Repatriation legislation in the United States has become a social and political emblem for Native people. It has strengthened and accelerated the movement to recover ancestral human remains and culturally sensitive objects from museums, universities, and other institutions around the world (Hubert and Fforde 2002; West 1996). The repatriation movement is also of signal importance to archaeologists and other researchers working in a variety of contexts in which human remains and culturally sensitive objects of Native peoples have been discovered, housed, and studied for more than a century (G. Clark 1996; Ferguson 1996; Meighan 1992; Rose, Green, and Green 1996; Thomas 2000; Watkins 2000; Zimmerman 1997).

With the latter issue in mind, the School of American Research (SAR; now the School for Advanced Research on the Human Experience) and the Society for Applied Anthropology (SfAA) hosted a series of meetings in 2004 and 2005. There, a small group of anthropological archaeologists looked at the process of repatriation and its role as a force of change in contemporary research and education. Part of an ongoing collaboration between SAR and SfAA on issues of central importance to anthropology, the meetings provided an opportunity to begin a review and analysis of cultural change and praxis within archaeology, anthropology, and museums in the United States in response to the movement.
Since 1989, and in some cases well beforehand, thousands of human remains and many thousands of objects of a funerary, sacred, or patrimonial character have been returned to indigenous communities in the United States under federal repatriation legislation. Seminar participants examined the field of anthropology before and after passage of the Native American Graves Protection and Repatriation Act (NAGPRA) in 1990 and its precursor at the Smithsonian Institution, the National Museum of the American Indian (NMAI) Act of 1989. These laws mandate that museums and other repositories of Native American human remains and objects share information with, consult with, and return requested items subject to the statutes to federally recognized tribes and Native Alaskan and Hawaiian communities defined in the legislation.

For many Native American groups in the United States and elsewhere, the subject of repatriation is closely related to issues of cultural survival, community revitalization, knowledge and language preservation, protection of sacred sites, and political sovereignty (White Deer 1997). Many Native Americans have a spiritual and religious motivation for their involvement in the repatriation movement that transcends any discourse or critique of archaeological method and theory. How and why archaeologists do what they do is often an ancillary concern to Native peoples, who are primarily motivated by making sure that their ancestors receive culturally appropriate treatment. Archaeology, physical anthropology, and museum anthropology, however, are profoundly implicated in this issue, with effects across the board, from access to data to research methods, scholarship, ethics, collaboration, consultation, and public outreach. The SAR–SfAA seminar, held in Santa Fe, centered not on matters of compliance with the mandate, its legal ramifications, or even the effects of repatriation for Native American communities, as a number of important volumes already have done (e.g., Bray and Killion 1994; Fine-Dare 2002; Mihesuah 2000b; Swidler et al. 1997; Thomas 2000). Rather, the seminar participants focused on changes the federally mandated repatriation process has wrought in professional practices, theory building, and training the next generation of anthropologists who will work in museums, universities, and other organizations worldwide (Ferguson 1996).

ASSESSING THE EFFECTS OF REPATRIATION

Assessing the effects of repatriation on North American archaeology is becoming somewhat easier as the movement continues to mature and expand during its second decade of implementation in the United States. Repatriation is part of a set of related issues that play a powerful and per-
active role in the development of the discipline as archaeologists and allied researchers redefine and, hopefully, improve their relations with the people and cultures whose past they have depended on to study for more than a century. The ownership of indigenous knowledge and artistic creations (Brown 2003), the protection of sacred sites (Carmichael et al. 1997; Gulliford 2000; Mills and Ferguson 1998), and Native stewardship of cultural resources (Ferguson 1996; Swidler et al. 1997; Watkins 2000), as well as the larger issues of tribal sovereignty, self-determination, and economic development, all bear, directly or indirectly, on the evolution of archaeological praxis in North America and beyond (Fine-Dare 2002 and chapter 2, this volume; Kehoe and Emmerichs 1999; Thomas 2000; Trigger 1989).

Joined with repatriation, which requires “meaningful” (see Stapp and Burney 2002 and Stapp, chapter 12, this volume) consultation with Native groups on the evaluation and custody of human remains and objects protected by federal statute, these factors have begun to impact the field and its intellectual development in ways unimagined only a few decades ago.

The resolution of contemporary issues with Native peoples, codified (if imperfectly realized) by implementation of repatriation legislation, also touches on the reevaluation of some of the most basic theoretical and methodological tenets of the field. New light on the peopling of the Americas (Adovasio and Page 2002; Bonnichsen 1999; Dillehay 2000; Dixon 2000a; Stanford and Bradley 1999; Strauss 2000), better understanding of the biological, social, and material consequences of contact and colonization (e.g., Dobyns 1993; Thornton 1987; Verano and Ubelaker 1992), and increased knowledge of the meaning and importance of culturally sensitive objects and sites among Native American communities (Brown 2003; Merrill, Ladd, and Ferguson 1993; Messenger 1989; Stoffle and Evans 1990; Tall Bull and Price 1993) are just a few examples of areas where the increase and diffusion of knowledge within anthropology and archaeology have coincided with the repatriation mandate. Many of these changes may not be directly attributed to the impact of repatriation. They nevertheless have co-occurred as a bundle of related developments, while repatriation itself moved to the forefront of the field, and they are intimately and profoundly colored by the larger political and social environment within which repatriation has unfolded.

In fact, repatriation and other processes related to indigenous rights and participation in American archaeology may well come to rank with other historic movements that have acted to change the face of the field—from the shift to culture-historical and ecological perspectives during the first half of the twentieth century (Childe 1925; J. Clarke 1939; Ford and
Willey 1941; Kidder 1924; Steward and Setzler 1938) to the widespread adoption of more explicit scientific methods for studying the archaeological record that accelerated in the 1950s (Binford and Binford 1968; D. Clarke 1968; Taylor 1948). As one of the “ultimate post-modern challenges” to the discipline (Elizabeth Boone, Director, Pre-Columbian Studies, Dumbarton Oaks Research Library and Collection, personal communication, 1993), repatriation questions the value and prerogatives of establishment science as customarily applied in archaeology. Like gender, politics, agency, and any number of other topics that emerged in archaeology’s post-processual phase, repatriation will remain an enduring issue of the “post-post-processual” era. Repatriation presents a basic challenge to practitioners (theoreticians, methodologists, teachers, and promoters) of all stripes—that archaeologists examine the social and political context of their research enterprise more explicitly and, most importantly, make the goals and accomplishments of the profession clearer and more accessible (“open”) to a wider range of constituents (Goldstein and Kintigh 1990) than ever before.

As Thomas recently pointed out (2000 and chapter 3, this volume), repatriation has acted to reestablish some of the centrality that involvement with the concerns and interests of descendant communities has held for the practice of anthropological archaeology in the Americas at different times in the past. Following reassessment and tempering of processual archaeology’s explicitly scientific agenda, dominant during the 1970s and 1980s, repatriation has emerged in conjunction with a growing emphasis on humanist (Thomas 1998:57–64) and community-centered studies in archaeology (see Loring, chapter 10, and Stapp, chapter 12, both this volume; Stapp and Burney 2002, among others). These trends establish new contexts for collaboration and provide unique opportunities for combining Native American heritage studies with many of the core theoretical objectives of the field (e.g., Worl 2005). Few within the discipline could have imagined the effects that repatriation legislation would have on archaeology when it was originally signed into law in 1989 and 1990. Many of those concerned with the issue initially fell into either overly pessimistic (“end of science as we know it”) or overly optimistic (“right all the wrongs of the past”) camps and into debates that quickly framed the issue as a post-modern clash of entrenched Native American and “scientific American” ideologies in gridlock (e.g., Benedict 2003). The actual or at least observable results of this movement to date (e.g., Kakaliouras, chapter 6, this volume; Killion and Molloy 2002) seem to fall somewhere in between these two extremes, however. Many of the outcomes that have emerged make
sense only in retrospect. For example, that the repatriation issue, largely a critique of standard archaeological praxis, would induce Native Americans and members of other aboriginal groups outside the United States to revisit some of the fundamentals of the discipline and to call for anthropologists to approach the use of oral traditions more critically and develop ethnographic methods that solve contemporary problems might still come as a surprise to many in the academy (Fine-Dare, chapter 2, this volume, and 2002:188, citing Weiner 1995).

Now, in 2008, it is possible to look back on how the response to repatriation has evolved in practice and theory and make some generalizations based on the casework, viewpoints, and personal experiences of those involved. As I argue here (also see Killion, chapter 7, this volume), the routine practices adopted by participants charged with carrying out the repatriation mandate in a variety of everyday organizational and social contexts are the key factors for understanding the effect of repatriation on contemporary archaeology. Below, I examine some of the emergent properties of this movement and its effects on the field at large and on our ability to better envision and, hopefully, understand the past.

EXPANDING NETWORKS FOR ARCHAEOLOGICAL RESEARCH: THE INTEGRATION OF KNOWLEDGE TRADITIONS

Clearly, one of the most salient outcomes of repatriation for the discipline is the long-term place this process has established for itself within archaeology and related fields in the United States and elsewhere. As many authors have pointed out, “repatriation [NAGPRA] is forever” (e.g., this volume; Rose, Green, and Green 1996:81). Indeed, repatriation is an open-ended process under the law and, by definition, will continue to require compliance for the foreseeable future. But repatriation is not only forever, it is also everywhere. Repatriation, an inherently pervasive phenomenon, has spread and established itself well beyond the world of museum anthropology, federal archaeology, and contemporary cultural resource management—places where statutory compliance is required and most apparent. These are the areas most impacted by the law and, coincidentally, the sectors of archaeological practice that possibly generate the most employment within the field. Thus these are the domains of archaeology that will continue to have an important influence on extending repatriation’s impact in professional practice. But the topic of repatriation is also beginning to gain currency and prominence in academic and research contexts. The issue is treated routinely in basic introductory texts (Peregrine 2003; Sutton and
Yohe 2003; Thomas and Kelly 2006, to name just a few) and is required reading in graduate seminars on archaeological methods, theory, and professional ethics in anthropology programs across the country.

The pervasive and open-ended nature of repatriation as it continues to unfold in universities, American Indian communities, museums, government agencies, and elsewhere should not obscure another powerfully emergent quality of the movement—the degree to which the process has formally and forcefully opened the discipline of anthropological archaeology (broadly defined) to participation by individuals and groups historically on the margins or completely outside the field and excluded from the rewards and challenges of professional practice. New patterns of “professionalization” (see Kehoe and Emmerichs 1999), fostered in part by repatriation, have drawn a greater number and variety of participants into archaeology (and related fields) than ever before. This enlargement in the ranks of both students and professionals who are cognizant of or engaged in the issue can well benefit a discipline that is still poorly understood by the public at large and recognized more frequently in “fantastic archaeology’s” bizarre and faulty images of the past (cf. Feder 1999; Lovata 2007; Williams 1991). Positive and informed perceptions of both anthropology and archaeology are becoming more and more critical as the field competes for political support and funding both nationally and internationally. Commenting on the intellectual and political revolution for the practice of archaeology wrought by repatriation over the past couple of decades, Pyburn (2002:555) reminds us that the public’s perceptions of this field and its “relevance” to those outside it (as determined by a variety of social, political, and even recreational factors) will increasingly determine its health and continued survival in the rapidly changing and interconnected world of the future.

Involvement of more Native Americans in archaeology, while growing steadily in recent years, has historically been slow and uncommon and is still fraught with challenges and contradictions (see Lippert, Thomas, and Watkins in this volume). The Native people of North America clearly played a central role in the development of anthropology and the subspecialty of archaeology in the West. In the past, Native Americans were almost always absent or were involved in the field as objects of study, often without consent. For a variety of reasons, both social and political, Native Americans seldom were recruited or invited into the discipline’s professional ranks. The causes of this imbalance are complex but were clearly tied to anthropology’s own development within a Western scientific tradition dominated by white middle- and upper-class males and guided by the
corresponding intellectual biases of the time. In addition, anthropology's short history as a discipline is woven into the larger half millennium of Euro-American expansion and domination of the aboriginal inhabitants of the Americas and into the long-term patterns of violence and injustice that only recently have been more widely recognized. The discipline's role in the past and the institutions and social contexts within which its earlier practices were forged and continued to develop are not easily separated from the ethical, practical, or theoretical constructs of contemporary research. Nor can today's research be disengaged from the future role that Native people, along with their human remains and culturally sensitive objects, will play both inside and outside museums and other institutions around the globe. In spite of those who might well prefer to "get on" with the business (as usual) of "scientific archaeology" in the present, the material and political consequences of the past remain at the heart of the repatriation mandate and the (re)definition of relations between archaeologists and Native Americans. These issues are critical, not only to improving Native Americans' perceptions and trust of archaeologists and their wider role as archaeological practitioners but also to the broader understanding of and support for the archaeological endeavor by students and the public at large.

It is perhaps ironic, given anthropology and archaeology's troubled past with indigenous people in general and Native Americans in particular, that repatriation is, in fact, bringing more Native people and their perspectives and concerns into the practice of archaeology than ever before. A large part of this engagement is due to the "routinization" of practices, required by statute and formalized in a protracted regulatory process, that repatriation entails. Thus, while in one important sense forced, the resulting level of involvement is nonetheless historically unprecedented for the field and is slowly and inevitably becoming an important building block for research, community collaboration, and public education in the archaeology of the twenty-first century. Repatriation, as it compels wider participation by Native Americans and others in archaeology and related studies, broadens the social context of research and teaching, as well as the public's perceptions of the relevance of archaeological research outside the field's narrow theoretical domains or beyond its more sensationalist public persona. This broadening or "opening" of anthropological archaeology to a greater number of players has, inevitably, changed routines of archaeological practice both locally and globally.

The opening of archaeology also extends to the intellectual horizon—for archaeologists, Native Americans, and others—and addresses the questions
of how and what we can know about the past (see Bray, chapter 4, and Zimmerman, chapter 5, both this volume). From the very public conflict among tribal leaders and prominent scientists over the remains of Kennewick Man to the slow and measured production and review of museum inventories and summaries by museum staff and Native American representatives, repatriation has inevitably opened new doors to the way we conceive of the past and how we go about asking questions and presenting interpretations of the archaeological and historical records. Paradoxically, the potential for epistemological and ontological growth in anthropological archaeology, linked to the implementation of repatriation legislation (see Ferguson 1996), appears unrelated to the “science as usual” routine thought to prevail in archaeology (corresponding to a paradigmatic change, in the Kuhnian sense of the term [Kuhn 1996]). Rather, this potential for an intellectual change of perspectives is externally driven and emerges from the daily routines alluded to above. It is the consequence (again ironically, or at least unexpectedly) of everyday practices of information sharing, routine face-to-face consultation, and, ultimately, the periodic return of remains and objects under the law among a uniquely heterogeneous network of practitioners.

The expansion of archaeology both practically and theoretically under the influence of repatriation is the product of engagement by parties or communities involved in the process—the simple, reiterative (recursive and repetitive) routine of learning, sharing information, contesting, negotiating, and “moving on” that repatriation regularly demands. In the past there was little formal interaction between archaeologists and Native Americans as communities per se. Native–archaeologist relations usually consisted of idiosyncratic interaction by individual researchers and informants rather than community-to-community involvement. In this light, part of the recent expansion of archaeology in response to repatriation can be viewed as the result of knowledge integration along the front lines or borders of different “communities of practice” (Wenger 1998), with a large number of practitioners involved on all sides. The resulting integration of different “knowledge traditions” (Turnbull 2000:38–40) in repatriation, albeit in ways often chaotic and at first unintended, nevertheless has come about in an environment where individuals and groups meet with one another on a more level playing field of negotiated practice afforded by legislation. What was once a private club (the traditional, disciplinary-centered, and individualizing field of archaeology) is now a more public endeavor, making the arena of research and the construction and presentation of the past more subject to scrutiny and contestation and, perhaps
in the same sense of irony already noted, more of an evaluative and "scientific" process as well. Repatriation clearly is not the only factor in the complex process of integrating knowledge traditions within the field of anthropological archaeology today, but it is a seminal example of the wider political concerns that impact scientific methods and theory in many fields of contemporary inquiry.

There are, of course, many exceptions to this older, relatively "closed" characterization of archaeology (cf. Loring, chapter 10, this volume). It is safe to say, however, that a more narrowly conceived process of analysis and hypothesis testing, rather than integration and mixing of knowledge traditions, has been the traditional strategy and objective within the field (again, in one sense ironic for a social science based on cross-cultural comparisons). Archaeologists and anthropologists, in general, have historically worked within a series of theoretical frameworks largely driven by internal arguments and well-defined problems. However, the blending of perspectives and the messy and contingent integration of disparate forms of knowledge and insights in larger public contexts, characteristic of the repatriation environment and other community-centered and often aboriginally grounded cultural studies, represent an "aggregation of viewpoints" and may serve as an important source of "robustness" in science itself (Star 1989:37–54, cited in Turnbull 2000:11). The repatriation movement, then, is contributing to a modest but pervasive paradigmatic shift in archaeology that emanates from the "ground up" and features new ideas and perspectives orthogonal to historic patterns of innovation and change within the field. This movement, in the long run, may end up looking more like the science and theory building envisioned by Kuhn than its supporters or critics ever imagined.

A CAVEAT ON SCIENTIFIC PREROGATIVE

The goal of this volume is to showcase some of the different experiences and perspectives of archaeologists and others regarding the impact of repatriation on archaeology and, as argued here, to illuminate the integrative role of repatriation as an important component of knowledge production about human culture in general and about Native American heritage in particular. As implied above, this process is ongoing, but its basic and emerging properties can be delineated and its reiterative and enduring effects can now begin to be discerned and appreciated. However, it is also important to distinguish arguments about repatriation as an assault on science by religion (G. Clark 1996, among others), not treated here, from those, explicitly foregrounded in this volume, that see repatriation as an
illustration of the contingent nature of Western scientific research in particular and of all knowledge acquisition and implementation systems more generally. Fundamental to the assault-on-science viewpoint is the notion that repatriation poses a unique threat to archaeological practice and theory building because it allows for decisions about the conduct of archaeological research and the recovery of data that favor “political considerations over [the] disinterested evaluation of knowledge claims” (G. Clark 1996). An alternative perspective, adopted here, posits that all knowledge claims, to a lesser or greater extent, are intimately bound up in considerations that are inherently “political” and otherwise “interested.” Anthropologists, as scientists, have always been faced with this fundamental dilemma or paradox—the degree to which our statements about the world reflect the social and political forces around us—although perhaps not so publicly and provocatively as in the case with repatriation.

Sociologists of science and other scholars (Latour 1987; Star 1989; Turnbull 2000) have, in recent decades, focused on the way scientific knowledge grows through the acceptance, rejection, and transformation of explanations about how the world works. Latour, for example, examined social, political, and other “environmental” or external factors that impact the evolution of scientific knowledge. His study extended Kuhn’s The Structure of Scientific Revolutions (1996) and highlighted the way scientific statements are affected by the many contingencies that scientists encounter in the larger world. His analyses have emphasized the social and political life of science and the tug and pull of forces that surround and permeate research and theory building. At the heart of these contingencies are the iterations of local practice and negotiation: the everyday routines, individual choices, expectations met or not met, allegiances formed and dissolved, deals made, funding criteria addressed, and much, much more. In sum, archaeological research and theory building (like the activities of scientists, engineers, physicians, and others in many disciplines) are colored and textured by the demands and choices of actors operating in real-world networks. These challenges and choices are at the heart of repatriation’s impact on contemporary anthropology. As one senior Native American anthropological archaeologist put it some time ago, “practice does not always make perfect, but it certainly makes a difference” (Ed Ladd, personal communication, 1992).

THE CHAPTERS IN THIS VOLUME

The chapters in this volume emerged from a series of meetings in Santa Fe, first at SAR and later as part of the SfAA annual meetings.
Richard Leventhal, then president of SAR, suggested that we assemble a small group of scholars involved with the repatriation movement to talk about how repatriation had affected the praxis of anthropological archaeology. Leventhal and I presented the idea to the SfAA Executive Committee at the Portland SfAA meetings in 2003 as a plenary session proposal for the 2005 SfAA meetings in Santa Fe. The committee enthusiastically supported the proposal. Work began for a planning session (“Politics, Practice, and Theory: Repatriation as a Force of Change in Contemporary Anthropology”), held at SAR in August 2004. The planning session was followed by a plenary session (“The Opening of Archaeology: Repatriation as a Force of Change in Contemporary Anthropology”) at the SfAA meetings in Santa Fe in March 2005. Nancy Owen Lewis, academic programs director at SAR, was instrumental in helping me recruit session participants and in guiding them through a short-term seminar at the school in 2004 and later to their presentations at the SfAA meetings in 2005. George Gumerman, who became interim president of SAR in 2005, helped bring the participants together again for a brief meeting at the school following the 2005 SfAA meetings. Both SfAA and SAR deserve an enormous amount of thanks for their support of the project and a debt of gratitude from all volume participants for making the meetings a reality and establishing the foundations for the volume that followed.

Eight original participants (Tamara Bray, Dorothy Lippert, Stephen Loring, Thomas Killion, Keith Kintigh, David Thomas, Joe Watkins, and Larry Zimmerman) attended the SAR meetings in Santa Fe and contributed chapters to the volume. Following the SfAA plenary session, the participants met and asked that two additional chapters—one on the history of the repatriation movement (Kathleen Fine-Dare’s chapter 2) and another from the perspective of a physical anthropologist involved in repatriation (Ann Kakaliouras, chapter 6)—be added to the volume. Two anonymous reviewers strongly recommended a chapter (12, written by Darby Stapp) representing a cultural resource management (CRM) perspective to incorporate this critical context for repatriation praxis in contemporary archaeology. Rosita Worl of the Department of Anthropology at the University of Alaska–Juneau and the Sealaska Heritage Foundation presented a paper at the SfAA plenary session in Santa Fe (“The Native American Graves Protection and Repatriation Act: Integrating Science and Tlingit Ancient History”) but did not submit a chapter for publication in this volume.

Opening Archaeology: Repatriation’s Impact on Contemporary Research and Practice is divided into four broad sections: “History”; “Outlook on Method and Theory”; “Experience and Practice”; and “Regional Perspectives.”
Following this introduction (chapter 1), the “History” section begins with Kathleen-Fine Dare, a professor of anthropology at Fort Lewis College in Colorado. In “Histories of the Repatriation Movement” (chapter 2), she provides the larger historical context for the repatriation movement with discussions and tables that detail events that shaped white-Indian relations in the United States and the discipline of anthropology. Fine-Dare was directly involved in repatriation negotiations with Native American representatives and students in the Four Corners region at Fort Lewis College. Her perspective as a cultural anthropologist and a researcher also working in the Andean region provides another facet of praxis typical of the mix of heterogeneous traditions of knowledge that constitute repatriation. Fine-Dare’s tabular history and essay condense much of the history of the movement originally presented in her much larger and more comprehensive work, Grave Injustice (Fine-Dare 2002). She also considers the plurality of viewpoints and the effect of emerging perspectives now taking center stage and transforming practice in anthropology, archaeology, and museums nationally. Given the course of Indian-white relations in North America, we see how the passage of repatriation legislation was an inevitable consequence of American history. The historical inevitability of repatriation is repeated in chapters throughout the volume.

David Hurst Thomas (chapter 3, “American Archaeology in the Twenty-First Century: Back to the Future?”) is a curator in the Department of Anthropology at the American Museum of Natural History. Like Fine-Dare, Thomas looks at the history of the discipline, less from the perspective of time’s inevitable arrow but rather through the field’s cyclical evolution during periods more and less aligned with the interests or needs of Native Americans. He examines repatriation in terms of broad developments in American archaeology, particularly during the nineteenth and twentieth centuries, and how the movement now fosters a return to the centrality that Native American concerns and perceptions had for the field during its infancy. Thomas examines the lives and experiences of some of the best-known figures in American archaeology (Thomas Jefferson, Frank Cushing, Adolf Bandelier, and Franz Boas, among others), critiquing the anthropology of their times but also emphasizing the unique engagement of Native American life by some of the field’s earliest practitioners. While no apologist for the methods employed, Thomas foregrounds the concern and advocacy often practiced by these early pioneers. His narrative traces changes in the theoretical orientation of the field and the way that culture-historical, ecological, processual, and post-processual paradigms have shaped Native and scientific relations over the course of the past two centuries.
Thomas's thinking on the subject has evolved considerably and been changed by engagement with Native critics (e.g., Vine Deloria Jr.) and by involvement with the National Museum of the American Indian as one of its early board members. His perspective provides a narrative of American archaeological history and some familiar guideposts for engaging a contested past. His chapter, like others in this volume, illuminates the centrality of repatriation for teaching and training in the field. While repatriation is now best known for the conflict over Kennewick Man, it is also increasingly known by histories such as the one envisioned by Thomas—presented here and, more importantly, in the field’s basic texts of method and theory.

Tamara Bray, a professor of anthropology at Wayne State University, begins the “Outlook on Method and Theory” section of the book in chapter 4, “Repatriation and Archaeology’s Second Loss of Innocence: On Knowledge, Power, and the Past.” Bray, who has written extensively on repatriation, served as a case officer in the repatriation program at the National Museum of Natural History before moving to Wayne State. She examines shifts in the power and politics of cultural representation in the wake of repatriation legislation. Bray draws a cogent analogy between the repatriation and feminist movements in archaeology and the processes by which the prerogatives of “establishment science” have been challenged and redefined under these distinct but related critiques. Her examination of Vine Deloria’s critique of American archaeology, in particular his thought-provoking, if equally outrageous discussion of theories surrounding the peopling of the Americas, is instructive, not so much as an exposition of his or others’ errors in analysis of particular data sets but for the “objections he raises to the paleo-Indian orthodoxy of American archaeology” and the suggestion, according to Bray, that “positioned rationality can illuminate inconsistencies and turn scholarship in productive directions.” Her chapter echoes a theme that runs throughout this volume—the degree to which the realignment of scientific prerogatives, either forced or fostered by the repatriation movement, has quite productively exposed the relations of power standing behind both the “how” and the “what” we can know of the archaeological record. From the reassessment of oral histories by archaeologists to the participation of Native communities in osteological analyses of ancestral remains, changes in the course and content of inquiry directed by repatriation can invert the positions of dominance and open up new territory, ideas, and creative research about the past. Bray’s position and prognosis is that this loss of innocence and prerogative bodes well for the future health of the discipline.
Larry Zimmerman is a public scholar of Native American representation and a professor of anthropology and museum studies at Indiana University-Purdue University and the Eiteljorg Museum in Indianapolis. He addresses the theoretical impact of repatriation by teasing apart ways that the opening of archaeology can incorporate other epistemologies. Zimmerman long has been one of the field’s most outspoken voices for indigenous issues in archaeology and the importance of repatriation to the growth of the field. In chapter 5, “Multivocality, Descendant Communities, and Some Epistemological Shifts Forced by Repatriation,” he looks at how repatriation changes perceptions of what is worth knowing about the past. He revisits the ebb and flow of relationships between archaeologists and Native Americans earlier explored by Thomas and concludes that the theoretical drift of archaeology for most of the twentieth century was decidedly away from the Native people whose remains and objects were the focus of study. This trend resulted in the colonial and elite agendas that have dominated the field.

Zimmerman identifies “processual enthrallment” of archaeology as a powerful force that acted to obscure and erase the voice of living descendants from the landscapes of archaeological research. The resulting polarization of Indians and archaeologists has, more recently, been partially addressed by the post-processual critique. Zimmerman, however, also credits the growth of cultural resource management, which he believes represents one of the strongest countercurrents to the earlier processual emphasis of theory and method (see also Stapp, chapter 12, this volume). By “opening up archaeology” to the greater historical orientation in contemporary CRM and by involving more Native partners, clients, and sponsors as part of the process of managing cultural resources, the field inevitably has been altered in orientation and personnel. Academic agendas can sometimes obscure the good that archaeologists and anthropologists have done for the preservation of Native traditional knowledge, material culture, land, and language. CRM, often in service to Native clients and increasingly under the direction of tribal organizations, emphasizes consultation and the integration of archaeological and Native traditions of thought, inevitably stitching together points of view and different approaches in new and productive ways. This perspective—repatriation’s underlying and reiterative effects on archaeological method and theory—is repeated throughout the volume (see Watkins, chapter 9, and Stapp, chapter 12, both this volume). Zimmerman concludes on the very different meanings of “truth” and “validity” in the archaeological endeavor. He cautions all involved to better understand and acknowledge the objectives of and limits to knowledge of the past and the
complexities of its representation in the present. Zimmerman’s comments underscore the paradigmatic importance of repatriation and the way it blends the experiences and perspectives of those involved to expand and connect some very discrete traditions of knowledge.

Chapter 6, by Ann M. Kakaliouras, professor of physical anthropology at Whittier College in California, provides a unique view of repatriation’s impact on method and theory in physical anthropology. The chapter, “Toward a New and Different Osteology: A Reflexive Critique of Physical Anthropology in the United States since the Passage of NAGPRA,” examines the recent migration in osteological and bioarchaeological research outside North America. International research is neither new nor detrimental to the field of physical anthropology, but offshore research has certainly accelerated with the rise of the repatriation movement. While this shift is not unexpected, given both real and perceived restrictions on the conduct of research under legislation in the United States, Kakaliouras also sees it as ironic and regrettable, given the fact that repatriation has generated at least as much data collection and “research” on Native American human remains as any other episode in the history of anthropology.

Kakaliouras, trained in the crucible of repatriation during the late 1980s and early 1990s, is part of a generation of physical anthropologists who became professionals at a time when repatriation and reburial became facts of life. She points out that her perspective is relatively new within the field and expresses the less common view that physical anthropology and bioarchaeology can benefit from the engagement that has taken hold in archaeology and museum anthropology since passage of repatriation legislation in 1989 and 1990 (see also Rose, Green, and Green 1996). Physical anthropology has since focused on the methodological challenges of data capture in response to the phenomenal increase in osteological information associated with repatriation documentation efforts. Kakaliouras notes in addition that many physical anthropologists have responded to repatriation by opting to work (and advising their students to seek research opportunities) outside the United States. She documents a recent decrease in research presented at the annual meetings of the American Association of Physical Anthropologists, tied in part to the exodus of US physical anthropologists out of North America. These trends have had a chilling effect on training programs and student recruitment for work in North American physical anthropology and research programs that could be directed at navigating the new realities of research in the United States. The tide now may be turning, with physical anthropologists such as Kakaliouras and a large number of students expressing keen interest in the
sociopolitical and historical implications of pursuing research in North America in the context of the repatriation movement. Her chapter is a call for the development of training environments in physical anthropology that can adapt to and benefit from research opportunities and the growth of knowledge through engagement with contemporary descendant groups in the context of repatriation. Repatriation's growing salience with students in anthropology and the increasing demand for curricula that provide background and training to help students better understand and engage the repatriation movement are themes that run through the chapters of Opening Archaeology.

Chapter 7, “A View from the Trenches: Memories of Repatriation at the National Museum of Natural History, Smithsonian Institution,” begins the next section of the book, “Experience and Practice.” In this chapter I describe some of my own experiences with the daily iterations and cumulative effects of repatriation as an administrator and archaeologist at a large institution (the Smithsonian) during the first decade of the new repatriation laws. I combine my own observations on the effect of repatriation and its contribution to the “increase and diffusion” of knowledge at the Smithsonian with a set of case examples from the Repatriation Office at the National Museum of Natural History. I touch upon the increase in heterogeneous knowledge spaces afforded by the repatriation process at the museum, the reiterative nature of daily encounters among practitioners trying to solve and negotiate routine challenges along the way, changes in long-term collections management and research practices that repatriation has encouraged, and the educational experience afforded me as a fledgling museum archaeologist and program manager steeped in the process (locally and nationally) during the 1990s. I look at a sample of cases from Alaska, the Great Plains, northern California, and Hawaii that reflect a range of experiences encountered by those involved. These examples suggest some of the hurdles that had to be crossed, the lessons learned, and the resulting heterogeneous knowledge contexts that evolved as part of the repatriation process at the Smithsonian and other large museums and that will form the environment for collaborations among scientists, Native people, and others in the future.

Chapter 8, “The Rise of Indigenous Archaeology: How Repatriation Has Transformed Archaeological Ethics and Practice,” is by Dorothy Lippert, a case officer from the Repatriation Office at the National Museum of Natural History, Smithsonian Institution. Lippert’s chapter is about being a Native American (Choctaw) and an archaeologist working in repatriation. She provides her own personal perspective on the movement as she
grapples with the ethical challenges and demands of science as a profession and her identity within her own home community. She begins with her memories of a trip to the Washita Massacre site in Oklahoma, the sorrow she felt, and her sense of kinship with the Cheyenne people who died there in 1868 and earlier at the Sand Creek Massacre in Colorado. These memories are her entry point for examining the importance of repatriation, respect for the dead, their connection to the ethical concerns of living Native Americans, and, in this case, the edification of archaeologists, both Native and non-Native. The integration of ethics and practice in these contexts opens a way for non-Natives to understand the responsibility felt by Native Americans for their ancestors and a tradition of archaeological knowledge augmented by indigenous thinking and sensibilities. Lippert, as a scientist and Native American, sees this expanded knowledge space as providing a “stronger, multifaceted perspective on ancient lives.”

Lippert’s chapter examines personal conflict, the pull of her community, and the demands of her profession in the course of research and casework in repatriation. Ultimately most sure and comfortable with her own community by birth, she feels that the potential for fracture between these different identities is countered by involvement in archaeological research that is “community centered.” Indigenous archaeology (Watkins 2000) and community-oriented archaeologies stress relations with living groups and critique processual archaeology, which can create a barrier between the archaeologist and those whose ancestors produced the archaeological site. Accordingly, Lippert sees both archaeologists and Native Americans as going through an important if rough transition to better come to grips with what the other is all about. Native American archaeologists, although still a small corps of researchers and activists, are growing in number and will have an important impact on the course of repatriation and related issues within archaeology. The influx of indigenous archaeologists such as Lippert, in addition to the growing number of younger archaeologists who have grown up with the reality of repatriation described by Kakaliouras, will have a profound effect on the ideas and approaches that will characterize the field in the decades to come.

Lippert concludes her essay with the case of a young Choctaw woman whose remains are held by the museum. While saddened to think of the remains of someone so like herself caught in such a predicament, Lippert reminds us that she can now effect proper treatment of her relative by acting as both an archaeologist and a Native American. Lippert’s contribution to the volume is an eloquent example of how the opening of archaeology is coming about in a very good way.
Joe Watkins is a professor of Native American studies at the University of Oklahoma. He has been active in indigenous archaeology, archaeological ethics, and the repatriation movement nationally and locally for many years. In chapter 9, “The Repatriation Arena: Control, Conflict, and Compromise,” he looks at control of the archaeological record by indigenous groups and archaeologists and the conflicts that repatriation has engendered. He identifies a number of different scenarios in which groups are placed at odds with one another, be they American Indian tribes against other tribes, American Indian tribes against archaeologists, or archaeologists against other archaeologists. Repatriation impacts archaeology through conflict and compromise concerning the interpretation and use of the cultural past. Watkins’s backgrounds as a Native American, professor of anthropology, and compliance archaeologist all combine for a unique perspective on the challenges that repatriation presents and the outcomes realized in the process. His analyses and case examples give ample evidence that what the archaeological record is and how we may know about it are intimately impacted by our social, educational, and political backgrounds. Sole scientific prerogative to statements about the past, which he rejects, ignores the reality of the repatriation process as it unfolds today and misses the opportunity to help frame how archaeological knowledge might evolve in the future.

Central to Watkins’s approach and theme, to which his examples testify, is the necessity of engagement in spite of the often adversarial nature of repatriation. Picking up on a point also made by Zimmerman (chapter 5, this volume), Watkins shows how what he calls compliance archaeology (archaeology that must meet the terms of legislative and regulatory requirements, such as federal archaeology and CRM) is at the center of decisions now being made about the archaeological record and its representation. As academic archaeology does not necessarily articulate with the requirements of repatriation, it is marginalized, relatively speaking, in spite of a good deal of overlap in personnel and subject matter. The point is, there is a larger world outside of academic archaeology that engages the repatriation process both theoretically and methodologically. Part of the impact for the field is a loss of influence over the outcomes of repatriation. This point is echoed by Kakaliouras and other authors in the volume.

Watkins provides a series of case examples from the annals of the repatriation process over the past decade or so. He touches upon such diverse cases as the human remains and funerary objects from the Spiro Mounds of Oklahoma, a request for a Kiowa war chief’s shield, the return of Steed-Kisker remains from Missouri, the controversy over the Kennewick
remains, and more. In each case, he identifies the agendas of the parties involved and the outcomes. In the process, Watkins draws the reader into the arena of repatriation and the (potential) integration of knowledge in a variety of contested cases.

Stephen Loring is an archaeologist and museum anthropologist with the Arctic Studies Center at the National Museum of Natural History, Smithsonian Institution. He draws on many years of anthropological research and education in the North, as well as his knowledge of repatriation casework in Alaska at Natural History. In chapter 10, “The Wind Blows Everything off the Ground: New Provisions and New Directions in Archaeological Research in the North” (which begins the book’s “Regional Perspectives” section), Loring contrasts the repatriation of remains and objects with the repatriation of information and knowledge from museums. He examines collaboration between Native communities of the North and museums in the South that make resources for heritage studies and cultural renewal more accessible.

Loring calls to attention the change in prerogatives—to control remains, objects, and information and to present and interpret the past—before and after repatriation. Among the Innu of northern Labrador, these shifts first moved control from the exclusive purview of the elders to the dictates of non-northern professors, researchers, and administrators. The control has now shifted again to a negotiated space, involving these players and others under the present order of repatriation. Loring emphasizes that there is no going back: repatriation has forever changed the arenas of heritage studies, archaeological and museum research, and interpretation of the past; indigenous perspectives are never again likely to be excluded from the process. In the world of community-oriented archaeology that Loring inhabits, these new relations have become a fundamental fact of archaeological method and theory—an outcome with which he is quite comfortable.

Loring’s chapter uncovers the local and intimate impact of repatriation on the thinking and work of archaeologists who reside or spend a great deal of professional time in particular regions. They are, in effect, a product of the communities they work in and the histories and experiences of those communities with Western exploration, colonization, and exploitation. These communities now have received official recognition of their responsibility for the disposition of cultural resources and their voice in the interpretation of the past. Regional specialists are well positioned to understand local histories, unique perspectives on the past, and areas of present need or interest. Thus they are presumably committed to a resolution of
repatriation claims that can have a profound effect on continued research in the future. Ongoing connection and responsibility to people and locality have been the exception rather than the rule in archaeology. The community link is especially weak for those working predominantly in large metropolitan or national museums, where they are often cut off from regular community contact but where some of the most difficult work and drama of repatriation takes place.

The effective translation of repatriation to progress in method and theory is explicit in Loring’s discussion of experimental archaeology among the younger Innu and the students he’s worked with over the past couple of decades. His efforts to open archaeology in the northern context also uncover a much broader notion of ancestry among Innu descendant communities than is generally conceived. This notion of ancestry, connection to the land, and persistent routines of a traditional “northern” way of life ultimately transcends the immediate concerns of human remains and sensitive cultural objects to encompass intellectual property, symbolic heritage, and spiritual knowledge. Loring feels that collaborative study of the traditional knowledge that the Innu struggle to preserve is good for archaeologists and good for archaeological theory. Like others in the volume, he sees the reconsideration of oral histories, a focus on social identity, and engagement of values of northern peoples in their approach to one another, the land, and the past as necessary stepping stones for the development of the field. Loring examines repatriation case examples from Point Barrow, Alaska, and northern Labrador from this perspective and suggests how archaeology in the era of repatriation can reinvigorate our understanding of the human condition in the North. He suggests that a code of ethics promulgated by the United Nations could well guide the field of archaeology in the future.

Keith Kintigh, a professor of anthropology in the School of Human Evolution and Social Change at Arizona State University, is the author of chapter 11, “Repatriation as a Force of Change in Southwestern Archaeology.” As a southwestern archaeologist and past president of the Society of American Archaeology, Kintigh was at the center of many debates concerning repatriation during its first decade of implementation. He provides his own reading of the effect of the movement on archaeological research from the perspective of the southwestern United States.

Kintigh is impressed, as are others in the volume, with the push that repatriation has given, both in the Southwest and elsewhere, to research and scholarly thinking and to the study of social identity through analysis of oral histories, migration stories, and assessments of cultural affiliation.
For the Southwest especially, this resurgence is tied in part to the long history of archaeological work in the area and the interests of many early researchers (Frank Cushing, Fredrick Hodge, Jesse Fewkes, Emil Haury, and John McGregor, among others) in clan histories and traditional affiliations of contemporary groups tied to archaeological sites documented in the late nineteenth and early twentieth centuries. Reiterating Thomas's discussion in chapter 3, Kintigh points out that repatriation is, at least in part, fueling theoretical and methodological interest in tribal perspectives as keys to understanding historic and earlier migrations, settlement patterns, and identities of the aboriginal peoples of the Southwest. Coming in the wake of the post-processual critique, these initiatives are also uniquely southwestern. Kintigh highlights contemporary research by Wesley Bernardini, T. J. Ferguson, K. Tsinina Lomawaima, and Peter Whitely, among others (see also Mills 2004), which, while not always directly linked to repatriation casework, has developed in step with the new emphasis given to traditional histories and patterns of affiliation in the repatriation movement.

Kintigh notes the importance of the National Historic Preservation Act (1966) and the Archaeological Resources Protection Act (1978) and suggests that these laws are similar in their impact to NAGPRA—perhaps have even a greater impact—especially in terms of the number of participants brought into play. He also strongly criticizes the approach being taken by federal agencies in the Southwest and elsewhere to quickly resolve repatriation claims for administrative convenience and to avoid adverse public relations. He believes that the expedited federal cases serve neither the public’s nor the tribes’ interests because they give short shrift to the process of documentation and apply simplistic and inaccurate fixes to the often complex question of cultural affiliation. He ends with a call to balance archaeological outreach to Native communities with a revitalized sense of expertise and pride in research that can be conducted within the context of repatriation. To this end, he notes that much could be accomplished by adhering to the spirit and letter of the official ethical principles advocated by the Society of American Archaeology.

Darby Stapp is an archaeologist and director of the Hanford Cultural Resources Laboratory at the Pacific Northwest National Laboratory. He has a long history of archaeological research and CRM experience in the Pacific Northwest and has worked with many of the tribal communities in the region (see also Stapp and Burney 2002). In the final essay of Opening Archaeology (chapter 12, “The Impact of NAGPRA on Anthropology: A View from Cultural Resource Management in the Pacific Northwest”), Stapp looks at developments over the past thirty years in the Northwest and pro-
vides his own perspective on the significant role played by CRM in the changes wrought by repatriation on archaeology and anthropology.

Stapp begins with a brief overview of the history and structure of CRM, tracing the evolution of the field in federal salvage projects, university archaeology programs, historic preservation research, the environmental protection movement, and, more recently, repatriation legislation and related developments. As noted by other authors in the volume, both the National Historic Preservation Act and the Archaeological Resources Protection Act contributed to the growth of the CRM field in the 1980s and 1990s, fostering a convergence of Native American and CRM interests and representing one of the most dynamic areas of growth in archaeology today. As part of the professionalization of CRM that took off in the 1980s, Stapp notes a progressive redirection of objectives and orientation as practitioners moved from academic research models and notions of prerogative to the perspectives and goals of CRM, site protection, and regulatory compliance. In the process, perhaps more than any other sector of archaeology, CRM professionals have incorporated the effects of repatriation legislation into their day-to-day practice and theoretical orientation. The CRM business has evolved as an endeavor fundamentally grounded in the traditional methods of archaeology but also in response to the demands of compliance archaeology as discussed by Watkins (chapter 9, this volume). More than in the academy, these forces act to articulate CRM with the mix of theories, knowledge traditions, and approaches to the past encountered in the arena of repatriation. Thus CRM and compliance archaeology play an increasingly significant role in theory and method building in spite of their oft-touted divergence from traditional academic research agendas.

A large part of Stapp’s chapter 12 is devoted to his personal journey and development as a university-trained archaeologist coming up in the CRM field during the 1970s and 1980s. As with many of his peers, this journey began well before there was a great deal of consciousness within the field about Native American concerns with issues such as reburial, sacred sites, and culturally sensitive objects in museum collections. Archaeological projects in the Northwest during the 1980s and 1990s brought Stapp into contact with the Nez Percé and the Confederated Tribes of the Umatilla Indian Reservation, among other groups. These contacts began to change his perspective from that of science and site protection in archaeology to an archaeology targeted at serving community needs. In this case, the needs and concerns were those of Native Americans in the Columbia River area whose sites were the principal focus of the compliance archaeology with which he was involved at the time. Stapp ironically contrasts some of
the routine work of the time, and successful interactions with Native Americans related to repatriation, against the backdrop of intense media attention and negative publicity surrounding the Kennewick Man controversy in the Columbia River area and nationally. Many authors in this volume likewise note the enormous imbalance in media coverage, with the most negative and controversial aspects of repatriation replacing the movement’s large number of success stories. This unrelenting focus on controversy and deadlock tends to portray the field as more resistant to the process of repatriation than it actually is and all the more underscores the need to explore the openings in archaeological method and theory discussed in this volume.

Stapp concludes his chapter and the volume with a discussion of the changes that he believes are here to stay in cultural resource management—changes that may, in the end, come to characterize the wider practice of archaeology in universities, government, museums, and the private sector. Significantly, he gives important emphasis to an increase in the dissemination of new knowledge about the archaeological record and a growing transformation in the intellectual environment of archaeology. The coming decade should continue to demonstrate how these changes and the opening of archaeology to the forces of the larger world represented by repatriation will actually bear fruit.

Notes

1. Repatriation, as discussed here, applies primarily to anthropologically trained archaeologists and physical anthropologists, as well as other museum professionals. It should be acknowledged that the repatriation movement draws upon and has implications for the work of ethnographers and linguists as well as archaeologists and physical anthropologists.

2. Translating anthropological knowledge into action, praxis is the process by which theory becomes part of everyday experience and provides an opportunity for reflective contemplation where abstract concepts are linked to the real world. Praxis implies an active two-way integration of method and theory.

3. See http://www.cr.nps.gov/repatriation/ for definitions and other details on federal repatriation legislation (NAGPRA). See http://www.nmnh.si.edu/anthro/repatriation/ for repatriation provisions of the NMAI Act as applied exclusively to the Smithsonian Institution. The laws themselves are available online and in libraries.

4. NAGPRA also mandates the return of items to lineal descendants.

5. This statement may mask the political processes through which NAGPRA is
implemented. In fact, NAGPRA reinforces the values and prerogative of science (archaeological lines of evidence and scientific values and standards continue to apply), but the standard called forth in the law is explicitly not “scientific certainty.” Not all archaeologists appreciate where science stops (in presenting archaeological evidence) and politics and legal decisions begin. It is important to clearly identify the intellectual and legal processes at work in repatriation to illuminate the nuanced influences of science and society in archaeological research.

6. See the original language of the NMAI Act and NAGPRA, but also see Goldstein 1992 for some early and prescient concerns outlined for the future.

7. The repatriation legislation has no sunset provisions. Hence federally recognized tribes and other Native organizations take up the issue of repatriation when they are ready to do so. An examination of pending casework under NAGPRA, monitored by National Park Service staff and the (non-NPS) NAGPRA Review Committee, or under the NMAI Act at the Smithsonian’s Repatriation Office, reviewed by the (non-Smithsonian) NMAI Act Repatriation Review Committee, suggests that there is considerable work yet to be completed.

8. Repatriation and a number of issues of importance to indigenous peoples are now structurally formalized as areas of discussion and regular review within the Society of American Archaeology.

9. This situation is beginning to change. SAR seminar participants briefly discussed the rapidly growing list of Native Americans involved in professional archaeology today and the growing number of Native students now participating in graduate programs across the country.

10. It should also be noted that the 1992 amendment of the National Historic Preservation Act may be as important as NAGPRA in increasing the participation of Native peoples in archaeology (see Kintigh, chapter 11; Stapp, chapter 12; Watkins, chapter 9, all this volume).

11. I am presently a faculty member and chair of the Department of Anthropology at Wayne State University.
Archaeology, sometimes spelled archeology, is the study of human activity through the recovery and analysis of material culture. Archaeology is often considered a branch of socio-cultural anthropology, but archaeologists also draw from biological, geological, and environmental systems through their study of the past. The archaeological record consists of artifacts, architecture, biofacts or ecofacts and cultural landscapes. Archaeology can be considered both a social science and a branch of the A vision for Open Archaeology. Anthony Beck, School of Computing, University of Leeds, LS2 9JT, UK, a.r.beck@leeds.ac.uk. Cameron Neylon, Science and Technology Facilities Council, Rutherford Appleton Laboratory, Harwell Oxford, Didcot, OX11 0QX, cameron.neylon@stfc.ac.uk. This pre-print has been created from the September 2012 version of the document. The final article (DOI:10.1080/00438243.2012.737581) is in Volume 44, Issue 4, 2012 of The development of scientific archaeology in 19th-century Europe from the antiquarianism and treasure collecting of the previous three centuries was due to three things: a geological revolution, an antiquarian revolution, and the propagation of the doctrine of evolution. C.J. Thomsen classified the material in the Copenhagen Museum, opened to the public in 1819, on the basis of three successive ages of Stone, Bronze, and Iron. Open Access Archaeology Digest #697. Open Access (free to read) articles: Jeitun and the transition to agriculture in Central Asia http://bit.ly/12o9Lsp. From anarchy to good practice: the evolution of standards in archaeological computing http://bit.ly/1FYqTbf. Reference Notes to Plan and Views of Ancient Remains on the Summit of the Laws, Forfarshire. http://bit.ly/YTOw0V. Learn more about Open Access and Archaeology at: http://bit.ly/YHuyFK.
promotes archaeological ethics. Open science practices. improve archaeology by increasing transparency and reproducibility in archaeological research. This approach enables help archaeology contribute to the open science movement that has become part of normal scientific practice in many fields. For. Contribute to openstate/open-archaeology-data development by creating an account on GitHub. GitHub is home to over 40 million developers working together to host and review code, manage projects, and build software together. Sign up. Open Archaeology Data API http://docs.archaeologydata.com/. 550 commits. 1 branch. This page is maintained in part by a collaboration with the Archaeology Discord server. You can join the Archaeology server on Discord for more help with this activity. (Learn more). This guide is for pay-to-play Archaeology training and aims to help players find the most effective and efficient methods of Archaeology training. Archaeology is a gathering skill where players can excavate materials, soil, and artefacts using mattocks, then restore the artefacts at an archaeologist's workbench. A blue Download Open Archaeology for free. openarchaeology is a collection of software solutions designed to help operate an archaeology and heritage practice. It is also a philosophy applied to data gathered during archaeological investigations.
A list of open source archaeological software and resources. open-archaeo.info. CC0-1.0 License. 35 stars. Open Access Archaeology: OpenAccessArchaeology.org is dedicated to helping people discover and use Open Access resources in the field of Archaeology. by: Doug Rocks-Macqueen, Lorna Richardson, Emma O'Riordan and Katrina Urban. links: [Twitter] [Website].

Archaeology: OpenAccessArchaeology.org is dedicated to helping people discover and use Open Access resources in the field of Archaeology. by: Doug Rocks-Macqueen, Lorna Richardson, Emma O'Riordan and Katrina Urban. links: [Twitter] [Website].

Archaeology is a forum of novel approaches to archaeological theory, methodology and practice, and an international medium for the dissemination of research data and interdisciplinary projects. Scope of the journal includes, but is not restricted to: World Archaeology - discoveries and research Archaeological science Theory and interpretation in archaeology Archaeological heritage preservation and management. Join the conversation about this journal. Quartiles. Open Archaeology will host a number of sub-projects that while functional at a component level are intended to interoperate creating a complete AIS (Archaeological Information System), including the components necessary to manage the organisation carrying out the archaeology. Open Archaeology is first a concept or philosophy, with the 3 primary strands of open data, open standards and open source. More information can be found at the Open Archaeology homepage (http://openarchaeology.net). Archaeology or archeology is the study of human activity through the recovery and analysis of material culture. Archaeology is often considered a branch of socio-cultural anthropology, but archaeologists also draw from biological, geological, and environmental systems through their study of the past. The archaeological record consists of artifacts, architecture, biofacts or ecofacts and cultural landscapes. Archaeology can be considered both a social science and a branch of the humanities. In Europe...

The scientific journal Open Archaeology is included in the Scopus database. Based on 2020, SJR is 0.444. Publisher of the journal is DE GRUYTER OPEN LTD, FAC CONSTRUCTION, CADASTRE & ARCHITECTURE, UNIV PUB HSE ORADEA, 1 UNIVERSITATII ST, BIHR, ROMANIA, 410087. Publisher country is Poland. The main subject areas of published articles are Conservation, Archaeology, Education, ARCHAEOLOGY. We offer making basic...