalism and exposure to inclement weather.

Fundamental to all varieties of archaeology is the reality that "time is money." Other questions that were presented are what services do companies such as SRI provide that KAS does not, and what if all archaeology were done by organizations such as KAS? It is difficult if not impossible to answer the first question without knowing the structure of KAS. I have no idea who their permanent staff is, what kind of logistics they have, and what kind of volunteer base do they that they can count on. SRI has a full-blown GIS staff, soils staff, historical archaeologists and architectural historians, graphics department and report preparation staff. Archaeologists with Ph.D.s head each department except for the graphics and report production departments. They also have at least one, maybe two senior research directors that are also Ph.Ds. SRI has offices in at least four, maybe five cities. They are all staffed with highly qualified, seasoned professionals. They also have subcontractors to do specialty work that they do not routinely do. I am sure that KAS can match any number of these categories that SRI has in house, but having them available all the time is another issue altogether.

To answer the second question, I think that the only way that an organization such as KAS could or would operate would be in the absence of stringent historic preservation laws such as Sections 106 and 110 the National historic Preservation Act. Most clients could not withstand the archaeologists taking 15 years to complete a project. I am sure they may not have the requisite technical staff that would operate on a volunteer basis, or reduced income level. A large project such as Honey Lake took a large skilled staff and fully experienced field crew that could work on a tight schedule. The project also took numerous technical specialists that were not part of the SRI staff. Outside of KAS the only other organization that I know of doing anything remotely resembling the work that KAS does is the Colorado Plateau Archaeological Alliance (CPAA) in Utah. They do a small amount of compliance work, but prefer not to, and are limited to prehistoric archaeology.

The real answer is there is a purpose and need for both types of archaeology. Some archaeologists like to excavate large plantations, while others are equally engaged in analyzing acorn exploitation in the Sierra foothills. The public education and outreach that KAS does provide is a great service to the profession and the community, and the professional consultants ensure that prehistory and history are not lost beneath the machinery of progress. It has oft been said that the pride of a nation is in its past. Without archaeologists off all stripes plying their craft we would surely lose a sense of who we are and where we came from.

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Chapter 10

The “Other” Meaning of Value in Archaeology: The Uncomfortable Topics of Money, Looting, and Artifacts of Questionable Origin

Richard M. Pettigrew and Sanchita Balachandran

The Topic Please discuss situations in which you have had to deal with things that the field of archaeology and overall study of the past would really prefer not to exist: for Rick, this is the topic of treasure hunting and the video about Odyssey Marine Exploration’s finds that he posted on *The Archaeology Channel*; for Sanchita, this is the study of issues of treating the sword that she described in her article in *Archaeology Magazine*, plus any other similar situations that you have both encountered. We would like you to frame your discussions in terms of the topic of artifacts and money: in other words, in addition to their “priceless” value in representing the past, archaeological artifacts also have monetary value. How have you encountered this aspect of archaeology and the study of the past in your work (i.e., your given situations above), what dilemmas has it presented to you, how did you decide what to do, and can you see any solutions?

The Case of the Odyssey Video: Richard M. Pettigrew

Many would like to arrange for archaeology, ideally a purely scientific and academic discipline and process, to be divorced from issues of financial advantage and personal gain. Perhaps surprisingly, as our experience demonstrates convincingly, single-minded efforts to keep archaeology free from such subverting influences can lead to contradictions, quandaries and abiding conflicts. Even the freedoms of public education media expression and student project choices can be threatened by

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self-chosen watchdogs of archaeological ethics. One wonders, then, if it might not be better to recognize and accommodate the inevitable place of monetary value in the process of investigating the human past.

My organization, Archaeological Legacy Institute (ALI), produces *The Archaeology Channel* (TAC) (<http://www.archaeologychannel.org>), one of the world's most popular archaeology-related Web sites with traffic of eight million page views in 2008 and the top-listed Web site for a Google search on "archaeology video." Since we launched it as a streaming-media Web site in July 2000, TAC has grown dramatically in its online visibility, its professional stature and the volume of its video and audio content. We have worked hard to nurture and promote TAC and its growth as part of our public mission to tell the human story through Internet media.

One measure of our success in our effort to develop TAC is the degree of reaction and feedback we receive when we put up a new video or audio program. With few exceptions, the feedback we get is positive and encouraging. In our history, the most notable exception to this norm is the reaction we experienced in March 2008 and subsequent months when we posted a video that featured the curation facility of Odyssey Marine Exploration, a for-profit company that specializes in the location, documentation and recovery of deep-water shipwreck sites. The controversy hinges on ethical issues surrounding Odyssey's practice of selling artifacts with high monetary value. Such a practice often is seen as a violation of fundamental principles, but the controversy here highlights the different values simultaneously attributed to highly marketable archaeological artifacts and questions about how such artifacts should be treated and disposed.

My own archaeological career began in 1971 as an anthropology graduate student at the University of Oregon, where I earned my MA and Ph.D. degrees and where I was on the staff as a Research Associate from 1976 to 1986. During that time and in subsequent years as a private-sector archaeologist, I made numerous and, I hope, significant contributions to Oregon archaeology while absorbing and professing a fairly purist attitude against the marketing of artifacts. At the same time, until recently I probably did not fully recognize the potential conflicts of interest that can arise from making a living on doing archaeology. Eventually, my growing dissatisfaction with the endless pursuit of CRM contracts and the production of often cutting-edge research reports that few would read induced me to found an organization (ALI) devoted to widely sharing the insights, perspectives and knowledge we archaeologists accumulate. My passion became telling the human story to our fellow human beings through TAC using advanced digital media technology. When we launched TAC, I did not fully realize that I had added the processes and ethics of online journalism to my archaeological repertoire. But experience can be a harsh and unrelenting teacher.

The case in point is the video, *Anthropology Field Notes 6: Shipwrecks – with Odyssey Marine Exploration* (<http://www.archaeologychannel.org/content/video/anthfldnotes6.html>). This is the last of a series of video interview programs produced and submitted to us by Central Washington University and created by Faith Haney, at that time a graduate student at Central specializing in nautical archaeology. In her planning for this last video of the series, Faith sent letters to all the top nautical archaeology departments in the country requesting an interview, but the only group to respond to her

with an invitation was Odyssey Marine Exploration (OME) of Tampa, Florida. She had some grant money dedicated to the video series and spent the last of it going to Tampa to interview the Odyssey laboratory curator, Ellen Gerth. We had agreed to Webcast her video series, with the understanding that each submission was subject to our review, but we were not aware of her Odyssey interview until she sent us the video.

When she submitted her video to us, we saw that this was a potentially controversial subject, as many marine archaeologists do not consider Odyssey a reputable archaeological organization, as they are known to offer certain artifacts for sale. We do not go out of our way to raise the hackles of colleagues, but at the same time, we felt an obligation to follow through with our agreement with Central to Webcast their video series. We agreed to post it on TAC only after Faith agreed to make some edits in the video to highlight the fact that Odyssey was controversial and only if we could also post a disclaimer and create a message board inviting comments about the video. We felt that the video would create an opportunity to air the issue of for-profit marine salvage companies and promote a dialogue among professionals and the public that in the end would be a valuable contribution. The resulting communications and dialogue certainly realized that expectation and showed that Odyssey and issues surrounding monetary value in archaeology indeed are highly sensitive in our profession. We did not expect to, nor did we, reach a resolution on the subject, as we saw our role as a vehicle for discussion. The ramifications of the topic go far beyond what one can cover in a single article, but it will be useful here to offer a sample of the viewpoints expressed to show how honestly held opinions can differ.

We strengthened our disclaimer after the video went up and after representatives of the Register of Professional Archaeologists (RPA) requested this change. The currently posted disclaimer reads as follows:

Many professional archaeologists categorically and ethically object to the sale of artifacts collected from archaeological sites, whether on land or under the sea, in any circumstances. Other professional archaeologists argue that the sale of artifacts should be allowed in some circumstances, such as the sale of marketable commodities recovered under controlled circumstances in large and redundant quantities from deep-water shipwrecks, as claimed by Odyssey Marine Exploration. Our presentation of this program does not constitute an endorsement of Odyssey Marine Exploration, its practices or projects by Archaeological Legacy Institute. We are aware of the controversy surrounding shipwreck explorations by for-profit enterprises and we hope that this program will encourage meaningful and productive discourse on the subject. We welcome your thoughtful feedback to shipwreck@archaeologychannel.org.

We were prepared for differences of opinion about Odyssey, but surprised by the tenor of some of the responses. As we had invited comments for our online message board, we expected some negative responses through that mechanism. However, the quickest negative feedback and the least diplomatic comments came via personal e-mail to us rather than comments submitted for the video's message board. Without identifying the authors, I will summarize some notable examples.

One correspondent expressed deep disappointment in our “portrayal of commercial treasure hunters as archaeologists,” arguing that giving such exposure to a company like Odyssey was, in effect, “directly contributing to the exploitation of underwater cultural resources, ultimately leading to their destruction and dispersal.” This person then went on to allege that “the activities you support” in presenting this

video “are in direct contradiction to the ethical principles of the SAA, SHA, and AIA (principles your web page suggests are followed by ALI), the spirit and intent of the UNESCO Convention on the Protection of the Underwater Cultural Heritage and the ICOMOS Charter on the Protection of Underwater Cultural Heritage, and the Register of Professional Archaeologists Code of Conduct.”

Another used terse irony to make a point: “Advocating the commercial salvage of shipwreck archaeological sites is a questionable long term strategy. Will you also be doing the commercial sale of artifacts from public land sites?”

One e-mailer resorted to stereotypic and prejudicial name-calling: “... sometimes it takes a while for true colors to show, even for liberal whiney academics looking for compromise.” A frequently heard theme expressed compliments for what we had contributed alongside surprise and dismay at our alleged connection with looters. As an example, one respondent complimented us on our programming while finding “... it hard to believe that *The Archaeology Channel* is promoting a treasuring hunting company such as Odyssey Marine Exploration.” This person’s understanding of Odyssey’s activities, which appears to be incorrect and is at odds with our research into their actual practices, was that “... they only recover and conserve those artifacts that they can sell, while destroying the site and context of the more mundane and frankly, the more interesting organic materials that are on the sites....”

Another expression of this sentiment is the following: “by featuring this video on your otherwise commendable Web site, it appears to the public that plundering shipwrecks for artifacts to sell is the same as the legitimate archaeology projects featured in other videos ... I must say that I am struggling to understand how a person in your position and with your obvious passion for archaeology can condone this.”

Some of those objecting in direct e-mails refused to submit comments for all to read on the message board, apparently out of a desire to deny Odyssey a debating platform. Some objectors did submit comments to the message board, but the earliest and most frequent comments came from those who applauded us for opening up the subject on TAC. Here are some examples:

I want to applaud you for running Faith Haney’s *Anthropology Field Notes 6* featuring Odyssey Marine Exploration. I’ve interacted with Odyssey and one of its founders, Greg Stemm, for many years – most recently as a member of an executive group of archaeologists set up jointly by Odyssey and the British Ministry of Defense to provide advisory oversight of work on the shipwreck thought to be the Sussex. I’ve found Greg to be a very original thinker, and I think Odyssey holds out considerable hope for the future of commercial-based deep-water archaeology...

As for the possibility of doing good archaeology, I can only say that Odyssey’s fieldwork, as I’ve seen it demonstrated and described in research designs and project plans, seems to me to be superior to virtually anything I’ve seen even on dry land. Very tight control is maintained of provenience, and a unique system for both excavation and documentation makes it possible to produce a far more complete record of an Odyssey excavation than is characteristic of archaeological projects. I’d be surprised if the system worked perfectly all the time; there are doubtless lapses and mistakes, but it’s a rare field project anywhere that doesn’t experience lapses and mistakes (Tom King, 3/7/08)

There can be no denying that the company exists to make money for its shareholders and salaries for its employees, both recognized by the IRS as profits, and differing not at all from the taxable income of professional archaeologists. In short, in one way or another, we are all in it for the money...

Your condemnation [referring to one of the opposing comments] of the sale of shipwreck artifacts is, I suggest, as philosophically founded as are respect for motherhood and the flag. To reject either would be a sin so heinous as to be indescribable. I assure you that I agree. But I do not agree that the retention of every last potsherd or peso is in anyone's best interest...

No museum needs nor wants a ton of conglomerated silver coins or, for that matter, a thousand 1860s wine bottles. Providing a sufficient number are retained to represent all discernable variations, the remainder have no further informational value...

There is, I am afraid, a good deal of hypocrisy inherent in the “holier than thou” approach to the entire field of underwater archaeology – not the least of it in determining who shall do it and who may not, and what shall be done with the recovered artifacts. The *Titanic* exhibits and the recovery processes that preceded them are classic examples of the morally improper exploitation of the past. Nevertheless, salvage from its debris field was featured by the National Geographic Society and its exhibits were shown at the National Maritime Museum in London and in the Mariners' Museum at Newport News, Virginia. To my knowledge, nobody complained that Dr. Ballard lacked the appropriate archaeological credentials or claimed that the recovered objects had archaeological value (IH, 11/30/08)

The curator for Odyssey, Ellen Gerth, who was the interviewee in the video, submitted a defense of Odyssey for the message board, as follows:

Odyssey's professional mission differs significantly from treasure salvage operations whose sole aim is the recovery of commercially valuable items from sunken wrecks, typically without regard to archaeological standards and procedures. In its commitment to recover, preserve, and document underwater cultural heritage for future generations, Odyssey adheres to the same rigorous archaeological standards applied to terrestrial and shallow water sites. However, a significant difference is the cost and the requirement for specialized equipment essential for conducting deep-water archaeology. Those archaeologists who have taken the opportunity to observe our work in the deep ocean have made a point of recognizing that our archaeological protocols are not only on par with the “academic” archaeologists, but in many cases far surpass them ... While it is true that Odyssey Marine Exploration offers select **duplicate artifacts** for purchase by collectors, these artifacts are thoroughly conserved, studied and documented before sale ... Odyssey has a collection policy that provides for keeping any artifact that is unique, or available in limited numbers, in our study collection in perpetuity. These pieces are available for study, display and educational purposes. Fortunately, the profits derived from the sale of duplicate articles funds the ongoing care and maintenance of this collection, so the public is not forced to fund the maintenance of the collection (Ellen Gerth, 3/14/08)

The fallout from our webcast of this video extended beyond comments submitted by individuals and even beyond verbal argument. We received letters of objection signed by representatives of most of the leading professional organizations worldwide, clearly organized by several energetic individuals in key positions. These letters all argued that the sale of artifacts under any circumstances constituted the commercialization of archaeology and therefore was unethical. While this is the official position of many and possibly all of the major professional organizations, it clearly is not agreed to by many of their members, who believe that exceptions can be made to the “do not sell” proscription. We ourselves did not take an official position on the matter, maintaining steadfastly that our role was to air the opposing views.

In the end, this episode has been a valuable learning experience and one that was a necessary step in our development as an archaeological media organization.

It caused us to take a close look at our own principles and protocols and to develop a position statement on the matter, as follows:

At ALI, we are very much in accord with calls to promote responsible Stewardship of archaeological resources. This has been a fundamental aim of ours since we were founded in 1999 and we have worked since 2000 to develop TAC into a medium ideally suited to convey this message. Consistent with that effort, we are very keen to create and deliver informative content about the values and ethics of archaeology.

As developers of a media outlet, our obligations include some that go beyond what archaeologists normally have faced. In our activities we are compelled to adhere to a set of ethical principles much akin to those of broadcast journalism. In order to maintain credibility as well as to ensure fairness to those who may use our service, we have to be careful to separate our own opinions from those expressed by specific programs that we broadcast. Because inevitably we will at times be subject to pressure from interest groups of one kind or another, and to demonstrate clearly to all that we are not susceptible to this kind of pressure, we must resist calls to avoid or modify or remove specific programs.

Let me suggest that those who still have concerns about our showing *Anthropology Field Notes 6* first watch the video and then read the postings on the message board there. You will see cogent and sincere arguments on both sides of the *Odyssey* issue.

It's not easy to be on the receiving end of pointed criticisms and objections about our content and we don't go out of our way to create controversy. However, such controversy is an inevitable (but hopefully just occasional) part of media broadcasting. We ask for you all to understand. Thank you.

Rick Pettigrew
Executive Director
Archaeological Legacy Institute

Whatever one believes about the appropriateness and ethics of *Odyssey* and its marine archaeology program, we as a profession must come to grips with the realities of doing archaeology in a commercial world. The market value of artifacts matters not simply to museums, art dealers and customs agents, but more broadly to our profession at every level. ALI did not seek out this apparently taboo subject: it came to us. As the *Odyssey* dispute demonstrates, those who believe that the ethical debate on this subject is over are simply deluding themselves. Issues of profit and money will not go away or be resolved while we ignore what is really happening to archaeological sites and collections. In the construction of a realistic, effective and consensus position on archaeological values, which is yet to be achieved, a relevant, contemporary archaeology must openly and honestly consider alternative views on the appropriate disposition of marketable artifacts.

Archaeology, Conservation and the “Cost” of Archaeological Artifacts: Sanchita Balachandran

Archaeologists and conservators of archaeological material both acknowledge that artifacts can hold many values, and that these values are mutable and constantly re-interpreted by different stakeholders (Clavir 2002; Lynott and Wylie 2000a; Munos-Vinas 2004; Sloggett 2009). We are comfortable assigning particular values to these artifacts, such as, “artistic, historical, scientific, religious, or social [significance]

... [that] is an invaluable and irreplaceable legacy that must be preserved for future generations” (AIC 1994a). But where are these values ultimately carried and preserved—on the physical object or in the documentation and interpretation of the original context in which the object was found? On site, archaeologists and conservators often clash over this question of what is more important to preserve, the actual archaeological artifact, or the information it embodies. This conflict grows more acute when archaeological material, through the licit and illicit art market, emerges far from the context of the archaeological site and enters a museum or private collection. Now as commercialized objects, these artifacts have gained a monetary value according to physical qualities such as historical rarity or aesthetic appearance, but have lost much of the contextual information which archaeologists hold most dear. Are all of these de-contextualized objects then no longer worthy of preservation? In particular, are artifacts with no provenance entirely meaningless from an archaeological perspective, and should conservators therefore leave them to deteriorate? How should a conservator ethically preserve archaeological artifacts?

The fundamental question of what is worth preserving – the object or the information it carries – animates the complex relationship between archaeologists, museums and private collectors, and conservators. In this paper, I discuss the uneasy position of the archaeological conservator who works with both archaeologists and collectors of archaeological material; how can a conservator ethically preserve both the physical artifact *and* the knowledge it represents when they have been unnaturally separated by archaeologists, collectors, and the art market? Does the valuing of information and provenance over the physical artifact discourage its preservation? Furthermore, are there ways in which assigning a monetary value to an artifact actually encourages its preservation?

I trained as an art conservator at the Conservation Center at the Institute of Fine Arts, New York University. I focused on the conservation of archaeological material early on, and completed internships at the J. Paul Getty Museum, the Metropolitan Museum of Art, the Harvard Art Museum and the Los Angeles County Museum of Art, among others. I also pursued field projects that led me to Cambodia, Egypt, Italy, and Tunisia, as well as sites in the U.S. For six years, I worked as a freelance conservator, running archaeological conservation projects in Egypt in addition to working for museums and universities in North America. I recently joined the Johns Hopkins University as the Curator/Conservator of the Archaeological Museum. In this role, I conserve, manage and research a sizeable archaeological collection and teach conservation-related courses to undergraduate students. My path to this current position has broadened my view of conservation; it is not simply a field dedicated to the protection and study of individual artifacts, but rather a means of understanding the values and resonances of these artifacts within an historic, artistic, and social framework.

I was an undergraduate the first time I held an artwork – a nineteenth-century American painting – and it was also the first time I was aware of the commercial value of such objects. As I lifted the solid frame and cradled it gingerly in my arms, a fellow intern in the university gallery shouted, “don’t drop it, that’s three million

dollars!” The painting seemed to grow heavier and more fragile in that one instant, and I remember the relief of placing it against the gallery wall. My early concern about the monetary value of artifacts became less burdensome throughout graduate school; this was partly from gaining confidence working with unique artifacts, but also because the “cost” of art work was rarely discussed or even consciously avoided during my conservation training. I also grew to recognize the “preciousness” of archaeological artifacts as they emerged from the ground during an excavation. Conserving an artifact that had remained hidden for thousands of years and could be linked to a specific place or time, or even a specific individual in the case of grave goods, was a powerful and personal responsibility. These objects, while still in their original context, were priceless, both for the information and personal links they embodied, but also because they were not commercialized by the art market.

A conservator’s responsibilities are multilayered. On the most basic level, conservators study, document and treat artifacts, collections and sites in order to preserve them. This may involve slowing the degradation of an object through physical or chemical interventions; revealing evidence of its manufacture or use through careful examination or cleaning; and making artifacts robust enough for access and use by scholars, descendant communities and the general public. Conservators are also charged with maintaining the intangible integrity of objects, i.e., ensuring that our interventions do not compromise or remove cultural, religious or other associative aspects that give meaning to them. For example, disfiguring accretions such as drips of libations or other offerings may be left in place as evidence of religious use. As another example, artifacts that were intentionally broken for ritual purposes may only be virtually but not physically re-assembled. However, conservators are expected to remain unaware of the commercial value of the materials they preserve because of the concern that they “may be influenced by the prestige imparted by association with cultural property that is rare, famous or of high monetary value ... [as] this may affect the interpretation of data, judgment of condition, etc” (AIC 1994b). Thus, our professional ethics demand that we consider each object for every value it holds except monetary value for fear of compromising our level of care. Ironically, the only condition under which conservators are asked to discard every value *except* monetary value is when an object is an unprovenanced antiquity; in such cases, the historical, artistic, cultural, and intangible qualities are considered unworthy of conserving precisely because of the way that the objects have entered into a collection. But are conservators acting ethically if they intentionally allow archaeological material to deteriorate?

Preserving the De-contextualized Object

Several recent publications sketch the complex social and economic networks that make the removal and transfer of archaeological objects from their “source countries” to art collecting nations possible (Brodie and Renfrew 2005; Chippindale 2001;

Chippindale and Gill 2000; Mackenzie 2005; Szopa 2004). “Local diggers,” often destitute individuals in the source country seeking to supplement their regular income, unearth artifacts illicitly for sale to middlemen. The middlemen then pass this material on to local or international dealers who smuggle it to an intermediary nation where laws against illicit antiquities trafficking are less stringent. After establishing a reasonable “provenance” in these countries, the objects are “legally” sold to other nations. The commercial value of the artifacts increases exponentially from what is offered to the local digger by the middleman, to what the international dealer demands for the same object in a New York City gallery. This process and the price of certain types of artifacts have changed somewhat with the advent of online retailers who can sell antiquities relatively anonymously and with less risk through the Internet.

Many conservators encounter archaeological objects within a museum, where they have presumably been vetted for their provenance and then legally acquired.¹ Private collectors of archaeological artifacts generally work with freelance conservators, who, without the resources of a museum institution, are placed in the awkward position of having to decide whether they should request information about their clients’ legal title to these objects. Some conservators purposely do not ask for this documentation because of fears of jeopardizing a business relationship, while others are simply unaware of the current laws affecting the purchase of archaeological objects. In these cases, how much due diligence is required of a conservator before conserving a deteriorating artifact? Is it the conservator’s ethical responsibility to preserve the object, or preserve the idea that unprovenanced objects are archaeologically worthless and should not be legitimized through conservation treatment?

In 2007, I wrote in *Archaeology Magazine* of an agonizing decision to conserve an unprovenanced rusting Roman steel sword that was shattering into fragments (Balachandran 2007). My client, an amateur historian with a genuine concern for the long-term preservation of his collection, told me that he purchased his artifacts on Web sites such as Ebay. He felt strongly that he had rescued this sword and other such fragments from an uncertain future in their source countries. He emphasized that he was caring for his collection in a way that would be unsustainable on an archaeological site or even a museum. These are familiar arguments to anyone working with archaeological objects, but applying these questions to a specific object – such as the Roman sword – made them sound more reasonable and even justifiable. For my client, the purchase of ancient objects from Web sites made them accessible in a way that would have been otherwise impossible given his moderate economic

¹I have had several conversations with conservators who found that the objects they were asked to consider for acquisition or which were already part of the collection raised serious questions about provenance or indicated that they were recently looted. However, it was often beyond the conservators’ authority to suggest that these materials be de-accessioned or otherwise removed from the museum.

resources. Furthermore, he was willing to pay more than the cost of the original artifacts to have them preserved according to museum standards. To him, the sword had a value beyond its price tag; it was a personal link to history and to a particular (if anonymous) Roman soldier who had died somewhere in the ancient world.

Archaeologists and conservators are united in condemning the commercialization of archaeological objects, and advocate avoiding unprovenanced objects for fear of legitimizing them by examining or publishing them, or improving their physical condition (Brodie 2006; Brodie and Tubb 2001; Jaeschke 1996; Sease 1997; Tubb 1995; Sease and Tubb 1996; Tubb 1997). They have also argued that these fragments are devoid of any “scientific” value as they tell us nothing about the broader cultural context from which they came (Brodie 2006; Brodie and Tubb 2001). But conservators are trained specifically to identify and document the kinds of minute traces that individual objects, even when wrenched from their original contexts, can retain. In the case of the Roman sword, I could distinguish an impression of wood that was once pressed against steel during burial and remained visible in the rust. On the hilt, criss-cross striations were preserved the corrosion, providing evidence of the textile grip that was wrapped around it in antiquity. Why should this information be lost when a simple conservation treatment could preserve it for future generations?

After consulting my colleagues and reading extensively in the archaeological and conservation literatures, I went against the prevailing ethics to conserve the sword. But I resolved to no longer work on unprovenanced objects, primarily because of the risk of damaging my professional reputation. Through a series of e-mail exchanges with my client, I also convinced him to stop collecting unprovenanced artifacts and steered him toward volunteering on a scientific archaeological excavation. Despite this ethical victory, I remained unconvinced by the hollow-sounding arguments given by archaeologists and conservators condemning unprovenanced artifacts. Having worked on excavations, I recognize that objects from known contexts tell us more than these isolated fragments can, but de-contextualized objects also carry invaluable information. Bauer (2008) suggests that there will always be an illicit trade in antiquities even if international legislative controls in art trafficking are tightened and the collecting public is won over by the ethical arguments of archaeologists. Given this reality, it behooves both archaeologists and conservators to communicate more clearly with collectors and find alternate ways of collaborating with them to preserve the limited archaeological record.

Preserving the Context at the Cost of the Object

If, according to archaeologists, unprovenanced antiquities are “valueless” because they are wrenched from their original context, then the archaeological site is where objects are “worth” the most in terms of their historical, cultural, and scientific value. Therefore, archaeological sites and the artifacts buried in them should be protected and conserved as completely and ethically as possible. In reality, the

priority of an excavation is to find and document information about a site, rather than physically preserving all the material that is uncovered. Thus, resources are allocated for discovering information rather than keeping the artifacts that provide this data, and all but the more spectacular or rare finds are seen as somewhat unimportant once they have given up their desired contextual information. Ironically, these same artifacts – which archaeologists minimally prioritize with the archaeological context – become symbols of precious archaeological value when they are commercialized and traded through the art market. How can archaeologists legitimately condemn the circulation and preservation of artifacts by private collectors when they routinely discard similar materials as part of their professional practice? Would archaeologists change their excavation practices if they were more aware of the monetary value of uncovered artifacts?

There remains a deep rift between archaeologists and conservators within the context of an archaeological site, in part because of this double-standard regarding the value of finds. Conservation has yet to be fully integrated into the workings of most archaeological excavations because the emphasis is primarily on finding and documenting rather than keeping archaeological material. This means that material, once excavated, may not survive because there is little interest in conserving it for long-term study or use. Conservation is assumed to be luxury that most excavations cannot afford, rather than an essential means of understanding and analyzing the materials uncovered in the course of the dig season. Conservators’ decision-making skills and expertise may also be considered to be simple recipe-like techniques that can be easily taught to and applied by excavators to any variety of materials. Thus, important archaeological material that would survive excavation with conservation treatment may be physically damaged or lost by well-meaning but ill-prepared individuals who are not trained to preserve them. Many archaeologists also suggest that the artifacts they find are not beautiful enough to warrant a trained conservator on staff; therefore, the belief is that conservators primarily improve the aesthetic qualities of an artifact for a museum display, rather than stabilize it for purposes of scientific study. Such assumptions put both the artifacts and the information they can provide at risk, and ultimately limit the scope of an archaeological excavation.

The moment of discovery of an archaeological object is often the most vulnerable moment in that object’s “life.” In my experience working in the field, all materials, from robust stone to fragile textiles, begin to deteriorate rapidly once they are exposed to unstable ambient conditions. Therefore, there is a critically short period of time within which to stabilize and lift finds before they are irreparably damaged. During the 2002 field season at the University of Pennsylvania-Yale-Institute of Fine Arts Expedition to Abydos, Egypt, a group of 25 ivory bracelets discovered in an ancient child burial began to crack and split into hundreds of fragments within hours of being uncovered. It was only because I could temporarily stabilize them in situ that five of them could later be reconstructed for study and publication. This is but one example of the direct benefits of having a conservator on an excavation’s field staff. While not all excavations may require a field conservator, this decision should be made in consultation with a conservation professional *before* an excavation season begins, and provisions should always be made to bring in a conservator

immediately if circumstances require it. Furthermore, archaeologists must work in collaboration with conservators to draft long-term preservation plans for their sites so as to ensure that the material they excavate and the architecture they expose is protected for future excavations.

Conservators and archaeologists often clash on site over the question of what is more important to preserve: the object or the contextual information, respectively. But should not an ethical archaeological and conservation practice aim to preserve both equally (Lipe 2000; Lynott and Wylie 2000b)? Objects provide crucial information that even the most exhaustive descriptions, drawings and photographs cannot. An intact artifact may tell us about specific manufacturing techniques, the use of particular materials or pigments, or even preserve uniquely human traces such as fingerprints or DNA. Site practices must change to ensure that this original source material is not sacrificed for the sake of documentation. The development of increasingly sophisticated survey and photographic equipment means that information can be captured precisely in a matter of minutes. New conservation materials such as cyclododecane offer quick and entirely reversible ways to stabilize and lift fragile finds, also within minutes (Balachandran 2010). Given these tools, there is no justification for damaging or losing archaeological evidence. While there will always be competing priorities for preservation on site, the decision to simply document an artifact rather than conserve it should be an agonizing choice, not a routine one. If such measures are not implemented, it is disingenuous for our fields to condemn collectors and museums who wish to preserve unprovenanced objects when we ourselves are unwilling or incapable of doing so on site.

Conclusion

As per our ethical codes, conservators are bound to preserve both the physical artifact and the tangible and intangible values it carries. Thus, can conservators help reconcile the collector's fetishization of the physical object and the archaeologist's fetishization of the knowledge gained from that object? Conservators are uniquely placed to advocate for both the importance of archaeological context – as I did with my private client – and the actual artifact, as in the case of the ivory bracelets on excavation. Any rapprochement between collectors and archaeologists would require an acknowledgment that their entrenched positions on the preservation of only the object or only the information it contains, respectively, are in fact resulting in the destruction of the archaeological record. Archaeologists must also change their site practices in keeping with the high ethical principles they preach to collectors. This means recognizing that the physical preservation of the artifacts they uncover is an essential and routine archaeological responsibility, and one that requires planning, staffing, and resources. Furthermore, such care demands that excavations proceed much more slowly and uncover only as much material as they can preserve so as to fully discharge their ethical responsibilities.

Final Thoughts on Value, Money, Looting, and Artifacts of Questionable Origin: Richard M. Pettigrew

The papers by Ms. Balachandran and myself both pertain to concerns about the “commercialization” of archaeology. In both cases, an archaeologist and a conservator who consider themselves ethical took actions and positions considered unethical and improper by some of our colleagues. For Sanchita, the issue was her performance of professional services on behalf of a private collector and an object that had been removed from its original context. For us at ALI, the issue was our public presentation of a video that featured the curation lab of Odyssey Marine, a company that makes much of its income from selling redundant objects of high monetary value, such as artifacts made of gold and silver.

In both cases, we see an apparent clash between different kinds of value: monetary value and information value. Many archaeologists tend to regard their enterprise as a purely intellectual activity, independent of and on a higher plane than financial and commercial pursuits. To many, association with money debases and biases the search for knowledge. While I, too, believe that the search for truth should not be guided or colored by financial motives, I must point out the obvious: financial concerns always have played and always will play a key role in the conduct of archaeology. Most archaeology in the U.S., for example, is the work of for-profit companies and their paid employees, who endlessly seek out well-funded projects that are the source of their livelihood. Even university researchers follow the laws of economics, moving in directions encouraged and allowed by financial opportunities presented by grants and their departmental salaries. Might it not be time now to acknowledge the role of money in our work and find ways to come to terms with it? Would not such acknowledgment encourage the public to see archaeology as relevant – meaning here as part of a widespread and familiar socioeconomic system – instead of rarified and distant?

However, I am not convinced that this distinction of values is the sole focus of the dispute. Instead, it seems the debate has much to do with alternative strategies to accomplish what are widely agreed goals. Archaeologists generally agree that preservation of archaeological sites and their potential to yield information about past human activities is a critically important aim. This goal matches the high value that archaeologists place on information as opposed to market value. In this context, artifacts are considered to be important for their data potential, regardless of the price they might bring on the open market. A corollary goal, generally shared also by archaeologists, is to discourage and if possible prevent the damage that can be done to the information potential of archaeological sites by those who are motivated by greed to loot them for marketable artifacts.

With this in mind, consider the question: How do we achieve these goals? Those who hold that it is unethical to have any professional contact with private collectors or for-profit salvage companies believe (I think) that such contact encourages looting and destruction of archaeological sites (whether terrestrial or beneath the sea). Is this true? Conversely, is it true that professional refusal to work with all collectors

and salvage companies actually protects archaeological sites or collections? What evidence do we have for this? Is it not possible that a lack of engagement with such people and companies actually works against our preservation goals and separates archaeology from the mainstream of society? Beyond that, if artifacts are important to us purely as sources of information, then what is the proper disposition of multiple copies of identical objects (such as gold coins in the hundreds) that have extremely high value on the open market? And how do we protect marine archaeological sites containing such loot from salvagers using increasingly available and effective technology? And as queried by Sanchita, should archaeologists not simultaneously give proper deference, both in and out of the field, to the information value of an artifact and its values as a physical object?

I believe these questions need to be debated within the professional community and explored empirically to find out what policies might be the most effective. A pragmatic and nondogmatic approach to heritage protection and our role in the wider society seems likely to yield better results both for the preservation of the archaeological record and the public perception of archaeological relevance.

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Chapter 11

Archaeology on the Screen

Julie M. Schablitsky and Nigel J. Hetherington

The Topic How is archaeology interpreted and presented in movies and television? We are interested in general descriptions of your experiences with the media industry and any comparison – contrasts that you might be able to do between how archaeology is developed for the big screen vs. television – and how different topics are approached for filming, such as Egyptian tombs vs. American battles. Generally, what are appropriate levels of detail? To what extent and where is “dumbing down” necessary? Do you need to balance what you personally find interesting and what will “sell” or is anticipated to be of interest to the public? Are there things you would like to see in the world of film and archaeology that just do not seem to be possible, and if so, why?

Packaging Archaeology for Television: Julie M. Schablitsky

As archaeologists, we are both attracted to and repelled by the media. Television coverage of our work can successfully educate the public on a marginalized group’s history or reveal previously unknown or misunderstood aspects of a culture. However, as we hand over research material to the production company, we also lose control of how they present our findings or what they choose to focus on in their telling of the story. When substantial funding is granted to a research project by a network in exchange for rights to a famous story, the principal investigator may be requested to negotiate away certain publication rights to that network for a number of years.

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Newspapers, radio, and television reach a much broader audience than our academic publications and conference presentations; and now that we recognize the benefit of civic engagement to our projects and the community, many of us embrace the popularizing of our research through documentaries and feature length articles in popular magazines in order to successfully reach these publics. My experience with high profile archaeology sites and new discoveries (for example, the Donner Party, John Paul Jones' birthplace, and historic DNA) has provided me a wide range of experiences with television. Although I am on the research faculty at the University of Oregon, I currently live and work in Maryland where I head the Cultural Resources Section at the State Highway Administration (SHA). Since my role at SHA is to also direct our public outreach program, I find the media and other electronic resources invaluable to my work. Admittedly, this form of outreach is limited to providing the public only the highlights of our research. Media venues do not have the airtime nor publication space to relay all of our findings and interpretations; however, responsible reporting should at least incorporate the site's significance into their story. Despite the occasional misquote and sensationalization of headlines, published and televised briefs on our work generally provide the public the bottom line on our research.

Since the age of seven I have wanted to work as an archaeologist. The first time that the past became interesting to me was when I recognized fossils of shells in the limestone gravel of my driveway. After that experience, I checked out every book on Egypt and Mesoamerica that I could find in our small town public library in southern Minnesota. Naturally, interest in past cultures encouraged me to seek out an education in the field of anthropology that resulted in obtaining my doctoral degree with an emphasis in archaeology. My dissertation focused on a marginalized neighborhood in Virginia City, Nevada and the discovery of a nineteenth-century hypodermic syringe on that site introduced me to the world of documentary film making (Schablitsky 2002). The syringe and associated needles held nuclear DNA profiles that I used to help interpret the site (Schablitsky 2006a). The discovery and filming of these results encouraged a production company to provide limited funding and a week of filming on another site that required a second look, the Donner family camp site in northern California. My interest in the portrayal of archaeology on television was piqued when I observed my own research as well as my colleagues' work being processed and repackaged for the general public by various media resources (e.g., Schablitsky 2007). Regardless of the subject, successful documentary film producers emotionally and intellectually stimulate their audience. Whether or not it is the emotion that I prefer the audience to feel (for example, repulsion for cannibalism), I now understand the power of television and recognize one of the avenues an archaeologist can take to humanize the past.

As a principal investigator of the Donner Party Archaeology Project I was exposed to a range of national and international media experiences ranging from local newspapers to television documentaries (Schablitsky and Dixon 2004). The tale of the Donner Party is one of the most popular stories of the American West. During the winter of 1846–1847, more than 80 people became snowbound in the Sierra Nevada Mountains and after depleting their food supplies, some of the pioneers ultimately

turned to cannibalism to survive. Not unexpectedly, we witnessed responsible reporting by some of the media that eloquently illuminated the story of the family and their descendants.

Other media glossed over our findings to highlight the story of cannibalism, even going as far as to insinuate that the absence of human remains in our bone assemblage proved the Donners never cannibalized. Two major networks even aired documentaries on our Donner party research. In one of the documentaries, the public never learned that we identified the location of one of the Donner's shelters, reconstructed their diet from small bits of faunal remains, or identified activity areas within their camp (Schablitsky 2006b; Robbins and Hanks 2006). Revealing these findings on television had the potential to transform the Donner Party story from one of bloodthirsty cannibals to a very human story of survival in the face of great personal tragedy.

Instead, the documentaries attempted to answer the question about whether the Donners actually cannibalized each other. One of the productions showed us excavating in the field finding a piece of bone with a chop mark, but left the audience wondering if it could be human; it was horse. The second documentary focused on the traditional entrapment story that included highlights from our scientific research that concluded with a Donner descendant's interest in our work. The descendant hoped that our work would help prove that her family never cannibalized. In the end, we took a closer look at the historical record and concluded that it was probable that her great, great grandmother left camp before cannibalism began at the Donner family camp.

Every archaeological site could potentially fall victim to over simplification or sensationalization by the media. Although a limited amount of repackaging is necessary to make some aspects of the research digestible for the lay audience, our significant contributions about the past can be in danger of being bypassed or overshadowed if entrusted to irresponsible writers, directors, and editors. Archaeologists should also educate themselves on the variety of documentaries currently being produced and develop a relationship with the director and producer if they chose to highlight their research in a popular medium. Furthermore, they should understand the limited amount of control they may have in the development and editing of the show.

Despite my experiences with the media, I still believe that television documentaries have the potential to accurately teach the public about the process of archaeology, to demonstrate the value of our discipline, and to present the findings in an ethical and intelligent format. I appreciate that each production company has limited time and money to produce a documentary. Reduced budgets often result in short cuts during the shooting of the episode and in the editing of the hours of footage. Although these limitations may inhibit the ability of the director to capture every aspect of archaeological research and interview multiple experts on specific subjects, it should not affect the question they choose to ask in the documentary nor the delivery of the findings. If networks cannot successfully tell the story of an archaeological site with their current documentary style, perhaps what they need to do is change their formula to both entertain and accurately educate the audience.

Time Team America

In January 2005, at the Society for Historical Archaeology Conference in York, England, I was asked to participate in an American version of [the British archaeological TV show] *Time Team* by Tim Taylor, the creator and executive producer of the show. After three years of negotiations with American networks, the British television program distributor, Channel 4 (now a division of Digital Rights Group) agreed to partner with Videotext (Tim Taylor's UK Production Company), PBS, and Oregon Public Broadcasting (OPB) to produce five episodes of *Time Team America*. Similar to the UK version, *Time Team America* includes a seasoned professor, an eccentric excavator, along with other professional archaeologists with experience in public archaeology. Bringing in experts to help tell the story, the archaeologists have three days to excavate and interpret what they find. The goal is to reveal new data and leave behind a remote sensing blueprint of the site for the local archaeologists to follow in subsequent seasons.

This is the first time that an American network has funded a series that focused solely on archaeology sites within the U.S. Perhaps the most creative aspect of the program (and one that would receive a standing ovation from every archaeologist) is that *Time Team* teaches the viewer about the process of archaeology. Unlike documentaries which interview scholars who have already made their great discovery, *Time Team* cameras catch the artifacts and discoveries as they are made by the archaeologists. In a sense, it allows the audience to peer over the shoulder of the archaeologists and eavesdrop in on their conversations.

What I personally found most interesting about the creation of *Time Team America* was how they picked the archaeological sites to be examined and the method in which they chose to shoot the scenes. The UK series began by excavating in the backyards of people who claimed to have found interesting pottery or other unique items in their gardens. Over a weekend, a crew of British archaeologists descended onto these small places to reveal Roman walls and in one case, a mosaic floor. For American archaeologists, the permitting logistics and our archaeology team's concern for exposing and abandoning archaeological sites for the sake of a television show caused the producers to film multi-year archaeology projects such as field schools. These sites allowed us to conduct remote sensing surveys and assist the local archaeologists in answering long-standing questions about their site. Although we helped document the site during the excavation, future artifact analysis and report writing from our work would be rolled into the final site analysis.

A year before the shooting of *Time Team America*, the director asked the team archaeologists to come up with a list of sites where we could help the local archaeologists answer a question. Initially, I was a bit amazed at the types of sites that were chosen for the series since most of the sites would likely only reveal subtle traces of archaeology after only a few days of excavation. What I later learned was that the director did not choose sites based on the probability of us discovering features or even an earth shattering artifact assemblage. Instead, the producers were after an archaeology site that had a good story. In the end, the story will always carry the

show if the archaeology is a bust, and this is exactly what happened on the nineteenth-century African American town site of New Philadelphia, Illinois.

Standing in a fallow agricultural field in Illinois, the production assistants handed us our script. Unlike traditional documentaries, this show employed three camera crews who filmed different scenes simultaneously. The script dictated who accompanied which camera crew to a specific location, whether the local archives, the dig site, or an interview location with one of the experts. Despite the archaeologists being split up among the three crews, the excavation progressed quickly after the remote sensing equipment canvassed our survey area that allegedly held the remains of an African American schoolhouse. Test unit excavations soon revealed that the field was plowed to the subsoil and no trace of the schoolhouse remained beneath the plow zone. Despite the failed attempt to locate remains of the schoolhouse, the other two camera crews had been documenting interviews with descendants and African American scholars, the cooking of traditional food, and the singing of slave ballads. In the end, the director created a beautiful story about the freedom and the hope of an African American man named Frank McWorter, despite the absence of archaeology. Although we did not find the schoolhouse, *Time Team America* documented conversations between scholars on the African Diaspora and taught the viewers about the process of archaeology, including the moments of disappointment with which all archaeologists are familiar but seldom have the chance to share.

A year after filming at the five archaeological sites (Roanoke Island, New Philadelphia, Topper, Range Creek, and Fort James), the series aired on PBS in July and August 2009. I was amazed at the editing and the story lines that followed our scripts almost precisely. *Time Team America* successfully presented the archaeological findings that ranged from small sixteenth-century ceramic sherds to nineteenth-century stone walls. Camera crews artfully captured conversations in the trenches as well as sound bites explaining how to use a trowel on an archaeological site. Indeed, traditional documentaries often dumb down scientific procedures and jargon and edit out scholarly discussions; *Time Team America* used our academic conversations and placed a host alongside of us who asked for clarification of terms and methods. Additionally, OPB created a Web site that allows viewers to continue their education on archaeology and learn more about the sites they watched on television; short video clips explain stratigraphy, ground-penetrating radar, and cultural resource management.

In sum, OPB produced a documentary series that went beyond the artifacts and into the methods of archaeology and the lives of the people we were studying at each site. From this experience, I have renewed faith in the potential of public education through television and the importance of utilizing the Internet for continued education after the excavation of a site. I hope that *Time Team America* will inspire other documentary filmmakers to humanize and illuminate the lives of the people behind the artifacts and to realize that scientific data and complex findings will not alienate their viewing audience. Instead, the multi-faceted documentation of an archaeological site may actually diversify and increase a network's viewership.

Producing Archaeology for Television:

Nigel J. Hetherington

The narrative behind the growth of the media over the last two centuries, from the beginnings of the printing press to today's multi-faceted output, mirrors, and overlaps to some extent with that of the development of modern scientific archaeology. The relationship between the two has become over time a complex and interwoven one, perhaps even incestuous. If we accept the view of Terry-Chandler that: "Heritage could be defined as the representation of the past for popular contemporary consumption" (Terry-Chandler 2000: 67) then it should also be stated that it is the media in the main that offers the public the multiple interpretations of the past that defines the modern view of heritage.

In the world of television, archaeology is a relatively small player although it has of late gained ground; the formerly fashionable output of gardening, cooking, and lifestyle shows has recently been usurped (in the UK and North American market) with programming focusing on archaeology and other studies of the past. Never has there been a time when the past is apparently so popular; schedulers regularly devote a whole week of prime airtime to programs on Ancient Egypt, entire weekends are given over to celebrations of historical events and celebrity presenters now tell us all about their own and others, past lives. Additionally, sales of DVDs and books of these programs routinely outsell prize-winning authors.

We need to ask ourselves, where does this all leave the study of archaeology and should all this new attention and interest be considered a positive thing for the field of archaeology? For many, the benefits are tangible, university admissions for Archaeological, Museology, and Heritage courses are at a historical high and people of all ages are becoming attracted and engaged by the study of the past (Schadla-Hall 1999: 152). However, even though these programs may encourage admissions, many students arrive with an unrealistic view of the profession they are about to study, the reality of contract archaeology for instance, of days and weeks digging in a muddy field in the rain are not often portrayed on television and therefore it could be argued that the small screen is responsible for painting an unrealistic portrait of the work of archaeologists (Schadla-Hall 1999: 152).

Despite this new found television popularity, the process in which a television program is devised, produced, and finally arrives on our screens is not something generally understood by the viewing public, or by many archaeologists, in fact it is often seen as a fantastical process or something of a black art. Regardless of the fact that many archaeologists have appeared on television as an expert contributor, or had their work featured within a program, a number of misconceptions and fallacies still exist within the archaeological professional about the role and nature of the broadcast media. It should be noted here that some broadcasters, such as the BBC, have a public service element contained within their charters; however, broadly speaking television is there to entertain and to achieve high viewing figures.

At this point, I must declare that I now find myself in somewhat of a unique position in that I am an archaeologist who earns a living as a television producer, working mainly on programs with an archaeological or historical component.

This transition from an archaeologist to a television producer took several years and quite a lot of soul searching on my part, mainly about my role within an industry that many of my colleagues mistrust and actively avoid.

The story of how I made this switch in my career is a relatively short one; having graduated from the Institute of Archaeology at University College London (UCL) with a BA in Egyptian Archaeology (after a sudden mid-life career change from the financial sector into archaeology), I found myself drawn to the field of archaeological heritage management and embarked on a Masters course at UCL reading Cultural Heritage Studies. While undertaking this period of study I was fortunate enough to be offered a position working for the eminent Egyptologist Dr. Kent Weeks, the Director of the Theban Mapping Project in Egypt.

As a respected scholar and to an extent a media personality, Dr. Weeks has had a long and successful relationship with the media due in large part to his spectacular re-discovery of one of the largest tombs in Egypt, the tomb known as KV5, the mortuary complex for the sons of Rameses II in the Valley of the Kings on the West Bank of Luxor. Working alongside Dr. Weeks on the management plan for the Valley of the Kings for three years brought me into regular contact with television producers and production companies and sowed the seeds of an idea that was to later develop into the formation of my own media and heritage consultancy company, Past Preservers.

From that small start in 2005 Past Preservers has grown into a successful and dare I say well-respected company that I still manage and operate on a day-to-day basis. Our remit is to provide creative guidance in the making of historical television programs, to supply experts for on camera and research positions and represent archaeologists and historians who want to move into a full time career in the media as presenters. We have also recently launched our own production company with two partners, one in London and another in Los Angeles, to develop our own program concepts. Due to the international nature of the business I am “based” in three locations: Egypt, the UK, and the U.S.

Therefore, you could say that I have a vested interest in the media and yes, that is true to a point, but first and foremost I am an archaeologist and one that believes that the powerful role the media can play in protecting our heritage is worth our attention. More importantly, it is worthwhile building a sustainable relationship with the media to secure a future for the past. I am not stating that the media is without faults, that would be mistaken, but I can truly say that I have never encountered a producer who deliberately set out to either deceive the archaeological community or the viewing public. But we have to remember that first and foremost what a television producer is making is entertainment, if that educates and empowers people along the way then we have all achieved a result. This is where we come in, the archaeological community that is, we need to understand our role or – dare I say our duty – to get our message through to the media and via them to the public.

One way this can be done is through organization such as mine. At Past Preservers we actively encourage the academy to communicate to us their ideas and projects for television shows. The media industry is always hungry for new program ideas or concepts and currently a significant number of these are developed in-house by

production companies without the involvement of professionals in the various historical fields. This is not a direct policy of the production companies but rather because no mechanism exists for dialogue between the two worlds. We hope to change that. However, to understand how we arrived at this point we need to take a brief look at the history of archaeology on television.

Archaeology on Television

The past, at whatever level and at whatever time, has lost none of its power to inspire. Archaeologists, whether on screen or off, hold a key to that treasure box (Day 1997: 12).

A caveat should be made here that this brief overview of archaeology on television is focused on the UK television market. The period beginning in the 1950s with the advent of commercial television in the UK to the early 1970s were the formative days of television broadcasting and watching television was a very different experience than it is today. Before the advent of new technologies, such as satellite and cable television, the video recorder and the World Wide Web, viewing habits were more formal and structured. The arrival of these new technologies would eventually fragment the terrestrial television audience; however, before this took place families largely watched television as a group and were limited in most cases to one television set per house (Weight 2002: 252). The first exposure of archaeology on the UK television took place in the 1950s with the program *Animal, Vegetable or Mineral?* This featured the renowned archaeologists' Sir Mortimer Wheeler and Gordon Childe and was not much more than televised lecturing. The use of a single expert or talking head in these shows has led to the labeling of this period the "lone expert" or "age of authority" phase (Ascherson 2004: 155). This type of programming was to set the tone for television portrayals of archaeology and archaeologists for the next 20 years or more.

In the 1970s and 1980s archaeology featured very little on television apart from its portrayal in cinematic features such as the *Indiana Jones* Trilogy starring Harrison Ford as the swashbuckling hero. The 1980s and early 1990s were categorized by the arrival of programs such as *Time Team*, *Meet the Ancestors*, and *Two Men in a Trench*, which were to herald in a new era for television archaeology in the UK. However, the last decade has seen an explosion in programming related to archaeology, history and the re-discovery of the past. Countless documentaries, live digs, speed or extreme archaeology, reconstructions, and re-enactments of past lives now fill our screens on both the terrestrial services and to greater extent on the satellite and cable channels, which devote hours of screen time every week to the genre.

The current output is dominated by a small number of global broadcasting companies, on cable and satellite the three main players are The Discovery Channel, The History Channel, and The National Geographic Channel; increasingly their programming also dominates terrestrial output. Many within the academy are of the opinion that these new style programs are a vast improvement on the old talking heads style of archaeology documentary and point out that they attract young people

to the discipline; however, others such as Schadla-Hall (1999: 152) have pointed out above that the programs portray an unrealistic view of the archaeological profession. I personally believe they can have a positive effect on the image of archaeology, for instance in the author's own archaeology undergraduate class of 2000 (UCL), a large majority of the student body claimed unashamedly that their interest in archaeology came from watching such television shows.

However, a continuing issue is that the academy is not actively engaged with the program makers, apart from a few notable examples what involvement there is, is largely unplanned. The vast majority of the output of archaeological shows is publicly ignored in the academic community, in fact, many scholars would deny even watching this "type" of programming or being aware of them; however, for some academics, taking part in these programs has become a substantial source of income for themselves and their projects (Ascherson 2004: 156–157).

Some production companies seek out relevant professionals to provide guidance in their choice of subject matter for their documentary concept and during the research phase of program making; however, many report a reluctance by archaeologists and academic institutions to be involved with their projects. Therefore, can we then blame the media when we do not like the end result they produce? This is one area in which Past Preservers believes it can make a significant impact, by closing the gap between the two worlds of archaeology and the media.

Numerous archaeologists, historians, and interested parties, however, are worried by all this new media attention and as Stephen Fry stated recently: "in publishing and in broadcasting, history is a phenomenon that continues to exceed expectations. Enthusiasts bounding about from battlefield to palace and castle and back again, filling more air time than ever before. From Melvyn Bragg's matchless colloquies on Radio 4 to documentary series bearing the proud epithets 'landmark', 'flagship', 'prestige', 'must-see', 'event TV' and 'water-cooler moments'" (Fry 2006). I have heard many archaeologists ask where is all this leading? Is archaeology not just the new cooking? Just as cooking was the new gardening? Should the academy be making the most of this attention or should we be addressing the long-term effects this media frenzy is having on the profession and the future direction of archaeology?

However, the fear of television and its power to influence public opinion is not new; in 1960, the Observer Newspaper in a leading article entitled "The Uses of Television" stated: "TV bosses should try to refine taste rather than feeding the undoubted public appetite for trivialities and narcotics" (Briggs cited in Weight 2002: 314). Ever since then, television has been accused of "dumbing down" and of aiming at the lowest common denominator (Weight 2002).

In the relationship between the academy and the representation of the past on television, many have argued that what is taking place is simply the commodification of our heritage by program makers. However, this relationship is not quite as one sided as we assume. Ascherson has argued that many archaeologists are as adept at working the media as their counterparts in the TV world (Ascherson 2004: 145). For example, in 1922 when the tomb of Tutankhamun was discovered, Howard Carter was involved in some media manipulation of his own and was guilty of inadvertently starting the stories about the curse Tutankhamun. By giving exclusive right

to the *Times* of London, Carter left the other journalists on the outside holding a grudge against him and Lord Carnarvon and with very little left to write about, they concocted the story of a curse.

This type of exclusive deal is not unique either. In the 1920s, The Egypt Exploration Society agreed an exclusive deal with The *Illustrated London News* and the newspaper was granted rights to cover all finds at the society's excavations at Amarna. Due to the connection of Amarna with Tutankhamun and the recent discovery of his tomb, it turned out to be a very lucrative deal for both parties. The style of the resulting pieces was tabloid in essence and treated the Amarna royal family like newly discovered celebrities, setting in process the media relationship we have inherited in part today (Montserrat 2000: 74). This is mainly a phenomenon of the print media but is also prevalent within news agencies on the small screen and some production companies, the simplification of reducing a new discovery to a headline or sound bite; discoveries are often only described in terms such as the oldest, the biggest, the most valuable, etc.

In my own work one of my roles is to act as a mediator between the worlds of archaeology and the media, commissioning editors are hungry for new talent and new stories to tell, but many archaeologists are reluctant to come forward to tell their stories from what seems to be a built-in hostility to the media. The commissioning process in television normally works through production companies who pitch (attempt to sell) their ideas to a commissioning editor at a network (the channels). The ideas or concepts they have for programs are either developed in house or in collaboration with partners such as ourselves or professionals working in the relevant field.

These barriers between the academy and the media have to be broken down if a successful and sustainable partnership is to develop. At Past Preservers our approach has been to develop our own production house, mainly staffed by archaeologists who understand the media world they are dealing with and who can begin to build bridges between the two communities. Additionally, many universities are teaching the next generation of archaeologists how to deal with the media for their own advantage; Bristol University must be singled out for their forward thinking on this point.

Finally, we should discuss what are the benefits for archaeology of a relationship with the media? For one, the academy should consider the funding implications of archaeology by and for television; many of these "research" digs would probably never be carried out if it were not for the production company's funding (Ascherson 2004: 156). Secondly, the media can help archaeology reach a mass audience; they can foster a deeper appreciation in the past and ignite interest both among potential students and among the public.

In my opinion, archaeologists are becoming increasingly media-aware and more able to manage the sometimes fractious relationship with the media in a more productive way. However, for the long-term benefit of the discipline the academy must engage more directly and indirectly with the media, for example, by training future archaeologists in effective ways of handling media relationships, as Wollen said "if the past is a foreign country... then cinema and television provide ideal means of getting there" (Wollen 1991: 191).

Further Thoughts on the Presentation of Archaeology in Television and Video Formats: Julie M. Schablitsky

Hollywood regularly produces movies centered on historical events and people. In fact, the academy award for best picture is often bestowed upon movies with historical story lines, for example, *Gone with the Wind* (1939), *Ben Hur* (1959), and most recently, *Chicago* (2002). Documentary films also regularly capitalize on the public's interest in history. The History Channel, a network solely dedicated to our past, was launched over 15 years ago and regularly competes with other well-known cable brands for audiences interested in history. Most archaeology documentaries are successfully produced using either a traditional or host-based formula. The traditional documentary incorporates scholars who report on their research or a familiar subject. In the past, these "Ric Burns-type" productions incorporated scenery and gray-haired talking heads laced together with a faceless narrator and emotional music. Although this formula of documentary is still relevant, directors are more likely to film the scientist on location to keep the scene moving and to catch the channel surfer. The second style of documentary uses a professional host to lead expeditions to known archaeological sites. Both formulas attempt to hold the viewing audiences' attention by producing a fast moving script interspersed with computer animation.

The professional "host-led" archaeology documentaries use a reality television style format with unfiltered comments by the host who may have a background in journalism or less often, archaeology (for example, the *Naked Archaeologist* and *Bone Detectives*). This type of documentary can be risky for scholars to participate in since it is common to be given limited knowledge about the premise behind these shows. Recently, I was asked to review a History Channel documentary for *Archaeology Magazine* called, *Solving History with Olly Steeds*. During the episode "Hitler's Mummies," Steeds visits a museum in Germany where he is kicked out half way through the interview with the curator. It was at that moment that the curator learned of the director's plans to produce an episode on the way the Nazis used mummies and bog bodies for their abject purposes. Although the production company found this to be great television that underscored the host's insistent ability to get to the bottom of the story using exploitive tactics, it undoubtedly reinforced the archaeology community's mistrust of the media. This unfortunate event should caution archaeologists against being interviewed without learning about the premise behind a show; however, it should not dissuade them from working with ethical and educational networks, such as PBS as exemplified by their approach to *Time Team America* (described previously).

Admittedly, archaeologists have very little control over the production and final editing of any documentary and no influence on the "grab and go" sound bites aired on local television networks and radio. Although the interviewee can control what is said during filming, the editing of an hour-long program will take place in a studio where dozens of hours of film footage will be distilled down to 50 minutes.

Those archaeologists who participate as an expert in a documentary featuring their site may work with the director to incorporate aspects of their research that may appeal to the scientific community, but there are no guarantees that those scenes or discussions will survive the editing process. Indeed, an archaeologist may exercise some control on television when their career and research interest is dependent on media exposure. In the previous section, Nigel Hetherington presents Howard Carter as an archaeologist who manipulated the media. I disagree with his interpretation of Carter's objectives; rather, Lord Carnarvon agreed to sell exclusive rights of the story to the *London Times* in an attempt to reduce sensationalized coverage and to exert some control over the dissemination of information relating to their discovery of King Tutankhamen. Lord Carnarvon penned a familiar sentiment felt by many archaeologists when he wrote to Carter about his frustrations with the media: "Neither of us having much experience of press sharks, one is rather at a loss to know how to act for the best" (Macintyre 2007). Perhaps a better example of a contemporary archaeologist who has influence with the media is Zahi Hawass. Through a range of venues, from interviews to his reality-style television series, *Chasing Mummies*, Hawass is adept at using the media to stimulate excitement and preservation of Egyptian antiquities.

Also in the previous section, Nigel points out the absence of a communication system for archaeologists to share story ideas with documentary filmmakers. This absence of a dialogue between the scientists and media results in high profile archaeologists receiving regular inquiries from production companies who shop around for story ideas to pitch to the networks. The conversations usually focus on the archaeologist's potential role in their undeveloped story idea or aspects of their research that will appeal to a television audience. Although I believe a mechanism for archaeologists to share story ideas with the networks could be mutually beneficial, it will not remedy the situation of highlighting popular historical stories and focusing on the sexy attributes of a site. Furthermore, in our electronic age of Facebook, Twitter, and blogs, Hollywood would have already created an Internet-based "idea bank" for the archaeological community if they were truly interested in our story ideas. Indeed, documentary producers entertain their audience with the findings from our research, but they also highlight a connection that a project may have with some controversial or shocking subject matter. When archaeologists agree to allow the production company the use of their research, it is often to educate the public about their site, expecting interesting aspects of their science to make it into the storyline. If the television producers want to entertain and archaeologists want to educate, where is the common ground and how can we work with documentary filmmakers without fearing the potential misrepresentation of our research and critique from our academic colleagues for "over exposing" a site?

If interested in pursuing a relationship with a production company and/or network, it is imperative to request examples of the director's recent work to ensure the style and presentation of similar material is acceptable to you. In addition, expectations should be realistic, meaning not all of a site's methods, findings, and/or interpretations will be incorporated into the documentary. In fact, what may be significant

to the archaeologist is not necessarily what the director believes will interest the audience. The benefit of sharing archaeological discoveries on television is that it can often lead to additional media opportunities, financial support for a project, and perhaps most importantly, media exposure can stimulate audience curiosity about a less known aspect of our past.

Perhaps a first step in taking advantage of media opportunities is to first train archaeologists on how to work with production companies and networks to highlight their research. As Nigel suggests, universities should offer classes on how to work with the media to benefit archaeology. At some universities, teaching students how to incorporate the public into their archaeology projects and create a dialogue with the community is a key aspect of their educational experience. The addition of a course or partnerships with a media department could provide archaeologists opportunities to appreciate what data the media will likely be interested in highlighting and even how to ensure data are delivered in an engaging way. Furthermore, the goal of the archaeologist, particularly when in front of the camera, is to deliver an enthusiastic message to the audience about the archaeological site; sometimes the scholar's focus on television should not be about how much data to cram into a 10 second sound bite, but to stimulate excitement and feelings of stewardship about the discovery in the audience. Fame through television appearances is not just for people, it is also for archaeological sites. Any archaeologist who steps in front of a camera, whether for a 30 second interview on the local news or an hour long feature on a site, would benefit from a class or workshop on how to navigate through the process of documentary film making.

The publishing of scholarly articles, popular pieces, or at a minimum, establishment of a Web site where the public can learn more about the site is a prerequisite before agreeing to share research data with the media. The existence of a television documentary on a project without supporting material available to the public and academic audiences is a disservice to our discipline and a lost opportunity. The decision to place research into the hands of a documentary filmmaker must be based on a trust with the producer and the potential for public exposure to benefit the project and increase awareness on a previously unknown or misunderstood aspect of our past. The decision to decline a documentary producer's invitation to share significant findings should be appreciated by the public and likewise, the choice to televise an archaeology site should be respected by the academic community.

Final Thoughts on the Presentation of Archaeology in Television and Video Formats: Nigel J. Hetherington

In the previous section, Julie suggested that archaeologists have little or no creative control over the material used in a documentary. In my experience, it is very unusual for any participant involved in a documentary production to have creative control. Hence the need to work with established production companies with a good track record or for the participant to seek representation is essential.

My second point concerns our discussion of Howard Carter and the discovery of the tomb of Tutankhamun. Julie states that he sought an exclusive deal with the *Times* to avoid sensationalist coverage. My point is that this in-built mistrust he had of the media in fact lead to even more sensationalist coverage and, essentially, totally backfired for Carter. This reinforces both of our recommendations that archaeologists need to have media training and learn to engage with the media.

Finally, I add to Julie's point that no forum currently exists for the exchange of ideas between production companies and the academy proves their lack of interest in such a venture. In fact, a critical complicating factor in developing such a forum is the issue of control of its intellectual property. The media is a very competitive industry and such a forum would have to be secure and have means to address intellectual property issues. Past Preservers is currently working to establish such a forum in the near future.

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Chapter 12

Historical Archaeology and Public Engagement

Della A. Scott-Ireton and David Gaimster

The Topic How do we determine appropriate levels of archaeological involvement and subjects in an educational setting? To what subjects or topics does archaeology contribute? Are there innovative applications of which you are particularly proud or think are really good? Are there any applications of archaeology that you would like to see but have not been able to make work?

Public Education About the Past, Including the Underwater Part, in the U.S.: Della A. Scott-Ireton

I've been interested in archaeology since I was a child. As a little girl, I never wanted to be a nurse or a teacher or a ballerina, like most of my friends – I only ever wanted to study the past. When I was quite small, before I learned to read on my own, my father read to me *The How and Why Wonder Book of Lost Civilizations*. Filled with stories of the discovery of lost cities such as Machu Picchu and Pompeii and with colorful images of intrepid explorers (including underwater explorers!), I remember poring over it for hours. It was the first book I ever read on my own. How could anything be more exciting?! I couldn't understand the lack of interest my peers usually showed when I began to expound on the wonders underground and under water. Much later, as a professional archaeologist (the book never said anything about the *years* of school, by the way), I began to realize that the lack of interest in our heritage isn't just a childhood thing. Although many people have a passing

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fancy for the perceived romance of archaeology – thank you, Indiana Jones – a great majority do not understand the purpose of studying the past, the value of preserving the tangible remains of the past, or how archaeology can contribute to their daily lives. While I’m often still bewildered by the general lack of understanding regarding my profession, I believe I can help people understand the usefulness of archaeology. I also believe I have a professional and ethical duty to do so.

From my earliest schooling in archaeology at the University of West Florida in Pensacola, the need for engaging the public was stressed as an inherent part of the profession I wished to pursue. I continued in historical archaeology at UWF, earning a Master’s degree while giving public presentations and training volunteers, before taking a job with the Florida Department of State’s Bureau of Archaeological Research as an underwater archaeologist. For a decade, I focused on explaining to Florida’s diving citizens and visitors that the real treasure of shipwrecks is their history, rather than mostly nonexistent sunken gold and pirate booty. The most rewarding part of my duties for the state of Florida was the development of Underwater Archaeological Preserves – historic shipwrecks interpreted as “museums in the sea” for divers and snorkelers (<http://www.museumsinthesea.com>). I helped the Preserve system grow, and saw first-hand how the process of involving local divers in the research and interpretation generated a sense of stewardship that was the single most effective way of preventing looting, vandalism, and mistreatment of shipwrecks. I enrolled at Florida State University in Tallahassee to pursue a Ph.D., and wrote my dissertation on the development of underwater archaeological preserves, shipwreck parks, and maritime heritage trails, with the idea of formalizing the important “steps” for creating successful interpreted maritime heritage attractions. My current position, described in more detail later, allows me to focus entirely on public engagement with the goal of protecting heritage sites through education and direct involvement.

The issue of relevance in historical archaeology is one that I find myself discussing with my colleagues more and more. Theoretical debates and methodological discussions generally take a back seat to ideas for making our field mean something to people outside the archaeological profession. This does not mean that theory is ignored or new methodologies are not pursued, only that, in my experience, the question of making archaeology, and especially historical archaeology, relevant to the nonarchaeologist is an increasingly important focus for thought and effort among professional archaeologists.

In the U.S., “historical archaeology” focuses on the post-1492 European occupation of the New World, since Indigenous Peoples in North America did not have a system of writing and, therefore, left no documents to augment the archaeological record. Even though the people of Central and South America did possess sophisticated means of written communication, the 1492 date generally is used as a dividing line between historical and prehistoric archaeology, as a means of convenience and because much deciphering of indigenous writing is on-going. Based on this definition, the period of time that historical archaeology covers is less than 4% of the approximately 14,000 years people have lived in the Americas.¹ The United

¹ The debate surrounding the “peopling of the Americas” is a topic for an entirely different publication.

Kingdom/European definition of historical archaeology is, of course, very different. I believe the issue of relevance, however, is quite similar.

Archaeologists in the U.S. are, in general, very good at talking to one another. We go to international, national, regional, and local conferences and tell each other all about our latest projects and current research topics. We sit in bars and restaurants and tell each other some more. We post to online message boards and tell each other again in excruciating detail. We publish gray literature and journal articles that only other archaeologists read. What we're not so good at is telling nonarchaeologists what we're doing and, more importantly, why we're doing it and *why they should care*. The branch of archaeology known in the U.S. as "public archaeology" was developed to address this deficiency and to explain to people the goals of archaeological research and why it is relevant.

When discussing my career in public-oriented archaeology, a particular photograph taken in the 1970s always comes to my mind. The photo shows an active excavation at a famous U.S. historical site with archaeologists working away and visitors looking on; the site is roped off with a substantial area between the barricaded visitors and the archaeologists. A sign is posted with large, unfriendly letters that states "DO NOT DISTURB THE ARCHAEOLOGISTS." The archaeologists are utterly ignoring the visitors, who, in turn, have no idea what is going on. I can guarantee those visitors left that site not understanding the purpose of the digging and, further, not caring at all. We are fortunate this narrow-minded and detrimental approach to archaeology has changed so much in the U.S., although there still is much work to be done. In the U.S., the "public" basically means the voters (and future voters); these are the people who have the power to pass legislation that will protect our cultural heritage on public lands, including submerged lands. They also have the power to rescind legislation, block funding, and abolish research and management programs. What they do all depends on whether they believe archaeology is important or not. It all comes down to relevance.

I am fortunate to work for an organization that has the sole purpose of education and outreach, explaining to nonarchaeologists the purpose, importance, and value of archaeological research and the need for preservation of cultural heritage sites. The Florida Public Archaeology Network's (FPAN) mission is to "help stem the rapid deterioration of the state's buried and submerged past and to expand public interest in archaeology." Our three major goals are educating the general public, assisting local governments (at the county and municipal levels) with archaeological issues and preservation initiatives, and supporting the State of Florida's Division of Historical Resources (which has management responsibility for cultural heritage sites on state-owned and controlled lands). The enabling legislation for FPAN is written using rather vague language, which allows staff to interpret the goals in a variety of ways.

The days of "public archaeology" meaning giving a public lecture here and there and maybe inviting people to visit your site for an afternoon are passé. Although a good start, more sophisticated methods for engaging the public in archaeological research, ethics, and goals have been developed and are proving successful in making archaeology relevant to the public. In particular, training programs, for example, to enable teachers to use archaeology-related lessons in their classes, to help city and county administrators manage cultural sites on their property, and to assist park rangers in identifying and protecting cultural resources, have proven effective.

As an example of this sort of training program, one of the most valuable services that FPAN offers is training for SCUBA instructors, called the Heritage Awareness Diving Seminar (HADS). Offered in partnership with the Florida Bureau of Archaeological Research, HADS is not a course to teach methods of underwater archaeology, but is rather an underwater historic preservation course. Training agencies in the U.S., such as the Professional Association of Diving Instructors (PADI), the National Association of Underwater Instructors (NAUI), and Scuba Schools International (SSI), are required to teach new divers about the underwater environment. Basic Open Water divers learn to keep gear from dragging over coral and to not molest sea life; they generally, however, do not learn about laws protecting shipwrecks or the need to preserve submerged cultural sites as part of the underwater natural environment. HADS is targeted to diving leadership – instructors, instructor trainers, and course directors – to teach them how to teach underwater heritage preservation and to encourage them to include this information in their classes. By providing this training, FPAN can help to “plug” a gap in the standard diving curriculum where the underwater cultural heritage is concerned.

With the value of these training workshops in mind, I submit that simply telling the public about archaeology is no longer sufficient. As archaeologists, we must engage the public in the study and preservation of their own past by enabling them, through providing training and hands-on opportunities, to participate in archaeological research to the extent of their interest. In many cases in the U.S., the public has not only the interest but the *right* to understand what archaeologists are doing; when research is carried out using public tax monies or on publicly owned lands (as state and federal lands generally are), the public is entitled to know for what their lands and money are being used. If we operate under the assumption that education leads to appreciation that leads to preservation, we can only help ourselves and our profession by helping the public, for whom we are ostensibly discovering and understanding the past. By showing the public how archaeology is relevant to their lives, interests, communities, and heritage, we can ensure that archaeology is for someone, rather than simply about something.

A London View on the Relevance of Historical Archaeology: David Gaimster

Archaeology has the capacity not only to calibrate but also to amplify the established documentary and iconographic record of human experience. From the mid 1990s the conference program of the Society for Post-Medieval Archaeology (SPMA) (*The Age of Transition. The Archaeology of English Culture 1400–1600; The Archaeology of Reformation; The Archaeology of Industrialization; and Cities in the World*, to name but a few meetings) has revealed the capacity of archaeology and the study of artifacts to illuminate the “parallel lives” of ordinary people who experienced the effects of the merchant capitalism, industrialized modes of production, urban sprawl, environmental damage, colonial expansion, religious

sectarianism, and the social inequality that are all defining characteristics of the modern world. These SPMA meetings have contributed to a deeper understanding of the material and mental attributes of what we now regard as modernity and the foundation of the world we live in today. Over the past few years I have also attended a series of conferences in Europe and in North America that illustrate the current intellectual and professional surge in the discipline of historical archaeology.

I have been working professionally as an archaeologist, museum curator, government policy advisor, and latterly as the CEO of an independent heritage charity for nearly 25 years. My interest in postmedieval archaeology stems from early involvement in urban rescue excavation in London and on the Continent, which by the mid 1980s was being practiced as a multi-period enterprise. Following doctoral work on the ceramic supply and demand in the towns of the Lower Rhineland and the trade in Rhenish ceramics to London and English ports, I joined the British Museum as curator responsible for the national collections of medieval and postmedieval archaeology and social history. The emerging discipline of historical archaeology greatly influenced the writing of my monographic study of German stoneware production, trade, and consumption around the world between the thirteenth and twentieth centuries (Gaimster 1997). Following a three-year spell as policy advisor on cultural property matters at the Department for Culture, Media and Sport (DCMS), where I took forward legislation and other regulatory instruments helping to protect a wide range of heritage assets, including cultural property of the sixteenth to twentieth centuries, I moved out of public service into the independent charity sector. My role as General Secretary (CEO) of the Society of Antiquaries of London (SAL), the UK's oldest and lead independent foundation for the study and protection of the historic environment (<http://www.sal.org.uk>), has provided me with a opportunities to foster and promote historical archaeology both within and outside the UK heritage community through our lecture program, seminars and publications and through political advocacy. Outside my professional roles, I served for 18 years as a Council member, Hon. Secretary and latterly as President of the SPMA, highlights of which include the strengthening of relations and collaboration with the Society for Historical Archaeology in North America and related disciplinary institutions in Britain and Europe.

My career has seen considerable developments and advances in the discipline and practice of postmedieval archaeology in Britain and Europe. Historical archaeology is emerging as an increasingly vibrant and popular strand in the UK university teaching and research activity. Leicester University now has Britain's largest grouping of researchers specializing in historical archaeology. In April 2008, the University's School of Archaeology and Ancient History announced the launch of its new Centre for Historical Archaeology, recognizing particular strengths in the post-Middle Ages, but also the School's broad research and teaching expertise from archaeologically minded ancient historians and historically minded Classical and Medieval archaeologists (<http://www2.le.ac.uk/departments/archaeology/research/centre-for-historical-archaeology/cha>). The Centre aims to encourage and coordinate interdisciplinary research in the field of historical archaeology by building

links with other departments within the University, especially the Centre for English Local History, the Centre for Urban History, and the School of Museum Studies.

Across the English Channel, the German Society for Medieval and Post-Medieval Archaeology (Deutsche Gesellschaft für Archäologie des Mittelalters und der Neuzeit) has recently published its eighteenth conference proceedings a conference devoted to the archaeology of the post-Middle Ages (Untermann and Jansen 2007). The 22 articles discuss a wide range of subjects from local pottery production in northern Germany to Baroque gardens and the mortuary culture of nuns. Its annual current conference program tends to review themes on a multiperiod thematic basis. In 2010 the society addressed “Religiosität” over the course of the medieval and later historical periods. 2009 marked the launch of the first European journal dedicated to “historical archaeology.” *Historische Archäologie on-line* will address content concerning the fourteenth to fifteenth centuries to the present and seeks to reflect the 60% of all archaeology that is represented by the medieval and later periods, for which there is considerable survival of material and written sources (“...Epochen mit so genannter dichter Überlieferung”).

In Germany, as in the UK, practitioners of historical archaeology have tended to work in museums, heritage and conservation agencies, or (increasingly now) in the planning process. Relatively fewer historical archaeologists have university teaching status, although the subject is now on the rise as a modular degree option. Since 1980 a number of chairs of Medieval and Later Archaeology have been founded in German-speaking countries: at Bamberg (1981), Innsbruck (1989), Tübingen (1994), and Halle-Saale (2005); and medieval and later studies are now, or at least have been, a well-established component of archaeology classes taught at Hamburg, Heidelberg, Kiel, Würzburg, Göttingen, Greifswald, Vienna, and Zürich. In Scandinavia, there are courses for the medieval and later periods within the Institutes of Archaeology in Lund, Sweden, in Aarhus, Denmark (which has had a Department of Medieval and Renaissance Archaeology since 2005), and also in Bergen, Oslo and Trondheim, Norway. Since the mid-1990s the University of Turku (Åbo) in Finland has run bachelor's and postgraduate research degree programs in historical archaeology. Its cohort of research students in historical archaeology is one of the largest and most active in Europe.

If strict disciplinary demarcation on strictly period grounds seems an increasingly sterile exercise, most of the more recent discussions of the nature of historical archaeology in western and northern Europe have veered toward a more generic culture-historical definition corresponding to a broad post-Columbus/post-Gutenberg/post-Schism/proto-industrialization consensus. In coediting the newly published *International Handbook of Historical Archaeology* (Majewski and Gaimster 2009), which contains essays from all the populated continents, I was able to review European historical archaeology in a global perspective. It seems to me, at any rate, that if it comes to formulating definitions or labels of what “historical archaeology” is, then it must surely be the archaeology of Europe IN the world. The interaction of Europeans with the New World changed European society materially and irreversibly. It is this defining European interaction with the globe that we can study in the archaeological record more effectively perhaps than any other

historical discipline and across the social spectrum. The current approaches offer a means of examining and amplifying current historical orthodoxies on the origins of modernity as exemplified by Felipe Fernández Armesto recent popular treatise *1492: The Year the World Began* (Fernández-Armesto 2009).

In short, a temporally less constrained view of “postmedieval” archaeology has emerged, one that recognizes the primacy of archaeological chronology and diverse aspects of change and continuity between the late Middle Ages and the present day. A growing interest in the archaeology of the nineteenth and twentieth centuries, an increasing focus on historical issues and themes and the identification of synergies between the “Historical” and the “Contemporary” or “familiar past” have all helped to obscure the boundaries between the past, the present, and the archaeological record. Perhaps the term “Postmedieval archaeology” now does an injustice to an expanding and increasingly pluralistic discipline in European archaeology, which can no longer define itself in terms of reference to another period in European history. By contrast, perhaps the term “Historical archaeology” better accommodates the new pulses in the study of early modern European society and its material legacy.

This general recognition represents a radical change from the position of the 1960s and 1970s, when the European archaeology of the postmedieval period was regarded as little more than supplemental to the main business of the documentary record and had suffered from the “handmaiden of history” syndrome. Today, as the first synthetic studies are published, the subject is beginning to frame its own historical points of reference as well as define its own distinctive contribution to the writing of mainstream history. Returning recently from a conference in St John’s, Newfoundland “*Exploring New World Transitions*” on the 400th anniversary of the first English settlement in Canada, I feel the discipline is truly coming of age internationally and is engaging actively with wider public audiences to provide new and stimulating perspectives of key historical events and processes.

Despite these professional and disciplinary advances, I question whether historical archaeology has contemporary popular relevance and is making a consistent impact in enhancing public understanding of the past. Of course, there are good examples around North America and Europe of special exhibitions, public lectures, and Web sites showcasing new knowledge and best practice in the presentation of historical archaeology. When I was in St John’s, I saw two site visitor centers and a special exhibition exploring the archaeology and artifacts of the first European settlements in Newfoundland and Labrador. Imagine my anticipation on receipt of an invitation to attend the opening of the new Galleries of Modern London at the Museum of London, which explore the story of London and Londoners from the Great Fire of 1666 to the present day. Three new galleries contain 7,000 objects, images, interactives, and films. According to the Web site, “People are at the heart of our galleries and every artifact tells a personal story.” (<http://www.museumoflondon.org.uk>).

The Museum of London (MoL) is one of the leading metropolitan museums in the world. Its London Archaeological Resource Centre (LAARC) holds information on over 7,500 archaeological sites or projects that have taken place in Greater

London over the past 100 years. While most are multiperiod, of these 110 are exclusively postmedieval site archives. I fully expected to find an integrated and multidisciplinary approach to the design and historical narrative in the new Modern galleries. Given the extensive professional resource that the Museum holds in urban archaeology, I fully expected to see the Museum showcase the contribution of archaeology to the making of London as a world city. I fully expected to be able to explore difference and diversity in the archaeological record, between consumers of different income and class and between local resident and immigrant communities going back to the Great Fire. With new media dominating the design, the presentation has little or no space for an artifactual, environmental, or forensic contribution or perspective to what is to all intents and purposes a conventional the social history narrative. Curatorially, it appears as if the Museum has collected no archaeological artifacts dating from after the Great Fire. Evidence for poverty, which is introduced as a nineteenth-century phenomenon associated with factory industrialization, is illustrated by Charles Booth's poverty maps of the 1880s and contemporary photographs of slum-dwellers. Extremes of wealth and poverty could have been traced through the diverse communities investigated both in the heart and on the edge of London in the past 30 or so years. The relative quality of the domestic material culture and faunal waste from the households of artisan groups living at Aldgate on the eastern edge of the City, for instance, could have been employed to show the contrasting social signatures of clay-pipe makers and other manufacturers on the margins of the metropolis in the seventeenth and eighteenth centuries (Thompson et al. 1984). Not all citizens lived in the center of town in the postmedieval period. Excavations of gentry residences in Southwark or outside the City in Essex, Kent, Surrey or Middlesex could have been presented to explore the consumer habits of the increasingly wealthy mercantile class and their access to the products of European colonization around the world. Where are the bones of postmedieval Londoners? Here surely, with the skeletal records for 10,000 individual human beings curated by its Centre for Human Bioarchaeology (<http://www.museumoflondon.org.uk/English/Collections/OnlineResources/CHB/AboutUs>), the Museum can explore through case studies the physical effects of poverty, insanitary slum housing, the everyday hazards and dangers of work and of environmental pollution on the men, women and children of the industrial city. What is missing here is full human contextualization of the growth of modern London, which is a narrative to which archaeology can contribute a unique and vivid insight.

Of all British museums, I expected the Museum of London to devise an integrated historical and archaeological narrative for its treatment of the modern city. There are possibly several interrelated explanations for this indifference to the contribution of historical archaeology, not least a pervasive negative attitude in curatorial circles to material culture evidence in museums, which was evidenced in an article by Diane Lees, Director of the Imperial War Museum, in *Museums Journal* published last October (2009), in which she berated museums for storing archaeological archives: "We should hang our heads in shame at the amount of public money going on storing domestic rubbish...." Although rightly making us think about the sustainability of curating our collections, the message is not especially

helpful in raising awareness of what is a significant challenge for museums. It may even be potentially damaging to the future of archaeological collections in museums by giving the impression that this material is of no merit in telling the stories of past communities. On the contrary, for much of the human past, even in comparatively recent centuries, our collections of domestic waste – the fragments of pottery, building materials, animal bone, and so on – are crucial and irreplaceable sources of historical evidence. The unique combination of object and context offered by excavated finds reveals new narratives about lives of ordinary people that are located precisely in time and space. The application of new technologies to enhancing our understanding and use of that resource adds to its value over the years. The notion that such archaeological material is duplicative and limited in its historical value is simply ill-informed, both in prehistory and for historical cultures.

Della has given us a positive review of developments in public (historical) archaeology in Florida and the U.S., involving the creation of opportunities for active participation in field projects and research. I could not concur more eagerly with this approach, which will lead to a more informed and experienced audience for archaeology. I continue to be concerned, however, about our curatorial framework and policies. As new media and interactives begin to dominate museum gallery design, original artifacts are being pushed out. In so many ways historical archaeology has developed into a mature and intellectually vibrant discipline supported by the universities, but the public are being shortchanged intellectually by our leading cultural institutions. This tendency toward curatorial exclusion, either out of design or ignorance, is one trend that needs challenging by all those engaged in historical archaeology. The SPMA conference held at the University of Glasgow in September 2010 (*Engaging the Recent Past: Public, Political, Post-Medieval Archaeology*) will provide an opportunity to address some of the issues and tensions raised here publicly. There is a very important role here for our independent heritage bodies, whose efforts are largely led by volunteer professionals in the sector. Institutions such as the Society of Antiquaries of London can provide a forum for individuals to debate current policy, practice, and trends both in the care and protection of the cultural heritage and also in its study and communication. The issue of relevance and respect of our work in the public domain must form the focus of a new debate, which these nonstatutory bodies, without the conflict of interest caused by public funding, can promote.

With the trend over the past 30 or so years toward increasing specialization within the heritage profession and the separation of roles into investigation and reporting, curation and research, and communication and outreach functions, archaeologists have allowed others to tell their story. Unlike, say, in the case of “straight” archaeological presentations (the MoL prehistory gallery, for instance), the trend is particularly severe for the historical period, and especially post-1500 when documentary sources become more common. Museums still tend to rely on the historical evidence for their narrative and artifacts remain a means of visually supplementing the storyline. This reality, I believe, stems also from our own complacency or perhaps inability as archaeologists to create sufficiently accessible excavation archives that can be used by others in the cultural heritage or by the public for research and learning.

The Society of Antiquaries has initiated a debate on this issue by inviting Professor Richard Bradley to publish his study of developer-generated fieldwork in the UK prehistoric archaeology (Bradley 2006). According to Bradley, of greatest concern is the lack of access to the so-called gray literature generated by most commercial archaeology, which is client-led, its quality dictated by statutory regulation. Thus, as he says, the excavation agenda is largely governed by volume in economic cycles affecting the construction industry and in location by the decisions of planners and developers. Some have argued that archaeology is impoverished as a result, with technical description taking precedence over research goals, which in turn leads to a conservative, “anti-intellectual” excavation culture. For Bradley, the main victim is the study of material culture and its wider public relevance.

My professional career to date has seen great advances in the discipline of historical archaeology, both in terms of method and theoretical development. Indeed, it is now accepted as a core teaching module by universities in North America and northwestern Europe. It seems, however, that there are still some significant challenges facing practitioners in the field, particularly, and perhaps more so in Britain and Europe, in the sphere of public recognition and understanding. One priority must be the enhancement of the quality of archaeological sites archives so that they can be accessed and exploited more effectively by those engaging in public archaeology, be they in the classroom or the museum gallery. The Archaeological Archives Forum in the UK has made considerable advances in raising standards here (<http://www.britarch.ac.uk/archives/>). And another of particular importance to historical archaeology must be to continue to review and refine our archaeological research frameworks on the national, regional and local level (see for example <http://www.museumoflondonarchaeology.org.uk/English/ArchiveResearch/Researchstrat/>). It is here that we can ensure that the archaeological research objectives are aligned to key historical questions and themes, such as colonialism and globalization. By this process historical archaeologists can contribute a unique perspective on modernity.

Final Thoughts on the Importance of Archaeological Nonprofits and Public Education About the Past: Della A. Scott-Ireton

One of the most intellectually stimulating aspects of archaeology, in my opinion, is the opportunity to discuss with colleagues the current trends and, especially, challenges in our field. Archaeology is a very small profession in terms of numbers of practitioners, and even smaller when the various cultural or topical or temporal specializations are considered. We all know each other or at least know *of* each other, you know, and often know one another’s business, professional and sometimes personal. We stay at our colleagues’ houses or share hotel rooms when we travel because our budgets are limited, and because we generally like each other. We also often provide a support network for our peers, commiserating

on dwindling budgets and looted sites, as well as celebrating grant awards and book publications. Perhaps most importantly, we pay attention when our colleagues make a call for action.

David's point about raising awareness regarding the importance of maintaining and utilizing the material culture collections of historical archaeology is astute and is well taken. His example of the Museum of London's failure to effectively integrate artifacts into their new and exciting Galleries of Modern London exhibit is, to my thinking, symptomatic of the general failure to recognize historical archaeology as relevant. Why is archaeological research needed, when we have all these documents and photographs? What can archaeology possibly tell us that we don't already know, because the people living then told us? These questions are, of course, exasperating to historical archaeologists, who see time and again that the historical record is incomplete, biased, flawed, and often "forgets" people such as women, children, servants, slaves, the illiterate, the defeated, and the poor. David calls for archaeological collection archives to be improved so they can be better utilized by researchers and by the public. I think his concern ties right in with the goals of public archaeology.

I stated in my previous article that the "public" basically means the voters and future voters. While this is generally true and includes what most of us think of as the nebulous public, there are, of course, many "publics." We can compartmentalize "public" into many groups, such as educators, youth, museum-goers, sport divers, senior citizens, vacationers, tourists, metal detectorists, etc. One of these publics is heritage professionals: those people engaged in the understanding, preservation, and presentation of the past. As we can see from David's example of the recent article in *Museums Journal*, not all heritage professionals understand the relevance of archaeology, the importance of curating the material culture of the past, and how that material culture can contribute to the modern appreciation of our common heritage. Heritage professionals, many of whom are not archaeologists nor have archaeological training, are one of the publics we, as archaeologists, have a responsibility to educate. We need to recruit these colleagues as partners – if they do not understand the relevance of our profession, we have lost a vital voice for the need and value of archaeology as a whole and for historical archaeology in particular. In our efforts to engage and educate the public, let's not forget to look to our own as well.

The single largest contribution to making archaeology relevant that organizations like David's Society for Antiquaries and my own Florida Public Archaeology Network can provide is giving people the knowledge to "fight" for their interest in their past. In the face of dwindling governmental budgets, decreased tourism in hard economic times, and increased pressure on public funds, heritage research and attractions often are the first to feel the pinch and the first to be cut. By educating people about the need and relevance of archaeology, of historical research, of collections maintenance and management, of heritage tourism, nongovernmental organizations such as the SAL and FPAN, as well as local organizations such as the Florida Anthropological Society and the Nautical Archaeology Society, can provide constituents a voice to make known their opinions, interests, and values. In this way, these organizations help people to serve as advocates for their own heritage, preserving our collective past for the present and the future.

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Part II

Deep Sides of Archaeological Relevance

Introduction

Joe Flatman and Marcy Rockman

This second part moves on from Part I to take a “big picture” approach to the contemporary relevance of archaeology. Here, rather than discussing day-to-day “operational” concerns, the emphasis is on the importance of long-term patterns and broad but present-day concerns and how archaeology is, can or should play a role in such “global” debates, including archaeology in relation to resource and energy supplies, climate and environmental change, conflict and war, and identity, ethnicity and nationality.

Part II demonstrates that archaeology is a quintessential part of the fabric of society, a fact that both archaeologists and the general public alike tacitly accept, but rarely acknowledge. As Fritz and Plog (1970: 412) wrote some 30 years ago:

We suspect that unless archaeologists find ways to make their research increasingly relevant to the modern world, the modern world will find itself increasingly capable of getting along without archaeologists.

True in 1970 and equally true now, there remains much work to be done in order to appropriately highlight *why* archaeology is relevant to society and why archaeology is a justifiable thing to spend scarce time and resources on. But in particular, the contributors to Part II make clear that while archaeology tells us about our ancestors and ourselves, archaeology is particularly useful in helping us shape the *future* in ways that we want, including trying to avoid the worst aspects of the past. As Sabloff (2008: 17) writes:

Archaeology can play helpful roles in broad, critical issues facing the world today. Archaeological research not only can inform us in general about lessons to be learned from the successes and failures of past cultures and provide policy makers with useful contexts for future decision-making, but it really can make an immediate difference in the world today and directly affect the lives of people at this very moment.

There is, for example, a growing body of work on archaeological lessons of climate change that is touched upon by several authors in Part II: how human adaptation to past climate change can be used to inform modern decisions about responses to climate change in our and future worlds. This is the type of “critical issue” identified by Sabloff. Archaeology demonstrates, time and again, that humans are resourceful, inventive and above all adaptive: *as a species, we are good at dealing with change*. Archaeology helps give both “broad brush” as well as “little picture” examples of how humans can adapt to climate change – from entire civilisations down to individuals, for example, how we can live in a more sustainable manner in more energy-efficient buildings. The problem is, archaeology has done poorly in highlighting this supremely practical use of its knowledge, experience and skills.

In other ways, Part II continues the debate began in Part I about, not what place in contemporary society there is for archaeology, but rather what place there is for *archaeologists*. The practitioners highlighting specific issues in this section are all very much “working” archaeologists, their chapters highlighting not hypothetical issues but real concerns that they are directly involved in managing, mitigating or even militating against. Just as much as in Part I, these are practical people making “real world” decisions that have physical impacts on the environment, both the cultural/historic environment as well as the broader natural environment. These physical impacts will, in turn, become part of the archaeological record analysed by future generations.

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Chapter 13

What the Walrus and the Carpenter Did Not Talk About: Maritime Archaeology and the Near Future of Energy

Joe Flatman

The time has come, the Walrus said, to talk of many things; Of shoes – and ships – and sealing-wax, of cabbages – and kings, And why the sea is boiling hot, and whether pigs have wings (Carroll 1872: 78–79).

And around the world, the diplomatic, economic and military strategies of every nation continue to be shaped by one overriding objective—to maintain uninterrupted access to a steady supply of energy. The goal is sacrosanct, to be pursued at all costs, regardless of the way it perverts the culture and politics of entire regions or props up corrupt governments and dictators or, ultimately, fosters instability and resentment (Roberts 2004: 12).

Précis

This chapter is concerned with the likely entanglement of energy resources and archaeology over the next 30 years and beyond. It considers the impact of the global energy crisis upon the marine archaeological resource, and by default, it also considers questions of climate change and archaeology. In a book addressing the contemporary relevance of archaeological research, the preliminary conclusions of this chapter are bleak:

1. The early–mid twenty-first century is set to become the age of conflict over dwindling resources, especially hydrocarbons, and also (one hopes), the age of the expansion of renewable energy replacements for hydrocarbons.
2. In this conflict, the seas and oceans will become the primary global battleground of both governments and industries, since these are the last great (largely) unexploited areas of the world.

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3. The growth regions for mid-twenty-first century maritime archaeology – the seas and coasts of Southeast Asia, the Americas, Africa, the Arctic and the Antarctic – are all those areas most likely to be fought over and/or exploited for energy resources in the future.
4. It is inevitable that archaeology will become embroiled in this conflict: specialised access to remote survey and deep-diving technologies, the mapping of submerged cultural landscapes, and familiarity with associated aggregate and hydrocarbon deposits will place the archaeological community in the middle of a battle it will struggle to fully understand and be incapable of controlling – a pawn in a global game in which every form of submerged material becomes a commercial commodity.
5. Beyond being simply ignored and thoughtlessly destroyed or damaged, submerged cultural heritage is seriously at risk of being hijacked as a tool to demonstrate national legal claims to, or interest in, particular areas, regions or resources, an abuse of “national” cultural heritage that maritime archaeological materials such as shipwrecks appear particularly, peculiarly susceptible to (see Flatman 2003: 150–151).

Together, such immediate-term, global geopolitical events look likely to present a new challenge to the archaeological community that will confront it with serious questions about cultural heritage research, resource and rescue priorities, public access and communication, and professional ethics.

Introduction: The Global Maritime Archaeological Resource

Extensive and ongoing fieldwork has demonstrated the incredible extent and wealth of historical period shipwreck materials that survive submerged around the world. Millions of wrecking events are known to have taken place since prehistory, and hundreds of thousands of wreck sites have been identified in every corner of the globe. Many of these sites have been subject to extremely rigorous archaeological investigation, providing a unique chronology of global seafaring since approximately 6000 B.C., and prompting the emergence of the sub-discipline of “maritime”, “marine” or “under water” archaeology through the work of countless pioneers around the world (see for example Bass 1966, 1972, 1988, 2005; Muckelroy 1978, 1980; Throckmorton 1987; UNESCO 1972). Other wreck sites, sadly, have not been subject to such careful examination and have been looted for their contents or even simply unknowingly destroyed in the face of development. Most recently, the increasing use of – and ability to access using new technologies – the deeper waters of the continental shelves and also abyssal deeps has also demonstrated the richness of the archaeological resource in “deep” waters (i.e., those beyond the reach of divers, whether sports or technical) (see Manley and Foley 2004).

Alongside shipwrecks exists a much less well-known field of research within “maritime” archaeology – that of submerged cultural landscapes. The 1970s in particular witnessed a range of submerged prehistoric archaeological sites being identified around the coasts of the southern North Sea. These coincided with similar discoveries in the Eastern Mediterranean and North America (see Blackman 1973, 1982a, b; Blavatsky 1972; Flemming 1962, 1972, 1980; Frost 1969, 1972; Marx 1972) and were part of the great expansion of the discipline of maritime archaeology in this era. Since that time, the broader archaeological potential of offshore sites in the North, Baltic and North Atlantic seas and oceans has also begun to be explored; similarly, in Australia it has long been recognised that many of the first places settled by humans in this region are now located underwater (Flemming 1982; Allen and O’Connell 2003; Dortch et al. 1990; Dortch 1997a).

The point of this introductory sketch is that there remain a huge number of submerged archaeological sites around the world that remain undisturbed. However, the world is now on the cusp of a new era of ocean exploration, with considerable exploration and change likely, especially in the deeper waters of the continental shelves. There are, thus, new threats to the global marine archaeological resource coming from new directions, in addition to the traditional, existing and ongoing “threat” of treasure hunting. Within this, the heritage community faces a lack of joined-up assessment – there are serious gaps in and variations of types (prehistoric vs. historic shipwreck) and locations of data. Europe has, overall, very good published data upon shipwrecks and submerged landscapes alike, but most of the rest of the world is in a much poorer state, including major sections of the U.S. and Australian coastlines where one might reasonably expect good data to exist. There is also a lack of clear management – either national or international legislation or education, as well as a serious lack of publication and thus dissemination:

[There is] history of scepticism that exists in the wider archaeological community about the value of underwater prehistoric archaeology... four preconceptions inform that scepticism: [a] that underwater archaeological remains have not been preserved or are too difficult to retrieve; [b] that in any case they are unlikely to provide information that could not be more easily obtained on land; [c] that coastal settlement and marine palaeoeconomies are marginal to the main patterns of world prehistory; [d] that the search for underwater civilisations advocated by amateur enthusiasts is a further symptom of a marginal field of study (Bailey 2004: 3).

Maritime archaeology needs to do more, work harder, disseminate further and network more effectively. For all the challenges that archaeologists as a community have faced in the last half-century, the specific maritime community faces even greater challenges in the future, because of all the sub-disciplines of archaeology, it is the one likely to face the greatest change in the next half-century. This, then, is surely one manifestation of the contemporary relevance of archaeological research (Fig. 13.1).

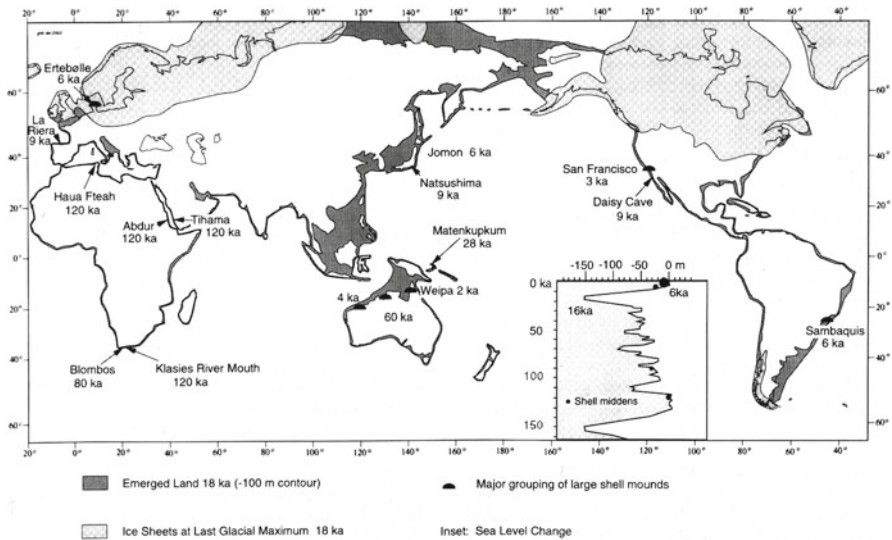


Fig. 13.1 Map of the world, showing the extent of Continental Shelf exposed at the maximum marine regression in prehistory (copyright Geoff Bailey/University of York. Source: Bailey 2004: 4)

What Resources, What Locations?

While the exact timing and statistics are debated endlessly by all groups along the political spectrum from right- to left-leaning, optimist to pessimist, the general fact remains that the world is facing major socio-economic challenges over the next 30 years and beyond. Quite simply, the world is running out of resources, particularly energy resources. Alongside this, the world is facing marked climate change of its own making, which looks set to physically alter the world in highly significant ways. Even the most optimistic of political, economic and social commentators accept that this “crisis” does exist, and that the outcome may be a global economic shift with major socio-political consequences:

The last three times oil production ‘dropped off a cliff’ (1974, 1979, 1991), the resulting price spikes pushed world into recession – ‘and these disruptions were *temporary* [original author’s emphasis]... presumably the effects of a long-term permanent disruption would be far more gruesome... an inflationary ripple effect would set in... commercial activity would slow, and segments of the global economy... tip into recession. The cost of goods and services would rise, ultimately depressing economic demand and throwing the entire economy into an enduring depression that would make 1929 look like a dress rehearsal and could touch off a desperate and probably violent contest for whatever oil supplies remained (Roberts 2004: 13; see also Noreng 2002: 26).

If the data for oil in particular is analysed, the statistics – varied, debated and skewed as they are – are bleak. For instance, BP Amoco and the U.S. Geological Survey both estimate that there were 1.03 trillion (1,033 billion) barrels of conventional

petroleum left at the end of 1999 (e.g., “proven” oil discovered but not yet pumped out of known oil fields, as owned by private companies such as ExxonMobil and countries such as Saudi Arabia and Norway), over 50% of which are in the Middle East, together with between 200 and 900 million barrels of oil in “undiscovered” regions (that is, oil not yet confirmed but strongly indicated by various geological markers), an overall untapped potential of approximately 1,250–1,950 billion barrels left in 1999. At the “current” (1999) rate of production, this equals 73 million barrels/day, or 26.6 billion barrels/year, which would place the world at a point of “total” oil depletion (i.e., no more presently recoverable oil) around 2060. However, the U.S. Department of Energy predicts that worldwide consumption will rise by approximately 1.9–2.0%/year between 1997 and 2020, reaching 113 million barrels/day (41 billion barrels/year) by 2020. This would see “total” depletion of global oil resources in 2040 (see Campbell and Laherrère 1998; Klare 2001: 40–43). Both the “proven” and “undiscovered” figures for oil reserves are also deeply unreliable; estimates for “proven” oil are routinely exaggerated for economic and political gain; “unproven” reserves may well be much greater (1–1.5 trillion barrels is a possibility); and predicted global consumption may yet rise or fall markedly.

Worldwide, there exist approximately 600 systems capable of producing commercial volumes of oil and gas. Of these, approximately 400 have been explored. The remainder lie in places such as the Arctic or in deep offshore waters – remote, hard-to-reach areas the oil companies have turned to only after exploiting the more accessible oil (Roberts 2004: 51).

The “deep ocean” (e.g., international waters on and off continental shelves) in particular is thought to hold the greatest potential for undiscovered oil reserves, both in terms of “unknown” reserves, and also the technological ability – not to mention the socio-economic will – to exploit these:

There is no question that the future of offshore [oil] exploration lies in deep and ultra-deep water plays... there have been to date 52 deepwater discoveries in the US Gulf of Mexico, 20 offshore Brazil and 17 in deepwater fields off West Africa for a combined total of almost 23 billion barrels of oil. These numbers, however impressive, represent only a fraction of the potential in these new theatres (Furrow 1998: 34).

There are three main factors contributing to this strong growth in offshore production: the application of new technology, changes in fiscal regimes and new organisational approaches to the management of projects (International Energy Agency 1996: 3).

3D and 4D seismic scanning in particular is proving extremely beneficial in the exploration stage, and estimates of the global extent of economically recoverable oil in the offshore zone now run to about 20% of the world total (approximately 200 billion barrels), with such technologies constantly increasingly what is economically recoverable much faster for offshore areas than onshore – e.g., economies of scale are beginning to “kick-in” in offshore oil exploration (International Energy Agency 1996: 29). There is also thought to be many undiscovered – or currently untapped – oil reserves on the relatively easier-to-access continental shelves, especially the South China Sea (hotly disputed), West Africa, the Bay of Mexico (“deltaic” deep-water, with known prehistoric sites at least in “shallow” water nearby along the Gulf coast of Florida), South America (deltaic Brazil for oil, but with both known and hypothesised archaeological sites along the western

South American coast associated to the coastal-led colonisation of the Americas), and particularly in the much disputed waters of the Arctic and the Antarctic. The battle for control – either economic or political/military – is likely to be particularly bitter in the continental shelf zone since, as discussed below, the one major piece of international legislation that “controls” national access to the continental shelf, the 1982 UN Convention on the Law of the Sea (UNCLOS) is unclear on whether national territorial control extends to the edge of the continental slope, to 200 nautical miles offshore, or simply to 200 m depth of water. The “Green” lobby has so far kept oil companies from tapping into many reserves, especially in the Arctic, where such organisations are willing to fight hard to protect the natural environment. The costs and research/development requirements of drilling and producing oil in deep, ice-covered waters thousands of miles from any tanker port also pose enormous technological challenges (Roberts 2004: 64). But alongside simply a growing demand as oil prices inexorably rise, climate change may assist and encourage the extraction of such “inaccessible” oil, melting ice and rising temperatures in areas such as Siberia, which could create an ice-free northern sea route along the Siberian coast allowing oil tankers and other vessels to sail from Europe to Japan without going via the Suez Canal, assist exploration and drilling, and lead to less “downtime” from bad weather/extreme climate conditions stopping work or damaging equipment (Roberts 2004: 64):

in the past, national power was thought to reside in the possession of a mighty arsenal and the maintenance of extended alliance systems, [now] it is now associated with economic dynamism and the cultivation of technological innovation...National security depends on successful engagement in the global economy...an outlook that views economic and security interest as ‘inextricably linked’ will naturally tend to place high priority on the protection of vital resource supplies (Klare 2001: 7–8).

The world also has a serious and escalating shortage of fresh water: as Klare (2001: 19) notes, less than 3% of the planet’s total water supply is fresh water – and much of this is locked up in polar ice or glaciers. Approximately 50% of this fresh water is already appropriated for human use, and if current patterns continue, then total human usage will approach 100% of available supply by approximately 2050, producing severe shortages in some areas and intensified competition for access to sources, possibly violent competition by individuals and nation states alike.

Beyond undersea hydrocarbon extraction – oil, gas, and their derivatives (especially in the deep-ocean/offshore and Arctic/Antarctic, partially or fully under ice) and water, many other resources exist in the oceans of the world, and the exploration and exploitation of such resources will have serious impacts upon submerged cultural heritage (see Cook et al. 1992a: 158–165, 166–167, b: 338–346; Exon 1992: 8–16; Flemming 2004a: 114–117; Heinberg 2003: 135). This includes:

- Mining of precious and non-precious metals.
- Aggregates extraction, including shallow-water dredging for sand, gravel and rock, and deep-ocean collection of materials such as ferromanganese, phosphorites, evaporates.
- Fishing – especially drag-net bottom-trawling.

- Marine engineering, pipe- and cable-laying, etc.
- The deep ocean as a “storage solution” – including for disposal of human and animal effluent, and also liquefied CO² (see Metz et al. 2007).
- Ocean nourishment – feeding algae with iron oxide distributed into the oceans so that it “eats” CO².
- Renewable energy – wind, wave, sun, also the potential of thermal energy from deep-ocean vents as well as OTEC (Ocean Thermal Energy Conversion – the process of pumping cold ocean water to the surface and using the temperature differential between this and warm surface water to run a thermal engine to generate electricity).

The world is running out of resources, especially oil and water resources. As a global community, the world is unlikely to replace these resources (especially the energy resources, with “alternatives” such as “renewable” energy) fast enough to prevent a rush to exploit the last reserves of oil and gas that exist around the world. Almost without question, such unexploited resources are in areas of the greatest potential for undiscovered submerged archaeological deposits. The future looks extremely bleak for the survival or even proper exploration, analysis and interpretation of these archaeological materials.

What Threats, What Concerns?

The global community has to see these threats to the archaeological resource as combined – holistic. It is not simply a case of the threat from hydrocarbon exploration and extraction on its own; this comes alongside the threats posed to submerged cultural materials by other explorations and extractions for useful materials, alongside the risk of damage or destruction of sites as a result of the varied impacts of climate change (such as flooding), and even alongside the damage caused by “environmentally friendly” “renewable” energy developments. All of these developments have an impact upon our natural and cultural heritage alike, above, across and below-water, and the underwater cultural heritage is likely to be the worst hit in this process.

Beyond the immediate, ongoing or imminent problems posed, globally, by the various threats to submerged cultural heritage discussed below, archaeologists face serious additional challenges of resource prioritisation, management and professional ethics. There is, for instance, a lack of clear management for “international” sites, due partly to gaps in current management/legislative frameworks (e.g., UNCLOS), and partly because of the unsustainability of current management proposals (e.g., the 2001 UNESCO *Convention on the Protection of the Underwater Cultural Heritage*, which will never be ratified in its current form by many nations – including the U.S. and Britain – because of successful lobbying by industry on the one hand and fears of “creeping” coastal State jurisdiction – and thus legal as well as fiscal responsibility for management – on the other). Another question is that of

renewable energy resources: does the “clean” energy provided by wind, wave and solar energy “offset” the damage to archaeological sites that occurs through their construction? And beyond this, what are the ethics of professional involvement with the military-industrial complex, such as working with oil exploration companies in advance of development? There are questions of the balance between “passive” and “active” involvement here, e.g., all humans are complicit in the continued use of hydrocarbons and derivative products and the global instability this fosters, but do archaeologists cross a line when they become directly involved in or funded by the hydrocarbons industry? Is there an argument of “needs must” or even a “heritage offset” just as someone might sponsor a tree as part of a personal “carbon offset”? What also of the ethics of fieldwork in – or offshore of – countries with questionable regimes? Archaeology – particularly maritime archaeology – simply is not involved in such debates in the way that the “green” lobby is.

“Direct” Pollution

There is a demonstrable threat of immediate damage to and destruction of submerged archaeological deposits through invasive hydrocarbon survey tools like bore, vibro-cores and grab-samples, dredging, the construction of exploratory and appraisal wells, the construction of on-site extraction sites, pipelines, and off-site coastal terminals, refineries, etc., and the decommissioning of such sites. Such threats and impacts have been demonstrated numerous times by both government and industry assessments, and are now a “standard” threat identified in industry-led environmental impact assessments in, for instance, the British sectors of the North and Irish Seas in Europe (see Williams 2001: 8–10; Wessex Archaeology 2005: 38–41). This can comprise direct damage to archaeological sites and structure, disturbance to relationships between structures, artefacts and their surroundings, and also the destabilisation of sites prompting degradation, the loss of artefacts within general volumes of dredged material (Wessex Archaeology 2005: 36).

“Indirect” Pollution

Far less well understood, mainly because it is far less-well studied, are the “indirect” threats posed by energy developments to submerged and coastal archaeological sites. These include surface runoff, oil spills, etc. causing secondary damage to archaeological sites and monuments, including the destabilisation of sites prompting degradation, and the erosion of sites leading to damage, disturbance and instability. The 2010 “Deepwater Horizon” disaster in the Gulf of Mexico also demonstrated the susceptibility of historic environment resources to oil spills and slicks alongside the better-appreciated impact of such disasters on the natural environment. This area of concern can also be argued to include the damage to the

environment – both natural and cultural – caused by the degradation of historical period shipwrecks of the nineteenth and twentieth centuries via leakage of fuel oil, heavy metals and other toxins (see Lenihan 1989; Delgado and Murphy 1991; Drabble 2002; Flatman 2007a, b, 2009). To this can also arguably be included the problems posed via the by-products of oil, principally plastics, but including a wide variety of materials such as various chemicals and even toiletries, which are both capable of contributing to the damage to/destruction of archaeological sites, and yet also increasingly comprise archaeological contexts about which there is little understanding; i.e., archaeologists do not have a full understanding of the decay processes of fibreglass vessel hulls under water in various conditions.

A point of considerable contention, there is then the thorny question of the damage to archaeological sites caused by the construction of renewable energy resources that are felt to be broadly culturally beneficial, but which nonetheless actively or accidentally damage archaeological sites, as beginning to be considered in the UK thanks to organisations such as Collaborative Offshore Wind Research into the Environment Group (COWRIE), who recently commissioned an *Historic Environment Guidance Note* for the offshore renewable energy sector (see Wessex Archaeology 2006). The COWRIE Guidance Note includes several recommendations, variously enforceable under the UK law, including the use of formalised – and compulsory – scoping reports, environmental impact assessments and geophysical survey prior to developments. Such assessments also include that of the “damage” to the broader “setting” of features such as wind-farms in the landscape (see Colcutt 1999; Masser 2006), a problem identified from a UK perspective in legislative guidance such as PPS (Planning Policy Statement) 22, *Planning for Renewable Energy* (CLG 2004). Similarly, in the *Barriers to Commissioning Renewable Energy Projects* report prepared on behalf of the UK Renewables Advisory Board and the Department of Trade and Industry (Land Use Consultants 2005), nowhere in the 86-page document does the word “heritage” even occur. General “heritage” simply is not perceived to be an issue in most renewable energy projects, and even “archaeology” is only mentioned twice. As a final example, a recent UK outline briefing on *Planning for Wind Energy* (British Wind Energy Association 2005) included, again, only one fleeting reference to archaeology.

Climate Change

Fiona Reynolds, Director-General of the National Trust, one of the UK’s largest coastal landowners, called climate change “society’s great challenge” in a recent ICOMOS lecture, a conclusion borne out by the recent UK government review (the “Stern Review”) *The Economics of Climate Change* (Stern 2006) as well as in two recent strategic assessments of their estate by the National Trust (2005, 2006). Damage to coastal archaeological resources from the consequences of global warming is now not only an acute threat but also an active and escalating occurrence, including the flooding of coastal wetlands, the loss or abandonment of coastal sites

through storm surges and erosion, and damage to marine environmental through rising sea levels causing problems such as algae blooms (see Heinberg 2003: 137–184, 199–200). The Stern Review makes for uncomfortable reading, and its data, data-collection, and analytical methodologies have all been questioned, but among just some of its preliminary conclusions are that all the scientific evidence points to “increasing risks of serious, irreversible impacts from climate change” (Stern 2006: iii), that “the impacts of climate change are not evenly distributed; the poorest countries and people will suffer earliest and most” (Stern 2006: vii), and that “an effective response to climate change will depend on creating the conditions for international collective action” (Stern 2006: xxii). The most up-to-date evidence for climate change comes from the Intergovernmental Panel on Climate Change (IPCC); in terms of UK-specific data, the combined domestic Climate Impacts Programme (UKCIP) (Jenkins et al. 2007) and European Environment Agency (EAA 2004) scenarios are then the most reliable indicators. There is now no denying the general trend of CO₂ emissions leading to global climate change. This is happening now, it is a concern *now*, it is not the responsibility of future generations and a pressing responsibility is to ensure that cultural heritage is taken into account in managing this process and addressing the threats posed. This is why, for instance, there is a new UNESCO working group on the question of climate change and the historic environment (see Cassar 2005; Cassar et al. 2006). But one of the major problems as regards climate change and the historic environment remains that of convincing governments to consider cultural heritage within climate change impact assessments, and to see the protection of cultural heritage as not only a moral, social imperative but also an economic imperative. At present, the “green lobby” is proving successful in ensuring that due consideration is made for the environment, but the heritage lobby is not; for instance, the Stern Review (Stern 2006) does not include a single mention of heritage or archaeology – even from a tourism perspective – within its 580 pages.

Case Study 1: Lessons Learned from the UK Irish and North Sea Territorial and EEZ Zones

The North Sea Basin is an instructive example of the characteristics and management environment of submerged cultural landscapes in relation to energy developments. Representing a discreet, definable geographic region, the area contains a distinct and well-understood archaeological sequence with cross-cultural contacts since prehistory. There is also a long-lived relationship between archaeology and the hydrocarbon and marine aggregates industries in the North Sea, since globally significant archaeological remains overlie areas of known natural gas and oil reserves, as well as being within areas regularly fished, dredged for aggregates and crossed by numerous shipping lanes. There are many overlapping interests in this zone, both archaeological (e.g., modern shipwrecks overlying prehistoric submerged cultural landscapes) and non-archaeological (e.g., fishing vs. gas extraction vs. aggregates extraction).

Strategic environmental assessments of the UK Territorial and Exclusive Economic Zone (EEZ) waters of the North and Irish Seas on behalf of the UK's Department of Trade and Industry (see Flemming 2002, 2003, 2004b, 2005; Wessex Archaeology 2005), as well as work by archaeological consultants on behalf of or in collaboration with the offshore hydrocarbon and inshore dredging and aggregates industries have revealed a wealth of archaeological evidence for both historic shipping losses and, in particular, prehistoric submerged cultural landscapes. Flemming (2004a) discusses how such sites have been discovered, surveyed and sampled, and also offers suggestions for their interpretation, management and protection. Marine industries in this zone are willing to collaborate with archaeologists as (a) this assists them in predicting – and thus mediating against – risks such as unexpected archaeological discoveries through mapping programmes, etc., and (b) this is good for public relations. Projects such as the North Sea Palaeoenvironments Project (see Gaffney et al. 2007, 2009) have also demonstrated how 3D seismic data previously collected by industry can provide an efficient way of generating models for the Late Quaternary and Holocene palaeoenvironments (Fig. 13.2).

There are, however, questions raised by activities in the North Sea about the ethics of the discovery, exploration, interpretation and management of such submerged cultural landscapes. There are particular problems with “basics” such as the mapping of the extent of prehistoric archaeological sites – especially extensive, multi-period, prehistoric submerged cultural landscapes and associated “natural” features (e.g., palaeochannels). Associated to this is the problem of the lack of joined-up data collection/analysis (e.g., often several different companies collect the same data and then will not share this either with one-another or with academia because of confidentiality problems, thus certain areas get surveyed again and again and the data never gets released). These “data” problems are also exasperated by the lack of joined-up management and legislative strategies between governments across territorial boundaries in this sea zone, as well as of joined-up management/legislative strategies at the domestic level by single governments across the intertidal zone, including problems such as the enforceability and applicability of laws (e.g., the lack of defined legislation “fit for purpose”, and even the non-application of enforceable laws such as the UK Ancient Monuments and Archaeological Areas Act 1979), which could be – but so far has not been – used to protect submerged prehistoric sites and areas. At the heart of this lies the extreme difficulty of making clear to government, industry and the general public alike both the sheer complexity, and extent, of multilayered, multi-period, multi-site, large-scale submerged prehistoric cultural landscapes, the fragility of these landscapes, and the problems involved in their successful mapping, interpretation and management. As noted elsewhere, there is scant other attention paid in various strategic British government assessments of either what is “most” or “least” important, or what criteria can/are used to signify importance (see Flatman 2007a, b). The abiding irony, of course, is that this is the government of an island nation that, in other contexts, places a great emphasis upon its “distinguished” maritime heritage, and that still relies heavily upon the marine environment as both a strategic and commercial resource. As noted in Flatman (2007a), that it took until 2002 for the National Heritage Act to extend

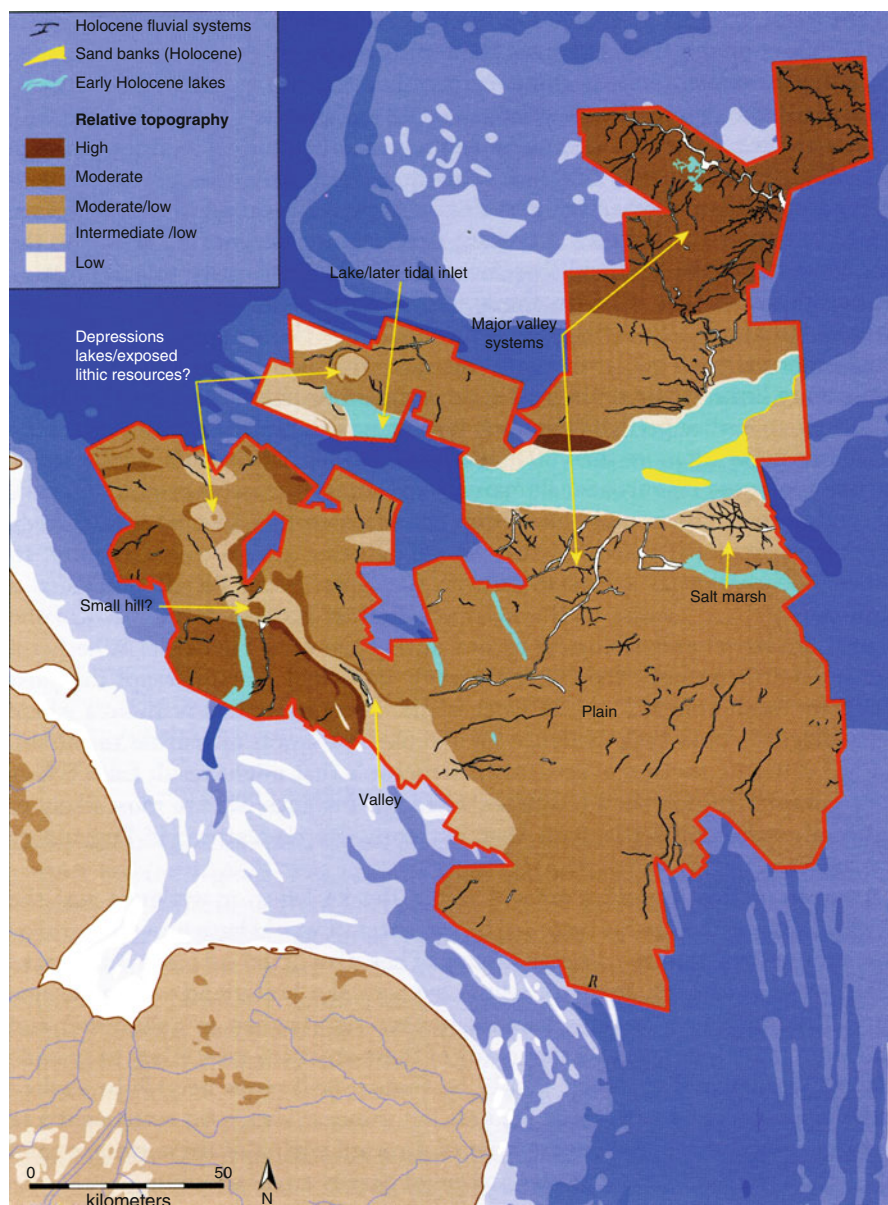


Fig.13.2 Major topographic or economic zones within the southern North Sea study area of the North Sea Palaeolandscapes Project (copyright University of Birmingham. Source: Gaffney et al. 2009: 140, Fig. 5.7)

English Heritage's management remit out to the 12 nautical mile limit around England speaks volumes about what "value" British society places upon its historic assets. Admittedly, there has been something of an explosion of consultation, guidance and strategic resource assessment concerning the UK marine historic

environment since 2002,¹ but recent changes to the UK legislation impacting on the historic environment, the marine environment and the natural environment, especially those relating to the Marine and Coastal Access Act (2009) remain instructive of the institutional priorities of the government (see Flatman 2009: 9–10). New marine management policies in particular have singularly failed to recognise the complexity of the marine historic resource, continuing to define materials in terms of spot “sites” rather than blended, layered cultural locales. In another context, the UK’s Climate Change Act (2008) does not mention either “heritage” or “archaeology” even once. This is in spite of the presence of major proposals in the Act for the enhancement of renewable energy resources with a clear potential to impact adversely upon archaeological sites both above and below water, as recognised in existing guidance documents such as *Historic Environment Guidance for the Offshore Renewable Energy Sector* (Wessex Archaeology 2006). Nowhere in government, industry or popular debate has the critical question been asked – does the “clean” energy provided by wind, wave solar and other “renewable” energy facilities “offset” the damage to (or destruction of) archaeological sites that will occur through the large-scale construction of such facilities? *This is arguably the question for the twenty-first historic environment lobby.* Should such an offset “allow” for the damage of/destruction to archaeological sites for the “greater social good” of renewable energy? Just how many kilowatts of “green” electricity “offset” one less submerged Mesolithic cultural landscape – and can, or should, such an offset be measured? There are new types of threats to the marine historic resource from industry, and new questions of archaeological ethics as maritime consultancy/contracting develops in response.

Case Study 2: Beringia – A Known Submerged Cultural Landscape

One of the most interesting aspects of the process of the prehistoric colonisation of the Americas from a maritime perspective is undoubtedly the existence of the Palaeolithic submerged landscape centred on Beringia in the far north. The concept of a land connection between Asia and the Americas is deeply rooted – as early as 1589, Fray de Acosta suggested this as an explanation of how some plants and animals entered America from Asia. However, the formal concept of Beringia was

¹Examples of guidance include Joint Nautical Archaeology Policy Committee (1995), English Heritage (1996), British Marine Aggregates Producers Association and English Heritage (2003), English Heritage (2003b), British Marine Aggregates Producers Association and English Heritage (2005a, b, c, 2006), English Heritage (2006) and Wessex Archaeology (2007). Examples of strategic resource assessment include Joint Nautical Archaeology Policy Committee (1989), Fulford et al. (1997), Historic Scotland (1999), Ministry of Defence (2001), Oxley and O’Regan (2001), Davidson (2002), Roberts and Trow (2002), Dawson (2003), Flemming (2002, 2003, 2004b, 2005).

first proposed in the 1930s, the result of a number of scholars work, not least Hultén (1937). Beringia was subsequently verified both geologically and archaeologically by a number of individuals, most notably Hopkins (1967) and West (1981, 1996). By 1967, enough evidence had already been collected to suggest to Hopkins that the Bering “land bridge” was inundated for the last time some time shortly after 14,000 years ago. He later revised this estimate to shortly after 10,000 years ago. Direct archaeological evidence has been recovered in recent years, with the remains of extinct animals dredged up from the ocean floor, and ancient river channels mapped within submerged sediments. Cores taken from the seabed of this area also contain deposits such as peat that could only have been formed when this was dry land, and these cores have included insect remains that have been successfully dated using C14. As Hoffecker and Elias (2003: 34) comment, “as its boundaries have been enlarged and much new data pertaining to its environment have been collected and analysed, it has become apparent that Beringia supported a diverse mosaic of cold habitats during both the Late Glacial Maximum and the preceding interstadial period” (see also Dixon 1999; Hoffecker 2005; Hoffecker and Elias 2003). While few near-coastal or underwater sites in North America contain evidence for marine and intertidal coastal exploitation, a number of sites in South America do contain such evidence for marine adaptation by approximately 11,000 BP. The broader contextual evidence of the archaeological potential of submerged prehistoric sites off the Pacific coast of the Americas – North, South and Central – is huge. Given the evidence from sites such as the Little Salt Spring and Warm Mineral Spring sink-holes (see Clausen et al. 1975, 1979; Gifford 1990–91), the Aucilla River, Douglas Beach and Venice Beach sites (see Flemming 1980; Easton 1988, 1990; Purdy 1991; Porcasi and Fujita 2000; Faught 2002–04), thousands of submerged prehistoric archaeological sites are likely to exist around the coast of the U.S. alone, and the technologies to discover, identify, survey and even excavate these sites, even in relatively deep water, exist. However, so far, few such sites have been formally identified or excavated to archaeological standards off the Pacific coast as only one example (Fig. 13.3).

Placing the exploration of Beringia against the “rush” for oil, a number of threats to this potential archaeological resource become apparent. Already, Alaskan oil represents 25% of the total U.S. production of oil, and the state of Alaska realises some 85% of its total income from oil and gas reserves. Meanwhile, underneath Alaska’s surface lies as estimated 30% of the total proven U.S. oil reserves, and underneath its outer continental shelf an estimated 41% of the U.S. offshore gas reserves and 29% of the U.S. offshore oil reserves. The data for the Russian side of Beringia is not available but can be assumed to be of a similar magnitude:

‘The Arctic is going to be the next big play’, promises Tom Ahlbrandt, the director of the U.S. Geological Survey World Assessment Project’... ‘We feel that more than half of all undiscovered resources are in the deep offshore, of which half are in the Arctic’... ‘We haven’t even begun to discover all the oil that is out there’ (Roberts 2004: 56).

Actual data on proven and undiscovered undersea oil reserves in Alaska are hard to come by. But, as an example, a 1998 USGS study indicated that at least 5.7 billion (95% probability) and possibly as much as 16.0 billion (5% probability) barrels of



Fig.13.3 Map of Beringia (copyright University of Birmingham. Source: Gaffney et al. 2009: 134, Fig. 5.5)

technically recoverable oil exists in the Arctic National Wildlife Refuge 1002 area alone, with a mean value of 10.4 billion barrels. Technically recoverable oil within just the Federal lands of the 1002 area is estimated to be at least 4.3 billion (95%) and as much as 11.8 billion (5%) barrels, with a mean value of 7.7 billion barrels (USGS 1998, 2005a). Given that the U.S. consumes about 20 million barrels daily, if the Arctic National Wildlife Refuge oil reserves were used to supply 5% of the current U.S. daily consumption, the reserves, using the low figure of 4.3 billion barrels, would last approximately 4,300 days (almost 12 years); using the high estimate, the reserves would last approximately 11,800 days (32 years). Similarly, a 2005 USGS assessment of undiscovered oil and gas resources of the central part of the Alaska North Slope and the adjacent state offshore area found that there is a significant amount of oil and a large amount of gas that remains to be discovered. The assessment estimates that there are 4.0 billion barrels of oil, 37.5 trillion cubic feet of natural gas and 478 million barrels of natural gas liquids that are undiscovered and technically recoverable (USGS 2005b). A recent reports in *The New York Times* (October 10th 2005) even suggested that melting Arctic icecaps “could have a positive side,” in opening up not only oil and gas reserves but also new commercial shipping routes, cruise ship destinations and important commercial fisheries (Krauss et al. 2005).

There is the possibility – perhaps certainty – of archaeological and ethno-graphic discoveries in this process, dating from prehistory to literally the present-day. But how these will be managed remains unclear. The threat is present, and although the activities of the U.S. Bureau of Ocean Energy Management, Regulation and Enforcement (BOEMRE) [formerly known as the Minerals

Management Service (MMS)] may help to mitigate the threat, so far, while various environmental impact assessments of possible Alaskan oil fields pay at least some due to natural environment concerns, barely any mention cultural heritage (in marked comparison to the coastline of the U.S.-controlled sections of the Gulf of Mexico). In addition, and just as in the previous example from the UK, those few pieces of the U.S. state and federal legislation that protect submerged historic sites, either by design or accident [primarily the Abandoned Shipwrecks Act (1988), National Marine Sanctuaries Act (1972) and Antiquities Act (1906)], do not necessarily do justice to the extent, nature or complexity of multiphased, multi-site submerged prehistoric cultural landscapes.

Case Study 3: The South China Sea – A Hypothetical Submerged Cultural Landscape

Across the South China Sea region, numerous historic wrecks are constantly being plundered for commercial gain. One of the best known of these is the *Tek Sing*, from which enormous quantities (over 300,000 pieces) of porcelain were salvaged in 1999, prior to being sold at auction in Stuttgart, Germany. The cargo is now in the process of being resold as individual lots by a variety of vendors, including internationally via the online sale-house eBay. Meanwhile, another hoard of approximately 150,000 pieces of porcelain was being sold recently from the *Hoi An* junk, lost in the South China Sea in approximately A.D. 1500, with its contents again presently being resold by private vendors. Of more recent date but similar outcome was then the salvage of the *Geldermalsen*, a Dutch sailing ship lost off Indonesia in A.D. 1751 with a cargo of tea, silk, gold and porcelain, which were looted, and the materials were sold under the name of the “Nanking cargo”, a process that led to a formal statement condemning the destruction of the wreck by the International Congress of Maritime Museums (Anonymous 2004). At present, only the Chinese government is attempting to formally manage the marine archaeological resource of the South China Sea. Since 1986 the Chinese government has funded an Underwater Archaeology Research Centre as part of the National Museum of China. In 1989 the government promulgated the “Regulations of the People’s Republic of China Concerning the Administration of the Work for the Protection of Underwater Cultural Relics”, the only legislation specifically protecting underwater cultural heritage in the region (Wei 2006). Most recently, China has been considering signing the 2001 UNESCO *Convention on the Protection of the Underwater Cultural Heritage*, although at present it has yet to do so. Beyond the demonstrable historic-era cultural heritage of the South China Sea area lies as great a potential for (and threat to) submerged prehistoric cultural heritage, both along the coastal fringes and also in the relatively deeper waters of continental shelf. At present, there is little substantiated evidence for such materials in the area. However, assumptions can be made about the submerged prehistoric archaeological potential to the south of this region, through the established theoretical principle of the prehistoric landmasses of

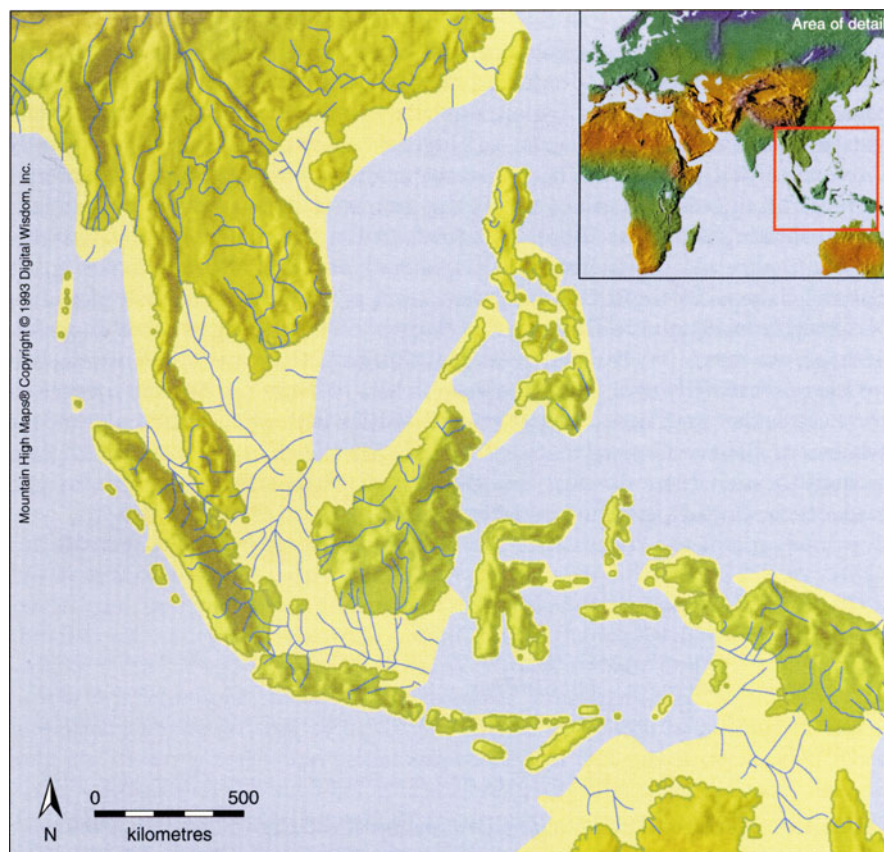


Fig. 13.4 Map of Sundaland (copyright University of Birmingham. Source: Gaffney et al. 2009: 137, Fig. 5.6)

Sunda and Sahul (see for instance Allen et al. 1977; White and O'Connell 1982; Smith et al. 1993), and in particular the limited but undisputed submerged prehistoric data from modern-day Australia (see for instance Dortch 1991, 1997a, b, Flatman et al. 2005; Nutley 2006; Webb 2006: 93–109 and passim) (Fig. 13.4).

While the immediate threat of the looting of historic shipwrecks continues and should be both monitored and opposed in the South China Sea, archaeologists should also look to this longer-term management question of the prehistoric cultural heritage. Following the examples of the North Sea and Beringia, such materials are under just as great a threat from offshore development, hydrocarbon exploration and exploitation, fishing and aggregates extraction. Nor is this helped by the medium- and long-term geopolitical situation of the region, a result of known oil and gas reserves – and assumed additional but presently undiscovered reserves. The Chinese Ministry of Geology and Mineral Resources has reported

that the South China Sea holds as much as 130 billion barrels of oil (greater than the estimated combined reserves of Europe and Latin America) (Klare 2001: 119). Similarly, there are also assumed aggregates and metal deposits worth extracting, and the entire zone of large-scale maritime commerce, with several major shipping lanes and/or transit points. Current projections suggest that by 2020, Asia will account for 34% of total world energy usage (with America at 24%, Western Europe at 13%, and former Russia and Eastern Europe at 12%). In terms of oil, this would mean a rise in consumption from 19 million barrels/day (1997) to 33 million barrels/day (2020), and in terms of gas the consumption rate is not known but estimated to be an even greater percentage change (see Klare 2001: 110). Meanwhile, seven separate states presently lay claim to large areas of the South China Sea: Brunei, China, Indonesia, Malaysia, the Philippines, Taiwan and Vietnam (see Klare 2001: 22, 109–137), and between 1989 and 1999 these countries clashed militarily, in various formats, at least 13 times on public record, particularly around the Spratly Archipelago, a zone of over 400 islets, cays, reefs and rocks, which currently houses military bases of China, Malaysia, the Philippines, Taiwan and Vietnam (Klare 2001: 124). Alongside this is the assumption that, if a major conflict occurred, other nations (in particular the U.S.) would be forced to intervene militarily to protect both their strategic interests and established treaty obligations (see Miles 1999; Song 2003). For example, the Philippines have a mutual defence treaty with the U.S., and Japan has also appealed for military support regarding claims in the past (see Klare 2001: 118–26). There is also an ongoing naval arms race in the area (see Klare 2001: 127–31). This was a conflict type and location predicted at least as long ago as the 1970s (see Siddayo 1978; Valencia 1985). The known growing and estimated growing demand for energy in Southeast Asia in response to general economic growth means that any cultural materials that lie in the way of energy-related developments are under serious threat, either from looting or simply random destruction. Within this has also come the demonstrated use of cultural heritage both on land and under water to further territorial claims – especially by China, which claims the Spratly Chain (which it calls the Nansha Islands) on the basis of a “continuous” Chinese administration of the archipelago since the Tang dynasty (A.D. 618–907) (see Gallagher 1994). In 1999, for instance, divers working for the French oil company Elf discovered another A.D. fifteenth century Chinese porcelain ship, the contents of which eventually ended up on display and then sale in Brunei, but which was seized upon by China as evidence reinforcing its historical claims. Such discoveries precipitated in 1992 the formal Chinese claim to the entire Spratly archipelago, a claim contested by the other claimants under UNCLoS, especially Vietnam (which has also been the first country to award oil exploration contracts in the area to foreign energy firms), but also Taiwan and the Philippines (Klare 2001: 121). See also for example the case of the Blacktip gas field in the Australian Northern Territory from 2001 onwards, where Indigenous land rights were instrumental in decisions on the management of the site (Begnaze Pty. Ltd. 2004; Northern Territory Government 2005) (Fig. 13.5).

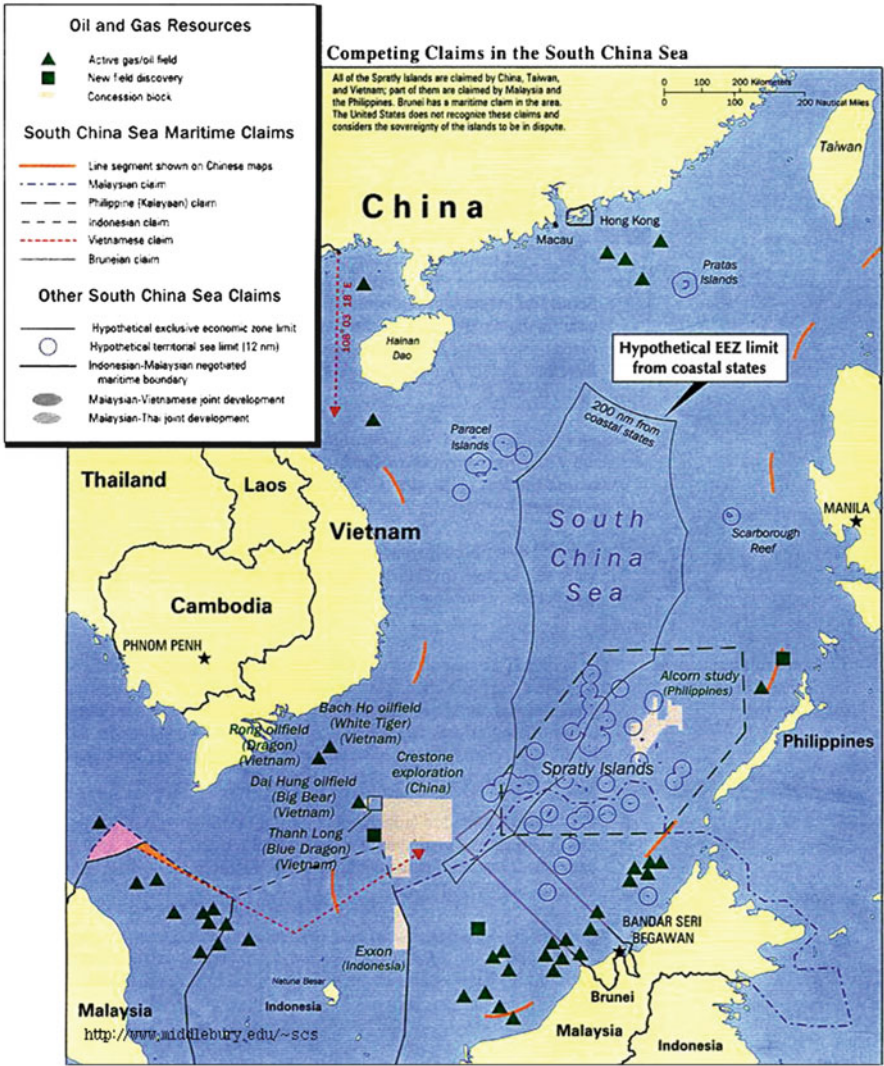


Fig.13.5 The political and economic geography of the South China Sea (copyright David Rosenberg, <http://southchinesea.org/>)

Conclusions

The preliminary conclusions that can be drawn from this discussion offer an extremely gloomy prospect for global submerged cultural heritage in the short to medium term. While there are a large number of known – and even more unknown but predicted/likely – prehistoric submerged sites and zones around the world, and a likelihood that

many more such sites will be discovered, there is also a strong correlation between the regional location of these archaeological sites and likely zones of underwater exploration and industry in the next 30–60 years. There is, thus, a strong likelihood of the discovery of – and immediate damage to or destruction of – such sites during industrial developments, both non-renewable and renewable energy initiatives, and through the ongoing effects of climate change such as sea level rise and storm damage. Climate change (including climate change management and mitigation strategies, especially along the coastline) then represents another type of threat.

The fact is that there is a serious absence of concrete data on the global extent and composition of submerged prehistoric archaeological sites, and an equally serious absence of concrete data upon the impact of seabed and sub-seabed industry on the stability of such sites. The archaeological community simply does not know where many sites are (although generalised predictions of the likely locations and extent of such sites can be made on the basis of past sea levels), and even if it did know where more sites are it could scarcely model the impact of such developments upon them. This can then be placed within a global management/legislative structure (e.g., ICOMOS *Charter on the Protection and Management of Underwater Cultural Heritage*, 1996; UNESCO *Convention on the Protection of the Underwater Cultural Heritage*, 2001) that is inadequate. Present management frameworks:

- (a) Are in many cases not designed with underwater cultural heritage specifically in mind (e.g., UNCLoS).
- (b) Where they do deal specifically with cultural heritage, are in many cases not designed with multi-site, multiphased submerged prehistoric cultural landscapes in mind, only “one-context, one-site” shipwrecks (e.g., the principle of Sovereign Immunity).
- (c) Have various “loopholes” or other problems (e.g., UNCLoS uncertainty about whether the legal limit of the EEZ is to the edge of the continental shelf, to 200 m depth, or 200 nm distance, and the general lack of legal frameworks for the international seas/deep ocean).
- (d) Only operates on certain levels (e.g., UNCLoS and the UNESCO *Convention on the Protection of the Underwater Cultural Heritage* alike would do little to prevent or chastise a country wilfully damaging the submerged cultural heritage within its own territorial seas or coastal zone whilst in the pursuit of other objectives).
- (e) Are frequently non-utilised or underutilised (i.e., the UK Ancient Monuments and Archaeological Areas Act, 1979; the UK lease of seabed by the Crown Estates, etc.).

The heritage community – indeed, the wider community of concerned citizens around the world – needs to do something to protect submerged cultural heritage from this specific, multivalent threat; this has to be done now; it has to be collective. It may be that such protection is offered through organisations such as ICOMOS and measures such as the UNESCO convention, through management tools such as UNCLoS, or through something entirely different; everything should

be on the table, no possibility ignored. However, within this must also come a prioritisation, an acceptance that such a process of rapid development will inevitably see the loss of some sites. Choices have to be made about priorities and resources be directed accordingly. Above all, this has to be a holistic view, global in scope, comprehensive in consideration. The provision of and continuance of energy supplies and other essential resources, and the control and reduction of climate change are intimately interlinked, not least of all in their impact upon cultural heritage. In a book addressing the contemporary relevance of archaeological research, issues such as these are of the *highest* relevance. Moreover, there are serious questions to be asked here of the balance between personal moral imperatives and the broader threat to the resource. It is often argued that deep-submergence technology in particular is “out of the box” – that others, especially treasure-hunters, will use such technologies if maritime archaeology does not, and that there is thus just as great a moral imperative to ignore the origins of such technology and embrace it for “good” in the management/protection of the marine archaeological resource through collaborative work with, for instance, the oil and gas industries, and also the military. But perhaps this is just an “easy out” – is there really any less an ethical concern of working with the military-industrial complex, or using directly military-derived technology, than working with a treasure-hunter? Sometimes the situation seems to be that, to paraphrase Rule (1986), “as soon as I submerge my ethics significantly drop”. The challenge for the twenty-first century, then, is how to protect and maintain the maritime archaeological resource, and also maintain professional ethics, in the face of unprecedented demands to compromise on both by government and industry alike.

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Chapter 14

The Necessary Roles of Archaeology in Climate Change Mitigation and Adaptation

Marcy Rockman

Human behavior that affects prospects and avenues for adaptation: except for autonomous adaptations by natural ecosystems, all adaptation actions depend on human behavior, and there is a critical need for research on determinants of adaptation that focus on this topic.... Scientific knowledge of human behavior as a factor in climate change adaptation is currently very limited...but is a critical component to understanding how adaptation decision-making might work and constitutes an important part of the knowledge base for adaptation planning and action at a variety of levels and sectors (National Research Council 2010a: 181).

Available evidence indicates that greenhouse gas concentrations in the atmosphere are increasing rapidly relative to historic concentrations due at least in part to human activities. The increasing gas concentrations are in turn altering global temperatures. These temperature changes in turn are generating and have the capacity to further accelerate a range of environmental consequences including but not limited to sea level rise, shifts in ecozones and current weather patterns, and stronger and more unpredictable natural hazards such as hurricanes and droughts. These consequences entail a range of adverse effects including but not limited to submergence of coastal areas, including heavily populated coastal areas, loss of species, reduced or shifted agricultural yields, and reduced and shifted sources of fresh water (Karl et al. 2009; National Research Council 2010b; Samenow and Rosseel 2010; Solomon et al. 2007). All of these adverse effects in turn have the capacity to place significant physical, economic, and emotional stress on existing human and other natural systems (Parry et al. 2007). There is also growing recognition that this type of climate change is a long-term issue: build-up of greenhouse gasses is ongoing and – even if all greenhouse gas emissions were halted right now – will continue over the course of decades to centuries. Therefore, the consequences also will occur over the range

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of decades to centuries (National Research Council 2010b; Pachauri and Reisinger 2007; Solomon et al. 2007).

Given this information that we, meaning the broad global community, have at hand, the bottom sum question is: what do we do? Currently, two approaches are being discussed in the world of policy: mitigation and adaptation. Mitigation in this arena means reducing outputs of greenhouse gasses through a combination of new technology and behavioral change with the intent of ultimately reducing the environmental and follow-on human system consequences of changed global temperatures (National Research Council 2010c). In turn, adaptation means adjusting human systems – including physical, economic, and social systems – to address the effects of changed global temperatures (Parry et al. 2007). Resilience is also commonly part of climate policy discussions: it means generally a system that can handle or absorb shocks and maintain or readily return to its pre-shock state. For purposes of this discussion here, I put resilience under the category of adaptation as resilience can be viewed as an adaptation to a variable environment. The critical point for this chapter and this volume is that these definitions of mitigation and adaptation, and by extension resilience, entail at least some changes in human behavior. Specifically, there is a need to change human activities with respect to greenhouse gas outputs; there is anticipation of a range of changes that will be needed to address the effects of rising global temperatures; and there is recognition that many current human systems are not as flexible as they could be in the face of anticipated future stresses and shocks.

From these comes the next big question – how do changes in human behavior come about? How can the modern world actually go about doing the human behavior parts of mitigation and adaptation and increasing resilience? From a policy perspective, these questions can be rephrased as:

1. How can behavioral change that advances mitigation and adaptation goals best be encouraged? (proactive)
2. What do we know about the rate, scope, and persistence of individual and group behavioral change in response to information and changes in environmental circumstances? (reactive)
3. How do both of these processes work over the long time frames entailed by the current climate change situation?

Archaeology cannot provide all the answers to these questions. No single field of inquiry can. Archaeology is, however, an important source of information for addressing these questions, particularly with respect to nature, rate, and persistence of social change over long time frames. Without the data, information, ideas, and interpretations that the field of archaeology can provide, there is much less of a chance of developing appropriate, workable, and durable means of addressing both mitigation and adaptation issues.

To date, however, archaeology does not have a well-established role in climate change science and policy. This should not be taken to mean that a range of archaeologists have not addressed climate change issues. The bodies of work and organizational contributions by Carole Crumley, Joseph Tainter, and Charles

Redman, to name just three readily identified in online lists, are staggering. However, no archaeologists served on the panels of the National Academies of Sciences recent substantive series *America's Climate Choices* and consultation with a sociologist currently working with the Intergovernmental Panel on Climate Change (IPCC) indicates no one with archaeological training is contributing to the preparation of the IPCC Fifth Assessment Report. The state of the situation is that, as noted in the opening quote from the National Research Council (2010a) above and developed in the introductory chapter of this volume (Chap. 1), understanding and procedures of how to incorporate the full enterprise of social science, not archaeology alone, with the physical sciences of climate, environment, and ecosystems, are still in infancy. For instance, the October 2010 *Progress Report of the Interagency Climate Change Adaptation Task Force* prepared by the White House Council on Environmental Quality (2010: 31, emphasis added) noted that:

The new Adaptation Science and Research Element within the USGCRP [United States Global Change Research Program] should develop a 'roadmap' that identifies existing adaptation science and service capabilities and gaps across Federally-sponsored programs... the 'roadmap' should include all relevant fields required for adaptation efforts, including disciplines beyond the traditional physical 'climate science' *such as social and behavioral sciences* and ecology, as well as interdisciplinary efforts.

Further, two of the eight actions recommended in the report to address current science gaps include:

- Expand research on relevant social and behavioral sciences to improve understanding of human responses to change.
- Identify the social and ecological tipping points and thresholds (beyond which change is sudden and potentially irreversible) to help guide decisions regarding intervention and planning (Council on Environmental Quality 2010: 32).

Issues of translating science and social science for use in policy development and implementation as developed in Chap. 1 of this volume apply. Due to the time scope of climate change, the problem will not go away any time soon. However, time available in which to effect changes of the nature and scale that appear to be necessary to sustainably meet on a global level greenhouse gas emission reduction targets that minimize adverse consequences is declining rapidly. As of 2005, greenhouse gas concentrations were measured at 379 ppm. Stabilization of concentrations in the range of 350–400 ppm, the lowest level scenario considered the IPCC Fourth Assessment Report (AR4), with anticipated 2–2.4°C rise above preindustrial levels and 0.4–1.4 m sea level rise from preindustrial levels, will require a 50–85% reduction in greenhouse gas emissions from 2000 levels by 2050 (Pachauri and Reisinger 2007). As such, there is urgent need to gather and make accessible useful archaeological information. With this in mind, I argue neither for nor against new research specific to issues of climate change mitigation and adaptation, though some undoubtedly will be needed. Rather, as will be outlined in the balance of this chapter, many sophisticated archaeological research wheels are already turning. Per the essence of relevance, my purpose is to show how they might be used for yet further purpose, extending beyond the functions they already serve.

Following here is an outline of three ways in which existing archaeological information could be organized and, as needed, additional basic research programs appended. Organization and coordination of research along these lines will address at least some of the translational issues, that is – interpretation of science for direct use in policy and decision-making – such as discussed in Chap. 1. Identification and communication of research through the most appropriate channels for policy- and decision-making will likely remain an ongoing challenge:

1. Climate science: Complement climate and environmental modeling with human–environment interaction data, particularly in the categories of “human barometer” and shifting baselines information.
2. Adaptation models: Expand both theory and detailed examples of cultural evolution and cultural adaptation, particularly with respect to transmission of information and practices within and between populations, persistence and malleability of socioeconomic practices within populations, and relative flexibility or rigidity of identifiable social systems and relative time frames of change (if any noted) within them.
3. Stories and narrative: Tell and authenticate or challenge with as much detail as possible the stories that underlie modern practices and understandings of climate and the natural environment, particularly the contrasts (where they exist) between what people say or have said and what they do or have done; case example below of recent archaeological and historical work on the origins of modern North American perspectives on climate and environmental variability based on the Jamestown colony in colonial Virginia.

Archaeology and Climate Change Science

There are two direct contributions archaeology can make to climate change science: first, to identify, where feasible, human barometers for paleoenvironmental records and second to be the means by which to check for shifting baselines.

Human Barometer/Social Indicators of Climate Change

By human barometer, I mean the extent to which site- and landscape-scale archaeological data can indicate what measurable environmental change may have meant for the people, their economies, and social systems on the ground in a given region over an extended period of time. The emphasis of this approach is on regions and data that complement efforts to assess local ecological tolerances and population histories. Big picture approaches to this topic are legendary, including but not limited to Jared Diamond’s much discussed *Collapse* (2005). While such interpretive work should continue, such as papers in McIntosh et al. (2000), the intent of this suggestion is

more local and data-driven. Current climate models are global in scale (National Research Council 2010b; Solomon et al. 2007) and capacity for prediction of impacts of climate change at local and regional levels remains limited. Archaeology has useful data at these smaller scales. Documentation of occupation sequences and resource use histories have the capacity to expand understanding of indicators of environmental change (Karl et al. 2009; Samenow and Rosseel 2010) and the means of communicating this to local populations. Collected papers by Anderson et al. (2007) are an example of cross-spatial comparison of mid-Holocene recorded environmental change at the human level. Marquardt's (1994) long-term public involvement with the archaeology of the Calusa in Florida and related raising of community environmental awareness is another example. The National Science Foundation's Long-Term Ecological Research Network (LTER; <http://www.lternet.edu/>), which includes leadership of archaeologist Charles Redman at the urban Phoenix, Arizona location (Redman, Grove et al. 2004), and the National Ecological Observatory Network (NEON; <http://www.neoninc.org/>), currently being established, should be used as foci for such efforts. It is critical that archaeologists be directly involved in efforts to identify the human-scale impacts of different amplitudes of climatic change, for reasons ranging from practical issues of knowledge of and access to the full range of archaeological data and literature, including "gray literature" as recently discussed by King (2009) to complex theoretical issues relating to the interpretation of social change.

To restate, my intent with the concept of human barometer is not that such work should outline complex theoretical issues relating to the interpretation of social change. Rather, it is to envision archaeology becoming a much thicker and integral strand in the many lines of evidence being pulled together to assess what rapid change in the global climatic system means below the global level and over different time scales (e.g., Karl et al. 2009). However, as the relationship between environmental conditions and human social change is fundamental to much archaeological research and as the ultimate objective of work to address the modern phenomenon of climate change is to manage the relationship between environmental conditions and human societies, efforts to link identified environmental change with human social change in the climate change policy arena are well nigh impossible to avoid. And if not provided by archaeologists, they are likely to be attempted by others with less training in the field. So, it is useful to outline the interpretive policy questions toward which human barometer information should be directed. These questions are developed here and also apply throughout subsequent sections of this chapter.

Although I am at odds with their approach to critique of Jared Diamond's *Collapse* (see Chap. 1), the concern over appropriate interpretation and use of human–environment data expressed in the collected papers in McAnany and Yoffee (2010) is real. The importance of keeping archaeological expertise at the forefront of such discussions cannot be overstated. However, it is also important, from a relevance and particularly a policy-oriented relevance perspective, that archaeological information be phrased so as to speak to major current political questions. In this sense, Diamond's phrasing of his approach – whether and how past societies chose to fail or succeed – speaks quite closely to current climate policy-maker concerns: what do we do with the societies and systems that we have right now? Given the effects we

understand our societies and systems have had and are likely to have in the future on the natural environment, what options do we have? What is the timeframe of those options? While to date most research effort has been directed toward understanding climate systems and ecosystems, growing awareness of the need for adaptation as well as mitigation is turning attention to human systems as well and the range of social changes that may be necessary as anticipated climate change effects take place (Parry et al. 2007). Climate science and the relevance of archaeology would be well-served if archaeological information could be organized to address not whether environmental change caused a given population to fail or succeed or vice versa, but rather what an ecologically flexible social system looks like in a given environment. Has there been one? Can we identify social tolerances and tipping points such as per the Council on Environmental Quality (2010) recommendations above? Can we identify accommodating practices or indications of social stress along the lines of the natural environment and human health indicators developed at the U.S. Environmental Protection Agency by Samenow and Rosseel (2010)? The complexity of human–environment interactions should not be devalued; rather the range and complexity of what humans have done in a particular place over the full course of measurable environmental change should be emphasized.

A case example of human barometer data in the making is the Chumash archaeological record in the Santa Barbara Channel region of the central California coast and the environmental fluctuations associated with the Medieval Warm Period/Medieval Climatic Anomaly (approximately A.D. 900–1300; Crowley and Lowery 2000; Lamb 1965). Kennett and Kennett (2000) developed a 25-year interval oxygen isotope record from a marine sediment core and Northern Channel Islands mussel shells and translated these data into a record of changes in sea surface temperature and related implications for marine productivity, which they in turn examine alongside 3,000 years of regional occupation history. The isotope data indicate that the period between A.D. 450 and 1300 was characterized by cold, highly unstable marine conditions, high marine productivity, and an inferred dry (low productivity) terrestrial climate. The regional archaeological record suggests the development of fully sedentary villages after A.D. 650, intensification of fishing approximately A.D. 950, intensification of exchange between the coast and Channel islands between A.D. 650 and 1300, and an apparent decrease in violent injuries after A.D. 1300 [some conflict continued to time of European contact (Grant 1978; Walker 1989)]. The bow and arrow was introduced between A.D. 500 and 800; its relationship to other identified trends is not fully known.

In another study published the same year, Johnson (2000) outlines how environmental and social instability appears to have set a context for regional heterarchical economic organization which in turn served as a basis for the development of hierarchical sociopolitical relations. The economic relations included the use of shell money and may have underlain the distribution of Chumash dialects in rough horizontal transects extending from the Central Valley of California to the coast by approximately A.D. 1000 (Johnson 2000). Geographic analysis shows villages with one or more chiefs relocated in areas characterized by *betweenness* appropriate to control of trade rather than accessibility to and control of specific resources by ethnographic times.

As many readers are already aware or would expect, these explanations draw on, build from, challenge, and/or support the work of many other scholars. In the space available here, it is possible note only a few. For example, Raab and Larson (1997) discuss the potential role of sea surface temperature variation and its relation to drought in the emergence of social complexity among the Chumash. Arnold (1997) challenges Raab and Larson's (1997) proposal that drought was driving factor in cultural changes A.D. 1150–1300, arguing that rather there was a complex interaction between drought, sea surface temperatures, as well as demographic changes and other technological innovations that underlay changes identified in social systems at that time. Rick et al. (2005) in turn focus on Channel Islands portion of Chumash history and, while they also suggest major cultural reorganization of Chumash society was sparked by a period of elevated sea surface temperatures, drought, and variations in marine productivity, again in contrast to Raab and Larson (1997), they emphasize the role of marine productivity fluctuations. Finally, Gamble (2005) considers phenomena of punctuated vs. gradual cultural change and notes that the archaeological record in coastal California not yet fine-grained enough to distinguish between these patterns.

There appears to be more agreement about the importance of the physical anthropological data developed by Lambert (1993), Lambert and Walker (1991), and Walker (1986, 1989) and recognition that growing population densities and greater circumscription of populations and territoriality underlay declines in health and increased violence, although the specific social conditions that brought about the non-violence-related health indicators also must be inferred. For instance, occurrences of *cribra orbitalia* (cranial bone lesions associated with anemia) can be caused not only by low iron intake but also by diarrheal disease due to poor water supplies (Walker 1986). Declining stature in the Late Middle Period (A.D. 300–1150) relative to earlier periods of the Holocene (Lambert 1993) is linked to increased rates of disease during the Late Middle and Late Periods (A.D. 1150–1782) (Lambert and Walker 1991; Walker 1989). Evidence of interpersonal violence, such as sublethal compression skull fractures, also are most common in burial populations from the Late Middle and Late Periods (Raab and Larson 1997; Walker 1989).

Several points from this outline have climate change policy relevance. First, this level of basic research, of tacking back and forth between locationally related environmental records and site, local, and regional archaeological data, and models of social structure and interaction developed from ethnography and other sources, is absolutely critical. THIS is the science of our social science. This is the gathering of data, identification of bounding conditions, testing of hypotheses, and updating of we can understand about the human past, and it takes a profession to do it well. Second, no policy- or decision-maker needs to know this full level of detail. The complexity of the issues can be expressed, along with nature and level of confidence in summary information, and the nature of further research needed to reduce levels of uncertainty. But not the charting out of how the current state of knowledge came to be, unless specifically asked for.

Third and finally, the human barometer for the Central California Coast spanning the Medieval Warm Period should include the following key points. With respect

to the environment, it is a “hinge” environmental area (meeting of different ecozones, after Crumley 2000; Johnson 2000); multiple environmental records indicate supra-generational environmental fluctuations; marine and terrestrial environments and related productivity do not appear to have been directly correlated; and terrestrial productivity appears depressed relative to marine productivity. With respect to human activity over the span of measurable environmental change, an identifiable society remained in place throughout the environmental fluctuations; use of resources during this time was characterized by increased economic segmentation linked by trade leading eventually to alternate alignments of villages and more structured hierarchical political organization; health indicators such as *cribra orbitalia* lesions, decreased stature, and incidence of violent injuries peak in the latter part of the environmental fluctuations.

In sum, the measurable environmental changes appear to have affected terrestrial subsistence resources to a greater extent than marine subsistence resources. The social system in the region remained in place over the full course of the measured environmental fluctuations and altered economic and ultimately sociopolitical organization, so, therefore, could be considered as an example of a flexible, estimably resilient system. This estimate is tempered by the evidence of health stress and increased violence. Overall, the society does not appear to have reached what might be considered a tipping point with respect to what is currently considered to be one of the more drastic social solutions to environmental stress, which is migration (Parry et al. 2007). This suggests at least a reasonable social ability to track an environment and its capacity, which leads to concept of shifting baselines.

Shifting Baselines

A baseline is a given set of conditions against which subsequent change is measured. Shifting baseline syndrome occurs when sequences of individuals, populations, or generations use their own first contact with a given facet of the environment as the baseline for that facet, rather than a fixed external standard. While each individual, population, or generation might note what they perceive to be a relatively small change or deterioration in that facet of the environment, the long-term change is actually much greater. This phenomenon of under-perception of change has been extensively explored with respect to depletion of fisheries (Bunce et al. 2008; Pauly 1995, 2001; Pinnegar and Engelhard 2008) and is being extended to other areas of conservation (Papworth et al. 2009).

The concept of shifting baselines is important for assessing both the impacts of climate change on natural and human systems and developing meaningful implementation plans for concepts such as sustainability and resilience. Goals for atmospheric concentrations of greenhouse gasses have been set relative to previous measurements: 1990 per the 1997 Kyoto Protocol, relative to 2005 following Conference of Parties (COP) 15 in Copenhagen in 2009. For the ecosystems and human organizations that live under and in interaction with those greenhouse gasses,

appropriate baselines are much more difficult to determine. Simply choosing the condition at which point a decision was made not to change further is insufficient (after Pauly 2001; Pinnegar and Engelhard 2008).

Archaeology has a critical role to play in determining previous environmental conditions. As eloquently outlined by Charles C. Mann in his synthetic work *1491: New Revelations of the Americas Before Columbus* (2005), ecosystems of the Americas have been extensively managed for many centuries before European contact through use of fire, selective hunting, soil development (e.g., *terra preta* in Amazonia), and other means. Further, the cultural baseline of European contact with the New World environment – such as iconic visions of “howling” or untouched wilderness – appears to have included multiple aspects that were not “primeval” conditions at all but rather temporary outbreak populations due to decimation of Native American populations from epidemic disease and concurrent cessation of their ecological management practices. The passenger pigeon is a case in point. Passenger pigeons formed enormous flocks in the eighteenth and nineteenth centuries. Studies by Neumann (1985), however, indicate that this abundance did not occur earlier. Examination of 41 sites across the habitual range of the passenger pigeon in the eastern and central U.S. shows passenger pigeon to be strongly underrepresented in faunal assemblages. Controlling for preservation and excavation methods, presence of some pigeon bones indicates that they were considered reasonable prey and were not excluded by taboo; leaving as most likely the explanation that the birds were not as numerous in pre-European times as they were post-contact.

Such analyses are important from both natural and human social perspectives. On the natural side, detailed studies such as that of Neumann (1985) form another critical strand of archaeological information that should be in the web of investigations assessing both the effects of climate change on ecosystems and plant and animal populations and potential future management practices. How can science fully assess how such systems may turn out if the starting point is not clearly defined? If available environmental records date to the mid-twentieth century, or the mid-nineteenth, is this time reach sufficient? Archaeology has the unique capacity to bring together ethnographic and historic texts and other records with past land and resource use practices. In this sense, unlike the level of relevant detail in the human barometer discussion above, for baseline analyses the smallest details of archaeological investigation become critical: what excavation techniques were used? What screen size? What pedestrian survey interval identified the known distribution of sites? What do presence, absence, and relative abundance data tell us about what we think we know about past plant and animal populations and their relationships with people?

Lynne Sebastian (Chap. 19) describes what she calls the tyranny of “we always” in cultural resource management. She notes how business practices established at the earliest in the 1980s have become enshrined, replicated faithfully from project to project, following assumptions that they are how things are supposed to be done, rather than developing new project designs that address the specifics of project locations and stakeholders. In his work with the Anasazi, Jeffrey Dean (1988, 2000) defines two primary time frames through which societies interact with environmental change: high-frequency processes (HFPs) which change with periodicities of less

than 25 years, and low-frequency processes (LFPs) which change with periodicities greater than 25 years. He suggests that populations orient or adapt themselves to HFPs, while LFPs are treated as relatively stable conditions.

I am still grappling with just how it might work, but propose, and strongly, that to expand understanding of the human social side of the shifting baselines phenomenon, several lines of archaeological research should investigate as closely as they possibly can issues of generational memory. One line would investigate instances of “we always” in modern uses of and interactions with natural resources and ecosystems. The foremost example of this genre of research is that done by the Garbage Project at the University of Arizona. Findings of the Garbage Project have challenged many assumptions such as the composition of landfills, the rates at which materials decay in them, and how we remember what we eat (see Rathje and Murphy 1992). The Garbage Project deals with recent discards and behavior and my sense is that the basal part of even the most forward-thinking archaeological brains will note that working with materials less than 50 years old (as designated by the U.S. National Historic Preservation Act) is not the core of the archaeological record or archaeological practice. Noted, but there is no guarantee that actions or perspectives encapsulated in current “we always” ideas began within or outside of the 50-year time frame. This is what needs to be investigated. Further, archaeological techniques, particularly those developed in historical archaeology (Little 1992), to compare and test the written record against the material record – what has been said vs. what has been done – are unique and necessary to outlining both the baselines of what we currently do and how they have moved and over what time frames.

Another line of research related to shifting baselines does need to go as far back as possible and seek to identify cases where useful information about the environment has been carried forward over LFPs. Such research would address how a population maintained actionable information for environmental conditions outside the experience of living members of that population. An example of such research is the examination of archaeological and paleoenvironmental records on coastal and interior Alaska by Minc (1986) and Minc and Smith (1989). Analysis of approximately 1,000 years of environmental records indicates that there have been long cycles in the range of 100 years or more of alternating favorable–unfavorable coastal and inland conditions (Minc and Smith 1989). Archaeological data describe episodic relocations of settlement concentrations coeval with variations in sea ice cover and interior drought. Several levels of oral tradition emphasize the importance of maintaining social connections between coastal and interior zones, and the most restricted level of hunting ritual emphasizes the dual relationship of coastal prey and inland game (Minc 1986). Minc and Smith (1989) identify this as an environmental coping mechanism: information about the place to go when things get bad is not just a social possibility, but rather part of the sacred order of the world.

It is important to note here that there is no distinct call for this type of information in current climate change policy discussions. Rather, it is my reading of what is needed to adequately address current questions about how to develop more resilient communities and scope means of adapting to anticipated environmental change under current climate modeling predictions. As noted above in the recommendations from the

Council on Environmental Quality report, there is just now formal recognition of the need to integrate social science research into resilience and adaptation planning. No framework has been established yet as to what that social science research should look like or the timeframes such studies should address. Multiple studies have been conducted recently regarding knowledge and opinions of the American public about climate change – very current and present information (Center for Research on Environmental Decisions 2009; Leiserowitz et al. 2010). The IPCC AR4 volume on impacts, adaptation, and vulnerability notes that by mid-to-later this century, extensive measures such as migration – abandonment in archaeological terms – may not be sufficient to address the scale of anticipated environmental change. Implications of this are that yet further wide-ranging social change is likely to be necessary. Thus, there is a large gap between current opinion and knowledge surveys and potential broad-scale social restructuring later this century. Archaeology has the capacity to address part of this gap. Part of the gap-filling should be with human barometer and shifting baseline data and in so doing defining the time scale of necessary data and the reach of useful social models. Another part of the gap should be filled with data and models about what archaeology knows about broad-scale social restructuring and the process of cultural adaptation, which is, therefore, the topic of the next section.

Cultural Evolution and Archaeological Contributions to the Topic of Adaptation

Humans adapt not to their real environments but to their ideas about them, even if effective adaptation requires a reasonably close correspondence between reality and how it is perceived (Trigger 1989: 269).

In just 29 words, Bruce Trigger captured multiple concepts: the balance of nature and culture in adaptation, the importance of information, and the critical role of the source of that information.

The IPCC AR4 report also points to some of these concepts in its extended definition-like discussion of adaptation in its volume on impacts, adaptation, and vulnerability (Parry et al. 2007: Sect. 17.1):

Adaptation to climate change takes place through adjustments to reduce vulnerability or enhance resilience in response to observed or expected changes in climate and associated extreme weather events. Adaptation occurs in physical, ecological, and human systems. It involves changes in social and environmental processes, perceptions of climate risk, practices, and functions to reduce potential damages or to realise new opportunities. Adaptations include anticipatory and reactive actions, private and public initiatives, and can relate to projected changes in temperature and current climate variations and extremes that may be altered with climate change. In practice, adaptations tend to be on-going processes, reflecting many factors or stresses, rather than discrete measures to address climate change specifically.

Biological adaptation is reactive (see Chapter 4), whereas individuals and societies adapt to both observed and expected climate through anticipatory and reactive actions. There are well-established observations of human adaptation to climate change over the course of human history (McIntosh et al. 2000; Mortimore and Adams 2001). Despite

evidence of success stories, many individuals and societies still remain vulnerable to present-day climatic risks, which may be exacerbated by future climate change. Some adaptation measures are undertaken by individuals, while other types of adaptation are planned and implemented by governments on behalf of societies, sometimes in anticipation of change but mostly in response to experienced climatic events, especially extremes (Adger 2003; Kahn 2003; Klein and Smith 2003).

The scientific research on adaptation is synthesised in this chapter according to: current adaptation practices to climate variability and change; assessment of adaptation costs and benefits; adaptive capacity and its determinants, dynamics and spatial variations; and the opportunities and limits of adaptation as a response strategy for climate change.

The National Academies of Science series *America's Climate Choices* echoes the IPCC definition with its phrasing of adaptation as “adjustment in natural or human systems to a new or changing environment that exploits beneficial opportunities or moderates negative effects” (National Research Council 2010a) and further “Adaptation is a process and not mainly about a set of actions to be taken right now” (National Research Council 2010a). However, outlines of how to go about starting adaptation are currently oriented toward specific actions. For instance, in the U.S. Global Change Research Program (USGCRP) report *Global Climate Change Impacts* (Karl et al. 2009), adaptation is defined as “changes made to better respond to present or future climatic and other environmental conditions, thereby reducing harm or taking advantage of opportunity” and examples of adaptation include “a farmer switching to growing a different crop variety better suited to warmer or drier conditions; a company relocating key business centers away from coastal areas vulnerable to sea-level rise and hurricanes; and a community altering its zoning and building codes to place fewer structures in harm’s way and making buildings less vulnerable to damage from floods, fires, and other extreme events...” (Karl et al. 2009). The Council on Environmental Quality (2010) progress report on climate change adaptation planning uses the National Academies of Science definition of adaptation and is similarly organized around planning adaptive actions.

Two points follow from these definitions. First is the implication of the list actions such that through their performance a given community or infrastructure or agency will “be adapted.” The listing of actions does not recognize the process of adaptation or the important role that transmission of change plays in adaptation. As developed thoughtfully by Redman (1999) and Redman, James et al. (2004), available evidence across millennia of case studies indicates that no single facet of human–environment interaction – use of fuel, intensification of agriculture, population, to list only a few – can be seen as responsible for past environmental destruction. Rather, it has been the work of integrated socioecological systems. The working policy definitions of adaptation and examples of its application do not yet effectively capture this aspect of the whole being a working of the parts. This leads to the second point, as recognized as necessary in the IPCC AR4, how do broad-scale adjustments of social and economic systems take place? What in fact do we do with this complex web of social, economic, and ecological systems that exists to reduce, to the extent we can, their effects on global climate and ecosystems and prepare for and adjust to the balance of anticipated rapid environmental change?

With respect to the first point, I have had the chance to present and discuss the issue of definition of adaptation and transmission of information with several individuals and groups involved with drafting climate change policy, of which the Council on Environmental Quality (2010) is the most recent product. I organized the topic into two key parts: first, insofar as adaptation is the outcome of the process of evolution, there is distinction between the processes of biological evolution and cultural evolution. Second, cultural evolution proceeds through transmission of information and there are multiple transmission pathways, each of which has implications for the rate, nature, and scope of cultural change. I based my discussion on models of cultural evolution and information transmission developed by Boyd and Richerson (1985, 1995, 2002) and Richerson and Boyd (2001, 2005), with additional background on macroevolution from papers by Prentiss et al. (2009b). The models as developed by Boyd and Richerson are complex and detailed; my presentation condensed and made leaps over multiple intervening proofs. Responses to this presentation, to date, have been positive to enthusiastic. How they will be incorporated into future policy and applications is not yet clear. I list the points below as they were presented as a framework to be used and improved upon:

Starting point: adaptation is the anticipated outcome of the process of evolution:

- Being adapted or “fit” in evolutionary terms means having the capacity not only to thrive but also to successfully reproduce.
- Biological evolution works on traits expressed by individuals that can be passed down vertically between generations.
- In this process, the characteristics on which evolution is working are inherent to the individual.
- The environment in which biological evolution works is the physical environment – relating to subsistence, other aspects of physical functioning – things needed for biological life.
- Culture is not held in genes, but in ideas, beliefs, and practices taken on by individuals and shared within a group.
- Culture is passed vertically from parents to children, and also horizontally between peers and from children to adults.
- Because the components of culture can be passed in multiple directions and are not inherent to an individual, the components of culture are essentially separate entities from the individuals.
- The collection of ideas, beliefs, and practices held by a given group is the “environment” in which fitness of a given idea, belief, or practice is tested.
- Therefore, evolution works on the components of culture distinct from its workings on the biological fitness of individuals and groups, which means.
- Cultural adaptation ≠ biological adaptation.

In other words, an idea, belief, or practice can be adapted to the social setting in which it occurs, but does not necessarily confer biological fitness on the individuals or groups that hold it. An example of the processes that underlie the phenomenon of demographic transition is the pursuit of a Ph.D. Having training at the level of a Ph.D. can confer high social status and other forms of social access, but spending many years of young adulthood with very low income and high levels of stress can reduce actual biological fitness (Richerson and Boyd 2005).

What all this means is that it is incumbent on individuals and groups to evaluate ideas, beliefs, and practices to confirm that it confers either social fitness, biological fitness, or both. So, when looking at ideas for human behavioral adaptation to future climate change, it is often

said you need to make sure that ideas suit the local culture. This whole model is the basis of that: you need an idea that works in the local social environment. However, it is also important to understand that an idea that takes off in a given social setting does not necessarily mean it is suited to the local physical or natural environment or vice versa.

As transmission of ideas, beliefs, and practices is integral to cultural evolution, it is useful to look more closely at how information transfer works at the individual and group levels; in other words, how ideas, beliefs, and practices develop and move around.

- There are two basic ways ideas, beliefs, and practices are adopted by individuals via individual learning or imitation:
 - Individual learning means you decide to how or whether to do a given facet of behavior based on your own experience.
 - Imitation means you make decisions on whether or how to do a given facet of behavior based on observations of people around you.
- In any given group, for any given facet of behavior, there is some ratio of individual learners and imitators.
- Thinking broadly about this: a higher proportion of individual learners in a given population tends to track the surrounding environment fairly closely. However, given the lower proportion of imitators, useful innovations do not spread very fast and may be lost or remain isolated.
- A higher proportion of imitators in a given population allows ideas, beliefs, or practices to be spread rapidly through the population. However, given the lower proportion of individual learners, the population which emphasizes imitation may be less effective at tracking the real environment.
- The process of imitation is generally not random, but proceeds according to one or more transmission bias; two key ones are frequency bias and prestige bias.
 - Frequency bias: most common idea, belief, practice around (e.g. ordering a bag from the Timbuktu company because everyone seems to have one).
 - Prestige bias: using an idea, belief, practice held by someone with high status (e.g. looking for clothing at J. Crew because Michelle Obama was noted as wearing an item from that store).

Now how do these processes work over the long term? Due to the processes of imitation, given practices that confer fitness in some notable way and put a practicing population at a relative adaptive peak (after Prentiss et al. 2009a; Wright 1932) can spread and be taken up by multiple populations.

- Once the practicing population is quite large, the social context is likely to include characteristics that favor ideas, beliefs, and practices that promote group cohesion – this is what allows the whole to stay at the top of the adaptive peak.
- Given the social context in which ideas, beliefs, and practices are circulating, frequency bias and likely prestige bias for imitators are likely to be quite powerful.
- Given the size of the group, widespread transmission of ideas, beliefs, and practices developed by individual learners may be impeded through inertia and the strong imitative forces.
- If the balance of imitative biases becomes too strong, the group as a whole may lose track of its real environments.
- If a group loses track of its environments, stress is likely. The length of time between development of the strong imitative forces relative to learners and strong indications of stress depends on the gap between actual environmental characteristics and the environmental perceptions held within the group; as noted in the starting quote from Bruce Trigger (1989; see above), this is the gap between reality and how it is perceived (Rockman 2003a, b, 2009).

In plain language, what this means is just because an idea, belief, or practice is widespread or has been practiced for an extended period of time does not mean it is or is still an appropriate idea, belief, or practice with respect to biological fitness for the environment in which it occurs; Also, a widely spread idea in a big population can be hard to change.

The presentation at this point turned to a discussion of the colonial history of climate understanding in North America, drawing particularly on the history and archaeology of Jamestown, also summarized in the following section of this chapter.

But returning to the second point noted above – the question remains: how do broad-scale adjustments of social and economic systems take place? How does information about changes in the natural (Rockman 2003a) and/or social environments develop in individuals and flow between members to the extent that notable changes in social structure come about? While clearly populations and societies have become more complex over time, what examples are there of lateral changes in social structure – not necessarily more complex, but different? This question currently has policy underpinnings as the point made by John Holdren, Director of the White House Office of Science and Technology Policy, in a 1970s publication with Paul and Anne Ehrlich that the U.S. should “de-develop” was reintroduced as part of a September 2010 interview. Holdren noted that de-development in this context meant “stopping the kinds of activities that are destroying the environment and replacing them with activities that would produce both prosperity and environmental quality” and that he anticipated this could be accomplished through a free market economy (Whittington 2010). Given the complexity of the U.S. economy and its interconnectedness with the rest of the world, it can be anticipated that such a change would require substantial changes in many facets of the modern socioeconomic system (following Redman 1999).

Useful ideas about cultural transformation and emergence of new cultural forms include work being done under the heading of cultural macroevolution. Prentiss et al. (2009a) describe cultural macroevolution as one of four Darwinian perspectives on culture, others being sociobiology, human behavioral ecology, and gene-culture evolution (*sensu* Boyd and Richerson work as developed above), and it is in this sense that I use it here. Consensus of the recent macroevolution papers collected by Prentiss et al. (2009b) appears to be that understanding of the cultural transformation process is just beginning, including debate over the basal unit of cultural evolution: artifacts? Or ideas? With respect to climate change adaptation policy, one visualization model appears to be both gaining theoretical traction and to have relevance to questions at hand: Wright’s adaptive landscape (after Bettinger 2009; Prentiss 2009; Wright 1931, 1932). The Wright landscape is essentially a grid of possible resource strategies upon which variously effective combinations relative to a given environment are represented by correspondingly high peaks. Key here is that peaks are surrounded by valleys and troughs which indicate maladaptive combinations and some form of valley crossing is necessary to get to a different (hopefully higher) peak. Prentiss (2009) notes that archaeologically such valley crossing may be represented as demographic low points. From a policy explanation perspective, this view of multiple adaptation possibilities and paths

that may exist between them is more accessible than a strictly verbal idea that “society should change” (or de-develop). I suggest, however, that such a theoretical model, as it functions on a high plane, should not be presented to policy makers as is alone, but rather be digested into bullet points such as above or as feasible, presented in one of the most powerful explanatory mechanisms archaeology has at its disposal – as a story.

The Power of Stories

Many archaeologists have spoken about the power of stories and unique capacity of archaeology to expand, support, and write anew stories about many aspects of the human experience. Examples include but are by no means limited to Praetzelis et al. (1997, 2007), Praetzelis (1998), Gibb (2000), Majewski (2000), and Yamin (1998).

I see two roles of stories in relation to archaeology and climate change. One is that of previously existing stories gathered by ethnography and history that encapsulate information and experience and, for want of a better term, outlook on life. Considered alongside human barometer and baseline-type information, stories can sometimes provide windows into the hows and whys of social interactions with an environment. As noted above, Minc (1986) and Minc and Smith (1989) document levels of oral tradition among the Tareumiut and Nunamiut that capture the long-term ongoing balance between environmental conditions that alternately favor the whale and the caribou. A Chumash myth and related festivals describe an annual competition between Coyote and the Sun, Coyote meaning good weather, the Sun representing drought (Blackburn 1975; Johnson 2000). Other Chumash traditions repeat themes of instability and unpredictability (Blackburn 1975). While an annual competition is by definition of an HFP (after Dean 1988), it is possible to suggest that the long history of climatic fluctuations in the Chumash region (e.g. Kennett and Kennett 2000) is reflected in the uncertainty in their oral traditions and that this outlook may have allowed a flexible approach to tough climatic times and to at least some extent helped manage their stresses.

The other role is that of narrative. Narratives make data intelligible and memorable as no other format. While it is always important to recognize that narratives are constructed and may represent a range of biases and are not direct analogs to the present and vice versa, they also have the capacity to generate critical thinking and assist in seeing the present in ways that may not occur through straight science or logical reasoning. Archaeologists have the role, along with historians for appropriate time periods, of laying out what we know about who did what, when and where, and perhaps why. It is unreasonable to expect that policy- and decision-makers and their staff, members of the lay public, members of other professions, even most members of the archaeological profession, will read through long and dense chapters such as this one. Developing our data into narratives is likely one of the best steps we can take toward being more accessible, which is a critical step in improving relevance. Following here is an example I developed for presentations to the

USGCRP and the U.S. Environmental Protection Agency to describe some of the background of modern North American understandings of climate. Fuller analysis of this example is published in Rockman (2010).

Jamestown Case Example

The Jamestown colony was established in 1607 as a project of the Virginia Company. Being investor-backed, it was expected to generate a profit, and quickly. It was also intentionally placed at the edge of Spanish possessions in the New World, so had military security as well as commercial objectives from the start (Kupperman 2007).

One of the reasons for investment was the range of anticipated products from the Virginia region. English climatic understanding in the late sixteenth/early seventeenth century was that climate was consistent by latitude, i.e., all regions south of London (essentially all of North America) were expected to be warmer than London and to have the capacity to produce latitude-appropriate goods. For Jamestown, this included wine and silk (Kupperman 1982).

Jamestown got off to a rough start. Initial mortality rates were higher than 50%; 1609–1610 known as the Starving Time (Kelso 2006; Kupperman 2007). This was due in part to the brackish water of the James River in the vicinity of the settlement. The location was chosen in part due to dense Native American settlements elsewhere in vicinity and also firm instructions from London to choose a defensible location with a commercially accessible deep water port (Kelso 2006; Kupperman 2007).

Strain was also due, in part, to climate fluctuations. Recent analysis of tree rings indicates that the 1607 arrival was in midst of intense 7-year drought; one of the strongest climatic fluctuations of the Little Ice Age. Even if the colony had been intended solely for agriculture, it likely would have been highly stressed (Blanton 2000; Stahle et al. 1985, 1998).

By 1617, 10 years after initial settlement, tobacco was being grown in streets of Jamestown for export, at the expense of agriculture for food. By 1618–1680, site and landscape archaeology clearly shows initiation of a dispersed settlement pattern organized around production of imported plants and animals. By 1680–1750, archaeology in combination with historical documents indicate the development of the colonial Chesapeake Bay agricultural economy (Blanton 2003).

There is no mention of drought in colony documents for approximately 10 years following founding (Blanton 2003; Kupperman 1982). Published descriptions of climate into 1630s vacillate between reporting actual climatic experience and framing expectations and experiences in terms of the consistent-by-latitude model (Kupperman 1982).

By 1630–1650s, published discussions of weather and climate recognized that some parts of New World more desirable than others, but also anticipated that civilization and further cultivation would “improve” climate and projected that the interior of the continent would prove to be more favorable (Kupperman 1982).

The anticipation that climate and by extension the environment should be consistent or predictable has remained a theme through the U.S. westward expansion. Examples include the 1922–1928 Colorado Compact that divided Colorado River water based on an average annual flow met only during wettest years recorded in the 1910s (Reisner 1986), and development of the Old River Control Structure, completed in 1963, to keep 70% of the Mississippi River in the channel that flows by New Orleans rather than switching to the more westerly Atchafalaya channel, a process it has undergone approximately every 500 years previously (McPhee 1989).

If I have developed this narrative well, it is possible that you are now wondering whether this idea/belief/practice of expectation of a consistent/predictable climate has been updated? Are portions of the world in the process of doing so now? You may be thinking about the debate between climate change science and climate change skeptics and the relation these have to social structure, social memory, shifting baselines, and our capacity to develop and transmit and share information from the environments around us. If any of these are true, then this narrative has had far more power than any list of recommendations I could have typed.

Conclusions

Karen Kupperman, in her meticulous history of early American writings about climate, summarized one of the primary colonial outlooks on the future of settlement of the American continent with this statement:

Colonists firmly believed that the climate of America, under the impact of settlement by Europeans with their agricultural technology, would become healthier, warmer, and more temperate (1982: 1287).

In short, the European form of civilization would alter the climate to better suit its needs and expectations. The irony of this statement is becoming ever more profound. While there remains uncertainty as to the specific timing, local effects, and rates of weather and environmental change under different scenarios, there is, at core, growing recognition of the sheer capacity of modern socioeconomic systems to contribute to variation in the Earth's climate (National Research Council 2010b; Solomon et al. 2007).

As noted in the definitions and recommendations cited throughout this chapter, the U.S. federal policy is increasingly recognizing the need to incorporate social science with its climate science. The goals of climate policy include mitigation, adaptation, and increasing both the resilience and sustainability of communities, socioeconomic systems, ecosystems, and their interactions. Behavioral change and to a yet unknown degree social change are to varying degrees explicit and implicit in these policy goals. Detailed social science questions have not yet been clearly defined.

As outlined above, the field of archaeology has much add to climate change social science. It has studied and has capacity to study yet further how identifiable social changes have occurred in the context of measurable climatic change, the capacity of past environments and the effects of humans on those environments, the

balance between social fitness and biological fitness, and the deep roots of some of the ideas, beliefs, and practices we use now. Due to the constraining time frames of policy and the current understanding of climate change impacts (Pachauri and Reisinger 2007), the call of this chapter is not for solely for wholly new research, but organization and improved communication of what is already known to address the climate policy questions as they are asked.

No call for action can be supported, however, if it is not clear to whom it is directed. As clearly shown throughout Parts I and III of this volume, there is not one profession within archaeology, there are many. I have tried to show throughout this chapter that addressing the social side of climate change will take the efforts of all of them, from clear documentation of field methods and analyses of artifacts, sites, and landscapes to the theoretical models that pull the data together and the presentation of all that we know. Communication of all this work to those determining climate change policy also must be an ongoing effort (see Chap. 1). Taken all together, archaeology can make important and highly relevant contributions to the global issue of climate change.

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Chapter 15

Teaching the Archaeology of War

James E. Snead

Context

In the spring of 2002, the provost of George Mason University, perceiving that war between the U.S. and Iraq was imminent, sent a notice to faculty urging us to turn the moment into a “teaching opportunity.” The episode had both general and specific implications for our students: located in the Virginia suburbs of Washington, DC, George Mason has many veterans on campus, and many others come from military families. Memory of the Pentagon attack on 9/11 was fresh. At the time I was teaching a course in archaeology, and set the day’s topic aside in favour of a general discussion of current events. People mentioned relatives in harm’s way, concerns about the broader impact of war, and related topics – all within a supportive context that was an encouraging example of civil discussion in the face of “shock and awe.”

Archaeology, however, was not mentioned in the conversation. How could it have been? We were in the midst of an introductory course, concerned with the “rise of civilization,” the interpretation of ancient garbage, and the occasional side trip to evocative places like Stonehenge or Machu Picchu. This was in line with the student understanding of what archaeology was supposed to be about: the ancient world and its exploration. The class consisted largely of anthropology majors, who brought along an additional subset of expectations – cultural anthropologists who disdained what they saw as a preoccupation with the long ago and far away, mixed with archaeology students who hoped to find their own intact tomb some day.

My own expectations regarding the utility of archaeology were not significantly different from those of the students. I did not enter the field because of any perceived

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relevance to the modern condition. Quite the opposite, in fact: one of my favourite toys as a child in the late 1960s was the G.I. Joe “Search for the Mummy” kit, including a sarcophagus with jewels in a secret compartment. My colleagues in graduate school at UCLA (University of California at Los Angeles) were often deeply engaged in archaeological theory and fieldwork, but the dynamics of that particular programme rarely engaged relevance or even policy. Student agitation on the UCLA campus in the early 1990s associated with NAGPRA thus came as a considerable shock, since I had not imagined that we might be unpopular or perceived as hostile by the Native American community. Although I planned to pursue a dissertation in the American Southwest, I had not, at that time, spoken with a Native American in the context of my work, suggesting that I was willfully avoiding engaging a critical audience, in this case members of descendant communities.

Listening to students talk about war in an archaeology classroom convinced me that my apparent irrelevance in the face of another sort of public topic was this now-familiar process of self-marginalization. In this case, the students were the audience, and my failure to challenge their stereotypes about what we did (or could do) was, in essence, letting them down. I had recently responded to a challenge on the part of a sociology colleague that archaeologists “don’t discuss sex” by pointing to the recent excavations Mary Ann Hall’s nineteenth century bordello on the Washington Mall (see <http://www.si.edu/oahp/nmaidig/>): surely war was an equally accessible topic for archaeological consideration.

Fieldwork

My interest in understanding and explaining warfare via archaeology was also stimulated by fieldwork begun at the end of the 1990s. At the time my interests focused on the relatively benign subject of community organization in the Ancestral Pueblo world of northern New Mexico. While attempting to acquire more data for a publication, however, I found myself studying a community of the early A.D. 1300s that had been intentionally “deorganized” by being burned to the ground. At the time there were few ways to understand such events except through the medium of war, and yet the intellectual terrain of studying warfare in the archaeological record was itself fraught with conflict.

Traditionally, Ancestral Pueblo society had been seen as peaceful, a preconception that was beginning to give way in the face of new empirical information and the adoption of theoretical perspectives developed outside the Southwest. Only a few years before Lawrence Keeley had coined the term “pacified past” to describe how archaeologists had willfully ignored evidence for conflict in various corners of antiquity (1996). Archaeological scholarship in the Southwest provides an excellent case of a pacified past, and it is clear that Pueblo history has often served as a slate on which scholars have sketched their preferred visions of antiquity. Yet this projection worked both ways, and fieldwork in the 1990s was generating an image of the Ancestral Pueblo world rife with violence and cannibalism – which seemed to be

overcompensation for previous error, but was also perceived as politically motivated hostility by many in the descendant communities.

These different models for conflict in the Pueblo past clashed in the air over Burnt Corn Pueblo as we conducted fieldwork there between 1999 and 2007 (see Snead 2008; Snead and Allen 2011). In light of the often irresolvable differences between such theoretical positions, my concern gradually shifted toward the challenge of identifying patterns of conflict empirically via the archaeological record. Our own evidence shaped this pursuit. All of the structures we investigated at Burnt Corn had been destroyed by fire, and yet the rooms we investigated in greater detail appeared to have been cleaned up beforehand. The stereotypes pertaining to Pueblo warfare – where applied – were that it had either been characterized by raiding that produced relatively few casualties, or that it had involved extensive, “processed” casualties. The massive destruction at Burnt Corn differed from those expectations, as did evidence that the site – or, at least, portions thereof – had been “decommissioned” prior to that event. Adding to the confusion were indications that contemporary sites nearby had also been burned, but rooms investigated at those locations contained the expected smashed pots and related evidence suggesting that they had been “sacked.” Reconciling these patterns with each other, much less relating them to the big picture, has been far more challenging than we anticipated. How could archaeology contribute to an understanding of war, if we could not understand the archaeology itself?

Lectures

A final stimulus toward teaching the archaeology of war in the classroom came from another kind of education, the reciprocal learning process engaged through discussion with the public as well as our colleagues. People have certain expectations for archaeology, some of which rarely enter into our own sense of what we think we are doing. Keeping up with our mission as defined by others, however, is one of the only ways to understand the box we are in, which must be done if we are ever going to get out of it.

I talk to public audiences several times a year, and because these events usually emphasize fieldwork in progress have increasingly turned toward my study of warfare and conflict. The conclusions I present at the end of such lectures vary with my optimism and pessimism about the endeavour at hand, and the comments and questions afterwards are good guides as to the success of my arguments. One striking commonality to talks I have given about our work on conflict, however, has been widespread skepticism as to whether warfare at Burnt Corn Pueblo was even a possibility. The preferred options for destruction suggested by the audience range between accident and benign intent. Typically we work through these scenarios – could a pueblo be burned down through carelessness? Range fire? Would Pueblo people have used fire as a response to contamination or disease? – but I am always surprised at how the strength of logic applied to such cases is not particularly relevant to the preferred answer.

“Why are you obsessed with war?” I was asked, after one talk. “Why are you obsessed with peace?” was my unspoken response, but of course the second obsession – if that is what it is – is more culturally appropriate than the first. I am struck by the fact that people prefer that some pasts be places of harmony and tranquillity, regardless of whether such a state is demonstrable or even likely. What such preconceptions mean for archaeology – for our efforts to build arguments from material evidence – must be taken just as seriously as our ceramic chronologies and correspondence with the National Science Foundation.

Stereotypes are also on display through our professional relationships, and the subject of war is particularly structured to bring them out. My professional niche – academic departments of anthropology, with sociologists, historians, and art historians down the hall – provides frequent exposure to the opinions of academics about archaeology. I am continually surprised at how little our colleagues know about us and what we do. Jokes about pith helmets are as likely to come from fellow social scientists as from students, often reflecting a similar lack of comprehension.

Anthropological archaeologists understand the challenges of working within such a broad discipline and so are accustomed to looking “outside” for common ground. The particular challenge thus faced by some of us in addressing the stereotypes of our colleagues (however defined) is that they often exist *despite* common interests. At George Mason, for instance, there is not only considerable academic expertise on the issue of conflict – in diverse settings, historic and modern – but also a certain emphasis on public outreach. It would thus seem that intellectual allies would be common – and yet even in such encouraging circumstances actual substantive exchanges are rare. This could be embittering, since access to resources and even mutual respect are linked to common understanding, but I think it is better to view what might be described as our “marginalization” as instead confirming our culturally defined role. It is thus not about education or learning but about expectations or even world view, which must be seen clearly in order to be subverted.

My interest in a rationale for teaching the archaeology of war developed within this complex context of intention, expectation, and opportunity. There were thus a number of decisions to make, the first one of which was the setting within which such a conversation should take place. Ultimately, two venues for this process developed: a course taught in a relatively traditional university format, and a series of symposia, addressing an audience both inside and outside academia.

Classroom

Most discussions of archaeological education emphasize teaching archaeology itself – in the classroom and in the field – or discuss pedagogical techniques in conveying traditional archaeological subject matter (the rise of civilization, etc.). There has been little concern with teaching other topics. When I began to set up a course on the archaeology of war, I thus found relatively little guidance. I did, however, have

ambitions to make it attractive to as broad a range of undergraduates as possible, so – rather than “The Archaeology of War” – I gave it the title “Warfare, Violence, and Sacrifice in Antiquity.” Those of us teaching in public institutions are highly aware of the importance of seat targets and course marketing, but this turn toward the sensational was to have implications beyond boosting enrollment. The first iteration of the course was in 2003, and I have taught it several times since, principally at George Mason, but also at UCLA and now at California State University, Northridge.

My initial approach to the course was to discuss theories of conflict in human societies and its origins with discussions of archaeological evidence and interpretation. This would provide the opportunity to present an integrated anthropological approach. Reading material was drawn from a range of sources, including texts that addressed the broad argument such as Stephen Le Blanc’s *Constant Battles* (2003) and – when it came out – Otterbein’s *How War Began* (2004). These were complemented by excerpts from *Demonic Males* (Wrangham and Peterson 1996), *Good Company and Violence* (Knauff 1985), *War Before Civilization* (Keeley 1996), and related material. My intent was to set up a theoretical structure using sources such as these and then pursue associated issues through archaeological case studies.

One central element of the warfare course from its inception was to use archaeological data from deep time through recent history. This approach ignored the conceptual divide between archaeology of the historic and “prehistoric” eras and very real differences in associated empirical information. I thus made regular use of the research of Douglas Scott and his colleagues at the Little Big Horn battle site (1989) and became increasingly familiar with other archaeological approaches to war in the “bullet era.” Two other case studies that I found useful were studies of the Romano-German battlefield at Kalkriese – at the time, derived largely from Wells (2003) – and the Ancestral Pueblo “cannibalism” site at Cowboy Wash (Billman et al. 2000).

My premise of an integrated approach to conflict in the human past disintegrated rapidly in the face of classroom experience. In part this was due to the traditional challenge of engaging students through theory that was often difficult to read and required broader intellectual frameworks than those of the standard undergraduate student. A more central problem, however, was the lack of connection between the theoretical literature on warfare and the available empirical information. In essence, the broader, explanatory approaches to conflict in the human past made only limited use of archaeological evidence, and that was often treated with a broad brush. As I asked my students to tack back and forth between theory and evidence, the discontinuity between them became evident to us all, and – despite their willingness – the challenge of integrating the material ourselves was often too much to ask.

Thus, both the students and I became aware that the data were rarely up to the assigned task, which was to aid in evaluating explanatory models of human conflict. In some cases, the theorists were anthropologists who played little direct role in acquiring the archaeological information they used to construct more general arguments; in others, the archaeologists showed little interest in applying their results to higher-order issues. In other words, the gulf between theory and application that bedevils anthropological archaeology appeared regularly in our classroom.

Since my aim was to demonstrate that archaeology had relevance for the study of human conflict, this challenge struck at the entire rationale for the course.

The most expedient solution was to study the problem itself: *why* archaeologists had made little comment on ancient/modern warfare. This drew us, first, into the sociological aspects of archaeological scholarship. Students were particularly attracted to the concept of the “pacified past” (Keeley 1996), but to investigate biases in the interpretation of archaeological information we also had to make sure that everyone understood the nature of the data. This approach was prompted by a common answer I received to the exam question, “what would you look for if you wanted to find the site of the Trojan War?” Answers often made reference to beaches littered with piles of rusty armour, human skeletons, etc., a clear sign that more preparation was in order. In effect, I had aimed the class at a broad spectrum of students but not prepared them to really grapple with the subject matter.

Thus, over time *Warfare, Violence, and Sacrifice* became less concerned with sweeping theories about humanity and more about problems identifying particular categories of past behaviour through scant material traces. Topics that might be a part of a standard introductory course – dating, formation processes, data recovery – were included, typically as elements of case studies that had some “conflict” content. Thus, we devoted attention to examples such as the 38 human skulls from two pits in a small cave at Ofnet, Bavaria (Frayer 1997). Mesolithic headhunters? Revered ancestors? Human sacrifices? War casualties? Victims of a single event, or several? The fact that the original excavations had been conducted in 1908 provided the opportunity to talk about changing methods over time, opportunities of re-examining older information – and associated preconceptions, which allowed us to circle back to some of the conceptual issues once more. I would often end a class with an introduction to their next batch of reading, leaving them with a question such as “what happened at Ofnet?” to take home. Ideally, after a series of such cases we could journey back to such higher-order questions with greater ease.

One unanticipated development of a more empirical emphasis to the subject of warfare was the involvement of student veterans. Most of these classes included a few who had served in Iraq, Afghanistan, or earlier conflicts, and as we moved away from theory these individuals often found ways to apply their personal experience to the topic. This was particularly useful in conveying concepts such as the “fog of war” to those of us who had no direct experience with war ourselves. The presence of veterans in the classroom also helped to ameliorate the sensational “appeal” of the subject. The various case studies – the sacrifice of Moche warriors at the Huaca de la Luna (Sutter and Cortez 2005), the Assyrian sack of Hasanlu (Muscarella 1989), Custer’s Last Stand (Scott et al. 1989), the lost fleet of Bikini (Delgado et al. 1991) – represent remarkable stories in and of themselves. But it was frequently difficult for all of us to step away from the horrified fascination engendered by such material and think it through. The skepticism of those who had “been there” was a useful corrective.

Keeping an eye on the general while addressing the particular was the most successful in situations where multiple cases addressed the same question. The most successful example of this approach was a set of studies associated with late medieval

Britain, all of which could be brought to bear on concepts of medieval warfare itself. Thus, studies of the battlefield at Towton, Yorkshire, could be integrated with information from the associated mass graves and from reanalysis of associated material a decade after original publication (Fiorato et al. 2000; Sutherland and Richardson 2007). When brought together with other recent studies pertinent to the Medieval era, such as the cemetery of St. Margaret Fyebridgegate, Norwich (Stirland 1996), this material was quite successful at building an image of conflict in the era to replace more romantic or even comic versions of jousts, chivalry, and Monty Python with more accurate images of massed foot soldiers being hacked to death or veterans of foreign wars who had turned to crime hung from gibbets. Although pop culture references are fleeting, there remains a “Braveheart” effect, for which this evidence proved an effective foil.

Nonetheless I remain skeptical as to whether the broader mission of *Warfare, Violence, and Sacrifice* has been achieved to date. Voluntary exit interviews have identified enthusiasts of the subject itself or students who happen to like my courses, but rarely people whose perceptions of human conflict have been changed by our discussion. One final exam question I often use is whether, at the end of the course, students consider themselves “hawks” (believers that war is inevitable) or “doves” (believers that war is circumstantial). Very few of the answers to these questions draw on subject matter covered in the course, and I believe that – if I was to do “before” and “after” sampling – there would be little movement on the subject. It is ironic that in a course devoted to dispelling stereotypes, individual beliefs concerning the human propensity for peace or violence are rarely shaken.

Symposia

With the course lodged in the George Mason catalog, I began seeking for other ways to reach beyond the standard archaeological audience on the subject of conflict. In 2008, with the support of the College of Humanities and Social Sciences, I hosted a “public symposium” on the subject of the “Archaeology of War.” The one-day event was organized to promote conversation: five speakers were invited, with each allotted a half hour for presenting results of current research followed by 15 min of discussion and then a short break. Extensive efforts were made to promote the event within the George Mason community, driven in part by students who were at that time enrolled in the warfare course.

The speakers, invited both because of their expertise and because they were equipped to address a nonprofessional audience, were Elizabeth Arkush (University of Pittsburgh); Clemens Reichel (Oriental Institute, University of Toronto); Tony Pollard (University of Glasgow); and Julie Solometo (James Madison University). All had current fieldwork to discuss. This represented a broad swath of material ranging from the Syrian Chalcolithic to the eighteenth century Scottish battle of Culloden. They also understood the broad purpose of the symposium and came prepared to explore various ramifications. The final event of the day was a roundtable

conversation between the speakers but also including panelists who were cultural anthropologists and historians.

Given our efforts to bring in a diverse audience, it was somewhat surprising to find that most of the 60-odd attendees were, in fact, professional archaeologists. The remainder of those present was students with a sprinkling of other colleagues. Despite the full room, we were thus spectacularly unsuccessful at attracting the targeted group. This had little effect on the conversation, which was lively and engaging. The historians on the panel – with classical and military specialties – expressed some puzzlement that they had been unaware of such innovative research, and in general of the potential contributions of archaeology. Included in the audience were military historians associated with the Marine Corps, who were equally encouraging. The lone cultural anthropologist, Andrew Bickford, who studies soldiers in the context of the modern military, pondered the potential of an anthropology of war integrating historical and modern theoretical perspectives (Bickford 2011).

Despite the positive feelings engendered by the symposium, however, our attempt to step beyond archaeology's core constituency was a modest success at best. The archaeologists in the audience were clearly motivated by the presentations. Longer-term interaction between the panelists was indeed stimulated – promoted also by a collective visit to the Gettysburg battlefield the following day – which may lead to innovative research initiatives, and some of the student participants were sufficiently enthused by the event to pursue their own graduate interests in the archaeology of war. Research and students, however, are traditional academic markers for achievement. No substantive cross-disciplinary relationships were established, and no members of the public wandered in.

The reality of these circumstances were brought home the following year, when – hoping that some momentum for interchange had been established – second symposium was organized along similar lines with the topic “The Archaeology of Human Rights.” In this case, a scheduling conflict meant that many of the local archaeological community were at a regional conference, providing a test of our ability to cross academic party lines. Despite another excellent panel of speakers, and the broad relevance of the subject, attendance of other academics was even lower than the previous year. It was clear that our scheme to attract a diverse audience by the stimulating nature of the subject matter was not a success.

But then, should it have been? Could we have expected members of the public to find their way to a conference room in the midst of a suburban campus? University colleagues to devote a day to stepping outside their particular comfort zone to investigate new ideas? Nonarchaeologists to imagine that we might make contributions to their areas of expertise? Perhaps, we thought, a better promotional strategy would have been wiser. We could have had better press releases, media outreach, coordination of schedules with other university departments and public organizations, more dynamic on-line presence via Web sites/listservs/social media, even rental of the university's electric marquee to bombard daily commuters with “THE ARCHAEOLOGY OF WAR.”

It may be that these tactics would have made the symposium format more successful, but I am doubtful that they would have, over all, budged the needle much further.

The mode of communication, after all, was not particularly friendly for the broad audience we sought. A symposium, like a course, is a highly traditional mode of communication, with certain fixed parameters and expectations, one of which is the freedom to sit in a room all day and ponder. This is an alien mode for most, and indeed poses a cost for the academics who carefully plan schedules to make room for such opportunities and thus have few spare minutes to step outside of the box.

As I have experienced with the course, there are broader, strategic concerns to ponder as well, the most apropos being whether the audience for our mission actually exists. If my students are attracted to the archaeology of war because of the appeal of the subject – not the seriousness of the concern – should we expect differently from the broader public?

Conclusions

Yannis Hamilakis has recently urged archaeologists to take a greater interest in pedagogy, describing it as “a social crucial and politically contested field of cultural production” (2004: 28). His primary concern is with the “colonization” of the university by corporate ideology, but he also notes that archaeologists “are rarely seen as cultural producers and as intellectuals,” thus passively accepting the role of purveying packaged information about the past to a sedate public (2004: 294), despite the fact that we are remarkably well-positioned to supply critique.

Warfare, Conflict, and Sacrifice in Antiquity has been a success, at least as measured by standard academic indicators of enrollment and student response. I expect that at least some of the impact I had hoped the course would have had, indeed, happened, perhaps through the response of individual students to issues of war and peace that they may encounter in their lives. Our fieldwork at Burnt Corn Pueblo is complete, and associated publications will gradually become part of the academic/public debate regarding warfare in the Ancestral Pueblo past. I have participated in conferences discussing the archaeology of war, events that are usually dominated by experts in historical periods, making my presence somewhat of a novelty.

There is nothing in my present experience, however, to suggest that it is likely that a broader public dialogue regarding the contributions of archaeology to the subject of war can be achieved. Indeed, it is my informal perception that such a result is common when we make an effort to make such contributions to any part of an informed social agenda. Beyond William Rathje’s Garbage Project, I would be hard-pressed to identify *any* widely acknowledged success at demonstrating the utility of archaeology in addressing nonarchaeological issues.

My skepticism is only partly based in my experience with teaching the archaeology of war, but also derived from my own perception of the nature of archaeology itself as an intellectual domain. Archaeology is a historical discipline focused on the physical remains of the human past, a legacy of the European Renaissance and the cultural imperative of grounding legitimacy in material things. The romance inherent

in the public perception of archaeology – the discovery of hidden knowledge pertaining to a past that cannot be understood in terms of the present – is difficult to separate from medieval monks returning from the Crusades with fragments of holy relics.

In other words, archaeology reflects deep cultural structures that remain largely unacknowledged in a modern discipline that pays very little attention to its own history. Shifting our rationale for existence is thus a tall order. Hamilakis notes that the modern theoretical emphasis on individual “agency” may have had the unintended effect of rendering us less able to present archaeological information in ways relevant to communities or larger social units (2004: 294). Such theoretical predilections may also colour our perceptions of our ability – as individuals or as small collectives – to move the bar. The general consternation that is faced by those of us who push in these directions – reflecting the “but you’re an archaeologist, right?” sensibility – cannot simply be dismissed as epiphenomenal. Fundamentally, we need to understand why it might be that our social role is so rigidly defined and thus difficult to get out of.

As engaged individuals in a rapidly transforming twenty-first century, we are trained to believe that we can contribute to processes larger than ourselves. The scarcity of examples of such transformations, however, should be instructive. By the nature of our profession archaeologists should be particularly aware that the dead hand of tradition is remarkably difficult to lift. My experience with teaching the archaeology of war is that riveting, topical subject matter does indeed provide the “teaching opportunity” that stimulated the course in the first place, but generating longer-lasting results from such moments remains a challenging goal.

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Chapter 16

Ethnic Identity and the Anthropological Relevance of Archaeology

Philip L. Kohl

Prehistory as Practical

In 1933, the year of the Nazis' accession to power, V. Gordon Childe published a short essay entitled: "Is Prehistory Practical?" In the terms of this current volume "practical" meant "relevant," and Childe answered his rhetorical question affirmatively, arguing that the principal practical value of prehistory was that it documented the continuous intercourse and exchange of ideas and technologies among different cultures with no single group or people disproportionately responsible for the development of constantly growing, shared social traditions. Keenly aware of the political context in which he wrote, Childe explicitly distinguished biological from cultural evolution and scathingly criticized the Aryan theory of racial superiority which was then deplorably transforming "one great country," previously renowned for its great standards of scholarship:

In 1933, it can hardly be alleged that Prehistory is a useless study, wholly remote from and irrelevant to practical life. In one great country at least, interpretations of supposed facts of Prehistory, have revolutionized the whole structure of society... No one can fail to appreciate the profound effect which theories of the racial superiority of 'Aryans' have exercised on contemporary Germany... Over against the processes of divergent development leading to the separation of distinct peoples – and confusion – can be traced no less a process of convergence... the peoples accessible to archaeological study were constantly interchanging material objects, ideas, and inventions... Objectively studied Prehistory will rather emphasize how much more precious and vital is the growth of the common tradition... To admit as good only what is Celtic, or Germanic or Indian, as exclusive nationalism would demand, is unscientific and unhistorical (Childe 1933: 410, 417–418).

Eleven years later, Childe returned to this theme at an international conference in London on "The Problems and Prospects of European Archaeology" after the end

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of the War. In his introduction to this conference, Childe (1944) again criticized German nationalist distortions of archaeology and reiterated his belief in prehistory's eminently practical value or relevance that made possible an objective study of the past based on "international co-operative effort:"

Archaeology... deals happily with concrete physical objects... There they are for the student to handle and observe. A stone axe or a water mill: a mosque or an abbey... *qua* material embodiments of human ingenuity and art are the same for Swede or Ulgar, Christian or Mohammedan... This very fact fits them to be a basis for international cooperative study in a way that the characters of political, military or ecclesiastical history can never be.

Most would concur with Childe's critique of Nazi distortions of the archaeological record, but his belief in the objective study of the past based on material remains would strike many as overstated or naively positivist in today's skeptical, multivocal, postmodern world. Perhaps, a stone axe may be objectively evaluated by a Christian or Muslim, but a mosque or an abbey? Our own political and ideological values inevitably affect our appreciation of objects as embodiments of human ingenuity, thus precluding a totally objective reconstruction of the past. Archaeology as the study of the material remains of the past necessarily has a political dimension, and its value lies not in its peculiar ability to reconstruct the past objectively, which it does not possess, but in its demonstration that all peoples have participated actively in a shared historical past.

The recognition that the practise of archaeology takes place in a political context today is well established (for a very partial list of references, cf. Kohl et al. 2007: 24–25, fn. 1) and clearly demonstrated by all the contributions to this volume. This short essay focuses on contemporary nationalist distortions or abuses of the archaeological record and on archaeology's relevance and responsibility for combating them.

Archaeology as a Political Practise

The entire land surface of the globe, save for parts of Antarctica, is carved into, precisely demarcated nation-states, the basic unit of political organization in modern historical times. All commentators on nations and nationalities, whether primordialist or constructivist, agree that nation-states require a myth of common origins, a national charter that distinguishes one nation from another. The historical reality of such a charter is not essential or typical; some invention or construction is always in play. The past is imagined, selectively remembered, and consciously manipulated by politicians, scholars, and citizens alike. Archaeologists, particularly those working within their own countries, are not immune from this active construction of the past, but are primary contributors to it. Indeed, as archaeology is one of the major sources for the remote past, archaeologists are often primary actors in the production of myths of national origins; they are not peripheral, but principal players in the contested nation-building drama. Archaeologists who receive state financial support for field projects within their own countries are often even more intimately involved in the ongoing construction of their state. This relationship is so natural that it has frequently

been overlooked and, until recently, understudied. Archaeology and politics are not identical activities, but archaeology always takes place in a political context and has a political dimension.

Archaeology as a national enterprise defines the default condition in many countries of the world. It is ubiquitous and will continue to occur everywhere as long as people live in discrete, bounded nation-states. Trigger (1984, 1995) long recognized the importance of regional/national traditions of archaeological research and even emphasized the positive features of national archaeologies:

Nationalism had a positive effect on archaeology inasmuch as it encouraged archaeologists to trace spatial variations in the archaeological record more systematically than they had done previously... nationalistic archaeology has stimulated asking questions about local cultural configurations and ethnicity that evolutionary and colonially oriented archaeologists did not consider worthwhile (Trigger 1995: 269, 272).

In other words, some state-building enterprises have been valuable and liberating. As the construction of myths of common origin and the development of a country's cultural heritage facilitate these processes, national archaeology has a positive role to play.

There is, however, a fine but real line between justifiable pride in one's cultural heritage and chauvinistic accounts that glorify one's own roots and typically denigrate those of one's neighbours. Justice Potter Stewart famously opined that he did not know how to define pornography, but he recognized it when he saw it. Similarly, we can distinguish national from nationalist archaeology, criticizing the latter in terms of its recurrent, objectionable themes: claims of cultural, if not biological, superiority; priority of occupation of some parcel of land; maximal definition of one's homeland; articulation of a special, sometimes spiritual mission for one's own special or chosen people; disparagement of the achievements or land claims of one's neighbours; and even the denial of the earlier presence or accomplishments of other peoples in an area claimed as one's own. National archaeologies occur everywhere, but whether or not they assume a questionable, if not dangerous, nationalist form varies from place to place depending upon the specific social and political contexts in which they appear. German prehistory under the Nazis was used to justify the territorial expansion of the Third Reich; today it is justly famous for its meticulous documentation of its rich archaeological record. A totally objective science of archaeology may be a will-of-the-wisp, but one can distinguish between the overtly political manipulation of the archaeological record and the sustained attempt to describe and understand it as objectively as possible.

Nationalist Archaeologies in Post-soviet Space

National archaeologies are ubiquitous, while nationalist distortions of the archaeological record, the primary concern of this article, appear more sporadically and are maintained with varying degrees of intensity. Such abuses, however, also occur throughout the world, taking specific forms in the Middle East, South and East Asia,

Sub-Saharan Africa, and the Americas. The lands formerly controlled by the Soviet Union, which constituted roughly one sixth of the surface of the planet, have been particularly afflicted by nationalist accounts of the remote past that have appeared with depressing frequency since the collapse of the Soviet state in 1991. There are specific historical reasons for this dangerous outbreak.

The Soviet Union took shape as a federal state in the early 1920s as it first began to recognize and control different administrative units – republics, provinces, and regions – that were based on and named after specific ethnic/national groups. One inevitable result was the territorialization of ethnicity: some groups received territories; others, less fortunate, coveted them. Instead of effacing peoples' sense of themselves, Soviet nationality policy constantly reinforced ethnic and national identities through what has been called deliberate "ethnic engineering" (Tishkov 1997); the Soviet Union was not a melting pot, but an "incubator" (Suny 1993) or "empire of nations" (Hirsch 2005). It emerged as a federal state divided by the ethnically administered units it had created and represented a unique form of empire, determined to bring all the peoples within it up to an advanced social level postulated by Marxist ideology. It thus reinforced and sometimes even created different peoples' sense of themselves, their identities.

This carefully constructed edifice eventually collapsed. A *Sovetskii Narod* or Soviet people never really materialized or, at least, did not do so to the extent that the state had triumphantly predicted. The contradictions inherent in Soviet nationality policy could not be overcome: constant reinforcement of one's ethnic identity through state-approved ethnographic museums, national identifications on passports and censuses, and ethnically distinguished territorial units cut against and undermined the concept of a modern, advanced, and progressive Soviet people. When the state self-destructed, it did so along the administrative lines that it had itself created. Soviet ethnographers and archaeologists were active participants in the ethnic engineering that fostered (and sometimes created) peoples' self-awareness and national identity.

Archaeologists' contribution to this making of nations was particularly consistent and clear after the Great Patriotic War (1941–1945). Archaeological cultures were seen as equivalent to ethnographic cultures and unproblematically identified as ancestral to contemporary ethnic or national cultures. The recognized ethno-administrative units could be confirmed by archaeological evidence. The spatial distribution of material remains had political consequences: "homelands" could be demarcated that were always drawn up maximally to the benefit of the group in question.

The determination of ethnogenesis became one of the central tasks of Soviet archaeology (cf. Shnirelman 1995; Chernykh 1995). The task was contagious. Russians were interested in their origins or those of the early Slavs, while non-Russians adopted the same procedure and methods to determine their origins. The ethnos was conceived principally in biological, not cultural, terms. Different ethnoses had their distinct beginnings (or "births"), and different peoples wanted to determine when they first came into being and what they could authentically claim as their original homeland. Competition over the remote past was fuelled by the ethnogenetic imperative, and this task was intimately tied to the very structure of the Soviet multiethnic federal state (Suny 1993; Tishkov 1997).

It was an easy and logical step to transform the precisely defined borders of these units into the national territory or homeland of the eponymous *ethnos*. This process, in turn, could be legitimized through the selective ethnic interpretation of the archaeological record, reifying the political unit by according it great antiquity. In the Soviet context, the concept of ethnogenesis was tied to a primordialist or essentialist conception of the *ethnos*. Once initially formed, the ethnic group possessed nearly all its defining characteristics, and it was the task of the archaeologist to document this record of continuous development and hallowed antiquity, justifying attachment or control over its maximally defined homeland.

Since the state fissioned along the ethnic administrative lines it had created, this process of ethnogenetic determination intensified after 1991. Some groups had been accorded territories, while more had not. Some groups found themselves as rulers of newly created independent states, but such states were not ethnically homogeneous. Peoples lost what beliefs they had in Marxism and rediscovered their traditional religious roots, chiefly Orthodox Christian and Muslim, while others developed neopagan beliefs, often interpreting archaeological evidence to create them. As usual, the Russians set the standard. Politicized reconstructions are not uncommon among Russian publicists and propagandists in search of a mythical maximally defined “Aryan” (i.e., Russian) homeland and may take xenophobic, racist forms among Russia’s growing skinhead groups (cf. Shnirelman 1995, 2007). One broadly popular racist account even extends the ethnogenesis of the ancient Rus (or Russians) back into Upper Palaeolithic times (Petukhov 2000), fueling the competition among non-Russians for even earlier or more glorious ancestors. Even Vladimir Putin got in the act or at least gave tacit support to such theses when he visited in spring 2005 the site of Arkaim in the southern Urals, widely touted by its excavator as the original Aryan homeland where Russians can find their national idea.

Non-Russians, of course, experienced the same displacements and transformations of identity and responded to the Russian challenge. Competition over the remote past is most evident in the Caucasus or isthmus of land capped by the Great Caucasus Range between the Black and Caspian Seas that is renowned for its ethnic and linguistic diversity, a diversity recognized by the numerous ethno-administrative units established for the area in Soviet times. The control of these units now is at the heart of the ethnic conflicts that broke out when the Soviet Union collapsed and have remained unresolved or relatively “frozen” ever since. Archaeological evidence is used to underwrite all these territorial claims.

Arguably more so than other areas of the former Soviet Union, the Caucasus is distinguished by its long historical consciousness and deep respect for one’s ancestors and for things that happened a long time ago. The actual dates of historical references to specific peoples in the Caucasus (such as, e.g., to the Armenians or to the Chechens) vary greatly, and this disparity itself fuels what can only be termed *competition over the past*. To compete, a people must claim an indigenous status or a presence based on dubious linguistic/ethnic identifications with no longer extant peoples mentioned in still earlier historical accounts. Such destructive competition distorts what is actually known and results in the proliferation of certain deliberately constructed myths that reoccur over and over again. Such myths include: (1) autochthonous development in

a primordial homeland; (2) direct genetic links with a famous historically recorded people, ideally with one associated with an early complex, literate state; and (3) the belief that one's own ethnic group or aspirant nationality initially formed and sustains itself by perpetual conflict with its sworn inveterate enemies, typically a neighbouring group settled in a contiguous territory (cf. Gadjiev et al. 2006: 58–60; Kohl et al. 2007). An important point is that nearly every major ethnic group engages in such myth-making enterprises, and their dubious, mutually contradictory claims become obvious. When Georgian forces bombarded Tskhinvali, the capital of the breakaway separatist republic of South Ossetia, and fighting also erupted farther west in the separatist republic of Abkhazia in August 2008, all combatants defended their actions in terms of the perceived territorial integrity of the areas they controlled or sought to control. In the Caucasus, the concept of territorial integrity is associated with the concept of homeland and is supported by ancient historical and archaeological evidence. The Late Bronze/Early Iron Koban culture, first discovered in the late nineteenth century, is found on both sides of the Great Caucasus Range, and this distribution is used to justify Ossetians' current occupation of both sides of the Central Caucasus. The makers of the Koban culture and their famous bronzes are seen, of course, as the direct ancestors of the Ossetians. Georgians have a different view. They see the Koban culture as a regional or provincial variant of the more famous and renowned Colchidean culture bordering the Black Sea (Lordkipanidze 1989: 194, fn. 2), and this culture, of course, is directly ancestral to the Georgians. The Abkhazians also see themselves as indigenous with claims to different archaeological ancestors.

Contradictory nationalist interpretations of the remote past proliferate in the Caucasus and, more generally, areas of the former Soviet Union. We cannot review them in any more detail here. The final questions are: what is the responsibility of the archaeologist who confronts such nationalist interpretations and what is the relevance of archaeology when archaeological evidence is used to promote ethnic hatred and conflict?

Archaeology as Anthropology

Ethically responsible archaeologists have both a negative and positive role to play. Minimally, archaeologists, particularly those working abroad, must understand the political implications of their own and their colleagues' works. If they do not so contextualize their research, they run the risk of their discoveries being used for questionable political purposes. They have the additional responsibility of debunking unsustainable claims or dubious identifications based on ethnically moot material remains. Archaeological evidence is not always underdetermined, but it often is. Most nationalist accounts cannot withstand critical scholarly scrutiny, and archaeologists play an extremely important negative role in critiquing them. It also must be admitted that sometimes in the best of circumstances the "preponderance of evidence" – not just archaeological, but also linguistic, cultural, biological/physical, etc. – converges to support a specific ethnic/national identification. In those circumstances, the responsible archaeologist should accept and support the specific identification.

Even when such an ethnic/national connection with the remote past can be made, the link does not necessarily justify a contemporary political use of that remote past. The connection with the remote past must be decoupled from the contemporary political appropriation of that past, with which the archaeologist may or may not agree. If archaeologists had really found – which they did not – a Hindu temple beneath the Babri Masjid mosque in Ayodhya, India, such a discovery would not justify the demolition of that mosque. The archaeologist could admit the presence of the earlier temple and still condemn the destruction of the mosque. Such issues should be separated. Similarly, an archaeologist could admit a cultural connection, however qualified, between the ancient Israelites and the contemporary Israelis, and still be highly critical of specific Israeli policies, such as the blockade of Gaza or the eviction of Palestinians from East Jerusalem. Such separate issues should not be confused or conflated with one another. Another relevant role archaeologists play is to distinguish between what we know and can confidently assert as archaeologists about the past and contemporary political uses of the past, some of which we find questionable or objectionable.

Among other difficulties, nationalist accounts violate basic anthropological principles. Peoples do not live in hermetically sealed, discrete entities called cultures or nations; rather they live in open, nonbounded communities, ever expanding shared social fields, and interact and exchange ideas and technologies with other peoples (Kohl 2008). There is no master race or chosen people with a special spiritual mission. Archaeologists as anthropologists also have an extremely important positive role to play by documenting these constant borrowings and interdependent developments among peoples, all of which are eminently traceable in the archaeological record. Anthropology provides a cultural evolutionary and national historical perspective on *Homo sapiens*. We are all biologically members of the same species and historically we have traversed similar paths that ultimately merge, always progressing together with other groups with whom we constantly interact. The Koban and Colchidean cultures are not directly ancestral to either the Ossetians or Georgians. Rather they both help define a shared Caucasian culture-historical community with a highly distinctive recognizable metallurgical tradition. Such documentation constitutes a positive reconstruction of the Caucasian archaeological record that it is easy and responsible to establish and that ultimately silences the dangerous nationalist distortions of that record.

Childe may have overestimated archaeology's ability to be an objective science, but he had a terrific sense of its practical value.

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Part III

Future Scope of Archaeological Relevance

Introduction

Joe Flatman and Marcy Rockman

The third and final section of this book, Part III hears from “senior” (in terms of authority) archaeologists giving their opinion on both the state of archaeology as well as the state of the world, as modern-day “community elders”. Here, they consider the place of archaeology as the means by which stories about how to live can be rediscovered, preserved and distributed, alongside the place of archaeology in relation to the history of science and preservation legislation. These senior archaeologists consider the past and look to the future, considering how an archaeological mindset offers unique perspectives on the human condition and the advancement – indeed, survival – of the species. These authors also consider some of the painful realities of the history of archaeology in terms of making archaeology relevant and also participatory with as wide a possible cross-section of society. In particular, this means addressing the relationship of archaeology as a discipline and especially archaeologists as individuals with Indigenous and Descendant Communities, where the behaviour of archaeologists in relation to such communities up until relatively recently was often nothing short of scandalous and shameful and where, as a consequence, distrust lingers on.

Other contributors to Part III consider instead the pragmatic nature of archaeological practise, and the lessons that can be learned from adapting existing behaviour – especially, in relation to legislative and management frameworks in the historic environment – in order to achieve better outcomes for archaeology, communities and, again, archaeologists. One of the undoubted lessons of these chapters is that while archaeology is frequently the study of change to and adaptation in ancient societies, archaeologists at work today are just as at risk as falling into the trap of what Sebastian coins the “we always...” scenario as any other professional community with too much work and too little time, of unquestioningly assuming that the present way of how things *are* done is the only way things *can* be done.

The contributors to Part III thus provide a useful dose of critical perspective on the past, present and possible future behaviour of archaeology as a global profession and community alike. The chapters in Part III serve as a reminder that archaeology is a relatively young discipline in comparison to some academic as well as “industrial” specialisms, and that such youth and vitality is to be cherished. Good archaeologists ask questions – all sorts of questions: of the data they are presented with; the environment (whether physical or cognitive) they find themselves in; and above all of themselves. Archaeologists should not be afraid, having asked such questions, to challenge the status quo and propose alternative modes of seeing, doing and telling, of ensuring that the best possible archaeological work is undertaken that engages with the widest possible cross-section of society. In terms of the contemporary relevance of archaeology, this is a reminder that the *behaviour* of archaeologists needs to follow Charles Darwin’s famous maxim that:

It is not the strongest of the species that survives, nor the most intelligent that survives. It is the one that is the most adaptable to change.

An adaptable and engaged archaeology *is* relevant, and has a place in present and future societies, around the globe, irrespective of age, gender, ethnicity, income, influence or other mitigating factor: an inflexible and unengaged archaeology is irrelevant and frankly, doomed to extinction. But above all, an engaged and relevant archaeology is *proactive*. There remain many corners of the globe, where archaeology is marginalized and archaeologists barely work. Part of the contemporary relevance of the archaeology of “now” is thus to extend to others not lucky enough to enjoy them the fruits of archaeological work – not in a sense of misplaced paternalistic colonialism, but in a sense of enabling people their birthright: the right to understand, interpret and manage their heritage in ways that matter to them.

Chapter 17

Pragmatism and the Relevancy of Archaeology for Contemporary Society

Stephen A. Mrozowski

Pragmatism is a term used often in contemporary political discourse. At its heart rests the belief that it is better to compromise and move forward even if it means not getting everything you want. Politicians are normally members of political parties that have platforms of core ideas that emerge from often cantankerous debate that leads to consensus among the party members. There are also specific pieces of legislation that parties promise to support, but during the legislative process these goals have to be wed with those from other parties. In principle, legislation should emerge from a process that seeks to reconcile the differences between competing positions. Pragmatism enters the process as a philosophy that promotes the idea that the value of all action, political, economic, social, should be measured by the same scale: what is its practical outcome? The inability to reach consensus results in nothing happening and from a pragmatic point of view this is less desirable than compromise legislation that will appeal to enough in the political center to offset the lack of support from either end of the spectrum.

As a political philosophy, pragmatism can prove difficult to make work and even more difficult to defend in the face of supporters who see their views as uncompromising. As an intellectual philosophy, pragmatism is more complex and wide-ranging, yet its core tenet remains that the value of any work is best measured by its practical consequences. With reference to archaeology, the question would be this: what practical contribution can archaeology make in addressing problems in the contemporary world, essentially the same question asked by all of the authors of this book. And it is important that archaeologists are asking these sorts of questions beyond those that concern theory, or methods, or interpretation, because the future of the discipline may well depend upon the ability of archaeologists to make their research more relevant in an increasingly fractious world (see Preucel and Mrozowski 2010:

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23–36). In this chapter, I want to argue for the value of a pragmatic approach in archaeology and then suggest two areas where archaeology has the potential to play a more active role: (1) the production of history and the ending of historical silence, and (2) providing evidence for Native American groups who are seeking Federal Recognition. Each of these examples involves the production of knowledge concerning the past that is used to influence or make decisions concerning the future. In the case of the Federal Recognition Process, the constituency who would benefit from the work of archaeologists may be limited to the individuals or groups involved. In the case of ending historical silences, there is potential to address conflicts that are global in scope. Many of the conflicts that confront our world today can be linked to the events surrounding the breakup of empires such as the Ottoman (Barum and Carroll 2000) or British Empires (Mrozowski 2009) or as a direct result of colonialism's troubled legacy (see Preucel and Mrozowski 2010: 425–430).

Pragmatism and Archaeology

If archaeology is thought of as a method for ending historical silence or providing evidence for Native American groups seeking Federal Recognition, what then is the role of a pragmatic philosophy in realizing these ambitions? Pragmatism offers several advantages in helping to build a framework for an archaeology that can meet the needs of today's complex world. Chief among these is pragmatism's tonic for what is referred to as the spectator's theory of knowledge. This foundational stone of pragmatism can be traced back to the work of John Dewey who was an early proponent of a socially responsible, politically relevant science. Dewey opposed the Cartesian view of knowledge because of its detached and segmented qualities. He argued that ideas and social theory needed to serve some practical purpose that saw them employed in the real-world to meet real-world problems. Dewey wrote extensively on social issues and was considered one of the leading social critics of his time. He called for the reconstruction of philosophy to assist in the public arena and espoused an enlightened educational process "in the search for the great community" (Dewey 1925).

Dewey's concern for building community and for the use of science, and in particular social science, to address real-world issues, echoes two recent developments, the postmodernist concern for self-reflexivity, and the greening of Marxism. The latter is a good example of how a pragmatist philosophy helped to overcome the Red/Green debates of the 1980s and 1990s. These debates surrounded attempts by some Green politicians in Europe to employ a Marxist critique of capitalism's contribution to the rapid deterioration of the world's environment. Initially, this was met with skepticism on the part of Marxist activists who saw the environmental movement as a particularly upper-middle class cause that failed to embrace the issue of labor inequalities in the work place as part of their overall political program. I would argue that this debate represents a good example of orthodoxy stifling intellectual growth. In the end, the Red/Green divide was transcended with the result

being the flowering of political ecology and ecological Marxism (Mrozowski 2010). In this instance, intellectual common ground was reached through a continuing dialogue that remained open. Respect for all forms of knowledge and the willingness to debate opposing views is another of pragmatism's strengths (Preucel and Bauer 2001; Preucel and Mrozowski 2010: 31; Saitta 2003, 2007). In this sense, pragmatism can serve as a bridging philosophy for archaeologists and anthropologists seeking to incorporate different voices, especially those of indigenous knowledge into their research.

Perhaps the best-known proponent of pragmatism in the twentieth century is American philosopher Richard Rorty (1982, 1998, 1999). Initially, Rorty developed an influential critique of analytic philosophy and the representational view of knowledge (Rorty 1979) that held that there is no foundational point on which truth can be grounded. There was in essence no true abstract measure of truth or the validity of an idea or theory. He was particularly critical of the philosophical belief that knowledge corresponded to some external reality. This attempt to critically examine the epistemological underpinnings of much of Western philosophy resulted in his overall rejection of much of social theory, including a fairly healthy disdain for Marxism and postmodernist thought. Rorty (1998) feels that both represent rather myopic pursuits that have resulted in political philosophy moving from its formidable position as a field of social engagement in the 1930s through to the 1960s, to its current state in which social theory is an elitist pursuit that would rather critique and deconstruct the contemporary world than attempt to engage it. Politically, Rorty was a liberal democrat who felt philosophy needed to address social issues that were linked directly to contemporary politics. By engaging real-world problems, Rorty sought to foster a greater sense of community and solidarity (Rorty 1998, 1999).

The philosopher, Patrick Baert (2005), has compiled a persuasive portrait of pragmatism as a philosophical framework for the social sciences. What makes his argument particularly germane is that he looks at both anthropology and archaeology as fields that have brought a pragmatic perspective to their research. In particular, Baert notes the "critical turn" outlined by George Marcus and Michael Fischer (1986) and James Clifford and Marcus (1986) and the questions it raised concerning the research practices of many anthropologists. The rise of feminist and postcolonial critiques has confronted anthropologists with a legacy linked to a colonial past that engendered many inequalities. One manifestation of this legacy was a general lack of respect for indigenous knowledge; a situation that postcolonial theorists have sought to redress (e.g., Castro-Gómez 2002; Ezie 1997; Lander 2002; Maldonado-Torres 2003; Salavatore 2003). Other developments that Baert (2005) attributes to the critical turn have been an openness to new methods, new approaches to writing, and new topics of inquiry. In the case of writing, for example, he suggests that Marcus and Fisher laid bare the notion that writing was a neutral act and was instead a practice that was subject to a variety of influences. These revelations led to a new appreciation for other forms of knowledge and the dialogical view of culture more broadly (Baert 2005: 162–164). For Baert, the critical turn in anthropology altered the character of the discipline from being a detached producer of knowledge to that of a more collaborative field that tries to find solutions to complex problems.

In taking this approach, anthropology regained an appreciation for self-referential knowledge thereby countering what pragmatists going back to Dewey have referred to as the spectator theory of knowledge (Baert 2005: 151–152; see below).

Baert then turns to archaeology in arguing that the growth of postprocessualism represents a movement that is very consistent with pragmatic philosophy. In contrasting processual and postprocessual archaeologies, Baert (2005: 160–161) characterizes the way processualism viewed cultural systems from a naturalist perspective in that cultures evolved primarily in response to environmental change. As a result there was little room for human agency in the models that processualist archaeologists constructed of past cultural systems. Postprocessualism took almost the opposite view in making human agency and the meaning people attach to their world the main focus of their research. By focusing on meaning postprocessualists also recognized the importance of self-reflexivity and self-referential knowledge more broadly in the way they constructed their portraits of the past: “they (postprocessualists) adopt a pragmatic stance, emphasizing how their method of inquiry may alter the present constellation of meanings. Knowledge is no longer conceived as something passive, but it is more like an action; it affects things” (Baert 2005: 163). Baert (2005: 162–163) goes on to argue that by embracing an openness to new forms of knowledge and the importance of self-referential knowledge, archaeologists are not only willing to be more critical of their own research, they have also recognized the importance of having their work serve the needs of the present.

Baert’s vision of pragmatism has much to offer an archaeology that seeks to play a more active role in the contemporary world. His focus on the importance of self-referential knowledge, for example, can help archaeology by stressing the need to be more open to different epistemologies. In so doing, archaeology has a better opportunity to make meaningful contributions to social or political issues that much of Western science often seeks to avoid. Rather than avoiding conflicts that might stem from mutually exclusive perceptions of history, archaeologists can engage these arguments in search of answers to points of dispute. By engaging the world, archaeologists can seek to avoid the pitfalls of what Dewey called the spectator theory of knowledge (see Baert 2005: 151). This idea refers to what Dewey labeled the representational perception of knowledge, the notion that science needed to essentially reproduce the world before it could understand it. Baert labels this approach social cartography and argues that researchers make the mistake of thinking that they can control for their own biases in seeking an objective image of the external world. Among others, Baert (2005: 152) points to both Roy Bhaskar (1978) and Anthony Giddens (1984) as social theorists who take this view. He notes that both ascribe

a mysterious capacity to individual researchers to ‘step outside history’, to assume what [Willard van Orman] Quine called a ‘God’s eye view’, stripped from the own culture, while subjects being investigated are portrayed as necessarily drawing upon a culturally specific framework to make sense of the world (Baert 2005: 152).

Rather than taking a God’s eye view of the world, Baert maintains that it is essential that researchers work dialogically in building a consensus view of what lay at the heart of many of the world’s problems. Central to such an approach is a rejection of foundationalism, the axiom that a singular epistemology is a prerequisite for grounding

knowledge. Baert (2005: 153–154) rejects this idea and argues instead for research built upon dialogues between observer and observed that can hopefully produce a more complete, less unidirectional view of what are often very different worlds.

Like Baert, I see pragmatism as a work in progress and it should remain as such. One of pragmatism's strengths as a philosophy is that it remains open-ended and willing to embrace a variety of forms of knowing. Another of its strengths is the emphasis it places on social action rather than seeing social science as the domain of detached observers of an essentialized reality. The world that archaeologists study is composed of a mosaic of cultural groups who share different histories. As I noted earlier, many of the world's conflicts can be traced directly to tortured pasts that remain active agents in shaping the attitudes and minds of the world's population. In some instances, histories have been purposely silenced, while in others, histories have been forgotten. People without history thirst for their identity and when this is denied them conflict or other forms of strife frequently develop (see Chap. 16). That is why the production of history is so important in shaping our own views of the present and potential futures (Schmidt and Walz 2007).

The Importance of History

So what is the role of history in the contemporary world? Most would answer this question with the well-known cliché that humans study history to avoid making past mistakes. Often this involves looking to history for lessons that can help us make decisions today. This can take several forms from looking at the historical roots of issues confronting politicians, military leaders, or the economic advisors of larger companies or considering historical parallels in making decisions. Still a further question concerns the role of history in shaping our current political discourse. Take the history of the U.S. as a starting point. If you want to construct a narrative in which America is the ultimate land of opportunity, then it is important that success and harmony is the root of your narrative. If the opposite is true and you want to stress those episodes of America's past that involve gross exploitation or even genocide, then the narrative will be markedly different with much less emphasis on harmony. These different images of American history can be marshaled in a powerful way to influence decision making that can have global effect and yet the very core of these narratives are seldom critically examined in a scholarly manner. Academics do this kind of research, but seldom does it play much of a role in the construction or critique of historical narratives. Why? Why is it that individuals who often spend a lifetime studying a particular topic, or period, or geographical area, are not consulted either formally or have their writings accessed? In the case of archaeology, it seems that while many in the public find the results of archaeology fascinating enough to subscribe to National Geographic or the growing number of popular publications dealing exclusively with archaeology, the field is still considered something closer to art in that it is appreciated, but not necessarily looked to for guidance. Even if archaeologists are primarily to blame for this, one way to begin

reversing the situation is to look critically at the way history is produced and used to construct portraits of the past in often stark contrast to those painted by others. Archaeology has the ability to examine differences such as this as well as the potential to redress historical conflicts that remain a part of the contemporary political landscape. Not all archaeologies or archaeologists need to engage in this kind of research, but there may be a constructive role for those working in areas where political, economic, environmental, or spatial injustices can be traced to historical conflicts or the purposeful erasure of history.

The Production of History and Historical Silence

History is both lived and produced. Despite the fact that archaeologists have always been interested in discovering what they have viewed as lost history, like historians, archaeologists are actively engaged in the production of history. History in the sense of what actually took place in the past is a reality that has been subject to a variety of processes that involve remembering, forgetting, the active silencing of some events in the past as well as the active commemoration of other events (Connerton 1989; Trouillot 1995). Both Connerton (1989) and Trouillot (1995) have outlined different ways that particular histories are silenced while others are purposely commemorated. They have also focused on issues surrounding the manner in which memory, commemoration, and political power intersect in shaping histories that often support specific agendas that simultaneously silence other histories. Both argue that these incidences of silencing are commonly purposeful and are connected to historical conflicts whose suppression is designed to quell narratives that counter those put forward by those who seek to use history to bolster their authority. As such both see the production of history, the process of remembering and forgetting, as cultural processes that exist at the societal level and which repeatedly reinforce broader structures of authority (Connerton 1989: 3; Trouillot 1995: 22–30). Trouillot's (1995: 40–53) study of the Haitian revolt presents a persuasive argument for the manner in which the exploits of particular heroes of the revolution have been recast so as to strip them of their virtues. In particular, he describes how the enemies of France who were so successful at combating attempts to quell the revolution are depicted as grotesque, almost animal-like in their behavior. These characterizations were designed to portray the success of the revolution as the triumph of evil forces thereby explaining the failure of the French to end the revolt. This erasure of history is only part of a broader process whereby the only successful slave revolt in the Western hemisphere has itself been revised into a nonevent (Trouillot 1995: 70–90). In this regard, Haiti's subsequent struggles to succeed as a nation reinforce the idea that the revolution was a failure.

More recently Connerton (2008) has outlined seven different types of forgetting. In outlining these various forms of erasure and denial, Connerton (2008: 69–70) notes the institutions, groups, or individuals who are often the agents of these processes. "Repressive erasure" (Connerton 2008: 60), for example, most often involves acts of the state. The most obvious example that Connerton (2008: 60–61) provides is

the way totalitarian governments have systematically erased the histories and identities of groups who have opposed them. In instances of genocide, this process can involve attempts to eliminate the groups all together. He also links the same process to Roman criminal law that resulted in proscribed rulers having their statues destroyed and their names removed from other forms of memorials. Yet another form of state enacted forgetting is what Connerton (2008: 61–62) terms “proscriptive forgetting” or when acts of the past are purposely placed beyond the reach of a legal system. Two examples that Connerton provides are when Charles II and Louis XVIII were restored to their respective thrones and both demanded that past transgressions be forgotten so that their nations could move forward. In some cases, pardons were granted to those who had participated in violence against the state. A much more recent example of this kind of proscriptive forgetting was South Africa’s attempts to reconcile its violent past with a new national beginning. In this instance, tribunals were used to investigate acts, but not all those involved were pardoned.

Connerton (2008) provides other examples of groups who have chosen to establish new identities by loosing parts of their past. Often this can be an individual act such as when immigrants choose to stress their new identities over that of their previous nationality. In the case of “Forgetting as Annulment,” Connerton (2008: 64–66) describes a complex process in which governments or institutions create such massive archives of information that individuals are lost under the weight of a bureaucracy. In many respects, this notion is similar to Foucault’s concept of governmentality (1979) in that it stresses the role of the archive in helping to reproduce governments and the ideologies that reinforce their legitimacy (Gunn 2006; Inda 2005; Lee 2006; Scott 1990). In collecting and archiving information colonizing states bolster their power by creating a variety of apparatuses that serve to classify populations under their control into groups who can master the written word and those who cannot. This emphasis on the written word and its power is one of the corner stones of postcolonial theory (e.g., Ashcroft 2001, Parry 2004; Sider 1987). In most instances, postcolonial theorists emphasize the ability of the colonized to master the language of the colonizers thereby providing the former with a powerful tool to undermine the legitimacy of the latter. Among the first to succeed at this was the legendary Franz Fanon (1963, 1967) who was the first to write about the experience of the colonized. His writings were instrumental in providing part of the justification for the anti-French conflict in Algeria, a blueprint that would be followed by generations of postcolonial writers in Africa, the Caribbean, and the New World as a whole (Gordan 2007; Ikeotuonye 2007).

Forgetting, Governmentality, and the Federal Recognition Process

The conceptual importance of historical memory and silencing has not been lost on archaeologists who have become increasingly aware of the way history is produced and the role archaeology can play in ending a variety of types of forgetting (e.g., Buchli

and Lucas 2001; Hayes 2008; Mills and Walker 2008; Schmidt and Walz 2007; Shackel 2001; Van Dyke and Alcock 2003). Much of this research focuses on the way some histories are remembered and commemorated while others are purposefully forgotten. One area of research that has not received much attention, however, is the link between institutional forgetting and the Federal Recognition process in North America (but see Daehnke 2007). In many respects, I think you could find no better example of a pragmatic archaeology. If the essence of a pragmatic philosophy is to ask the relevancy of a particular kind of research, in this case archaeology, to problems in the real-world, then asking what role archaeology might play in the Federal Recognition Process seems like the perfect candidate. What would a pragmatic archaeology such as this look like? In answering this question, I would like to draw upon research I have been directing over the past decade that involves collaboration with the Nipmuc Nation of Massachusetts and Connecticut. This collaboration has involved my own investigations of two Nipmuc communities, those of Magunkaquog and Hassanamesit (Law et al. 2008; Mrozowski et al. 2009), as well as working with the Nipmuc's own archaeologist and cultural preservation officer Rae Gould whose research has focused on the current Nipmuc Reservation in Grafton, Massachusetts (Gould 2010). These investigations have involved excavations, documentary, and oral history research on three properties connected with the two communities of Magunkaquog and Hassanamesit (Fig. 17.1). Both communities were established during the seventeenth century as part of the English Missionary John Eliot's attempts to convert New England Native groups to Christianity.

The literature surrounding the establishment and history of these communities is based almost exclusively on descriptions written by Eliot (1655, 1670a, b, 1834), Daniel Gookin (1836, 1970) who served as the liaison between the Massachusetts Bay Colony and local Native groups, and Samuel Sewell (1973) who was involved in many of the negotiations between the Massachusetts Bay authorities and the Nipmuc. Their descriptions suggest communities that were well on their way to becoming English in both culture and economy as well as Christian. They describe communities with streets and English style housing as well as meeting houses where their Native teachers could instruct those seeking religious education. These same meetinghouses were also described as being the places where the economic arts of husbandry and domestic arts such as sewing and cooking could be taught.

These accounts and others like them were often designed to paint portraits of Native American groups that would appeal to potential donors in England. They also contributed to the emergence of a more general view of indigenous peoples in North America as inferior thereby establishing a cultural view that would perpetuate many of the arguments offered in support of colonization (Sider 1987). Ultimately, these notions of inferiority would also underpin disappearance narratives that not only influenced political interactions between the Native and White communities in the past, but also continue to effect indigenous political struggles today and this includes the often capricious Federal Recognition Process (Daehnke 2007; Den Ouden 2005; Miller 2003, 2004; Raibmon 2005). In many respects the political struggles indigenous groups still face can be traced to a deeper history that remains fragmented and poorly documented. That is one of the reasons why the history of



Fig. 17.1 Location of Christian Indian communities (copyright of the author)

communities such as Magunkaquoq and Hassanamesit are representative of a process that remains in play.

The first phase of what were commonly called “Praying Indian” communities involved the establishment of seven such communities between 1650 and 1660. The first of these was Natick, the second was Hassanamesit, and the seventh was Magunkaquoq. Natick was home to a fairly large population of Massachusetts Indians, while Hassanamesit and Magunkaquoq were Nipmuc communities. The success of these communities that was trumpeted by Eliot came to a dramatic halt when conflict irrupted between the English and Native groups of New England during

what is called Metacomet's Rebellion or King Philip's War between 1675 and 1676. This was an extremely bloody 14-month conflict that saw attempts by Christian Indians to remain neutral thwarted by their own desires to fight with their own people and English steps to remove all of the inhabitants of the seven communities to Deer Island in Boston Harbor for a winter that would result in many of them dying during their internment.

While the postwar period witnessed the establishment of an additional seven Christian communities, those established before the conflict faced many difficulties. Chief among these was the decision by the Massachusetts General Court to oversee all Native land transactions and to redistribute much of the land originally granted to the Praying Indian communities to English colonists. By 1728 communities such as Natick and Hassanamesit that had been the largest of the communities saw their land redistributed to English settlers with small individual plots of between 100 and 200 acres provided for Native families. In the case of Hassanamesit, this involved seven families who worked with overseers chosen by colonial authorities. The main job of the overseers was to manage the affairs of these families. This included all land sales and distribution of funds from those land sales. Although working with the overseers often proved onerous for the Hassanamisco (Law 2008), these activities did result in an archive that is rich in information concerning the economic activities of the various Nipmuc families.

During the 1728 land redistribution, the English attributed the various Hassanamisco farmsteads to the male owners of the properties. This ran counter to Nipmuc practices of having property ownership handed down through the female line. With so much documentation one would have thought it reasonable to assume that finding the archaeological remains of these seventeenth and eighteenth century communities would have been easy. Yet this has not been the case. For close to 30 years, archaeologists tried a variety of methods and approaches to find these communities that were described as containing streets and English style dwellings with zero results. Several scholars sought to explain this lack of visibility on the communities having been abandoned and subsequently destroyed by modern development (Carlson 1986) while others suggested that the descriptions provided by Eliot and Gookin were inaccurate (Brenner 1980, 1986).

The first of these ideas that the communities had been abandoned is part of a larger perception still held by many today, laypersons and academic alike, that the Native populations of New England had disappeared by the nineteenth century (Den Ouden 2005; Gould 2010). This narrative of disappearance has been a consistent theme of New England political history as virtually every agreement between either colonial or state governments contains a phrase that links the length of the agreements until such time as all the descendants of these Native groups have died. This narrative of disappearance has also been woven into the work of anthropologists, archaeologists, and historians for much of the last 150 years (Den Ouden 2005; Doughton 1997; Gould 2010). Yet a growing body of historical and archaeological research has conclusively demonstrated that such a notion cannot be supported empirically. The Hassanamisco Nipmuc have survived and continue to reside in the very same communities they have for hundreds if not thousands of years (Doughton

1997; Gould 2010; Mrozowski et al. 2009). These same disappearance narratives have also served as impediments for many New England tribal groups when attempting to gain Federal Recognition. The Federal Recognition Process can be contentious and at times appear arbitrary often resulting in one group of Native descendents pitted against others in their attempts to demonstrate cultural and political continuity, the most critical piece of the Federal Recognition Process (Den Ouden 2005; Miller 2003, 2004; Raibmon 2005).

The efforts of Native groups such as the Hassanamisco Nipmuc to gain Federal Recognition have been thwarted by a lack of written documentation concerning their political continuity and the adherence on the part of Federal authorities to concepts such as acculturation – the belief that by adopting European cultural, religious and economic practices, Native groups somehow lost their identity. The issue of authenticity is a particularly pernicious problem for the aspirations of many Native American groups because it often forces them to portray themselves as somehow fossilized groups who have maintained their cultural identity as it was before the arrival of Europeans to the New World (Den Ouden 2005; Daehnke 2007; Miller 2003, 2004; Raibmon 2005). Archaeologists who have in the past drawn on concepts such as acculturation have contributed to this view by using the presence of European material culture as a measure of just how English, Dutch, or Spanish, Native groups were becoming under the weight of colonialism.

The issue of authenticity is also intertwined with Federal insistence of documentary proof of political and cultural continuity over the past 300–400 years as a basis for groups gaining Federal Recognition. This insistence on privileging one form of knowledge, the written word, over others such as oral history, or archaeological evidence of cultural materiality, run counter to the precepts of a Pragmatist philosophy that honors all forms of knowledge (Baert 2005; Preucel and Mrozowski 2010: 28–35). Nipmuc attempts to gain Federal Recognition were met with initial success based on their exhaustive work with Federal authorities during the Clinton administration only to see a last minute reversal on the part of Federal authorities during the early years of the Bush administration (Adams 2004). Since this time archaeological and documentary research has provided a counter weight to the argument that the Nipmuc could not demonstrate political continuity. In countering these claims, two major barriers had to be overcome, one legal and the other theoretical, both underpinned by epistemologies at odds with pragmatic philosophy. The first of these is the privileging of the written word over oral tradition or materiality. The second is the postcolonial concept of mimicry and its links, however subtle, to acculturation theory.

Over the past 20 years, archaeologists working in North America have begun the task of repairing relations with indigenous groups and this has come primarily in the form of increased collaboration (Colwell-Chanthaphonh and Ferguson 2008; Dongoske et al. 2000; Kerber 2006; Nicholas and Andrews 1997; Silliman 2008). These steps toward greater collaboration have made an important difference and resulted in a more respectful, more democratic approach to the study of Native American History (e.g., Atalay 2006; Kuwanwisiwma 2008; Silliman 2008). Despite these important steps, there remains one area where archaeology has not played as a large role as it might and that is in support of Native tribes seeking

Federal Recognition (Daehnke 2007; Mrozowski et al. 2009). This is unfortunate because archaeologists are very good at what they do. They can use a variety of technologies to interrogate a landscape, to find evidence of long-term settlement patterns, and their change over time. Some of our most basic approaches are strengths that we often take for granted, but which in a different context can prove powerful tools in demonstrating something as fundamental as the persistence of a particular group of people on landscape over a long period of time. Archaeological data can be used quite effectively to demonstrate the kind of political and cultural continuity demanded by the U.S. government in order for Native groups to be granted federal recognition (e.g., Daehnke 2007; Miller 2003, 2004; Raibmon 2005). When I first met with the Nipmuc Tribal council and I mentioned that I thought I was seeing evidence of cultural continuity between the seventeenth and nineteenth centuries in asking their support for work I hoped to carry out, their ears perked up. This was the beginning of a collaboration that has go on now for close to a decade and which is beginning to produce strong evidence for cultural and political continuity across a landscape for the past 400 years and into a deeper past (Mrozowski et al. 2009).

In discussing the results of the work I have been doing over the past decade, I would like to focus on the collaboration between the Fiske Center for Archaeological Research at the University of Massachusetts Boston, the Town of Grafton, Massachusetts, the Nipmuc Nation, and in particular Rae Gould, the Nipmuc historic preservation officer who has been involved investigations of three specific sites. The first of these is the seventeenth and early eighteenth century community of Magunkaquog. Our work there focused on a single structure that was discovered as part of a CRM survey for a large housing development that was going up on Magunco Hill in what is today Ashland, Massachusetts. The site was first discovered by the Public Archaeology Laboratory (PAL) of Pawtucket, Rhode Island (Herbster and Garmen 1996). I was brought in to the project at the request of the office of the State Archaeologist after negotiations between the project's developer and PAL broke down. The site itself consisted of a single, dry-laid stone foundation that contained a wealth of material culture. There was no evidence of an interior hearth or chimney; however, there was an external hearth that contained charred bone as well as evidence of quartz cobbles having been heated. The site assemblage was informative on a variety of levels, but perhaps its most notable quality was its clarity in terms of materiality. It was a discrete deposit that consisted primarily of English material culture that generated a fairly crisp image of a building that housed a modest collection of furniture suggesting by hardware relating to a bed and a small chest that may have had a single drawer. This is based on the recovery of a set of matching escutcheon plates and drawer pulls, ceramics, glassware, and several personal items including a set of thimbles. The collection also included a set of horse furniture including parts of a bridle and saddle. Horses were highly prized in the seventeenth century and so this suggests that the resident of building was an individual of some status (Mrozowski et al. 2009).

In addition to the collection of European manufactured goods, there was a small, but interesting collection of Native American items including several examples of heat-treated quartz that were fashioned into gunflints. The external hearth noted above contained the remains of several large quartz cobbles that had been subjected

to heating for the purposes of extracting quartz crystals. The crystals were perhaps the most evocative discovery made at the site since three of them were recovered from three of the interior corners of the foundation in small discrete pits. In their descriptions of the Praying Indian Community meeting houses, Eliot and Gookin note that they often served as the residence of each of the communities Native teachers. They also stated that these same meetinghouses served as the place where domestic arts such as sewing and cooking would be taught and where European visitors such as John Eliot or Daniel Gookin might stay. Based on the foundation of the building and the material assemblage associated with it, I believe that the building found at Magunkaquog did serve as the communities' meetinghouse. Given the overall architecture suggested by the foundation and the architectural artifacts recovered from within and around it, it was probably the most English style building in the community. Given that it was the only such structure found in a much larger area surveyed by PAL in 1996 (Herbster and Garmen 1996), the building probably served as a show place for the community to display its aspirations to adopt the trappings of English culture. If this description is accurate, then the Magunkaquog meetinghouse is what spatial theorist Edward Soja (1996, 2000) defines as a counter-space, a place of resistance. This attribution is supported, I believe, by the presence of quartz crystals in the corners of a building constructed as an outward expression of the Magunkquoag communities' Englishness and home to its spiritual leader, apparently the most pious member of the community. According to Murphy (2002), quartz crystals have been central parts of Native American spirituality in New England for at least 4,000 years. This interpretation is based on their recovery from burial contexts spanning this period. Assuming that the quartz crystals remained significant into the historic period, their presence suggests a Magunkaquog community that did indeed use English material culture and some facets of English husbandry – an interpretation based on the recovery of faunal remains of both sheep and pigs – but that their adoption of Christianity and English cultural practices was folded into a deeper Native spirituality. So while remaining distinctly native, the Nipmuc experienced the kind of change all societies do when new technologies and cultural practices are adopted. Based on the evidence from Magunkaquag, it does not appear that they were any less Indian than they had been before colonialism.

The importance of chronology at Magunkaquog is critical because it was one of the communities that historians had always argued was abandoned shortly after the conclusion of King Philip's War in 1676, despite the fact that documentary evidence confirms the presence of Native on the site in 1678 when they were attacked by a group of Mohawks (Mrozowski et al. 2009). What the archaeology strongly suggests is that the community, or at least this site, remained the home to Nipmuc Indians at least until 1749 when it was sold as well as the land surrounding it to a wealthy English proprietor.

Hassanamesit presents a similar story. As one of the larger Christian communities, it clearly survived the upheaval of King Philip's War only to see its original 8,000 acres whittled down to seven 100–200 acre parcels redistributed to seven Hassanamisco Nipmuc families. One of these was given to Sarah Robins and Peter Mugamaug in 1728, located in what is today Grafton, Massachusetts.

The site would eventually be home to four generations of Nipmuc households all headed by Nipmuc woman whose first name was Sarah. All descendents of Sarah Robins, they would maintain the household until 1840, after which it appears to have been used on a seasonal basis until approximately 1870 (Law 2008). The archaeology of the site has demonstrated the continuous presence of Nipmuc woman and their families as well as their connections to the larger Anglo community. These connections are indicated by the presence of an unusually rich assemblage of material culture as well as documentary evidence from the records of the court appointed overseers. One artifact of note was the nameplate for blacksmith Amos Ellis. Nameplates such as this could have been attached to windows or other items made by Ellis. Among the documents of court appointed overseers are several receipts from the years 1799, 1801, and again 1802 in which Ellis is listed as having provided hardware for the household of Sarah Burney, Sarah Boston's mother. Sarah Boston has been the subject of a rich folklore that depicts her as a larger than life figure who wandered the countryside working for farmers and selling her distinctive splint baskets (Law 2008).

The site assemblage also includes a wide array of foodways-related materials including dinnerwares, glasswares, and a large set of eating utensils and cooking skillets and kettles (Law et al. 2008). Law (2008) has argued that the rich foodways-related remains are evidence that the Sarah Burney–Sarah Boston household apparently served as a gathering place for local Nipmuc residents – a community meeting place. This interpretation has been supported by subsequent analysis of faunal material from two different parts of the site. Combined these analyses indicate that areas of the yard surrounding the house appear to have served as gathering places and that large meals were being prepared for what are assumed to be members of the surrounding Nipmuc community (Allard 2010; Pezzarossi et al. *in press*).

The work Rae Gould (2010) has carried out at another Nipmuc property in Grafton, that of the Moses Printer Family who like Sarah Robins was given their property during the 1728 redistribution, reinforces this interpretation. I believe that the lots given to the seven Nipmuc families during the 1728 redistribution held the dwellings of members of the original seventeenth century community and in almost all cases, where parts of landscapes that have much deeper histories. This certainly was the case at the Sarah Boston site where we have evidence of occupation going back at least 4,000 years. Note that I am not arguing for a continuous, unbroken cultural connection spanning this period for the seventeenth century families and their ancestors, but of a greater Native, and in this case potentially Nipmuc cultural affiliation.

One of the most important discoveries made by Gould (2010) at the Printer site is that it seems to have emerged as a gathering place for the local Hassanamisco Nipmuc during the latter stages of the nineteenth century, almost precisely when it appears that the household of Sarah Boston stopped being heavily utilized. Today the last three-acre plot of the Printer family household, known today as the Cisco homestead, serves as the stated recognized Nipmuc Reservation. Yet despite the fact that it has been so designated by the Commonwealth of Massachusetts, it is not the home of a Federally Recognized Tribe.

Those connected with the project believe that the archaeological and documentary evidence from Magunkaquoq, the Sarah Boston farmstead, and the Printer-Cisco homestead demonstrate that all three sites served as community gathering places over the past 300 plus years and that they provide strong evidence of the kind of political and cultural continuity denied by the Federal Recognition process. With its ability to document chronological changes in both settlement and cultural practices, I believe archaeology represents a scientifically, and legally superior form of evidence compared with a documentary archive much less amenable to the same kind of interrogation or scrutiny. The descriptions provided by both Eliot and Gookin concerning the Praying Indian Communities seem to contain some elements that can hold up to archaeological examination, but others that are inaccurate. Used in the manner outlined in this chapter, archaeology in the service of groups seeking Federal Recognition offers one answer to the question of how can archaeology serve the needs of the contemporary world. And that contrary to the belief of some (e.g., McGhee 2008; but see Silliman 2009), there is common ground between the best scientific practices of archaeology and the political aspirations of contemporary Indigenous groups and other descendent communities (see Colwell-Chanthaphonh and Ferguson 2008). From the perspective of pragmatic philosophy, this kind of common ground is essential if human knowledge is to serve some practical end. I would argue that pragmatism offers a direction for anthropological research and in particular the work of historical archaeology. By using our expertise to pursue a research agenda that seeks to end historical silence, archaeologists can work collaboratively with Indigenous groups in reestablishing connections between the recent past and a deeper history and in the process move archaeology firmly into the twenty-first century.

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Chapter 18

Looking Forward to the Past: Archaeology Through Rose-Coloured Glasses

Joe Watkins

When I sat down to write this piece, I was reminded that archaeology, as a discipline, is generally a backward looking science. We take our measurements, we measure the physical and temporal coordinates of the objects we encounter, and we estimate the context between that which we know and that which we believe we know. All is there, waiting for us to translate as we move through x , y and z -coordinates, and as we try to measure those relationships through time as well.

We create our three-dimensional grids on paper, and then extrapolate those positions back through time. We try to develop understanding of the relationships of those dimensions one to the other. With these relationships, we try to establish the ways that the materials of the past are interconnected with the people who dropped the objects or created the materials themselves. In this manner, therefore, archaeology attempts to gather information to help us better understand the people of the past: their life ways, their social structure and the culture that we can piece together from the bits of refuse they have left us.

As we think about the future of archaeology, I believe it is important to look at archaeology's positioning in contemporary society as a means to understand not only who finds archaeology useful today but also who we believe might find archaeology useful in the future. As archaeology continues to develop its future goals and objectives, it becomes imperative that it maintain open communication with as many publics as possible in order to keep from becoming increasingly insular.

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Who Finds Archaeology Relevant Today?

This may seem to be a silly question, but I am uncertain how many people find archaeology of use. In the U.S., however, the passage of the National Historic Preservation Act (NHPA) in 1966 stated that the U.S. government must be responsible for the protection of the historic and archaeological record in its role as protector of the continued social benefit of its population. As a result, I can identify at least four groups in the U.S. who find utility in archaeology.

The first group is composed of nonprofessionals who do archaeology out of sheer love for it. If archaeology is a mystery waiting to be unravelled, these are those who pluck at the unravelling strings that tie us here to the past in such a way that we cannot turn away from the exercise. This group of people is so enamoured with the past that they work through their holidays in order to “experience” the excitement involved in uncovering artefacts and materials of the past. Many of these people experience the thrill of touching an object that no one else has touched for hundreds, perhaps thousands, of years; the material object connects the person of the present with the person of the past, an electric connection that more humanizes the past.

In addition to these people who explore the relationship between the past and the present out of a desire to learn, there are archaeologists who do archaeology professionally – such as within an academic setting or within a cultural resource management (CRM) setting. These professionals see the utility of archaeology in a variety of ways, but perhaps it might be easier to discuss their relationship based on the way that each group deals with the material culture of the past.

Academic archaeologists are generally those archaeologists whose relationship with the past is primarily based on a “pure” research agenda. That is, they have an interest in the information that can be gathered from archaeological sites that will allow them to gain insights into societal reactions to events at a past time. Whether based on pre-contact or historical-period sites, the archaeologist is driven more by the research question than the specific archaeological sites which exist within the archaeologist’s research universe. This “academic research universe” is generally very wide and open, limited primarily by the researcher’s interests and geographical research area, although occasionally limited by disciplinary ethical codes and professional responsibilities to people studied.

Compliance archaeologists may be defined as those archaeologists whose work is conducted primarily because of a need to comply with legislation or regulations that impact archaeological sites. Although research is an integral part of the archaeological work, it is secondary to the compliance-related purpose of conducting the work. The project within which the compliance archaeologist works often defines the “compliance research universe.” In this way, the “compliance research universe” might be considered to be 180 degrees from the “academic research universe.” That is, the impact of the project on the historic resources more often determines which sites are subjected to scrutiny rather than the specific research interest of the investigator.

A fourth group who might see some utility to archaeology may be identified as those whose ancestors (real or perceived) created the material being investigated. While there are many local groups whose ancestors created the historic record, probably the most commonly impacted groups in the U.S. are American Indians and their tribal governments.

I have presented brief histories of the relationships between American anthropologists and American Indians elsewhere (Watkins 2000, 2003, 2004, 2005a, b), and American Indian authors such as Deloria (1969), Echo-Hawk (1997, 2000), Mihesuah (1996), Riding In (1992) and Trope and Echo-Hawk (1992), among others, have written on these relationships as well. However, not all American Indian groups are totally opposed to archaeology.

In the following sections, I explore some of the ways that archaeology is used by Native American groups, especially within historic preservation programmes. With this as background, I offer suggestions for ways that archaeology can increase its relevance to Indigenous people, draw attention to archaeology's political impact on tribal groups, and then close with a discussion of "archaeological relevance" and how archaeology as a social science can better develop relevance at a global scale.

"Uneasy Alliances": On-Going Relationships Between Native Americans and Archaeologists

The involvement of tribal groups with archaeology is wide and varied, but a number of tribal groups have become formally involved within the U.S. historic preservation system. As of March 2010, there were 100 federally recognized Indian tribes who have taken over the responsibilities of the State Historic Preservation Officer (SHPO) under the NHPA.

The 1992 amendments to the NHPA (Public Law 102-575-16 USC 470) enhanced the role of tribes in the national preservation programme. The amendments also strengthened the protection to places of cultural significance to Indians and Native Hawaiian organizations. Specifically, the amendments allowed for the creation of tribal historic preservation programmes and funding mechanisms, allowed for the creation of a competitive grant programme to fund tribal initiatives in this regard, and required that one presidentially appointed member of the Advisory Council on Historic Preservation be a Native American or Native Hawaiian.

In 1996, 12 tribes were approved by the National Park Service to assume the responsibilities of the SHPO to carry out compliance activities on tribal lands, pursuant to Section 101(d) of the NHPA. Among the responsibilities assumed by these tribes are conducting (or causing to be conducted) historic property surveys, preparing and maintaining permanent inventories of historic properties within their lands under their jurisdiction, nominating properties to the National Register of Historic Places, and reviewing Federal agency undertakings pursuant to Section 106 of the Act. As noted above, as of March 2010, 100 tribes had been formally recognized as qualified to take over SHPO responsibilities on their lands.

Tribal Historic Preservation Officers (THPO) are officially designated by a federally recognized Indian tribe to direct a programme approved by the National Park Service and the THPO must have assumed some or all of the functions of SHPO on Tribal lands. This programme was made possible by the provisions of Section 101(d) (2) of the NHPA. Before a tribe may assume the functions of a SHPO, the NHPA requires it to submit a formal plan to the National Park Service describing how the proposed THPO functions will be carried out.

These preservation communities – archaeologists, SHPOs and THPOs – have differing perspectives on archaeology and its utility to the public, but they all recognize that archaeology, at least in some regard, has relevance. These groups often join together as allies in pursuing the historic preservation needs that archaeology can offer, most often as it can help provide answers relating to the group's past. It should be noted, however, that archaeology for these groups is more often oriented toward compliance issues than academic ones.

A fundamental issue that creates problems within tribal historic preservation programmes is that tribes, by virtue of the federal regulations regarding assumption of the SHPO's duties on tribal lands, must organize their preservation programmes according to Western scientific and legal concepts. Outside of the consultation required by the NHPA, this format tends to discount Indigenous perspectives of the past rather than foreground it, thereby preventing an equal relationship between preservation "partners." It continues to privilege the archaeologist rather than the cultural practitioner.

What Can Archaeology Do to Become More Relevant to Indigenous People?

In order to increase its relevance, archaeology should look to find ways where it can become a means of supporting the things about which a culture wants to gather information. It should ask particular groups to identify areas of interest and then try to find answers that have meaning and relevance – it should become the "tool" rather than the "answer." At this point in time, archaeology exists primarily within itself and for its own purposes, remaining undervalued and unacknowledged because it offers little of value to outsiders.

Because of the importance of oral tradition with tribal groups, many tribal historic preservation plans emphasize the importance of on-going consultation with tribal elders and spiritual leaders with special knowledge of the tribe's traditions. Tribal groups also have given emphasis to the importance of protecting "traditional cultural properties," places that are eligible for inclusion on the National Register of Historic Places. These places are not important because of any archaeological or historical reasons, but because of their association with cultural practices and beliefs that are rooted in the history of the community. These places continue to be important in maintaining the continuity of the community's traditional beliefs and practises. Archaeology can provide a time depth that transcends the written record and one that gives hints at ways that human populations have interacted with the environment

and with other culture groups within their interaction spheres. But, in and of itself, archaeology cannot and does not answer these questions – it only gives the opportunity to *archaeologists* to *interpret* the material remains left by other cultures as a means of developing plausible constructions of past cultural actions. The “Past” is undiscoverable, and archaeological reconstructions of that past is too embedded in our own cultural backgrounds to be free of personal biases that influence not only how we interpret things and the meanings we give to those interpretations but also the stories we weave from those interpretations and relationships. The archaeological past is not “discovered,” it is created.

Some archaeologists are uncertain the extent to which archaeology should share its allegiances with groups outside of the academy, arguing that the discipline owes its allegiance to the archaeological record. Many see this shifting of allegiances perhaps as a question of “scientific objectivity.” These archaeologists seem to believe that archaeology should be “pure” in its approach, and outside of the influence of governmental or industrial lobbies, or equally free from social pressures often seen as “political correctness.” But, in reality, such questions are unfounded. Compliance archaeology has been a “client-based” profession for more than 50 years now, and by its very nature, owes its allegiance not only to the resource which it is supposed to protect but also to the client whose project is subject to the compliance procedures. This is not meant to imply that compliance archaeologists are anything but fully engaged in the protection of cultural resources, but merely to demonstrate that archaeologists continually are required to negotiate the often conflicting goals of the various publics with whom they must try to work.

Conversations with other Indigenous people who have experience with archaeology have centred on the need for archaeology to “bridge” the objective and the subjective aspects of heritage. A Maori archaeologist (and friend) believes that archaeology in reality has as its goal the destruction of archaeological sites rather than their protection. In essence, this is true: archaeological excavation is a destructive enterprise, and academic archaeologists (by the nature of their research) generally dig to gather the information they need to fulfil their research needs. Even compliance archaeologists, whose primary responsibilities should be to the archaeological record, must often excavate in order to determine whether the project impacts archaeological sites of “significance” or whether the project can proceed without minimal concern for the resources.

This can be seen to be in conflict with tribal concerns about the protection of archaeological sites as manifestations of ancestral occupation rather than “resources” to be exploited, impacted, or somehow mitigated. Perhaps a shift in archaeological perceptions from “resource-based” to “protection-based” would alleviate this conflicting consternation.

In addition, a more balanced approach to the practise of archaeology within cultural limitations might also help Indigenous populations feel less “used” by the political aspects to which archaeology has often been put – in most situations in former colonial lands, archaeology has been developed on the backs of the Indigenous as well as on the ancestral materials. That is, the archaeology of colonial lands has often relied on local Indigenous people as labourers to remove the accumulation of deposits under the direction of the archaeologist; likewise, the archaeologist

has developed as the expert on ancestral materials due to the wide-ranging training afforded by the Western academic system.

In a perfect future, archaeology would stop being considered a hand-maiden of colonialism, as it has been called. It would not be used as a mechanism to advance some “nationalist” agenda to prove either the fitness or futility of a particular culture, nor would it expound on the greatness derived from some ethnocentric notion of superiority. It is not within the purview of this paper to discuss the uses of archaeology to promote nationalist concepts of a shared history, nor do I wish to liken archaeology to a sub rosa attempt to destabilize Indigenous histories, but the wholesale disregarding of Indigenous histories out of hand due to the lack of a written record carries with it a not-so-subtle air of cultural superiority. One need only revisit earlier discussions of the Moundbuilder Controversy (Thomas 2000: 125–128; Watkins 2004: 338–339; Willey and Sabloff 1993: 22–25) to gain insight into the social and political impact that archaeology can have.

Archaeology as Political Action

In reality, archaeology has always been a political action. As Bruce Trigger noted “problems social scientists choose to research and (hopefully less often) the conclusions that they reach are influenced in various ways... (among them)... the attitudes and opinions that are prevalent in the societies in which they live” (Trigger 1980: 662). Alice Kehoe (1998) argued that archaeology continues to treat American Indians as belonging outside of science, and that those same scientists act as if only they have the ability to understand the processes which have led to the development of American Indian culture and prehistory.

One such recent example occurred when Douglas Owsley and Richard Jantz proposed to substitute the term “Paleoamerican” for “Paleoindian” in 2001. “Paleoindian” was the term previously applied to the archaeological cultures of the earliest inhabitants of the North American continent. While the move to rename the early inhabitants of the North American continent might seem appropriate from a purely scientific standpoint, it has very ominously political impacts on contemporary populations. Owsley and Jantz note that:

When comparing early skulls [in the New World] with available modern populations, we note that most of them fall far outside the normal range of recent population variation. More specifically, they especially fall outside the range of American Indian populations and are so different that it may be more *correct* to refer to them as Paleoamerican rather than Paleoindian as many do (Owsley and Jantz 2001: 566–567, emphasis added).

However, Owsley and Jantz’s substitution of the suffix “American” for “Indian” creates a new “vernacular code” that replaces American Indian deep history with “American history.” It is, as McEvoy and Conway (2004: 546) note, an attempt by archaeologists to “frame their claims over indigenous dead within a broad societal ‘heritage’ notion of ownership.” This “simple” change can have far-reaching impacts on the way that the general American public perceives the deep history of this continent, especially in terms of what has become a growing problem in identity politics.

It is interesting to note that Owsley and Jantz were both plaintiffs in the Kennewick case – where the remains of a 9,200-year-old skeleton was the subject of a court case to determine who might control the study and ultimate disposition of the human remains. Discovered in the Columbia River in 1996 by two individuals, the Kennewick skeleton and the resultant controversy over it pitted Native Americans against archaeologists and occasionally archaeologists against other archaeologists. When the final decision was handed down in 2004, the Kennewick skeleton was considered not to meet the definition of “Native American” under the Native American Graves Protection and Repatriation Act of 1990 (NAGPRA), and therefore not subject to repatriation. In essence, the case strengthened the idea that Western scientists, using their Western ways of “knowing” and operating within a Western legal system, were qualified to determine the fate of the earliest inhabitants of the political area now known as “America.” The proposed name change from “PaleoIndian” to “PaleoAmerican” was a not-so-subtle act to further wrest control over the country’s deepest past away from tribal groups.

The Kennewick situation has acted to widen the gulf between Native Americans and archaeologists, due in part to the continued support of Western science by Western legal systems. The control of the past by archaeologists, in the eyes of many Indigenous groups, seems to further dispossess Indigenous groups of their heritage. As Larry Zimmerman (2001: 169) has written, “it is difficult to see the historical relationship between archaeologists and Native Americans as anything but scientific colonialism,” whereby knowledge about a people is acquired and then “exported” out of the “country of origin” to be used for “processing” into intellectual material.

Elizabeth Brumfiel, past president of the American Anthropological Association and an archaeologist herself, draws attention to the relationship between contemporary, living cultures and the cultures that archaeologists study. She notes that:

Identities are frequently grounded in socially constructed understandings of the past, and this is true of those identities ascribed to others by outsiders and those identities embraced by individuals for themselves (Brumfiel 2003: 207).

In this manner, people in the *present* develop inclusive or exclusive characteristics that can be applied to differentiate *archaeological cultures* of the past.

This becomes especially potent when the people whose past is manipulated have less status or political power. As Sandra Scham notes:

The archaeology of the disenfranchised can be defined as a unique combining of culture with current and past political realities... To the extent that archaeologists in all societies typically place themselves in the role of mediator between the past and the present, however, it is disingenuous to suggest that popular views do not affect our work (Scham 2001: 190).

What Is “Archaeological Relevance”?

I am uncertain that one can define “archaeological relevance” in a way that would make everyone happy. In order to do so, perhaps, one might have to define (or consider) whether “the past” has any relevance to the present. Archaeology is a series

of techniques and methods of gathering insight about past cultures. It can offer insights into the ways that people in the past faced their daily decisions about obtaining food, water and shelter, as well as some insights into the interactions one culture might have with another. Our information, however, is often gathered through “proxies” – things that “stand in” for specific evidence. We cannot actually “see” inter-regional trade, but we can see the results of that trade. We cannot actually “see” cultural templates, but we can witness the sort of consistency in material culture that might be expected to result from the cultural expectations that might create such templates.

Developing Relevance for Global Perspectives

What can archaeology offer? Are we destined to be forever tied to King Tut and Golden Treasures? What good is archaeology?

There are certainly groups who find relevance of some sort in archaeology, in spite of the political aspects of it. Some are descendants of cultural groups whose past is delineated by archaeology, others are those who earn their livelihood “doing” archaeology, and still others are those who are enamoured of archaeology. However, the largest portion of the general population may or may not see any relevance of archaeology to day-to-day life, and it is this group that archaeology needs to focus its public education and outreach energies on.

Indigenous groups can continue to find utility to archaeology even if archaeology does not change. Within the U.S., requirements for compliance with federal legislation aimed at protecting America’s natural and cultural environments will continue to drive archaeological work relating to tribal needs. Basic archaeological answers to the questions of “Who?,” “What?,” “When?” and “Where?” will meet up the requirements for completion of tribal projects. Basic cultural historical approaches to the delineation and recordation of cultural deposits will also meet the federal intentions of a “one-size-fits-all” approach to CRM and historic preservation.

However, if archaeology wishes to go beyond the status of mere “utility” and on to one of true relevance, it must change. It must stop seeing itself as the “finder of truths” outside of a culture and establish working partnerships aimed at sharing the development of programmatic approaches to gather data to understand the cultural meanings of past events. These partnerships will be painful to some in that it will mean giving up the status as “expert” and taking on one of collaborator – “co-labouring” with others toward a common goal. These partnerships will likely draw upon known examples, but each one will need to rely on the definition of relevance determined by particular groups. For some, relevance will be based on shared governance of the past, with archaeologists providing the technical tools to help a tribal group answer its own questions about cultural issues. For others, relevance will be built around shared expertise, with oral traditions presented alongside of scientific ones in order to create a shared version of the past.

Whether this version of archaeology will look more like “Indigenous archaeology” (see Nicholas 2008) or “community based participatory archaeology” (see Atalay 2006), it will be different than the majority of archaeology that is practised today. It will likely be based on tribal sensibilities (however defined) and will be an extension of tribal sovereignty. It will be client-based in that it will rely on the client (the tribe) to determine the range, focus and product of its work. It might rely on excavation to document the manifestations of the past or it might rely on preservation through avoidance.

For those who wish concrete answers, tribally relevant archaeology may be frustrating and fulfilling, where the search is as much for “alternatives” as it is for “answers.” It will not be so much about finding as it will be about the process of asking, integrating and sharing.

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Chapter 19

Secrets of the Past, Archaeology, and the Public

Lynne Sebastian

Much of this book is about the relevance of archaeology in the sense of using information gained from the study of the past to inform decision-making in the present and the future. That is important. Among the unique gifts that archaeology has to offer to society are exceptional time depth and information about *which* cultural strategies and choices worked in the past and which ones did not. But not everything needs to have practical applications. There is a great deal to be said for the sheer joy of learning for its own sake and for the unmatched wonder of reaching out across all the intervening years and even centuries and touching the life of someone who lived long ago and in a world so very different from our own.

People love archaeology. Or at least, they love the *idea* of archaeology. Like most archaeologists, I frequently meet people on airplanes or at parties who, when I respond to the “what do you do?” question, reply, “Oh! That sounds so interesting!” Of course, a not-insignificant number of them think it sounds interesting because they believe it’s about dinosaurs, but still... no one has ever said, “Man! *That* must be boring” either. And I doubt that many actuaries or telemarketers hear the other most common reply, “Wow! I’ve always wanted to do that, ever since I was a child.”

Unlike practitioners of, say, particle physics or quantum mechanics, we have a ready-made constituency who, by and large, support legal requirements for and public funding of archaeological site protection and research. All they ask of us in return is that we share with them cool stuff about the archaeological record and what it means: *The Secrets of the Past*.

Every year in the U.S. millions of dollars are spent on archaeology – surveys, testing, and full-scale data recovery through excavation. Most of this work is done as a result of laws requiring that federal agencies consider the effects of projects that they carry out, fund, or approve on historic and prehistoric sites. All of this work is paid for by the American public – either directly through tax dollars or

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indirectly as passed-through costs from development industries. Are the American people getting their money's worth in "cool stuff about the past" from all this work? Sometimes, but not nearly often enough. And although I am focusing in this essay on federally mandated archaeology, often termed "public" or "cultural resource management" (CRM) archaeology, I would point out that most archaeology carried out by academic institutions is publicly funded in one way or another as well. Thus, our academic colleagues share some responsibility in the frequent failure of archaeologists to deliver public benefits commensurate with the public money invested.

So why is this happening (or, rather, not happening)? It is certainly not for lack of high-quality archaeological work with the potential to improve and inform our understanding of the past. Over the past 30–40 years, CRM archaeology has created vast amounts of data, introduced innumerable innovations in methods and technology, and yielded many breakthroughs in our interpretations of culture history, chronology, subsistence, gender roles, organization of production, social organization, and uncounted other aspects of life in the past. The problem is not with the generation of *information*; it is with the transmission of *knowledge*.

I want to be very clear here: many CRM consulting firms have used the resources of their larger projects and more progressive clients to produce wonderful, innovative products for the public. More and more CRM firms and academic programs are exploring collaborative research and interpretation involving descendant communities. The many initiatives of the Society for American Archaeology's Public Education Committee provide a wealth of information and resources for the public, much of it utilizing information generated by public archaeology and funding from the National Park Service, the Bureau of Reclamation, and CRM firms. Programs such as the Bureau of Land Management's *Project Archaeology: Intrigue of the Past* and the USDA Forest Service's *Passport in Time* provide unique, hands-on archaeological experiences for educators and the general public. But these outstanding projects and programs are very often outside of the mainstream of day-to-day CRM work and federal legal compliance, and they tend to be driven by the vision and dedication of individuals. The questions for this essay are: why *aren't* these kinds of special efforts to give back to the public part of mainstream, workaday CRM and federal compliance, and what would it take to make that happen?

Most of the CRM archaeology carried out in this country is a result of federal agency compliance with Section 106 of the National Historic Preservation Act (NHPA). In describing the purpose of the law, NHPA says:

...the spirit and direction of the Nation are founded upon and reflected in its historic heritage; the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people [NHPA §1(a)(1–2)].

In describing the purpose of Section 106, the implementing regulation says "the Section 106 process seeks to accommodate historic preservation concerns with the needs of Federal undertakings through consultation" [36 CFR §800.1(a)]. These broad purpose statements are very clear about the direction that compliance with this federal law should take. As Section 2(1) of NHPA says, we should be working "to foster conditions under which our modern society and our prehistoric and

historic resources can exist in productive harmony and fulfill the social, economic, and other requirements of present and future generations.” And for archaeology, a big part of “fulfilling the requirements” of present and future generations should be feeding the imagination and expanding the temporal perspective of a population that lives too much in the present and views cultural and environmental change as unprecedented and unknowable.

Most of us are familiar with the Section 106 requirements: federal agencies must “take into account” the effects of their actions – including approvals, such as permits and licenses – on “historic properties,” and provide the federal Advisory Council on Historic Preservation (ACHP) with an opportunity to “comment” on those effects. The law defines historic properties as places listed on or eligible for listing on the National Register of Historic Places (NRHP). Section 110 of NHPA lays out some very general requirements for how agencies should go about meeting these requirements; the Section 106 regulation (36 CFR Part 800) provides additional detail and sets up a process for federal agency compliance. This process has four basic steps: identify historic places, determine whether those places are listed or eligible for listing on the NRHP, evaluate the nature of the effects on listed and eligible properties, and decide on measures to avoid, minimize, or mitigate any “adverse” effects – that is, effects that would diminish those qualities that make a property eligible to the NRHP. Both NHPA and the regulation require that agency decisions about these steps in the Section 106 process be informed by consultations with a variety of “consulting parties” and the public.

That’s it. That’s the whole Section 106 process, the requirements of the law and the regulation, in 200 words. OK, there is a little more to it than that – this is a federal regulation, after all, and so by definition it contains *way more* than 200 words. But fundamentally speaking, this really is all there is to it. This is a process-based law not an outcome-based law; the results of the Section 106 process – which properties will be avoided, what efforts will be undertaken to minimize some effects, and how other effects will be mitigated – are decisions made by the agency, informed but not determined by the consultation process.

Not only are the requirements of the law and the regulation few and processual rather than substantive, the regulation provides for a remarkable degree of flexibility in the implementation of those few processual requirements. There is a whole section, a *big* section of the regulation, devoted to what are called “program alternatives,” mechanisms for customizing compliance procedures. As long as an agency does the basic steps – identifying and evaluating historic properties, determining the nature of effects and deciding on measures to resolve adverse effects – the options for accomplishing those tasks are virtually unlimited. Because only the process and not the outcome of Section 106 is foreordained, the range of avoidance and mitigation options is constrained only by the creativity of the parties (and, of course, the budget of the agency or developer!).

And yet... when it comes to archaeology, most Section 106 compliance marches on day after day, year after year in a lockstep, repetitious, frequently mind-numbing cycle. Each federal undertaking is addressed on a case-by-case basis, almost as if we had never seen one of these before. Each step of each undertaking becomes a

slave to “we always,” the two deadliest words in historic preservation. “We always” pushes us toward archaeology that is too often rote in method and redundant in outcome. As I am fond of saying, “we *know* they ate corn; the public knows they ate corn. Let’s move on.” And “we always” limits the value of even good, creative archaeology when it yields the same depressingly limited or nonexistent public products every time.

I teach continuing professional education workshops on compliance with Section 106, and my constant refrains are:

- Section 106 is about balancing preservation and development
- The Section 106 process is intended to be flexible and creative
- The Section 106 choices that we make should be based on the needs of the resources, the needs of the project, and the potential for public benefit

A few years ago, a staff member from a State Historic Preservation Office (SHPO) was taking the class. This gentleman was not in the review and compliance section – he did mostly tax credit projects – and his experiences with Section 106 had been relatively few and generally painful. Toward the end of the second day of the class he came up to me during a break and exclaimed, “You make Section 106 sound like *fun*!” It wasn’t intended as a compliment. I replied, “It *is* fun, if you do it right!” That’s my story and I’m sticking to it.

Of course historic preservation compliance for every little repaving project and cell tower and well pad and 404-permitted stream crossing is not fun, and usually it is not much in the way of historic preservation either. But in large part they are not fun and do not yield much payoff for preservation because we are complying, consulting, and generally obsessing over them one-by-one instead of treating them as repetitive categories of undertakings and finding ways to handle them programmatically. Let us consult and comply *once* rather than hundreds of times. You can do that? Yes! We not only *can* do that (36 CFR 800.14(b)), we *must* do it if we ever hope to create any sort of public benefit in return for the dollars spent on Section 106 compliance for these tiny projects.

Let us take cell towers, for example: a single archaeological survey for a single cell tower is not likely to yield the kind of “Big Picture” information that will engage the imagination of the public. But a hundred cell towers in topographically similar locations in a single region? Who knows what large-scale patterns or forgotten places we might find?! By connecting all those dots, perhaps we might discover a prehistoric hilltop-to-hilltop signaling system or identify the remnants of long-lost U.S. cavalry heliograph stations. By lumping together all the little bits of mitigation money from a hundred tower projects we might generate newspaper feature articles, a public access TV show, lectures at community centers and local museums, a website, roadside markers, podcasts, a whole range of possibilities. Look, folks! We have used your money to find out something cool about the prehistory or history of our region! Alternatively, the surveys might discover a pattern of locations of shrines that were used by native people in this region prior to their forced removal. This information could enable us to work with the cell tower industry to plan tower sites in ways that would avoid these sensitive places in future projects.

Or maybe, after we have surveyed the first 50 locations and found nothing, we could agree to forego survey on the rest of the topographically identical locations and use the money saved to fund mitigation of the visual effects of some towers on especially sensitive historic properties. Or we could use the money to fund a modeling project to identify places where future towers could be sited to minimize the visual effects on National Historic Landmarks in the region. Or we could fund development of a lesson plan meeting the state standards for eighth grade math on modeling topography and predicting locations of archaeological sites. Or a lesson plan meeting the state standards for fifth grade history on change through time in communication technology.

“But wait!” I hear a voice in the back of the room crying. “You can’t do that! The regulation requires that the agency identify historic properties that will be affected by the undertaking. They have to do an archaeology survey of the footprint for each and every tower!” No, actually, they *don’t*. What the regulation requires is that the agency must make a “reasonable and good faith” effort to identify historic properties that may be affected by its undertaking. Is it reasonable to doggedly survey 50 more topographically identical locations because “we always” survey all the locations? Is it “good faith” to expend public money in such an effort when the only “benefit” that accrues to the public is 100 more identical negative survey reports full of boilerplate text?

Clearly, I have oversimplified the situation and glossed over many complicating factors. It would require considerable “up front” effort to organize such an approach and to iron out the difficulties. The point is that there is no structural, legal, or regulatory reason why we cannot adopt a programmatic approach to a multitude of small undertakings, synthesize what we have learned from our efforts, and use the results to engage and inform the public, as well as using them to make better management and compliance decisions. Without question, doing what “we always” do is the easier course. But which approach would yield the better archaeology? The better historic preservation outcome? The greater public benefit?

So why does “we always” win out over innovative approaches? It is the path of least resistance. We did it this way last time and SHPO signed off on it. If we do it this way again, we have a higher probability that it will work. The tribes did not object the last time we did it this way; who knows whether they would be OK with this other approach? Let us stick to what works – creativity would be nice, but predictability is better. Public benefits? Have the contractor do a brochure like we always do. We know how much it should cost, we know how to write the scope of work, they know how to do it, and we can check off the “public products” box on the Section 106 cover sheet.

Beyond the siren song of a known quantity and a predictable outcome, “we always” lends a false sense of black and white, right and wrong to what is, in fact, a messy negotiated process. Some CRM practitioners – consultants, agency personnel, SHPO reviewers, and tribal staff – firmly believe that “we always” is required by and encoded into the Section 106 regulation, and they like it that way. It is much easier to be sure that you are doing the right thing if you believe that the right thing is predetermined. This is not to say that there are not good reasons for seeking a predictable outcome – planning and budgeting being two of the more important

ones – and for trying to establish clear-cut right/wrong rules for the conduct of Section 106 – litigation being the first one that comes to mind. But if a review process is treated by the parties as if it were rigid and legalistic, then it will, in fact, be a rigid and legalistic process instead of being one focused on balancing competing needs and yielding public benefits.

There are several reasons why “we always” is not always as good a deal or as necessary as it seems. Let us start with litigation. Yes, it is true; if you do not do what all the other kids did in terms of identification or mitigation, somebody looking for a hook to delay or kill the project can use it as a pretext to sue you. If they are that determined to stop the project, however, they will probably sue you even if you slavishly adhere to “we always.” The important point is not whether they can sue you – it sometimes seems that anyone can sue over virtually anything. The important point is “can they WIN?”

And the answer is no, because Section 106 is a process-driven law. If you can demonstrate that you made a reasonable and good faith effort to identify affected historic properties, you have met the regulatory standard for that part of the process. If you can demonstrate that appropriate negotiations and public involvement took place in your efforts to resolve the adverse effects and that the consulting parties agreed upon the mitigation measures, as evidenced by your signed MOA, then you have met the regulatory requirements for that part of the process. Because Section 106 is designed, in both law and regulation, to find a balance, to create an *accommodation* between preservation and development, it is rarely used successfully by those bent on stopping development.

What about “we always” as the path to predictability? This is often driven by agency managers or private developer who want, reasonably enough, to do only the minimum that is required. “I’m not paying for ‘research’ or other fluff. Just do what you have to do to get the archaeology out of the way of the project and meet the basic compliance requirements.” Time is money – and of course money is money as well; so they want a fast, predictable process that does not cost any more than absolutely necessary. And well they should! An agency manager’s first responsibility is to the agency’s mission, which he or she is charged with carrying out in the public interest. It does not matter whether that mission is licensing hydro-electric facilities, building airports, ensuring national security, or carrying out multi-use management of the public lands; the mission and the fiduciary responsibilities associated with it come first.

Likewise, private companies in development industries are in business to build pipelines or cellular communication towers or wind farms or housing developments. Although these companies have a profit motive, they are also serving the public interest. The point of a pipeline is not to put pipe in the ground, but to deliver the natural gas that will provide heat for thousands of homes. The project must be completed quickly – to get the gas flowing before winter – and as economically as possible because costs are passed on to the gas company and ultimately to the consumer.

The job of the cultural resource manager is to recognize that multiple public interests are being served and to find the point of balance among them. If we follow the path of least resistance and do what “we always” do to get through the compliance

process as quickly and painlessly as possible, we may deliver the natural gas before winter. But have we spent the historic preservation money wisely? Have we delivered any public benefit relative to the historic heritage upon which “the spirit and direction of the Nation are founded?” Alternatively, if we do a whiz bang Section 106 mitigation program that costs half again as much and takes twice as long as “we always,” the gas will not get there until next July and no one will be feeling that “productive harmony” thing going on.

The trick is to find a set of trade-offs that will balance public benefits from the development and from the historic preservation efforts. Try to find a set of mitigation measures that cost the same amount of money as “we always” and take the same amount of time but actually create public benefits relative to historic preservation. Or find mitigation measures that are really good and cost a little more but will enable us to get the pipe in the ground a month earlier. Or best of all, find mitigation measures that cost less, take less time, and yield real, tangible public benefits. “Impossible!” I hear that same voice from the back of the room cry out. “That creative mitigation stuff *always* costs more and takes longer than ‘we always’.”

No, actually, it *doesn't*; sometimes it costs less and is much faster. The thing that makes “creative” mitigation creative, however, is not that it costs less or more, and not that it takes less time or more time than “we always.” It is creative because it does an excellent job of accommodating the needs of the undertaking and the mission of the agency with the needs of the historic properties while maximizing the public benefit. Let us develop a slightly fictionalized example to illustrate the difference between “we always” and “look what we did!”

Military Installation X has, as its major mission, on-the-ground training for combat troops. Though less destructive than, say, a bombing range, the training carried out here has a high potential to damage historic properties through repeated small impacts over the long term. Scattered throughout the installation lands are the remnants of numerous small, late nineteenth and early twentieth century farmsteads, three schools, a sawmill, two churches, and eleven small rural cemeteries. The inhabitants of the area were removed from their homes and land, often with very little advanced warning, when the War Department decided to build a training base here at the beginning of World War II. All of the existing above-ground structures were removed in the 1950s, but a substantial historical archaeological record remains.

A large joint training exercise is proposed that will use two of the three training areas on the installation. Determining that the exercise is an undertaking for the purposes of Section 106, and following the doctrine of “we always,” the base archaeologist goes out and flags the boundaries of all the historical archaeological sites in the two ranges and declares that these historic properties must all be avoided during the training. The training coordinator has a fit, goes to the Commanding General and says that the archaeologist is compromising the combat readiness of the troops by making realistic training impossible. The CG's chief of staff calls the head of the Environmental Section, who makes things hot for the base archaeologist and his boss. The base archaeologist brings out the sacred texts known as NHPA and 36 CFR Part 800, invokes the mystical authority known as “SHPO,” and says “the regulation

requires us to either avoid eligible archaeological sites or do data recovery through excavation.” Eventually a grudging compromise is reached through which many of the farmsteads and all of the cemeteries will be avoided, but 16 of the sites that are most in the way of the training will be excavated.

The consulting archaeologists race into the field, work feverishly to get this large number of excavations done before the training commences, and then begin analysis and write-up for a limited-distribution report that will go only to the base archaeologist’s office and to the SHPO. Several of the trainees are in a bar in town one night, complaining loudly about what a pain it is to have to avoid all those [expletive deleted] archaeology sites every time you turn around: “they are just a bunch of old farmsteads, for Pete’s sake!” The bar owner shouts “WHAT!??” As it turns out, his grandparents and their children were among the many families who were moved out to make way for the base, and his elderly dad, like many of the displaced and their descendants, is still angry about the way they were treated by their own country. “We gave up our HOMES because the army said they needed the area for training, and now you are telling me that they won’t let you train there because some of the old cellar holes and foundations still exist??!” he asks.

So as you can see, everything is going really well. The trainers are mad because their training mission is being seriously compromised. The archaeological sites are either being gradually nibbled to death by repeated minor impacts or excavated – not because we know that those particular sites have important things to tell us about life in the past, but because they are in the way. The base archaeologist’s boss is mad because he had to spend all the money that he had intended to use for rehabilitation projects on the historic houses in Officers Row to help pay the cost of extensive excavations that produced a two-volume report on old nails, corrugated tin, and broken porcelain plates that no one will ever read. And the descendant community is furious (again) because their homes weren’t important to the military when they were *living* in them, but now 60 years later they are suddenly a big deal and have to be protected from the very training that caused the people to be evicted in first place!

Now let us consider Military Installation Y – same mission, same archaeological record, and same proposed training exercise. The Installation Y archaeologist goes to her boss and asks him to arrange a meeting for them with the training coordinator. At the meeting, she brings up the GIS layer on her computer that shows site locations in the two training areas and asks if there are any parts of those areas that will already be avoided during the exercises for other reasons. The coordinator points out two substantial streamside locations that will be avoided because of endangered species habitat. As it happens, the sawmill and 8 of the 37 farmsteads in the two training areas will be within this protected area. The archaeologist proposes that these streamside closure areas be expanded just slightly to include five more of the farmsteads. The training officer agrees. Then the archaeologist shows him the locations of the cemeteries and asks about avoidance possibilities. After considerable discussion, they come up with a plan to use the cemetery locations as a training opportunity to teach the trainees strategies for avoiding damage to cemeteries and other culturally sensitive sites during military operations in other countries.

At this point, noting that 12 farmsteads have already been excavated in the two training areas, but the results have never been synthesized or disseminated beyond the limited distribution excavation reports, the archaeologist proposes the following additional mitigation measures:

- Excavation of one of the two school sites that will be affected and protection in place of the other school site.
- Excavation of the one church site that will be affected.
- Excavation of one affected farmstead that is in a very different environmental setting than all the previously excavated ones and has several unusual features.
- Synthesis of the previous farmstead excavations and an evaluation as to whether additional farmstead excavations are likely to provide important new information not available through other means.
- Initiation of a program of outreach to the descendant families to honor their sacrifice, celebrate the lives and hard work of those hardy pioneers, and build a more positive relationship between the descendant families and the installation.

Agreement is reached between the Training Command and the Environmental Section, and the archaeologist develops a more detailed mitigation proposal and forwards it to SHPO with a request for a meeting.

The SHPO loves the idea of the proposed synthesis and the various public products suggested in the mitigation plan. After determining that the affiliated Indian tribes do not have concerns about the training exercises, the archaeologist prepares an MOA which is signed in short order by command and SHPO.

The training coordinator is a hero because the trainers like the cemetery idea and the fact that they are only avoiding two other sites. The trainers are also pleased that they need only wait for the excavation of three sites before training can begin. The archaeologist's boss is delighted because all of the mitigation can be accomplished with the money available from the training budget, and he can use his budgeted funds to put new roofs on two of the houses in the Officers Row historic district and fix the water problems in three more. And he is so inspired by all the talk about public products that he saves out enough money to print some really nice brochures about Officers Row and the famous military figures who lived there as young officers. These will be given to all new base personnel and to visitors as well. The CG's chief of staff calls the Environmental Section head to say that the CG is very interested in the outreach to descendant families project and would like to participate in any commemorative events.

The base archaeologist approaches the bar owner (it was the first time she had ever been in the place, of course) about helping her to contact and open a dialogue with the descendant families. It is a long, slow process because she is attempting to overcome 60 years of bitterness and anger. But slowly she makes some progress and begins collecting oral histories and getting ideas as to what the families would like to see for a commemorative event. Nearly a year later, on a beautiful fall day, 104 members of the displaced families converge on Installation Y for the first annual Heritage Families Homecoming. Busses take the descendant families to see the cemeteries, which have been cleared of brush, mowed, and refurbished by volunteers

from the installation staff and trainees. Tables in the recreation hall are covered with photographs and antique quilts and family bibles and old cradles and rocking chairs that the visitors have brought with them – remnants of the lives lived in what is now Installation Y. The families, base personnel, and many people from the nearby town wander among the tables, laughing and talking and exchanging stories and email addresses.

The head of the Environmental Section, a botanist by training, has taken cuttings from the many heritage roses still growing wild on the old farmsteads. Now rooted and arranged in rows of small pots, these are handed out to any of the families who would like to take them home. Late in the afternoon, the archaeologist gives a presentation about using historical archaeology as a check on historical records and using oral histories as a way to enrich (and correct!) the archaeological interpretations. After drawing big laughs when she describes some of the more embarrassing ways that the archaeologists got it wrong, she tells some touching stories about some of the ways they got it right. She also gives out copies of the new book about the farmsteads of Installation Y entitled, *The Times Were Hard, But It Was Home*.

Then everyone gathers on the edge of the parade ground and the Commanding General unveils a newly installed obelisk. He reads aloud the inscription on its, which says, “We will not forget our heritage families for they are unsung heroes who surrendered their homes and way of life for the sake of this nation.”¹ Turning to the small group of elderly survivors seated in chairs beside the monument, he snaps to attention and salutes them. There is not a dry eye in the crowd.

What would it take to make outcomes such as these routine parts of mainstream compliance? No changes in the law, no changes in the regulation, not even any changes in guidance. All it takes is creativity and a willingness to work with others. All it takes is a focus on the needs of the mission, the needs of the resources, and the public benefit – the hallmarks of excellence in compliance.

¹This like many parts of the fictionalized scenario, is based on actual cases. This inscription appears on an obelisk honoring the descendant families of Ft. Polk in Louisiana.

Chapter 20

Envisioning Engaged and Useful Archaeologies

Barbara J. Little

I've been asked to consider how our current historic preservation system might be improved in light of the contemporary relevance of archaeology: What works? What would work better? What would it take to get things to work better? The inevitable accompanying questions, among many, include what works for whom and to what ends?

In many ways, the historic preservation system is worldwide, but I am speaking from the viewpoint of the U.S. and the amalgam of my experiences as an archaeologist in the U.S. federal government for over 17 years and briefer experiences in both the academic and private consultant spheres.

As a citizen and taxpayer, I start with a presumption that archaeology mandated by legislation or funded with public monies should be of public benefit.¹ Often such public benefit is construed along the lines of the Smithsonian Institution's founding mission being "for the increase and diffusion of knowledge among men," with knowledge implicitly understood as that created by scientists and specialists. The United Nations' International Council on Monuments and Sites (ICOMOS) Charter for the Protection and Management of the Archaeological Heritage, adopted in 1990, includes a clear statement affirming that knowledge constitutes the primary value of archaeology:

¹The term "public archaeology" has shifted in recent decades, from denoting archaeology done with public funds or in compliance with public law, to a much broader meaning. In my experience, professional archaeologists practice at least three main categories of public archaeology (1) cultural resource management (CRM) or cultural heritage management (CHM) under public law; (2) outreach and education with the intention to prevent looting and vandalism of archaeological places and to combat the illicit international trade in antiquities; and (3) archaeology that aims to help communities or individuals in some way or to solve societal problems. These three categories are not neatly bounded; they can overlap and in some cases, a single project may contribute to all three categories.

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The archaeological heritage constitutes the basic record of past human activities. Its protection and proper management is therefore essential to enable archaeological and other scholars to study and interpret it on behalf of and for the benefit of present and future generations.

The regulations (36 CFR 60.4) detailing criteria of significance for the National Register of Historic Places under the U.S. National Historic Preservation Act of 1966 (NHPA) include criterion (d), most often used for archaeology for properties “that have yielded, or may be likely to yield, information important in prehistory or history.”

With both passion and good reason, there are also demands – by both archaeologists and non-archaeologists – for more specific and direct benefits of value to people who are not professional archaeologists but who see that the practice of archaeology may be of benefit and useful, or of detriment and therefore in need of rehabilitation toward the public good. The clearest demonstration of such demands is provided by multigenerational activism by Native Americans, resulting in partial redress through the Native American Graves Protection and Repatriation Act (NAGPRA).

As this volume and the many citations by its contributors attest, working for the relevance of archaeology is currently a growth field, as both archaeologists and non-archaeologists seek to make the discipline useful and publicly accountable.² Such archaeology is in no way limited to that done under the legal mandates, although most archaeology done in the U.S. falls within this category. I’ve participated in some of these efforts to make archaeology relevant because I am motivated in finding the meaning and purpose in what we do as a profession that has been sanctioned and to some extent even created by the federal government (see McManamon 2006a).

To some extent, then, the quest to make archaeology serve the public is a quest of citizenship and entails questions about what kind of republic do we, as citizens, desire to co-create, as it is our responsibility to do? What is the role of knowledge and research and of our own professional positions in our society? What is the function of heritage and how does it intersect with identity and identity politics? How do we use our skills, training, and privilege (whether based on class, race, or other identities) to improve the world in which we find ourselves?

What Is Our Current Reality?

Archaeology is a fragmented practice. Not only do we find archaeologists in the various economic sectors – academic, not-for-profit, public (federal, tribal, state, and local), and private consulting companies – but we are also divided by our spe-

²It is increasingly difficult to point to a limited number of publications, since many practitioners are taking on the relevance and public benefit of archaeology, but see, e.g., Funari 2009; Little 2007, 2009, 2010; Musteata 2009; Pikiyai 2009; Sabloff 2008; Stottman 2010; Zimmerman 2006; see also the contributors to special section *The Public Meaning of Archaeological Heritage* in the *SAA Archaeological Record* 5(2); see the contributors to *Archaeological Dialogues* 16(2) introduced with the editorial: “Is Archaeology Useful? An Archaeological Dialogue.”

cialties, geography, language, identities as scientists or humanists, membership in primary professional organization, and many other characteristics.

Many archaeologists accept that what they do might make a positive difference, however they personally define it. For the most part, though, “business as usual” is what drives the day-to-day work: classes need to be taught, meetings attended, reports reviewed, scopes of work written, and budgets defended. We find ourselves working with old models that have been crammed full of modern expectations. As an example, I think about liberal arts faculty who find themselves in profit-oriented institutions that now operate on business models quite different from the “public good” goals that used to drive institutions of higher learning. I also think about archaeologists who find themselves isolated within a governmental bureaucracy in a job where one individual is expected to be the expert in all cultural resource fields. Increasing demands and expectations make it difficult to focus on how archaeology might better serve the public good.

Many of our current issues and priorities have been identified through intentional dialog within the profession over decades. I review a few of these efforts and common themes in the following paragraphs.³

The Arlie House Seminars in 1974, for example, were instrumental in shaping the current practices of cultural resource management (CRM). With funding from the National Park Service (NPS), the Society for American Archaeology (SAA) organized a series of seminars to discuss the future of archaeology, particularly in the context of the emerging practice of CRM after the passage of the National Historic Preservation Act of 1966 and the issuance in 1971 of Executive Order 11593 “Protection and Enhancement of the Cultural Environment.” Discussions about certification and accreditation, reports, management, communication, law, and American Indians, raised issues that continue to be of concern, such as ethics, costs, report publication, preservation, communication, and cooperation (McGimsey and Davis 1977).

A number of conferences during the 1980s helped focus the profession’s agenda for public outreach and education on anti-looting efforts. In his description of the

³In the U.S., the practice of archaeology expanded dramatically after passage of the National Historic Preservation Act of 1966 (NHPA), which ultimately created the CRM industry in the U.S. and without which we probably would not be engaged in professional dialogues about relevance. Congress passed NHPA in response to concerns about the adverse impacts of federal development projects such as urban renewal and highway construction on archaeological sites and historic structures. NHPA established national policy and programs for preservation by requiring agencies to consider historic properties during development. NHPA created the National Register of Historic Places (NRHP), considered the Nation’s list of places with national, state, or local significance “worthy of preservation.” The NRHP created a process by which archaeologists or others must evaluate archaeological places according to a set of criteria to judge their worthiness for preservation or data recovery as opposed to unmitigated destruction. The purpose of NHPA sets out part of the benefit envisioned by Congress (16 U.S.C. 470 et seq.): “The spirit and direction of the Nation are founded upon and reflected in its historic heritage;...the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people.”

“Presenting the Past” conference series, Wells (1991) makes it clear that there was active cooperation among individuals in the academy, state government, and the federal government. In addition, the SAA organized two conferences around the theme of site preservation. “Saving the Past for the Future” and “Saving the Past for the Future II” were held in 1989 and 1994. After the first, the SAA established the Public Education Committee, which remains a standing, and active, committee. Other such meetings include the SAA task force on curriculum (Bender and Smith 2000) that gave rise to, among other things, the curriculum project, “Making Archaeology Teaching Relevant in the XXI Century” (M.A.T.R.I.X., <http://www.indiana.edu/~arch/saa/matrix/homepage.html>). “The Public Benefits of Archaeology” conference was held in 1995, primarily sponsored by the NPS, but with an array of partners (Little 2002). In that effort, non-archaeologists joined archaeologists to explain how the field is and can be relevant and have a positive impact on the wider society.

In addition to profession’s deliberate internal efforts, advocacy, and pressure from outside the field have fundamentally changed archaeology. Watkins (2000) traces the increase in Native American protests against archaeologists to the publication in 1969 of Vine Deloria’s *Custer Died for Your Sins: An Indian Manifesto*. Twenty years of protest, pressure, and lobbying eventually led to NAGPRA. Congress passed NAGPRA in 1990 to provide for the repatriation of Native American, Native Hawaiian, and Native Alaskan human remains and objects of cultural patrimony from federal lands, which are held by federal agencies or museums that receive federal funds. Archaeology in the U.S. has changed deeply since the passage of NAGPRA (e.g., Dongoske et al. 2000; Killion 2008; Swidler et al. 1997; Watkins 2000). Archaeologists, Native American and other descendants, and local communities are continuing to figure out ways to work effectively together, creating efforts that are changing the kinds of benefits archaeology has the potential to support.

Ethical discussions, as well as the formal statements of the major professional organizations, indicate archaeologists’ responsibility to the public (e.g., Lynott and Wylie 2000; Renfrew 2000; Vitelli and Colwell-Chanthaphonh 2006; Zimmerman et al. 2003). Archaeologists have been calling on their colleagues to revitalize discussion about how archaeologists and other cultural resource professionals “conceive of, define, and assign value to archaeological places” (Mathers et al. 2005: 1). Such discussions, between archaeologists and numerous publics who claim a stake in archaeological practice and interpretation, have created venues for all players to think more broadly about how to assess value, expanding consideration of the values, and hence benefits, of archaeology beyond information (e.g., Getty Conservation Institute 2000). Kate Clark argues that analysis of value or significance is basic to every aspect of cultural heritage management:

It is vital that archaeologists become more aware of value-led planning as a powerful tool for sustaining cultural heritage in the long term. If we are to pass sites on to future generations, we need to recognize that management involves multiple values, different perspectives to our own, and genuine engagement with stakeholders and their concerns (Clark 2005: 328).

In connecting archaeology to contemporary issues, an engaged archaeology involves looking beyond the discipline itself for ways in which archaeology can contribute to society.

Critics of the federal archaeology system have charged that it values bureaucratic purpose more than either knowledge-producing or public-serving purpose. The intensity of the criticism directed at federal historic preservation, including and sometimes quite specifically archaeology, waxes and wanes. When it reached a fever pitch in the mid-1990s, the SAA briefly took on the task of renewing the federal archaeology program and recorded some minor success (Lipe and Redman 1996). Participants in the “renewing” task force identified these goals (1) improving implementation of the National Historic Preservation Act, (2) increasing professional knowledge and expertise at all levels of archaeological resource management, (3) making better use of existing information in decision making about archaeological resources, (4) improving the dissemination of information from publicly mandated archaeology, and (5) recognizing multiple interests in archaeology and archaeological practice. Many of the observations and recommendations remain current. More recently, the Advisory Council on Historic Preservation (ACHP) (<http://www.achp.gov/archguide/>) has again sought to improve the implementation of NHPA, particularly the pivotal part of the law (Section 106) and its regulation (36 CFR 800).

The system we have currently is not what everyone envisioned at the onset of CRM. McGimsey (2006), for example, expresses his frustration at the failure of the Archaeological and Historical Preservation Act of 1974 (AHPA) to develop the kind of national program envisioned by archaeologists at the time, lamenting the lack of uniform program development and commitment by federal agencies as well as the continued public unavailability of most public archaeology reports. He and others expected the NPS to take a strong leadership position to ensure appropriate actions by other agencies and to develop a nationwide contracting program that would cover even non-federal lands. In response, the Department of the Interior’s Consulting Archaeologist and NPS Chief Archaeologist Francis McManamon (2006b) explains NPS approached archaeology by including it within its historic preservation programs. McManamon doubts that, given the reality of bureaucratic competition among agencies, it would have been possible for NPS to develop a nationwide program under its direct control. Instead, NPS developed the 1983 Secretary of the Interior’s Standards and Guidelines for Archaeology and Historic Preservation (http://www.nps.gov/history/local-law/arch_stnds_0.htm). The Secretary expects agencies to develop and fund their own archaeology programs while adhering to the Standards and Guidelines.

Partly due to the NPS approach, the U.S. federal archaeology program is diffuse and spread among various departments and bureaus, each with their own primary missions. With the exception of NPS, federal agencies do not have historic preservation as their primary mission; however, federal law requires every agency to follow historic preservation laws. Although each is subject to the same laws and uniform regulations, each complies with legal requirements according to their own policies and priorities. Given this reality, it is not surprising that federal archaeology is fragmented and uneven.

The question, “what works now?” is increasingly complicated because archaeologists are ever more aware of the ways in which archaeology is used beyond the traditional focus on increasing information and knowledge. Expectations rise, sometimes unrealistically, and we all too quickly become disillusioned and suspicious of old ways of doing archaeology.

In many ways, archaeology works very well indeed, but perhaps not always in the ways twenty-first century archaeologists would like to believe. Although the field has come to understand that it has functioned as one of many tools of colonialism, it continues to grapple with the implications of that understanding (e.g., Atalay 2006; Kehoe 1998; Nicholas and Hollowell 2007; Smith and Wobst 2005). We need to continually ask how our work is relevant insofar as it supports processes and structures in long-standing and often detrimental ways. As an example, consider the following analysis by Wilcox (2009: 122) in his critique of Jared Diamond's evidence and conclusions in *Collapse: How Societies Choose to Fail or Succeed*. Wilcox confronts archaeologists' complicity in telling stories about Native peoples that have not served their subject well:

As is the case with the O'Odham, archaeologists have contributed to the mythology of the vanishing Anasazi and generated a pervasive narrative of environmental mismanagement by Native Americans. While few would agree totally with Diamond's work, North American archaeologists bear significant responsibility for many of his conclusions. Archaeological interpretations of abandonments, and a failure to integrate indigenous histories, have helped support a national mythology in which conquests are accidents and Indigenous peoples are to blame for their own problems.

The federal archaeology program, particularly because of the special relationship between the federal government and tribes, bears a special responsibility to Native descendant communities with interests in the material remains of the past.

In this selective sample of our current reality, then, archaeologists work in a wide array of settings with a wide variety of daily tasks. Daily pressures and routines drive much of the work. We have certain issues that have become accepted as common goals, including site protection, public education, the need to adhere to ethical standards, public benefit, and consultation with descendant communities. We generally work within an archaeology that is rooted in colonialism and infused with inequalities, even though there has been a good deal of energy focused on creating a more inclusive archaeology. Changes in the field come about due to internal intentional dialog, response to an engagement with external demands, and implementation of laws, regulations, policies, and administrative structures and procedures.

What Is Our Desired Future?

In some aspects, our desired future is as fragmented as our current reality. What would make archaeology "work better" depends on what we think is broken, both within the public archaeology system and within the broader scope of society within which archaeological heritage and the legally mandated system of archaeology have influence. It is not necessary to seek homogeneity to improve the system; diversity can lend strength and resilience.

In response to fragmentation and "business as usual," we might seek connections and commonalities. Archaeologists have successfully raised consciousness about topics such as the prevention of looting and the public education imperative, and

increasingly, the curation crisis and our responsibility to care for the collections and records that archaeologists create. Archaeologists have become convinced of our ethical responsibilities toward descendant communities, an attitude bolstered by increasing influence of Indigenous archaeologists. “Relevance” or “public benefit” are diffuse rallying points and yet may be completely appropriate for a diverse practice with diverse publics.

Archaeology can work with its strengths as a practice that draws on many disciplines and concerns many people. Archaeology raises consciousness and awareness and encourages different ways of seeing the world, thinking about it, and acting in it. In its ability to cross boundaries, archaeology can serve to make connections across divides such as those between the sciences and humanities and between ecosystem conservation and cultural heritage preservation. Archaeology is landscape-scale and as such crosses political and jurisdictional borders, a fact which can and sometimes does engender cooperation.

It will be difficult to rehabilitate archaeology, if we insist that it stand alone. Instead, I believe it needs to be integrated within a much broader vision of heritage, one that includes both tangible and intangible, both cultural and natural. For example, Silverman and Ruggles (2007: 17) describe how the authors in *Cultural Heritage and Human Rights* “see a direct linkage between human rights and cultural heritage at the local scale, which, in turn, ultimately contributes, in the aggregate, to fulfillment of the global [justice] goal.” Colwell-Chanthaphonh and Ferguson (2004) promote an ethical framework to reconcile scientific and humanistic aspects of the Native American past. Reimagining the lens of gender is another crucial contribution (e.g., Joyce 2008); race and white privilege another (e.g., Blakey 2001; Epperson 2004; Franklin 1997; LaRoche and Blakey 1997; McDavid 2007; McDavid and Babson 1997; Mullins 2008; Orser 1998, 2007; Shackel 2003, 2007); and class and collective action another (e.g., Saitta 2007; Shackel 2009).

Larry Zimmerman and I have called for a creating a more activist, civically engaged archaeology in the public interest. We recognize that the public interest is notoriously difficult to define, as there are numerous publics and numerous interests (Little and Zimmerman 2010). I suggest that an archaeology that works toward the democratic ideals of social justice and equality is a relevant archaeology.⁴ Various archaeologies seek to change mainstream practice. Feminist, Indigenous, anti-racist, vindicationist, and Marxist archaeologists offer powerful models that share some goals and methods toward rehabilitating archaeology from its colonial and androcentric roots. Atalay (2006: 284) states a shared goal this way:

If our goal is to decolonize archaeology, we must then continue to explore ways to create an ethical and socially just practice of archaeological research—one that is in synch with and contributes to the goals, aims, hopes, and curiosities of the communities whose past and heritage are under study, using methods and practices that are harmonious with their own worldviews, traditional knowledges, and lifeways.

Archaeology’s desired future is in a state of perpetual creation. Defining purposes and making connections among people and practices will move archaeology forward.

⁴I don’t claim that it is the only relevant archaeology.

Decolonizing the field – whatever terminology we use to describe the process – takes the combined effort and joint participation of archaeological, descendant, and local communities. Communication and collaboration are key elements to all aspects of a socially relevant and responsible archaeology.

What Can We Do?

There is no clear or linear path in a cocreated future. Instead, there are bound to be many paths and contributions. If we want to change the way that public archaeology works, we will approach both leadership and vision as collaborative, inclusive, and shared. If we are to get to an imagined future, we need to be intentional about it. In these suggestions, I am primarily referring to archaeologists as the active parties, in collaboration with other practitioners and communities with interests in our work.

Make Connections Across Archaeology and Across Practices

Communications and collaboration are essential to working across agendas and across sectors.

Much as been made of the need to train students to be better CRM practitioners, but training is also needed for practitioners to be good managers who can understand and navigate the political terrain of governmental bureaucracies. Skills needed include the ability and persistence to educate upper management and make a compelling case (over and over again) that the goals of managers and agencies mesh with the goals of historic preservation as envisioned by Congress. Practitioners need administrative skills and expertise with budgets, resource allocation, and organizational structure.

Unfortunately, there is still a large divide perceived between academics and practicing archaeologists fueled in part by the widespread assumption that innovation and ideas come only from the academy and move into the field. Archaeologists outside of academia are in a similar position to that of applied anthropologists, who find that this disciplinary assumption both haunts and hamstring their work.⁵ The model implies that thinking and doing are separate activities. It suggests that theory informs practice but the reverse does not occur. Baba (1998, 2009) has made important suggestions for a unity of theory and practice to feed what she has called a “spiral of knowledge.” We can consciously tap the constructive interplay between theory and practice to create new ways of working that have their genesis in projects and communities.

As mentioned above, the profession has created and promoted the successful practice of CRM through a variety of tools and practices, among them the focused

⁵For archaeology as applied anthropology, see, for example, Shackel and Chambers (2004) and Stottman (2010).

workshop or conference. Such meetings of the minds have served archaeologists well. There is great value in bringing people together to focus on a problem or situation, create a plan with goals and methods for achieving those goals, and call on others to join in working toward an envisioned future. Crosscutting efforts are most successful when participants create broad coalitions and partnerships. Following through to accomplish the planned goals is, of course, essential. We could better integrate the public goals of archaeology and applied anthropology, particularly ethnography and the other fields methodologically and topically connected with archaeology such as architectural conservation, landscape, museum, formal and informal education, tourism, law enforcement, land management, and natural resource conservation. Public archaeology and public history share goals of collaboration with publics and promoting social justice (e.g., Green 2000).

Through both professional organizations and other means, we should make more opportunities for getting people together to share expertise and experience, identify challenges, envision a better future, and plan specific actions for cocreating new practices. New technologies might make it easier for such gatherings to be truly inclusive, but they can also work to exclude. Therefore, even our approach to getting together needs to be intentional, if we are to avoid the trap of rounding up the “usual suspects” and finding out what we already know.

Rethink Historic Preservation, Ecological Conservation, and the Connections Between Them

Archaeology is only a part of the mix of historic preservation and larger issues of land use and management. I believe that a viable future for archaeology relies on its integration into a larger scale of practice that includes reconceptualizing federal approaches to natural and cultural heritage in both policy and practice.

Consider the vision offered by the independent membership organization, the National Parks Conservation Association (NPCA). In anticipation of the National Park Service centennial in 2016, NPCA convened the National Parks Second Century Commission, which held public meetings across the country from 2008 to 2009. The commission envisions a potential future in which national parks forge a better world and their report (NPCA 2009) makes a series of bold and far-reaching recommendations to the President, Congress, and the National Park Service. I quote the first part of the first of four recommendations here because it challenges the federal government to do a better job, to integrate stewardship of natural and cultural resources, and to integrate stewardship with citizen engagement.

This recommendation to the President lays out a vision for integrating the work of federal agencies to create a new ethic of conservation and preservation (NPCA 2009: 42):

To advance the 21st-century National Park idea, The President of the United States should: establish a task force, including the National Park Service and other federal agencies involved in conservation and historic preservation, along with their state, local, and nonprofit partners, to map a national strategy for protecting America’s natural and cultural heritage.

The task force should:

- In consultation with foremost scholars and scientists, define critical indicators and standards for ecosystem integrity.
- Identify bold and achievable goals for preserving the nation's heritage resources.
- Articulate the role of National Parks, in cooperation with National Forests, National Wildlife Refuges, other federal agencies, state parks, and other public, tribal, and private lands and waters, in carrying out the nation's conservation and preservation strategy.

NCPA recognizes that changes in the national park system alone will not address the natural conservation and historic preservation needs of the country. A much wider network of people and organizations with common vision and common purpose is necessary. There are broad implications for archaeology and historic preservation on both public and public lands with public and private partners. Barrett (2010) offers specific suggestions about the roles of several different nongovernmental and governmental organizations. She takes on the challenge of integrating both natural resource conservation and historic preservation efforts on behalf of large-scale landscapes.

Advocate

Innovation does not routinely come from governmental agencies but from the efforts of citizens working tirelessly to achieve changes in legislation, regulation, policies, and/or practices. We cannot expect government action without external pressure. I believe that we need to recognize that “compliance” is not the point, if we want a federal preservation program that serves the public good.

In professional organizations, government affairs committees often pay attention to legislation, but there are everyday and periodic activities that would respond to public attention. Practitioners outside of government can “adopt” public lands and be involved with the decision making there: get on the mail and email lists, comment on initiatives, and be the watchdog.

Practitioners interested in increased collaboration and citizen engagement can pressure agencies to improve their techniques of public participation and adopt collaborative decision making through public engagement. Agencies will not necessarily adopt collaborative approaches without pressure, not because individuals are automatically opposed to the idea, but because such work requires training (time and funds). Collaborative approaches require a willingness to trust the process rather than predetermining an outcome. To encourage agencies to collaborate, share success stories in the media, with lawmakers, and in the venues where agency personnel learn⁶ (e.g., Leong et al. 2009; Martinez 2006).

⁶The George Wright Society biennial conference and journal provide one of the collection points for integrating natural and cultural heritage management in protected lands. An increasing number of contributors are concerned with engaging the public in decision making. See <http://www.georgewright.org/>.

Overall, what we can do relates to what we are willing to do. Envisioning engaged and useful archaeologies requires commitment to a process of cocreating the discipline with all of its participants and beneficiaries. I suggest that it is usually more productive to advocate than block. That is, be willing to be for instead of against, to offer solutions in addition to critique. Recognize that effective advocacy requires patience and persistence. I can think of no better words with which to close than the advice Frederick Douglass gave when asked about the most important thing a person could do. Douglass famously replied, “Agitate, agitate, agitate.”

Disclaimer The views expressed in this publication do not necessarily reflect the views of the U.S. National Park Service or the U.S. Government.

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Chapter 21

Conclusion: The Contemporary Relevance of Archaeology – Archaeology and the Real World?

Joe Flatman

Introduction

The practitioners drawn together in this book have debated and in some cases disagreed about what relevance archaeology has to society and even what the term “relevance” means to the discipline of archaeology. Taking its lead from several contributors, this concluding chapter makes some personal observations on the relevance of archaeology now and in the future. For the “now” are highlighted the economic benefits of archaeology, the only way in which it seems possible to make politicians pay attention to a topic in the present day – “money-talks” as they say, and archaeology needs to start getting a better return on its not inconsiderable investment. For the “future” is explored the role that archaeology can play in reshaping contemporary society and, hopefully, help create a safer, happier, and more equal world.

What all of this comes down to is that archaeology is part of the fabric of society. Not a desirable extra: *a quintessential part*. It is in the interests of archaeologists in particular and the public in general to better acknowledge this. To state this is more than mere passive agreement or acceptance of the current unsatisfactory status quo in which archaeology is woefully undervalued – it is a call for active, politicised engagement both as individuals and as a community, using our knowledge and skills to fight actively for archaeology. Archaeology needs to reengage with – in order to reenergise – local, regional, national and global debates that so regularly utilise archaeological data but so rarely formally *acknowledge* this.

In particular, two great challenges face global society in the twenty-first century that archaeology can – must – play a part in shaping responses to: first, climate change and second, resource scarcity. How specific governments choose to manage

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their responses to these challenges, in particular how they make changes to social structures and laws (including heritage management laws) is one part of the response to these challenges that archaeologists can play a role in “on the ground,” individually as well as collectively – actively lobbying for legislative and management changes that they believe in as well as enacting change themselves through their daily work, being truly “activist” archaeologists. How communities of nations respond on a broader, geopolitical level to these challenges is then something that archaeology can play a wider role in informing – the lessons to be learned from archaeology of the fall of old and the rise of new “powers,” the appearance of new technologies, and the exploration of new locations in the search for new resources.

Who says archaeology is not “relevant” if it can engage in such world-changing debates? The task at hand is to better demonstrate this relevance.

Relevance Now

As an archaeologist I am employed within a profession regulated both formally and informally by the state, funded by public as well as private finance – a regulated free-market. I fiscally as well as morally support this system, and I am in return supported by it, individually via my work and corporately via the excellent social welfare system of Britain. I am also both a supporter and beneficiary of private enterprise, again professionally as well as personally: although employed jointly by a university and local government, the greater proportion of the income streams that are used to pay my salary are ultimately derived on the one hand from taxes and on the other hand from capital-driven innovation and investment by these organisations. The international situation may vary, but within the territorial boundaries of my nation state (and with comparable models at work within the boundaries of many other nations), the “polluter pays” principle that funds the majority of archaeological activity – including the majority of my own work – is a well-established system that works, if not perfectly, then of a fashion, which has at heart a positive *objective* if not necessarily a positive outcome, and which is accepted both as an economic imperative as well as a social necessity.

If archaeologists do not “make” things, we do still “produce,” and by any standards, archaeology contributes to society more than it costs, even in terms of pure financial profit/loss. This is the ultimate, market-led reality of archaeology, and in the increasingly brutal economic circumstances of the early twenty-first century it appears to be the only argument that holds much sway any more (see Moshenska 2009 for more detail on this, and also the author’s reply to Moshenska, Flatman 2009. See also Aitchison 2009 for discussion of the pure “economics” of contemporary archaeology). As Moshenska usefully outlines (2009: 46), there are five types of “archaeological commodities – things possessing value” (1) materials; (2) knowledge/skills; (3) work; (4) experience and (5) imagery. To this can then be added some startling and useful data about the purely economic value of “heritage” in

contemporary society – as an indicative example from the UK for the financial year 2009–2010 (see Davies 2010 citing HLF 2010; Heritage Alliance 2010):

- Tourism is the UK's fifth largest industry and its third largest export earner: Specifically *heritage tourist* spending (including that on attractions, food and accommodation) directly generates £4.3 billion of GDP and employment for 113,000 people – making heritage tourism comparable to the film, motor-vehicle manufacturing and advertising industries.
- The wider impacts of heritage tourism on the UK economy (i.e. supply chain impacts on goods and services) increase this heritage tourism contribution to £11.9 billion of GDP and 270,000 jobs [some estimates put this figure even higher, as much as £20.6 billion of GDP and 466,000 jobs (Heritage Alliance 2010)].
- There are over 31 million *paying* visits a year to heritage attractions in England alone; 69% of the population of England (29 million people) purposefully visited an historic site in the past year (figures for Scotland and Wales are not available).
- Historic sites are a key driver of international tourism in the UK: More inbound tourists plan to visit historic sites than to visit the theatre, museums and galleries or sporting events. Ten million holiday trips are made by overseas visitors to the UK each year – four in ten of these visitors cite heritage as their primary motivation for visiting the UK.
- Increased visitor numbers to heritage sites have mitigated the impact of the global recession on the UK (helped partly by a weak British pound against other currencies): At the peak of the recession in the summer of 2009, visits to English Heritage properties increased by 17% and to National Trust properties by 20%. Such visits are expected to grow by 2.5% between 2009 and 2018, well above the general national prospects for growth.
- More than *ten times* as many people belong to heritage organisations as belong to political parties in the UK: In the summer of 2009 membership of the National Trust reached an all time high of 3.8 million people. Sixty-six percent of the historic environment of the UK is supported, managed or owned privately or by civic heritage bodies.
- Heritage Open Days are the biggest annual voluntary cultural event in England: In 2009, these attracted over one million people to over 4,000 local events and sites, representing an in-kind contribution of time by volunteers to the value of £3.8 million. There are over 5,000 heritage bodies in the UK and more than 400,000 people volunteer in heritage activities every year. Of these, archaeology alone contributes over 2,000 community archaeology groups with over 200,000 members.
- Over £120 million is contributed to the UK economy each year through the heritage planning regulatory system under Planning Policy Statement No. 5: Planning for the Historic Environment [and it is estimated that there was a total of 6,233 individuals in the UK archaeological employment as of 1 April 2010 (Aitchison 2010: 1)].

- The DCMS budget (the government department responsible for heritage) represents only 0.8% of total government spending: Only 4% of this budget (0.032% of total government spending!) directly funds the built heritage.

Some of the products of these archaeological commodities are thus *tangible*: Publications and reports, Web sites, TV and radio media that people use and even pay for; lectures, seminars and presentations given to public and private audiences alike, usually in return for a fee of one sort or another; excavated materials that end up on display in or storage at museums and archives that people choose to visit, and even whole historic sites that are open to the public, as well as the archaeological projects that people volunteer, some even pay, to go on in order to become formally involved in archaeology. Other products of archaeological commodities are *intangible*: the benefits to society of an enhanced understanding of our common past; the transferable skills that students gain from their studies; and the pure economics of the “polluter pays” system where legislation requires industries to pay for work on sites in advance of development. Altogether, such forms of “regulated” capitalism pay an estimated 90% of all archaeology in the UK: only some 10% of money spent comes from the public purse or private philanthropy. And that 90% of industrial funding represents at most a very few per cent of the total *costs*, let alone the end *profits*, of any development, so such environmental regulations are not the burden to or “block” on development that might be supposed. The broader intangible and purely economic benefits of archaeology and more broadly “heritage” to society are then incalculable – the money made through public interest in/participatory payment when visiting historic sites, of people choosing to pay a premium to live in old houses or historic districts, of people buying themed books, toys and computer games and watching related TV shows.

Why is archaeology relevant now? Because it does all of the above. Because it shapes places and people and makes money – and because if Britain for one stopped doing it, then that country would be both culturally as well as pure and simply fiscally poorer. That is why archaeology is relevant now.

Relevance in the Future

Governments around the world run “blue sky” events designed to help politicians and civil servants plan for the future. In the present troubling times of global terrorism, economic instability, energy and resource insecurity and climate change, such planning has taken on an urgency not seen since the height of Cold War “doomsday” planning. These planning events are fed, in part, by recent high-profile books full of doom-laden future scenarios such as Loveluck’s (2006) *The Revenge of Gaia*, Lynas’s (2007) *Six Degrees*, Weisman’s (2007) *The World Without Us* and most recent (and more realistically) Dyer’s (2010) *Climate Wars*. An intriguing example of related “academic” work are the series of workshops run by the “independent network of radical academics, independent researchers and committed campaigners” called

Rescue!History that resulted in the recent book *History at the End of the World?* (Levene et al. 2010: 11).

One example of these types of events in *government* is the “Foresight” programme run by the UK’s Department of Business, Innovation and Skills (BIS). The British MP (Member of Parliament – the lower house of the British legislature) Challen (2009: 58) outlines one such scenario for the UK role-played by the group, a scenario known as “Tribal Trading:”

The world has been through a sharp and savage energy shock. The global economic system is severely damaged and infrastructure is falling into disrepair. Long-distance travel is a luxury that few can afford and for most people, the world has shrunk to their own community. Cities have declined and local food production and services have increased. There are still some cars, but local transport is typically by bicycle and by horse. There are local conflicts over resources: lawlessness and mistrust are high.

Challen goes on to outline more extreme versions of this “Tribal Trading” scenario, escalated to a dystopian 2055 that Challen defines as “pre-medievalist” (I presume he means pre-mediaeval or “Dark Age” rather than the strict definition of “pre-medievalist,” which would be a world prior to scholars of the Middle Ages), with an effective collapse of the nation state, replaced by a “warlord,” essentially feudal, society with extremely polarised access to food, energy, water and technology and limited travel, communication and urbanism (Challen 2009: 60–61). Challen presents here a challenge: on the one hand to society at large, a warning that unless global society begins to cooperate far more effectively to meet the new challenges of the resource crisis on the one hand and climate change on the other, then we are, globally, doomed to some sort of collapse along these lines within the next one to two generations. But Challen’s challenge is also a particularly pertinent one to archaeologists: to demonstrate *how* archaeology can usefully contribute to such debates and thus *why* it is essential. No archaeologist that the author knows has ever been involved in such government planning: demonstrably they should be – if nothing else, to refute assumptions like that made by Challen that the past was, as Hobbes first suggested back in 1651, inevitably “nasty, brutish, and short.” Indeed, what is disturbing is how universally politicians, civil servants and academics alike – from BIS to Rescue!History (as unlikely an alliance as ever was made) – seem to assume that the future is inevitably grim, mainly because they seem to think that life in the past was equally bad – that global society is somehow “destined” to “collapse” in on itself as a consequence of overstressing resources. When politicians and civil servants make these types of assumptions it annoys but does not duly worry me: I am long accustomed to their making assumptions that I disagree with. But when professional academics like those who are members of Rescue!History make such assumptions I worry a lot. As an archaeologist in particular I am consistently confronted with the evidence that humans, in the past as in the present, and so I assume into the future, are (for all the bad they have undoubtedly done) ingenious, sometimes devious, clever, inventive, *innovative* and – above all – regularly kind, compassionate and thoughtful, not to mention creative, artistic and funny. This diversity of the human condition is what makes me glad to be an archaeologist, a professional paid to study the past; it is also what makes me a willing participant in the extraordinary

ongoing social experiment that is my adopted home city of London, where for all the news of fear, mistrust and violence in the press I far more often see acts of spontaneous kindness, generosity and thoughtfulness; and it is what makes me optimistic for the future, that this same generosity of spirit matched with unparalleled ingenuity will find global society a way into a future that is undoubtedly *different* from that of the past/present but which is not inevitably doomed to being *worse* than those periods. The challenge – *and it is a formidable one* – is first gain merely a place at that government table to make such arguments, and then to start to play a useful role in applying the lessons of archaeology to such scenarios in order to help create this possible future. To list but three examples that spring to mind:

- Demonstrating how societies in the past have successfully coped with major environmental changes on the large and small scale, without, inevitably, collapse.
- Demonstrating past, alternative – and most importantly attractive – models for socio-economic structures that operate in a more environmentally sustainable manner.
- Demonstrating alternative models for housing, urbanism and “sub-urbanism,” including alternative types of buildings layout and built energy efficiency.

This is not a hopelessly utopian vision of the past as a model of the future; nor is it Challen’s – and Hobbes – dystopia. It is something other all together, something new. It is both “big picture” and “small scale.” It is using archaeology to learn lessons about the past, both in terms of thinking and doing, cognition and material culture, and then applying these lessons to the current and future situation with all the advantages of communications and technology that we – at least some of us – have now, in order to build a better collective future. As the anthropologists Crate and Nuttall (2009: 395) comment in the conclusion to their influential edited volume *Anthropology and Climate Change: from Encounters to Actions*:

Anthropologists encounter climate change in situ, in the field, by being in place and encountering and pondering the physical and social evidence for and effects of climate change. Anthropology’s attention to human being means that our points of entry into data collection are people and communities. Our special skills are in interpreting and translating how a changing environment interfaces, transforms, underpins and undermines human communities.

Such anthropological/archaeological thinking, combined with such technologies, allow a very different scenario for a hypothetical UK from Challen’s to be proposed:

The world has been through a sharp energy shock. The global economic system has been irrevocably realigned, with an emphasis on barter, resource and energy efficiency: 98 percent of what was in the past deemed ‘waste’ in the [former] ‘industrialised’ world is now recycled or reused, total energy use has dropped by 60 percent (as compared against the UK’s 2010 usage levels), and 85 percent of energy now comes from renewable sources. Long-distance travel and trade is conducted by energy-efficient sailing ship, and most infrastructure is maintained at the local level, with limited central state intervention. Most foodstuffs are locally produced, and most business transactions are made over the internet, which is the central feature of most people’s daily working and leisure environments. Cities

have expanded in physical extent but have declined in overall population density, with extensive food producing areas within their boundaries: energy and resource-efficient urban farms sit alongside low-resource apartment complexes with communal social and outdoor spaces. Cars are no longer used, with local transport by foot, bicycle or energy-efficient public transport. While social inequality within communities remains in existence, levels of mistrust are no higher than those experienced in the UK's major cities in the early 21st century. Overall, crime has fallen to the lowest level since records began, because there is effectively full employment. International conflicts no longer occur because no nation has the resources to spare for offensive weapons, and the continued trade in goods and services relies on trust and cooperation. Most people have far fewer personal material possessions than their immediate ancestors, but enjoy good levels of health, life expectancy, personal freedom and privacy. There is a much improved sense of community and corporate responsibility.

This is, in part, the type of resource-efficient, low-carbon society already in existence in places like Cuba (see Buncombe 2006; International Atomic Energy Agency 2008) – as well as not being impossibly different (in terms of scale of personal possessions) from the experience of many people in Britain and the U.S. during the Great Depression of the 1920s and 1930s or (in terms of resource scarcity and travel limitations) from the lives and experiences of many people in Britain during WW2 or even the later nineteenth century. This is also a possible “detailed” view of one part of Dyer’s (2010: 181–187) 2055 scenario for the UK that is both plausible and “liveable,” and which is not apocalyptic. And of course, millions of people around the world to this day would be overjoyed to experience the type of lifestyle described above – only in the “industrialised” world does such a picture of relative resource “scarcity” seem unliveable.

Why is archaeology relevant in the future? Because it *could* do all of the above. Because archaeology continues to shape places and people – if given the chance in a far more significant and meaningful way than at present – and can *also* continue to make money. And because if Britain for one stops doing it in the future, then that country would be both culturally as well as pure and simply fiscally poorer. That is why archaeology is relevant in the future.

Conclusion: Promoting the Relevance of Archaeology

As I outlined at the start of this chapter, archaeology has often had a “shrinking violet” approach to public recognition in the past. This needs to end right now. It is time for archaeology to unashamedly claim full recognition for the impact and relevance it undoubtedly has on every aspect of society. As a starting point, propose below is a ten-point agenda for activist archaeology. Nothing below has not been said before – see for instance the varied contributions in Hamilakis and Duke (2007), Little and Shackel (2007), McGuire (2008) and Sabloff (2008) – but this is, to the author’s knowledge, the first time that such an *agenda* for action has been published (although see Krznaric 2010: 127–131 and Crate and Nuttall 2009; King 2002, 2009 also has a lot to say on this front about how to make government

heritage management systems work more effectively for both practitioners and communities alike):

1. Begin now: Start local. Tell your family, friends, colleagues, the coffee guy, the grocery store clerk, the airline attendant, everyone. Most of them do not know that the archaeological sites are under risk from things like development, climate change, or so on – they probably think it is just the natural environment that is under threat. Go proselytise.
2. Volunteer: Activist archaeology works. Think outside of the box (see point 3). Go out and get the community more involved in protecting and promoting *their own* archaeology. Volunteer to give public talks or lead public events, especially to children and teenagers who will bear the brunt of dealing with the new challenges of the twenty-first century in which archaeology might fall into the trap of being seen as a luxury, not the necessity it undoubtedly is.
3. Collaborate: Think holistically. For instance, talk to people you know who are involved in protecting the natural environment and see what you have in common as regards protecting the historic environment. Where natural environment initiatives might harm archaeological assets, lobby the environmental lobby groups to think and act responsibly.
4. Communicate: Write to any elected official you can possibly think of with a connection to this issue (that would be all of them), and tell them why archaeology matters to you as a voter. Remind them that, for instance, tourist revenues are at risk if large numbers of archaeological sites are damaged or lost. Do not forget to remind them that government – at every level – spends very little tax revenue on archaeology but gets a many-fold return in terms of money generated – that archaeology is a *net contributor to any economy*. Money-talks, so make it talk for you.
5. Instigate: If you work in local or federal government heritage management, then you are often in a position to instigate the most active protection by influencing local level decisions such as conservation management plans. Make sure you take the opportunity to comment on anything that comes across your desk – especially from natural environment colleagues who might not think so holistically (see point 3 again).
6. Demonstrate: If you work in central government heritage management then lobby hard in your respective department and any links it has (see point 3 again). If you work directly for an elected official, show them how you can make heritage protection a profit-generating vote-winner (see point 4).
7. Record: If you work in CRM then you probably see the direct impact of changes to archaeology more often than the rest of us. Think about this when you write up reports, and consider also writing an online diary, photo-journal or some other record with hard evidence for the negative impact of the energy crisis or climate change on the archaeology that substantiates our communal need for urgent action.
8. Educate: If you work in academia, make sure your classes include some element of contemporary relevance discussion in them. This need not just be in

CRM classes – think about issues like climate change in prehistory and the impact upon early agriculture, vegetation, species types and sea levels. Think also about how you can best make connections with staff in other departments. Do not allow your students or your colleagues to fall into the trap of thinking that archaeology is not as relevant as other subjects.

9. Circulate: If you do not work in archaeology, are an “avocational” archaeologist, or just simply interested, then points 1–4 above still apply to you. So too may the other points. Think about the ways in which you can make your job, hobby or contacts work in the favour of archaeology. This does not just mean archaeologists, government officials and journalists – almost everyone’s job has something to bring to bear here, and heritage at risk belongs to us all.
10. Play smart: Prioritise, energise and remember: not everything can be saved, and the clock is ticking.

Individuals and communities of archaeologists alike need to re-draw the lines of public and political engagement. The current deputy Prime Minister of the UK and leader of the Liberal Democrats, Nick Clegg, studied social anthropology at university and yet is one politician among many who does not seem to pay any attention to the lessons taught him by that discipline. Above all, therefore, there is a pressing need for archaeologists and anthropologists to engage more comprehensively with the political process – to run for office at every level, become local councillors and other forms of elected representatives, and so utilise to the common good the lessons of these disciplines. Archaeological organisations around the world similarly need to politicise, to make clear that they have not only a desire to be engaged in the “big” debates of society but also that they have a unique perspective and so contribution to make to these debates.

Why is archaeology relevant? Because archaeology can and must make these changes and engage in these debates if it – like wider society – is to survive, let alone prosper.

Epilogue: Archaeology in a Cold(er) Climate: Selling Archaeology to the Public, Politicians and the Press in a Recession

The final editing of this book was undertaken in the autumn and winter of 2010, a time of unprecedented change in the political, social and economic landscape of Great Britain, changes made by the new (as of May 2010) Conservative-Liberal coalition government:

First, the implementation of “austerity budget” funding cutbacks in the October 2010 “Comprehensive Spending Review” (HM Treasury 2010) designed to reign in the national deficit (the largest peacetime budget deficit in the history of the UK). This hit the arts and culture sector hard, and the heritage sub-sector of this *particularly* hard, with, among other cuts, English Heritage having its central government grant

cut by 32% (as opposed to only a 25% cut to EH's parent Department, the Department for Culture, Media and Sport) and the Museums, Libraries and Archives Council (MLA) (parent body of many local heritage organisations) being cut entirely, with further cuts likely to other key heritage-related organisations in the future.

Second, the development of the coalition government's "Big Society" agenda promoting a new spirit of "localism" in which the community and charity sector organisations are to play a much greater role in decision-making (including in decisions over planning and also in the provision of services to the community previously seen as the preserve of local and regional government), alongside a drive towards much higher levels of public philanthropy. Of particular concern across the winter of 2010 were consistent rumours – unconfirmed at the time of the submission of this book to the publishers in December 2010 – of a "root and branch" reform of the planning system, with the existing series of Planning Policy Statements (PPSs) – including the new Planning Policy Statement 5: Planning and the Historic Environment of March 2010 – potentially to be replaced by a new "high level" national planning policy framework that could fundamentally reform (for good or more likely for bad) the existing legal protection system for the historic environment in the UK.

Third, changes to funding structure of British universities – their effective "marketisation" – with a rise in student tuition fees (up to a possible "cap" of £9,000 per annum) matched by a drastic cut in direct support for higher education teaching in England, with an overall fall by some 70% between 2010 and 2014–2015 in the light of the "Browne Review" (of Higher Education) (Browne 2010), and – particularly damaging for archaeology – public funding to be withdrawn almost entirely from humanities and social sciences but only partially from other subjects. This last series of changes gained the greatest public attention, with mass protests of the like not seen in the UK since the unionised protests of the 1970s and 1980s, and particular fears that such changes would disproportionately harm the poor, the socially disadvantaged and women, who would be (further) discouraged from entering Higher Education by higher fees and reduced support for the arts and humanities.

Overall, these changes revealed a lot about the past successes – perhaps failures would be the better term – of not only the archaeological community, or even the "heritage" community, but in fact the wider "cultural environment" community in "getting our message across" to the public, politicians and press alike of the value – the contemporary relevance – of this sector. Despite protestations to the contrary by the new Culture Secretary, MP Jeremy Hunt, it was clear in the winter of 2010 that getting "archaeology," "heritage" and even "culture" into the unalienable, unquestioned political landscape (and so financial mindset) of Britain remained a battle still to be won. Unlike the "natural environment" or the "sciences," these have not become a "taken for granted" part of the landscape, indoctrinated into politicians as politically inviolable and financially "ring-fenced." Jeremy Hunt made this particularly clear in a speech given at the Heritage Alliance Annual General Meeting of 8th December 2010, when he repeatedly reinforced the message that the austerity measures implemented by the government – and seen by many commentators to fall

disproportionately on the cultural sector – were non-negotiable, and that any “rise” in one area of funding would have to be met by a corresponding “fall” in another in order to meet the scrutiny of the final arbiters: the Chancellor of the Exchequer and the all-powerful Treasury Department.

As a final conclusion to this book, therefore, it is worth re-acknowledging some of the basic realities – both good and bad – of the “relevance” of archaeology in society:

- Money “spent” on archaeology isn’t “wasted,” it is *invested*, since such financial contributions to the sector normally raise many times more money in “knock-on” direct and indirect financial outputs that are ever invested – e.g., such investment is an investment in the wider economy, and archaeology is thus a net contributor to the economy (see figures cited above from Davies 2010). Local politicians, in particular, need to be constantly reminded of this and invited to archaeological events. Similarly, industry needs to be reminded of the wider benefits of heritage in this light. Money spent on archaeology in the course of development is not only an investment, it is also good “risk minimization” (in that properly planned archaeological projects undertaken during, for example, the construction of new houses usually cost far less money and take far less time than improperly planned projects) *and* good public relations.
- Much more needs to be done in order to recognise and highlight the value of humanities and social sciences to society, especially the value of degrees in such subjects. Archaeology graduates, in particular, have a massive array of transferable skills gained from their degrees. The heritage sector in general, but especially the university sector, needs to work much harder to reinforce this message to prospective, current and former students alike, instilling a lifetime of engagement with archaeology, especially among those who do not remain in archaeology after their degree but who enter other sectors – including especially business, media and politics – where they might be in an influential position to support and promote archaeology.
- The heritage charity sector needs to “upskill” its management membership: for too long, the boards of trustees of archaeological charities and the like have been primarily drawn from the “professional” archaeological community, with limited input from industry. This “skills balance” needs to be inverted, with interested business people, professional PR and media workers and the like forming the core of such boards of trustees, complemented and advised by a much smaller number of “worthy” archaeologists. This is a “professionalisation” as well as a further step to wider community involvement in the historic environment, and would help put such organisations (and so the sector) on a firmer financial footing, fully utilising the “business” skills of such members.
- Archaeologists should above all remind everyone that archaeology is FUN and AWESOME! This relates in particular to the pursuit of serious “heritage” philanthropy, which has been notably lacking in the sector to date. Heritage philanthropy is often seen as worthy but dull – preserving “in aspic” a “lost” past, and thus not appealing to many rich people who enjoy life and its material pleasures! Such a perspective is not (nearly) so common in other sectors that enjoy much

higher levels of philanthropic involvement: heritage needs to change its game and make clear that as much - more! – fun can be had by investing in archaeology as by, say, buying (yet another) another sports car for a collection or giving a major donation to an art gallery. Archaeology should be one of the most appealing of areas for philanthropic involvement, by virtue of its lively, activity-based consideration of the pleasures and perils of human existence.

- Archaeologists and the wider related heritage community needs to constantly remind people that the “natural” environment they so cherish and are willing to spend money on to protect is in fact a “cultural” and so above all an *historic* environment. With the possible exception of some parts of the Arctic and Antarctic and the very deepest and most inaccessible corners of the ocean (but *including* near space and the Moon), all places have been touched by humans, influenced by humans and adapted by humans, in many cases over millennia. The “environment” is inherently historic, and so the study, understanding, management and protection of this environment essential.

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