discussion article

Archaeological Dialogues 16 (2) 131–142 © Cambridge University Press 2009 doi:10.1017/S1380203809990055

Millennial archaeology. Locating the discipline in the age of insecurity Shannon Lee Dawdy

Abstract

This discussion article responds to a forum question posed by the editors of *Archaeological dialogues*: 'is archaeology useful?' My response initially moves backward from the question, considering whether archaeology ought to be useful, how it has been useful in the past, and the millennial overtones of the question in our present climate of crisis. I critique the primary way in which archaeology attempts to be useful, as a dowsing rod for heritage through 'public archaeology'. While European archaeology has long been aware of the dangers of nationalism, in the Americas this danger is cloaked by a focus on indigenous and minority histories. I then move forward through the question and urge colleagues to embrace an archaeological agenda geared towards the future rather than the past. My hope is that transatlantic dialogue will be politically useful in reorienting archaeological research towards supranational problems such as climate change, hunger and population stress.

Keywords

crisis; public archaeology; future

When I first responded to the invitation to this provocative forum, the global economic meltdown was not yet visible. But there is nothing prescient about the preliminary title I bounced back. Our recent financial panic is just one more layer over a global mood that has prevailed since at least the late 1990s. We seem to be going through a long *fin de siècle* moment, a computer-driven version of that European intellectual movement of *ca* 1880–1914 characterized by a mixture of decadence and dread on the cusp of major change. Appropriate to the scale of a millennium rather than a century, the global mood today seems exponentially deeper than it did a century ago, with millennial preoccupations stemming from 9/11, global warming, disasters, new wars of religion, food shortages and growing neoliberal inequalities. It is fair, and important, to ask, where does archaeology belong in this perceived time of crisis and exigency?

The simple question 'is archaeology useful?' seems to me to embed three component questions. The first is 'should archaeology be useful?'; the second, 'is archaeology threatened with its own end-time?'; the third, 'can archaeology save the world?' With intentionally broad strokes, I am going to tackle each

of these in turn while trying to bring in both a temporal and a spatial perspective. Spatially, I want to note that some of the political, practical and intellectual challenges of making archaeology useful vary according to regional context, which I will attempt to show with quick examples from Europe, North America and Latin America (seizing the privilege of the role of the critic, I will warn you that my own subfield of historical archaeology in North America will come in for the harshest criticism since naturally I know it best). Temporally, I thought it would be helpful to look back at the status of archaeology during other moments of crisis.

In approaching these questions, I pursue an anxiety that has troubled me for a long time, which is not that archaeology is not useful, but that it often has been, and continues to be, useful for the wrong reasons, and for the wrong ends. The opportunity to think through this issue has convinced me all the more that archaeology needs, in some sense, to stop trying to do heritage. It needs to stop obsessing about tradition and worry more about the future. Public archaeology and community archaeology are ultimately more self-serving than helpful, and may even be dangerous – at least if the very claims that archaeologists make about the power of the past are to be taken seriously. I realize that these are provocative statements and will be controversial in some quarters, but the question leading us into this forum invites brutal honesty and a chance for substantial debate.

Should archaeology be useful?

Since the turn of the last century, archaeology has made several attempts to 'be useful' to contemporary society – from V. Gordon Childe's Marxism to the disastrous nationalism of Kossinna. In fact, it is the latter's haunting legacy to archaeology which makes this an existential question. Is there any safe way to apply archaeology to contemporary social or political conditions without the risk that it will be harnessed for ill? The 1990s burst of studies on nationalist archaeology (e.g. Diaz-Andreu and Champion 1996; Graves-Brown, Jones and Gamble 1996; Kohl 1998; Kohl and Fawcett 1995; Meskell 1998) continues to give us pause over this question. Once we open the door, accepting that archaeology *should* be useful, can we control the uses to which it is put, and by whom? This is the Pandora's box problem that causes many to retreat into a space of objectivism and detachment. Others try to walk an odd line of being politically engaged with the past, but disengaged from the present.

It hardly seems necessary to rehearse Gustaf Kossinna's contribution to archaeological nationalism and racism. Although archaeologists may still guardedly recognize his contribution to 'settlement archaeology', Kossinna blatantly used archaeological materials to promote ideologies taken up by the Nazis. Specifically, he argued that there was once a coherent Germanic 'fatherland' that extended over the borders of Germany into Poland, among other soon-to-be-invaded territories, and that the reunification of this prehistoric Germany was key to the restoration of 20th-century Germany. Further, it was the archaeologist Kossinna who introduced the idea of a superior Aryan race in European antiquity, holding it above even Rome and

claiming it had been unjustly overlooked. These were ideas he published for a general public from the 1920s up until his death in 1931 (Arnold 2006; Arvidsson 2006). Under the Nazis, Kossinna's archaeological approach became the Party line, and archaeology benefited, institutionally at least, with an eightfold increase in academic chairships (Hodder 1991, 206). The Nazis were scornful of archaeological research that was not explicitly useful for their agenda and, at the same time as they expanded the field, purged it of any who disagreed with Kossinna's theses or who attempted to maintain a safe scholarly distance. It is no wonder, then, that in the long hangover from the Sceond World War, many European archaeologists remain not only allergic to archaeological questions of race or ethnicity, but also averse to agendas that aim to make archaeology useful.

Still, simultaneous with the rise of Nazi archaeology, the career of the grand figure of European archaeology, V. Gordon Childe, was starting to rise. Like Kossinna, Childe was interested in the Aryans and their archaeological culture, writing The Aryans. A study of Indo-European origins in 1926. However, he vehemently protested Nazi claims of Aryan superiority (not to mention purity of roots) during and after the war. Childe's Marxist leanings in both politics and intellectualism are well known (Trigger 1980). While he did not explicitly advocate that archaeology should be useful, it is worthwhile to note that Childe thought it important to communicate his ideas to a general audience through publications such as Man makes himself (1936). As Ruth Tringham says, 'he was a highly political person; he was aware of the world about him, felt strongly about political issues and, throughout his career, incorporated these feelings into his choice of what he wrote and where he published it' (Tringham 1983, 89). However, the Marxist components of his analysis were largely ignored in Western Europe and Great Britain, while his public outreach efforts were imitated by few until the late 20th century.

The legacy of his work in Eastern Europe was different. But there, another problem arose, in that as in the Nazi case, archaeology had to be useful and had to be Marxist in Soviet-style academia. Childe came by his convictions both political and archaeological - on his own, whereas most Soviet archaeologists were given no choice. They were told by political authorities that archaeology should be useful. And generally they complied. Soviet-era archaeologies are replete with narratives of ethnos, evolutionary progress, and class analysis that helped to naturalize and give moral dignity to the socialist platform in each of its nationalist iterations (Slav, Czech, German and so on). This forced marriage between archaeology and politics has added to the European allergy towards what elsewhere gets called public archaeology.

In North American archaeology, there are at least two academic cultures at work, the prehistoric and the historic. Until recently, the first has rarely openly oriented itself towards being 'useful' or public. Several critics have noted how this very stance of detachment and a reluctance to connect living indigenous people to archaeological ancestors helped to rationalize the removal and expropriation of Native Americans from their lands (Trigger 1986; Fowler 1987). When not detaching living Native Americans from their ancestors,

archaeology has been used to make them appear as living, savage fossils. As Alice Kehoe notes, in the early 1900s

archaeology was asserted to be useful in policy making, in terms of both the general argument that information on the human career from bestial savagery to European civilization illuminated the inevitable path and characteristics of progress (Hinsley 1981, 138–139), and specifically the assessment of the stage in cultural evolution reached by particular societies coming under the jurisdiction of the United States (Kehoe 1999, 5–6; citation in original).

In other words, prehistoric archaeology in North America has a history of being at least inadvertently useful, if not nefariously useful. It is only in the last two decades that archaeologists have been forced by Native American communities and legislation such as Native American Graves Protection and Repatriation Act (NAGPRA) to make connections to present-day society in ways that respect both the historical realities of colonial displacement and the contemporary realities of ancestral beliefs. Although at first there was a vociferous reluctance to accept such alternative uses of the archaeological past, there now appears to be a genuine shift taking place in attitudes with a new generation of archaeologists (and some reformed old guard) now answering the question differently (Watkins 2005) – that is, *should* archaeology be useful?

In contrast, historical archaeology, at least as practised in the US and Canada, has from the beginning been expected to be useful. The first controlled excavation on a historic-period site occurred in 1797 at the site of Champlain's fort on the St Croix River. The purpose of the excavation was to settle a boundary dispute between Britain (that is, Canada) and the new United States (Schuyler 1976, 27-28). Following this, the next widely recognized historic-period excavation occurred at Myles Standish's home in 1856, in order for Myles's descendant, James Hall, to flesh out the legacy of this Mayflower officer and augment his own social capital (Deetz 1977; Deagan 1996, 19-20). In fact, the entire period from 1856 to 1960 could be called the patriotic phase of historical archaeology. The 1935 US Historic Sites Act helped launch a growth industry in the excavation, restoration and interpretation of historic sites across the country. Most of these focused on sites important to national narratives, such as Jamestown, Plymouth Plantation (site of the Pilgrims' landing and early settlement), and military forts tied to key victories over the British, Spanish, and Native Americans. The act stated that it was now national policy 'to preserve for public use historic sites, buildings, and objects of national significance for the preservation and benefit of the people of the United States' (US 292–74th Congress, emphasis added).

Despite this rather long and explicit history of archaeology in the service of the state, it is striking that American archaeology has been left almost entirely unscathed by critiques of nationalist archaeology. For some reason, it has not generally been viewed as nationalist (though for rare exceptions see Fowler 1987; Patterson 1999). It *has* been characterized as historically particular, reconstructionist, and 'public', but the connection to the political apparatus of the state goes underrecognized despite the fact that the Fed is by far the

largest financial guarantor of this work up to today and that it is, through the National Park Service, a highly regulated endeavour.

In the 1960s, with the formalization of the subfield of historical archaeology through the first Conference on Historic Sites Archaeology (1960) and the establishment of the Society for Historical Archaeology, the scope of historic sites widened to plantations and Native American historic villages. This attention brought with it new public sectors, as did the development of cultural resource management (CRM). Historical archaeology became more self-conscious of its 'usefulness' to several constituencies, particularly in the 1980s.

Historical archaeology in the US, in fact, has been a crucible for debates and developments in public archaeology. While it is impossible to do this vast and still-growing field justice here (for reviews see Merriman 2004b; Shackel and Chambers 2004), it should be noted that the awkward umbrella 'public archaeology' is deployed to cover a diverse set of views and practices. including (1) 'contract archaeology', in which 'public archaeology' is used as a euphemism for CRM or archaeology performed by government entities (e.g. Jameson 2003; King 1983; Little 2002); (2) 'didactic archaeology', which aims to educate the public with/through archaeology, often as a form of social critique (or 'critical archaeology'), bringing focus to the historical conditions of inequalities in the present (e.g. Copeland 2004; Potter 1994; McGuire 2008); and (3) 'community archaeology', in which local or descendant community members are invited to participate in the creation and execution of research projects in a more dialogic, collaborative mode (e.g. Mullins 2004; McDavid 2004c; Little and Shackel 2007). As suggested by this range of interests, the only agreement one could say characterizes these practices is that archaeology is and should be useful. Implicit disagreements hinge on different narratives about the past, or on which 'heritage' to develop through archaeology.

Public archaeology and heritage management can form an awkward, contradictory mix of intentions due to the multiple 'uses' to which it is simultaneously put. A colleague once shared with me that he was at a meeting for the Jamestown Rediscovery project of the National Park Service in Virginia when a participant offered, as a title for the planned museum exhibit of archaeological artefacts, 'Birth of a nation'. My friend (the name of the innocent will be protected) was appalled by the participants' seeming ignorance of G.W. Griffith's famous film of the same title that cast the Ku Klux Klan in a positive light. My friend was perhaps only bemused by a quite different concern voiced at the meeting that the exhibit failed in its civic engagement duties by neglecting to tell a story about Asian American contributions to the 17th-century English settlement. The irony of these errors underscores the missteps and dangers inherent in even the best-intentioned 'heritage management'.

In Latin America the landscape of archaeological practice has been dominated by foreigners, primarily European and North American, since the mid-19th century. While archaeology developed after the Bolívar revolutions, it nonetheless was a field in which international interdependencies between poor and wealthy nations have played out as a form of quasi-colonialism

(Joyce 2008). Up to the 1950s, colonizing archaeologists at major sites in Mayaland and the Andes swooped in, hired local labourers at cheap rates, and swept out again, having performed their resource extraction. Although in many areas we could say that this pattern prevails today, it has been mitigated by stronger local state controls on archaeological permitting and on the removal of archaeological materials. Augusto Oyuela-Caycedo (1994) makes the interesting distinction between state archaeology and nationalist archaeology, saying that most Latin American countries transitioned from colonialist archaeology (which he calls proto-state) to state archaeology between the 1950s and the 1970s with the establishment of institutions like the Museo Nacional de Antropología de Mexico or El Museo Nacional de Arqueología, Antropología e Historia del Perú. The aim has been to stem the outflow of patrimonial treasures and to control by whom, when, and how archaeological excavations take place, with assurances that there will be local and regional financial benefits. Archaeology has been forced to be useful. Oyuela-Caycedo, though, says that only a few Latin American countries have moved clearly into a nationalist phase of archaeology, by which he means an archaeology explicitly oriented towards developing national patriotism and indigenous heritage. The difference can be seen, for example, between museum exhibits oriented towards a generic (and usually foreign) tourist and those oriented towards a national audience that narrate the contributions of the country's indigenous populations to a unique local culture (Leighton 2008). Moves towards nationalist archaeology can be seen most clearly in Mexico, Peru and Venezuela since the 1990s.

Karen Guthertz Lizárraga goes so far as to say (1999, 363) that in Peru, 'the concept of National Archaeology, as developed in four national institutions, laid the ideological and political ground for the end of the terrorism in Peru'. In other words, archaeology there has made itself so useful that it helped bring an end to the Maoist Shining Path. Unlike in Europe, nationalism does not have a bad rap in Latin America. At least not yet. This is an essential difference in postcolonial contexts. Nationalist archaeologies in Africa and South Asia may be taking the same route. In postcolonies, archaeology serving a local political use is upheld as a corrective of the abuses of imperialist archaeology. As stated by O.F. Owen back in 1858, 'The true patriot becomes of necessity the antiquarian' (quoted in Trigger 1989, 148). I am not suggesting that this reverse swing of the pendulum should be stopped short in Latin America and other postcolonies, but I am saying we must recognize that such political uses of archaeology to create ethnic heritage narratives have a troubled past in the field and we should proceed with caution. Guthertz Lizárraga's allegation of 'terrorism' demonizes and oversimplifies the Andean peasants whose dislocation and poverty disposed them to consider Maoism in the first place.

It should be noted that the responses of mainstream academic archaeologists who focus on the prehistory of North America share much with those of foreign archaeologists working in newly nationalist Latin American settings. In both cases, they have been forced to adjust to the demand to be socially relevant or economically useful. Thus in many arenas the question 'is archaeology useful?' is a question archaeologists are increasingly forced to answer in order to be permitted to continue their work.

The other interesting parallel I see lies between North American historical archaeologists and European archaeologists working in former colonies. In both cases, an archaeology of apology has prevailed since the 1980s. In the US and Canada this takes the form of 'community archaeology' that seeks to involve the voices of the dispossessed and the underrepresented in the construction of archaeological narratives. European efforts have concentrated on developing more inclusive practices and dialogue through the World Archaeological Congress and its many publications. I want to stress that I have no ideological objection to inclusive and alternative archaeologies. However, in seeking to answer the question 'should archaeology be useful?', I think we have to take a hard look at our motivations and our success

Barbara Little writes in her introduction to *Public benefits of archaeology* an answer to our 'should' question. She says that public archaeology should serve the 'purposes of education, community cohesion, entertainment, and economic development' (2002, 1). However, this is an agenda set not by community members but by archaeology. While archaeology can be made to serve all these needs, it is unlikely that a local community would turn to archaeology first for any of these except perhaps the last - economic development – when an archaeological site is visually spectacular enough that it can be developed for heritage tourism. If your children need better public schools, are you going to turn to archaeology as a solution? If your community is strained with racial tension, is archaeology the solution? For entertainment, would most people prefer to dig in a hole or go to the multiplex?

In Paul Shackel and Erve Chambers's (2004) edited volume Places in mind. Public archaeology as applied anthropology, the editors note the many ways in which archaeology, both prehistoric and historical, has been reoriented in recent years to include multiple publics and multiple narratives about archaeological remains. However, I will note that several of the contributors use language taken directly from marketing (e.g. 'stakeholders', 'investment', 'target audience'). Considerations of indigenous communities are quite clearly oriented towards smoothing the way so archaeologists can placate a potentially troublesome public and still go about their business post-NAGPRA, or as a more heartfelt apology for the archaeological atrocities that NAGPRA was in part passed to address. A similar spirit of either reconciliation or apology infuses much of historical archaeology, stemming primarily from the challenges of doing the archaeology of slavery and not being misunderstood, as well as from sacrilegious blunders, such as the poor initial treatment of New York's African Burial Ground. The most vocal group of advocates for public archaeology is the large and now numerically dominant corps of cultural-resource managers. Their motivations for advocating public archaeology are also to smooth things over and forestall controversy over their projects, but primarily the aim is to bolster the public support of archaeology so that the laws stay on the books and the money keeps flowing. Academic archaeologists, depending on their national and institutional position, must also worry about money and making sure that there is a perceived public value to the work they do, often underwritten by taxes. So I am simply asking us to be honest. Most public archaeology

should really be called public relations archaeology. Archaeology has been very useful lately, but primarily to itself.

Is archaeology threatened with its own end-time?

In fact, I know of no other social-scientific or humanities field quite so anxious about involving communities in its research or making the work relevant, except perhaps for public health – the same field that spawned the Tuskegee experiment and the corrective of the Institutional Review Board. Is all this concern about social utility more fundamentally about legal necessity? Can you imagine literary critics or political scientists going door to door to ask community members to be involved as collaborators in their research projects (rather than simply as subjects), or asking them to set the theoretical agenda? I suspect the legal fragility and fiscal insecurity of practising archaeology is as strong a motivation to 'make archaeology useful' as any moral imperative.

That said, I do not think there is any major harm yet being done by these self-serving means and, in fact, the political uses to which archaeology is now being put by indigenous groups thus far seem far less dangerous than those of nationalism. But as many might rightly caution, this can be a slippery slope. In a landscape with multiple victims, such as, for example, the former Yugoslavia, which indigenous politics should archaeology serve? What do we do with Semir Osmanagic, who claims to have found not only the oldest, but the largest, pyramid in the world in his native Bosnia, with cultural connections to the ancient Atlanteans (Rose 2006)?

Although Osmanagic has failed to find many professional collaborators, I worry about the ways in which some archaeologists plunge into 'heritage management'. They contradictorily seem to hold the view that historical and archaeological narratives are politically powerful means of influencing the present - believing, as did George Orwell, that 'those who control the past control the future' - and, at the same time, seem cavalierly keen on creating a demand for heritage where none may yet exist (see Pacifico 2008; Matthews 2008 for situations in which local interest in 'archaeological heritage' is lacking or mismatched to the project). While some of these efforts are motivated by a sincere interest in sharing results or even the process of archaeological knowledge-building (McGimsey 1972; Marshall 2002b), these are usually difficult to disentangle from motivations to build political and economic support for archaeology. The projects often entail 'managing' the narratives that are produced in order to have a specific social effect. What powers and sentiments may be unleashed by inventing new traditions and expanding markets for the past seems to be overlooked. Even when community archaeology is geared towards widely shared and laudable emancipatory goals, such as creating recognition for the contributions of African Americans or encouraging a more democractic society, at the very least archaeologists should recognize the implications of their claims about the power of the past – and fill out a protocol for an Institutional Review Board. I wonder how many archaeologists have taken their own claims for social efficacy seriously enough to complete this responsible step?

The phrase 'age of insecurity' comes from the title of a prescient book on economics written by Larry Elliott and Dan Atkinson (1998), but it

now gets used to describe a general nervous malaise, particularly acute since 9/11, in which our insecurities are expressed bodily, nationally and economically. The state of our global economic insecurity is almost certainly going to hit archaeology hard, as it has already begun to do in a major wave of layoffs and restructuring at Colonial Williamsburg and the University of Pennsylvania Museum. As governments and foundations pull back and prioritize, archaeology will certainly be called upon to answer the question 'is archaeology useful?' If it is not useful - if it is perceived to be just humanist fluff – or one of those dispensable categories of the 'would be nice', then research posts and projects will fall to the budget axe. Realistically, archaeologists may not have much of a chance to make their case. Whatever public perceptions exist about the utility of archaeology are likely already formed. Still, I expect the public relations machines of archaeology will be cranking full steam over the next few years to defend against the demise of archaeological institutions.

Although I suspect that the current climate of doom has spurred us to ask questions such as the one that launched this forum, one does not have to know much about the history of archaeology to realize that it has actually done remarkably well in times of crisis and recovery. In fact, the first major stage in the formalization of the field occurred precisely during the fin de siècle movement I mentioned above: Augustus Pitt-Rivers was appointed Britain's first inspector of ancient monuments in 1882; the American journal of archaeology was founded in 1885; and in 1894 the first archaeology Ph.D. was awarded in the US. In fact, it was during the fin de siècle decades of 1880 to 1900 that archaeology became professionalized (Kehoe 1999, 5; Patterson 1999). The Great Depression of the early 1930s led to a second wave of expansion of archaeological institutions under the Works Progress Administrative, as well as improvements in excavation methodology in North America, with effects that rippled through the world. The SAA was established during this period. The GI bill after the difficult times of the Second World War and the rebuilding efforts of shelled European cities likewise contributed to the growth and increasing sophistication of archaeology. While there are certainly contingent reasons why archaeology flourished at these times, one of the less obvious is that during periods of crisis, when the future itself seems insecure or the recent past a shambles, people can become more contemplative. Public mood shifts towards a consideration of the long view, which archaeology provides like few other disciplines.

Can archaeology save the world?

To come to the crux of my cranky challenge here, I want to ask whether the way in which we have been answering the questions 'is archaeology useful?' or 'should archaeology be useful?' in recent years is the most honest, most responsible or, in the long run, even the most productive tack. In these many heartfelt public gestures, archaeology still sets the agenda the agenda of building heritage through artefacts. The apologetically inclusive archaeologies, the new indigenous national archaeologies, and the community-activist or critical archaeologies - no matter how framed, they are still variations of archaeology, an institution that must first serve itself,

and save itself. No matter how framed, I cannot shake the sense that the fundamental motivation for these outreach efforts, whether academic or contract work, is to rescue archaeology from a world no longer structured along the colonial and imperial agendas that once needed it.

What if we pulled back from our own insecurities about preserving our careers and instead deployed archaeology to address specific social and environmental problems of the present day? This is not archaeology as heritage, or archaeology in the service of obvious political agendas (such as state socialism and indigenous nationalism). I am suggesting that it may be more ethical and more useful to set archaeology free from history and heritage – in other words, that we reorient archaeology away from reconstructions of the past and towards problems of the present. This is not the same sort of detachment that allowed archaeology to set an agenda entirely internal to itself prior to postcolonial critiques, focused on pedantic problems that only interest other archaeologists. Rather than detachment or genealogy, the relationship between the past and present could be one of reflective comparison.

I would like to hear a louder conversation about the ways in which archaeology can be socially useful beyond inventing traditions and building heritage. What are its more practical, immediate, and material benefits? In many parts of the world, archaeology's greatest real-life utility is economic, in the form of archaeological tourism. Many archaeologists remain squeamish about this marketing of their work, but they must also recognize that some of the most spectacular archaeological sites are surrounded by communities struggling with poverty and neoliberal dislocation. Archaeologists have usually left the economic development of tourism and monuments to others, but I suggest that, in order to make clearer how archaeology is useful, we should be involved in the decisions that are made, contributing our anthropological sensitivity in ways that help local communities have a voice in these developments and improve the conditions of their lives in ways that are important to them.

Another way to approach this suggestion is to convene meetings at the major archaeological conferences in which we set an agenda of the major social problems of the day that might be addressed with archaeological insight. A list might include climate change, urbanization, agricultural sustainability, disaster and recovery, how to survive the boom–bust cycles of capitalism, or perhaps even alternative forms of energy and resource management. None of these topics requires forging a genealogical link between the contemporary case and archaeological cases. In fact, it may be better to form a diptych between archaeological and contemporary situations in order to provoke creative problem solving. The *longue durée* approach that archaeology offers also has the benefit of the cool distance of time, which may help people receive the resulting recommendations with a more open mind.

I do not mean to suggest that there are not already many archaeologists doing this. Colleagues such as Alan Kolata, Clark Erickson and Anabel Ford have long worked on modelling sustainable agricultural practices from archaeological sites in Latin America and Asia (for examples see Kolata 2000; Erickson 1998; Ford and Montes 1999). Other research specifically addresses

the issue of global warming (Bovy 2007; Jordan 2008; Lilley 2008). The growth of environmental archaeology is one of the most promising areas of potentially useful problem-oriented archaeology (see Evans 2003 for a review). Archaeologists working in Peru and Chile, for example, have been contributing to an interdisciplinary inquiry into the origins, patterns and effects of El Niño weather (e.g. Andrus, Sandweiss and Reitz 2008) and others have addressed worldwide desertification (e.g. Barker and Gilbertson 2000). On my own home turf, archaeologists have been useful to geologists trying to date the Mississippi river delta lobe formations in order to understand better the system's natural dynamics – information that is useful in designing a plan for coastal restoration (Törnqvist et al. 1996).

Other concrete ways in which archaeologists and physical anthropologists have been profoundly useful to contemporary society is by assisting in the excavation and/or recovery of mass graves and disaster sites, as seen in the archaeological response at Ground Zero in 9/11 (Gould 2007) or the archaeological forensic teams who have been assisting in Bosnia, Serbia, Ukraine, Iraq and Congo, among many other sites of recent war crimes and disappearances (Haglund, Connor and Scott 2001; Wright, Hanson and Sterenberg 2005; see also Steele 2008).

I realize my advocacy of environmental archaeology might sound like a retreat into the heyday of processualism, but I would insist that this is a very different day and a very different agenda. Human-environment interaction actually entails, whether acknowledged or not, the theoretically radical proposition of the agency of the material world in the mode of Bruno Latour (1993). Following Latour rather than Darwin, it allows for a dialectical and contingent co-constitution of society and nature. This is far from the timeless and monolithic natural world that once informed processual archaeology. Crucially, this new view recognizes the fragility of ecosystems rather than presuming their deterministic force.

To conclude, if the question 'is archaeology useful?' makes us at all nervous, then we should tackle it more honestly and follow the examples of our colleagues who are applying their work to pressing contemporary problems. While we need not totally disinvest from heritage-building projects, neither should we flatter ourselves about how truly helpful these are, nor delude ourselves into thinking they are unproblematically uplifting. Nor should we hide from the fact that a prime motivation for public archaeology is to build constituencies who will support funding, permitting and access.

The alternative I am suggesting for a socially useful archaeology might be called 'futurist', which I mean in the generic sense of a prospective orientation. This might not be so radical a proposition as one that rides a groundswell of temporal re-imagining already under way. At the same 2009 Society for American Archaeology conference at which this keynote was presented, Tamara Bray organized a session entitled 'Crystal balls and possible pathways. Visions of (co-)futures in archaeology'. A recent surge in archaeological attention to temporality, including future times, folding and recycling, suggests that epistemically archaeology is beginning to explore alternatives to the linear, evolutionary timeline in which it has for so long been encased (e.g. Bradley 2002; Gosden 1994; Lucas 2005; Murray 1999; Olivier 2004). Walter Benjamin's quite archaeological approach to history, material culture and temporality is a sympathetic source of philosophical inspiration. Benjamin recognized the social understandings of the past and the present as engaged in an active dialectic. In fact, the recent rediscovery and embrace of Benjamin may be the beginning of the end for the *fin de millénaire* malaise: 'Overcoming the concept of "progress" and overcoming the concept of "period of decline" are two sides of one and the same thing' (Benjamin and Tiedemann 1999, 460). Thus the move towards a futurist archaeology I am advocating has simultaneously a pragmatic, ethical and intellectual appeal.

Stimulus towards a future-oriented archaeology, or at least an archaeology that intersects with contemporary social problems, is also coming from the general archaeological public. A survey of the last three years of *Archaeology* magazine yields a growing number of such titles as 'Global warming threatens the ancient world', 'Drugs and looting. The crystal meth connection', and 'Rome's appetite for oil' (these examples all from the April/May 2009 issue). Thus the current climate of crisis is already pushing archaeology to be relevant and useful to the present. Another title runs, 'Iceland's unwritten saga. Did Viking settlers pillage their environment?' (Zorich 2007). The last paragraph reads,

As the worldwide climate changes and natural resources are exploited to their limits, Iceland may become an example for other nations that are approaching their own thresholds. Looking out over the farm's eroded remains, it isn't exactly clear whether we are seeing the past or the future (51).

Walter Benjamin would agree.

Acknowledgements

I would like to thank the organizers, Liv Nilsson Stutz and Ian Straughn, for the honor of the invitation to this forum, and thank the commentators for their thoughtful replies, which have already proved 'useful' in my continuing education.

Note

And, of course, I certainly do not mean to reference the Italian fascist art movement which attempted to dictate the future, properly capitalized as 'Futurist'.

> Archaeological Dialogues 16 (2) 142–148 © Cambridge University Press 2009 doi:10.1017/S1380203809990067

Third millennium changing times Rita P. Wright

Shannon Dawdy has presented us with a provocative dialogue on the question 'is archaeology useful?' In it, she forecasts a rather bleak future for our field, raising doubts about whether archaeology should be useful and whether it is 'threatened with its own end-time'. Woven throughout her paper are major

concerns about the use of archaeology for nationalistic ends and heritage projects which she deems fulfil the needs of archaeologists rather than those of the public they serve. In the final section of her paper, when she asks, 'can archaeology save the world?', Dawdy recommends that we reorient our research 'away from reconstructions of the past and towards problems of the present' (p. 140). In my contribution to this dialogue, I introduce an issue that reflects on cultural heritage, antiquities and artefact preservation, which, though they may seem antithetical, are closely aligned with Dawdy's concerns. As a prehistorian with a focus on the third millennium B.C. in the Near East and South Asia, I consider these issues to be the 'big stories' that have emerged in the early years of this third millennium, and those that speak directly to the usefulness of archaeology. Of course, it is not the only thing we do, but it is 'useful'.

The changing climate in the antiquities trade

While the looting of antiquities has a long history, I am not sure how anyone could have missed the surprising challenges faced by archaeologists, museum directors, curators and national governments as a series of events unfolded, beginning in 2000. A good place to start with is the destruction of the Buddhist statues by the Taliban in Afghanistan in March of 2001 (Lawler 2002). This was followed closely by the looting of the Baghdad Museum in 2003 and a flood of artefacts that appeared on the antiquities market (Polk and Schuster 2005). In 2005 serious questions arose about the artefact collections and acquisition policies of the J. Paul Getty Museum in Los Angeles.

The archaeological response was immediate. Professional organizations like the Archaeological Institute of America (AIA) used their strong ethical codes against publishing looted materials as a platform on which to inform the public about the destruction of history that results from the purchase of illicit antiquities. Far from a mirage, in the year 2000 Chippindale and Gill published a comprehensive study of the large number of artefacts in several private and museum collections that were acquired after 1973, a date uncomfortably close to the UNESCO international sanctions imposed against acquiring artefacts that lack provenance. As an example, their study documented the extensive destruction caused by the looting of several hundred Cycladic marble figures currently held in museum and private collections. They calculated that it would require the looting of 10,000 graves (85 per cent of the funerary record of the Early Bronze Age Cycladic) to recover as many marble figures. In other words, these artefacts were not chance finds but 'deliberate searching of known archaeological sites for saleable antiquities' (Chippindale and Gill 2000, 119), a practice that probably is common in other archaeological contexts. Based on their results, I worry less that we have gone too far in our passion to preserve the past than that we have not gone far enough in speaking out against destruction of cultural heritage and the need to preserve and protect it.

Not surprisingly, museum directors on their side hold different points of view. Proclaiming museums as the primary curators of the past, Philippe de Montebello, then director of the Metropolitan Museum of Art, accused

archaeologists of being the major 'instigators of criticisms of museum policies' regarding their holdings of looted artefacts. He made it clear that he did not consider archaeology 'useful' when he famously stated that archaeologists were exaggerating their claims that the context of artefacts was essential to the reconstruction of the past, since (according to him) 'ninety-eight percent of everything we know about antiquities we know from objects that were not out of digs'. Furthermore, 'how much more would you learn from knowing which particular hole [an artefact] came out of?' Speaking about the Euphronios Krater, a 2,500-year-old Greek bowl signed by the potter, looted from a tomb in Italy and held in the museum's collection, he said, 'Everything is on the vase' (Kennedy and Eakin 2006). His colleague, James Cuno, former director of the Fogg Art Museum at Harvard University and presently director of the Art Institute in Chicago, also expressed doubts about the significance of context and the loss of knowledge that results from looting. Even though context was desirable, for Cuno, the aesthetic, technological and iconographic knowledge to be gained from artefacts outside their specific context was significant enough to justify acquiring and exhibiting looted artefacts (Cuno 2008).

These issues of national heritage came to the test when the Italian government requested the return of objects held by the Metropolitan Museum of Art, the J. Paul Getty Museum, the Princeton University Museum and the Boston Museum of Fine Arts. Italy has strict laws that were codified in 1909 in which palaeo-anthropological and archaeological materials, whether movable or immovable and more than fifty years old, are the property of the Italian government. Although looting of archaeological sites in Italy continues to be widespread, the laws are rigorously executed by an active cultural heritage unit of the Italian national police, the TPC (Carabinieri Tutela Patrimonio Culturale).

More drastic measures were taken in the Italian government's dealings with Marion True, an art historian and chief antiquities curator at the Getty, who helped build its collection of antiquities from the Greek, Roman and Etruscan cultures. Although True had professed high standards for the acquisition of antiquities (in fact, the Getty did return antiquities to Italy during her tenure there), many were acquired either through purchase or through gift from major collectors and had been acquired illegally by those collectors. True's career came to an end in 2005 when she was indicted in Italy for removing Italian patrimony. Greek authorities also indicted her but their charges were later dropped. True was dismissed by the Getty when she disclosed that she had obtained a loan from Lawrence Fleischman, a major collector of antiquities, 'just days after' she had arranged the purchase of their collection by the Getty for sixty million dollars (Eakin 2007). She is currently on trial, along with Robert Hecht, the dealer with whom she worked in acquiring antiquities for the Getty (Povoledo 2009). They are being tried on conspiracy charges for the trafficking of antiquities.

A series of other initiatives by the Italian government followed in which collectors were approached. Shelby White, who directs the Leon Levy Foundation, a major New York philanthropic organization, and holds an important collection of antiquities, returned ten objects from her collection

to the Italian cultural ministry (Povoledo 2007a; 2007c). The artefact return took eighteen months of negotiations and was the first that the Italian ministry had successfully negotiated with a private collector in the United

Four major museums in the United States have negotiated agreements that involve the return of antiquities. In addition, as part of the arrangement, the Italian government has made concessions involving the loan of artefacts. For example, the Metropolitan Museum of Art agreed to return two dozen classical antiquities, one of which was the Euphronios Krater (the vase that speaks for itself!), in exchange for receiving objects on loan for future exhibitions. The Princeton University Art Museum agreed to return eight artefacts that had been looted and illegally exported to the US. They will also have access to long-term loans of material from Italy. In addition, cultural exchanges have been arranged that grant Princeton students access to archaeological sites for future research projects. As for the J. Paul Getty Museum, its director was replaced, and new policies for acquisitions have been established. Its current director, Michael Brand, developed a policy that is similar to the arrangements made by the Metropolitan Museum. Patty Gerstenblith, director of the Cultural Heritage Law programme at De Paul University, described the Getty guidelines as 'the most far-reaching of any U.S. art museum' (Boroff 2006). All told, more than one hundred artefacts have been returned from the four major museums - the Boston Museum of Fine Arts, the Getty, the Metropolitan Museum of Art, and Princeton University.

Antiquities theft is being pursued in other venues. The extent of criminality involved in the antiquities trade was revealed when federal agents raided the Los Angeles County Museum, a gallery and three other museums that possessed collections of looted antiquities from South East and East Asia that were donated by collectors. The objects were exported as replicas of antiquities by painting them and applying false stickers that read 'made in Thailand' (Wyatt 2008). In a sting operation in which an undercover agent from the National Park Service posed as a collector, the museums and donors were accused of inflating the value of the gifted artefacts that were later written off as deductions on their federal taxes.

The artefacts involved in the case of the Los Angeles County Museum differed from the 'classical' antiquities held by the Metropolitan Museum and others discussed earlier. Joyce White, an archaeologist and director of the University of Pennsylvania Museum's Ban Chang Project, authenticated the artefacts recovered in the investigation. She found that most of the artefacts were intact and had been looted from burials, obviously some of the most important contexts from an anthropological perspective. It is significant that this investigation revealed an active market in artefacts from prehistoric and lesser-known cultures as well as in the classical antiquities that have been the major focus of the headline news. As White put it, this investigation demonstrated the widespread looting of artefacts beyond the 'large expensive pieces of Classical antiquity' (quoted in Wald 2008).

Beyond these cases, other projects have been initiated by individual archaeologists. Brian Rose, the current president of the AIA, teaches courses

on the rich cultural history of Afghanistan and Iraq to military personnel en route to combat zones. Elizabeth Stone at SUNY Stony Brook uses sophisticated software and high-resolution satellite imagery to monitor looting of sites in Iraq, an innovative effort that alerts Iraqi officials and the US military of site destruction and looting, much of it in remote regions, and not easily detected on the ground.

Archaeologists appointed to the Cultural Property Advisory Committee of the US Department of State have played an important role in reviewing requests by foreign governments that prohibit the export and sale of antiquities to the US. The majority of these requests have gained the approval of the committee. Still, many different groups have vested interests in these requests and are supported by powerful individuals with agendas that differ from those of the archaeologists. In the case of a request from the People's Republic of China, for example, coin collectors were aided by Senator Charles Schumer (Democrat, New York), who was presented with a Friends of Numismatics award in January 2007 for his 'valuable assistance... in the arts and collecting community' by the Ancient Coin Collectors Guild (see www.accg.us). Although part of PRC's request was voted in the affirmative by the committee, the coins were tabled. They were finally affirmed in January 2009.

These examples bring me back to Dawdy's discussion of nationalism and an 'imperialist archaeology'. Her dialogue is naturally restricted by time and space limitations and deals principally with North and South America. There are a few references to European archaeology and she gives a brief nod to Africa and South Asia. My experience in South Asia differs from Dawdy's observations from abroad. In fact, the imperial days of which she speaks are largely behind us in most of the Near East and South Asia and have been for some time. Certainly they are not a phenomenon of the third millennium. I assume that all archaeologists who conduct research in foreign countries are required to apply for permits to conduct their research and are subject to regulations issued by federal or, rarely, local governments. The long-established archaeological infrastructure in Pakistan is actually a legacy of British colonial days. Permits are granted through the Ministry of Culture and officers with archaeological training that are employed by the Department of Archaeology of the Government of Pakistan are assigned to excavations. The government representative is on-site at all times and monitors procedures. For example, opening new excavation units requires permission from the representative. Artefacts discovered on the excavations are transmitted to the government through their representative and remain either on-site in proper storage areas or in other repositories selected by the department. All artefacts remain in Pakistan, though they may be loaned for study purposes and later returned. In addition, some projects establish training programmes for students from local universities and elsewhere.

Although the system is intensely bureaucratic, it does not match Dawdy's suggestion that archaeologists implement a programme of Institutional Review Board documentation, an issue that brings me back to questions that might emerge as the US government funds projects in Iraq and Afghanistan.

Presumably, these projects are designed to provide assistance or engage in what are meant to be genuinely helpful projects in which archaeology and heritage are implicated. I find it worrisome, if not downright scary, that anyone would suggest that an Institutional Review Board document be required to conduct archaeological research in a foreign country. It would be offensive at the least and might lead to total rejection of a permit application because this is not the way business is done in many parts of the world. All work projects begin with the ministry of culture of the host country and the protocols established there.

In many areas of the world these days, work is conducted as a collaborative, international enterprise (Kohl 2008, 504) and all such matters are worked out among colleagues. We share with our colleagues a desire to conduct problemoriented research and make the compromises necessary to satisfy all parties concerned. This is far and away from the 'archaeological colonialism' that Dawdy worries over in her dialogue. We also are aware that our research results might be used 'to underwrite questionable political agendas' (ibid., 504), a fact of life that we just have to live with. The only way to control it is to collectively donate our trowels to the Smithsonian attic collection and stop digging. Admittedly optimistic, Phil Kohl proposes that there may be a way to divert nationalist tendencies by examining the ways in which we interpret the results of our research. Rather than emphasizing the uniqueness of archaeological remains, in appropriate situations, especially in macrohistorical approaches, we need to consider the 'shared nature' of past societies (Kohl 2008, 504; see also Kohl 2007).

A matter of context

Finally, I return to Dawdy's concerns about cultural heritage and nationalistic tendencies because I am not persuaded that they are things of the past. The issues I addressed here will continue to loom large in this new millennium and I expect archaeology will be at the forefront of advocacy for the preservation of heritage. Nationalistic issues and the complexities involved in achieving reasonable outcomes will be more difficult to resolve.

I began this article with news of the destruction of the Buddhist statues by the Taliban in Afghanistan and measures taken by the then 'legitimate' government. As a national policy, all artefacts and monuments that preceded Islam were to be destroyed. They were particularly eager to erase the Buddhist statues from the country's past because they were well-known throughout the world. The National Museum in Kabul was also targeted and a large number of smaller Buddhist artefacts were smashed and other artefacts destroyed that dated back to Alexander the Great and earlier into prehistory.

The year in which the Bamiyan statues were dynamited by the Taliban, I attended a meeting at the Asia Society in New York City and for the first time heard de Montebello and Cuno state that the statues did not belong to Afghanistan, but were the cultural property of the world. Any rules and regulations pertaining to their recovery or restoration should be decided by Western scholars.

Just a few years later, in 2003, President Karzai proudly announced the discovery of artefacts that had been hidden in a vault in the presidential palace in Kabul since 1979. Using a system of checks and balances, it took five bank officials to open the vault in the presidential palace. International teams of archaeologists rushed to the scene to assist with curation and to re-establish a database that had been destroyed during the intervening years. One of the archaeologists that returned to Kabul was Viktor Sarianidi, the archaeologist who excavated Tillya Tepe, where a hoard of Bactrian gold was discovered. Buried in the tomb were five women and one man, all of whom were adorned with gold and semi-precious stone ornaments (Galvin 2004). Their sumptuous objects and rare finds are providing a new understanding of the social and economic lives of the nomadic groups that traversed the Silk Road, engaging in trade and accumulating large quantities of wealth, 2,000 years ago.

There is a sign on the door of the National Museum of Afghanistan in Kabul that reads, 'A nation stays alive when its culture stays alive' (Sullivan 2002). These sentiments may have been the inspiration that led the staff of the museum to move the gold to the security of the vault many years ago. It was a handful of people comprising museum guards, curators, sweepers and others that hid the gold and many other artefacts that they viewed as Afghanistan's national treasures. Additional objects were removed from the museum or hidden in cupboards and under shelves and kept in safekeeping during Taliban rule. The story behind these heroics could hardly be mistaken for self-serving acts; they were, in fact, dangerous. They acted for all the right reasons and were being genuinely honest in their worry over tradition and heritage. You might say they were obsessed about their future at a time when their national identity was being destroyed.

An exhibition, *Afghanistan. Hidden treasures* has been on a worldwide tour of museums (Hiebert and Cambon 2009). It opened at the Metropolitan Museum of Art on 23 June 2009 on loan from the government of Afghanistan, bringing the question of world heritage full circle and informing the world of the country's rich cultural history.

The examples I have discussed reveal the complexities involved in questions of nationalism and cultural heritage that are very much in the present. From my perspective archaeology is far from an 'end game'. Our contributions to issues regarding looting, collecting and acquiring antiquities have made a good start on resolving some complex issues. Moving forward into the new millennium, fresh from processual and postprocessual debates, archaeologists have crossed a divide and hopefully are more tolerant of the different ways to 'do' archaeology. Important gains have been made by archaeologists in developing an enlightened ethical awareness. In that sense, I view the future of archaeology optimistically. We may finally be at the beginning of a transformed age when we are more confident about the value of our field and the significance of the remains we study. In the examples I have provided and others not discussed, I see a future in which we will continue to attempt to persuade others – professional colleagues and the public – that looting destroys everyone's history.

Archaeological Dialogues 16 (2) 149-152 © Cambridge University Press 2009 doi:10.1017/S1380203809990079

(How) Can archaeology be useful to American Indian groups? Joe Watkins

Dawdy's keynote paper, rather than answering the question whether archaeology is useful, asks whether it should be useful. That is, she asks whether archaeology needs to be useful beyond archaeology for archaeology's sake. It is a valid question, because many people see archaeology as a nonessential option, of peripheral use if any. For others, archaeology's utility lies in its ability to provide the long-term view of human behaviour and humankind's reactions to situations of the past that, hopefully, we might use to help us deal with present and future events.

As an Indigenous person (I am a member of the Choctaw Nation of Oklahoma, an American Indian tribal group), I wish to comment in two areas. First, I believe the issue is not so much whether archaeology should be useful, but rather that archaeology should not be used against any group of people. Dawdy reminds us of the use to which Kossinna and the Nazi regime put archaeology of the state, and her comparison to the words of V. Gordon Childe serves as a counterpoint and an example of archaeology of the state done for 'good'. Dawdy also reminds us that such use of archaeology in support of the state has not been done only in Europe, and her use of citations from Fowler, Trigger, Kehoe and Hinsley concerning American Indian issues with archaeology are well placed. She believes that contemporary American archaeology's considerations of indigenous communities are 'quite clearly oriented towards smoothing the way so archaeologists can placate a potentially troublesome public and still go about their business' (p. 137) in the post-NAGPRA world - this is probably more correct than anyone has dared suggest prior to this juncture, but it only goes so far.

I have elsewhere offered a broad overview of Indigenous perspectives on archaeology (Watkins 2005). Perhaps the most telling perspective is that offered by Don Sampson, a former Board of Trustees chairman for the Confederated Tribes of the Umatilla Indian Reservation. In a position paper related to the Kennewick Man case, Sampson noted,

We want the public and scientists to understand that we do not reject science. In fact, we have anthropologists and other scientists on staff, and we use science every day to help in protecting our people and the land. However, we do reject the notion that science is the answer to everything and therefore it should take precedence over the religious rights and beliefs of American citizens (Sampson 1997).

A year later, another group involved in the Kennewick process reaffirmed the stance. Marla Big Boy, an attorney for the Colville Tribe, told reporters at a press conference in Santa Fe in December 1998, 'The Colville Tribe is not against science. We are against the use of science to discriminate and disenfranchise Native American tribes' (Big Boy, as quoted in Coleman 1998). In both these statements, the general term 'science' is used in place of 'archaeology', and both of these groups were united in their fight against the implication that the interests of 'science' should somehow trump all other values.

Second, as hinted at in Sampson's statement, I believe that there are some tribes who seem to have found a 'use' for archaeology. The Pawnee Tribe of Oklahoma has chosen to use archaeology in order to expand what might be considered its 'aboriginal homeland' as well as to extend 'Pawnee identity' further back into the archaeological record. I documented a portion of their use of archaeology to get the Salinas Burial Pit (a 'tourist attraction' in Kansas) closed and the human remains and associated funerary artefacts reburied in 1990 (Watkins 2000, 105-10) and their efforts to reclaim human remains and associated grave goods from the Nebraska Historical Society for reburial in 1991 (ibid., 110-15). Further, the Pawnee have continued to request the return of human remains from other institutions for reburial. A 'Notice of inventory completion for Native American human remains and associated funerary objects in the possession of the Colorado Historical Society, Denver, CO', published on 11 July 2002, in the Federal register (US Government 2002), outlined the disposition of human remains and associated funerary objects from the collections of the Colorado Historical Society. The Colorado Historical Society determined that the

preponderance of the evidence, including archaeology, oral traditions presented during consultations with the tribes listed above, expert opinion, and new evidence provided by the Pawnee Nation of Oklahoma in their repatriation request...indicates that a relationship of shared group identity can be reasonably traced between these human remains and associated funerary objects and the Pawnee Nation of Oklahoma (US Government 2002).

The repatriation of the material from the Nebraska Historical Society established a relationship between the Pawnee and prehistoric Loup River/Itskari-phase sites or remains of the Central Plains Tradition, dated to the period between about A.D. 1100 and 1350 (Steinacher and Carlson 1998, 256). The material recovered from the Colorado Historical Society further expanded the Pawnee's reach back in time as human remains associated with the Early Ceramic period or Plains Woodland (*ca* A.D. 100–1000) were repatriated to the tribe.

While the long-term legal ramifications of this manoeuvring are unclear, these actions have created a de facto aboriginal homeland for the Pawnee tribe that spans a great portion of the central and southern Great Plains (the states of Colorado, Nebraska, Kansas and Oklahoma). It has also created a legal precedent for extending the amorphous concept of 'shared group identity' from a contemporary culture back in time to an archaeological one. It is possible (though not very probable) that, should the United States government wish to return federal land within these states to an American Indian tribe at some point in the future, perhaps the Pawnee Tribe will have the strongest claim based on this 'relationship'. Not all of the relationships between the tribe and archaeologists have been amiable, but the tribe has learned to work effectively within the system established by repatriation legislation.

Additionally, as a result of amendments to the National Historic Preservation Act of 1966, tribal authorities have taken over the functions of the State Historic Preservation Officer on tribal lands. A review of the website of the National Association of Tribal Historic Preservation Officers revealed 76 tribal historic preservation officers in 24 states covering more than 34 million acres (see http://www.nathpo.org/THPO/state_list.htm) that have been formally recognized by the National Park Service as meeting the qualifications necessary to take over the functions of the State Historic Preservation Officers. These represent people who work for American Indian tribes to minimize impacts to cultural heritage on tribal lands. It is important to note that I did not say impacts to tribal heritage, since these offices focus only on the cultural heritage of the land under tribal control. The geographical shortcomings of the National Historic Preservation Act are another matter, but I mention the THPO programme because it indicates a formal American Indian attempt to use at least a portion of archaeology's tools to manage American Indian heritage. In my opinion, this indicates that some tribes have found archaeology 'useable', if not 'useful'.

The Navajo Nation Historic Preservation Department, through its Cultural Resources Compliance Section, coordinates consultation and compliance procedures to facilitate the Bureau of Indian Affairs' compliance with tribal and federal preservation laws as well as providing technical support to tribal members. In this manner, it supports the nation's sovereignty by providing its own compliance systems over federal requirements. It also acts to speed up projects that require compliance with historic preservation laws and regulations to allow services to get to local tribal members more quickly. Even in this regard, however, the Navajo Nation does not 'use' archaeology.

An analysis of the situation makes some things clear. It is possible for American Indian groups and archaeologists to work together when united for a common cause, and American Indians are not averse to working within an established system to get things accomplished. Archaeologists were able to use the positive publicity generated by the closing of the Burial Pit to influence the Kansas legislature to obtain passage of a law which protects unmarked burials from destruction, and at the same time American Indians got a law that protects unmarked burials from commercial exploitation. There are some areas, therefore, where American Indian tribes have been eager to take over various aspects of archaeology.

Even while many American Indians as individuals recognize the validity of information that archaeologists can provide concerning cultures within geographical areas of the past, it is unlikely that these groups feel the need to embrace any explanatory power archaeology might offer. Tribes have entered into conversations with archaeologists, and those conversations often revolve around the different ideas concerning the archaeological record and the past.

Sometimes the conversation has been initiated by archaeologists working in conjunction with tribal people (cf. Anyon et al. 1997; Dongoske et al. 1997; Whiteley 2002), and other times it comes from the perspectives of an American Indian trying to unite the work of archaeologists with tribal perspectives (Echo-Hawk 2000). Regardless, archaeologists who work with American Indians recognize that the archaeological record can become fuller

and more meaningful by integrating American Indians with the beginnings of the research programme. For example, archaeologists Chip Colwell-Chanthaphonh and T.J. Ferguson interviewed representatives of the Hopi, the Tohono O'odham, the Western Apache, and the Zuni – Native American groups that consider the San Pedro River valley to fall within the boundaries of their traditional homelands – to tie the archaeology of the area with 'learning how Native peoples conceive of the ancestors, documenting the cultural values descendant communities have for ancestral villages and understanding the historical narratives embedded in tribal traditions' (Ferguson and Colwell-Chanthaphonh 2006, 4). Rather than trying to use archaeology to explain or delineate culture history, the authors chose to highlight the tribal perspectives on the area in a manner that was more fitting to those perspectives.

As indicated in the previous discussion, I still do not believe American Indians find archaeology 'useful' in its scientific sense as a means of giving them additional information concerning their past. Perhaps this is not so much a shortcoming of the discipline as it is a strength of American Indian belief in the value of individual tribal perspectives. If archaeology as a discipline wishes to strengthen its standing among American Indian groups, it must continue to search for ways to make what it has to offer truly useful to American Indians. Such utility may continue to be found merely within the compliance area, where American Indian projects are impacted by federal preservation legislation. Archaeologists must also search out ways to integrate the 'scientific record' with tribal perspectives in order to *supplement* rather than *supplant* tribal views of the past and the roles of the cultures within it. Otherwise, archaeology will lose any utility to those whose ancestors contributed to the archaeological record we study.

Archaeological Dialogues 16 (2) 152–157 © Cambridge University Press 2009 doi:10.1017/S1380203809990080

'Fortuitous and wasteful mitigations . . .' Mark Pluciennik

In this *fin de siècle* moment – or is it closer to a mood of Depression? – the Keynesian idea of expanded government spending is much in vogue. We have been here before. As Shannon Lee Dawdy notes, part of Roosevelt's New Deal in the USA was the famous Civilian Conservation Corps, who performed much archaeology and related work (Maher 2008; Paige 1985). It seems particularly appropriate, then, to repeat a famous quote of Keynes: after all, archaeology comes surprisingly close to that much-derided Keynesian remedy. It was in his *General theory of employment, interest and money* that he wrote, "To dig holes in the ground," paid for out of savings, will increase, not only employment, but the real national dividend of useful goods and services' (Keynes 1936, 220). What is less often quoted, though, is the subsequent comment: 'It is not reasonable, however, that a sensible community should be content to remain dependent on such fortuitous and often wasteful mitigations'.

In Keynesian mode, I want to suggest that archaeology is quite probably less 'useful' than many other human activities we might undertake, though equally it could be argued to be often less harmful. I agree with much of what Dawdy writes and in particular her repeated calls for 'honesty', but I suspect that the view from inside archaeology is necessarily somewhat different to that from elsewhere (cf. McGuire 2007). What I want to propose is that if by 'useful' we mean more than the provision of employment primarily for archaeologists, we would probably do better looking elsewhere. Archaeology, I would argue, is neither particularly useful nor necessary, but it is intellectual fun. Whether that is sufficient justification is for various others to decide.

Dawdy suggests that the question that frames this discussion can be broken down into three components. I would read the question slightly differently and indeed more pedantically. What, I might ask, do we mean by 'useful' in the first place? Useful to whom? And I would also wonder what we might mean by 'archaeology'. There are various ways in which we can approach this question and put forward answers. One very simple (if rather selfinterested) way would be to admit that, for most readers of this journal but also many others in the associated field, obviously archaeology is useful: it provides employment for us and others, interest, careers, money, education, entertainment - and opportunities for interesting archaeological dialogues. Further, for many it does not appear to do any very obvious harm which would negate that usefulness, and may even offer some temporary protection to some small parts of our planet. Others, of course, especially the variously colonized or worse, will see archaeology, along with anthropology and its offshoots, as direct perpetrators of evil deeds such as grave robbing, and other forms of desecration. Or one might reasonably view archaeology in its most ubiquitous form - cultural resource management - as a willing collaborator with the dark forces of ever-expanding development and a voracious and environmentally destructive capitalism (Kintz 2001). But then, as Dawdy has also noted, archaeological endeavours may also enrich communities in various direct and indirect ways, from tourism to a heightened sense of place as well as the more ambivalent values of 'identity'. We should, of course, neither expect nor want simple answers. But the point is surely clear: where archaeologies might fit among such a constellation of uses and abuses is of course highly contextual and dependent on one's position in time, and space, and sociocultural and political situation. The uses - the purposes – to which each archaeology might be put can be very differently glossed: useful to whom? When? And for what? I do not think one can reach any definitive, global or universal answers that way. And Dawdy and others have rehearsed warnings about archaeological misuse which I need not repeat.

Can one, then, at least ask what is meant by 'archaeology'? Leaving any moral import aside, and without worrying where archaeology blurs into history, may I propose that it is the systematic investigation of the human past? If accepted, then that term 'systematic investigation' immediately suggests that large numbers of people – the public so often recently appealed to – are typically excluded from knowledgeable participation or indeed interest:

not that sheer quantity of participants or indeed democratic validity need necessarily be a parameter of 'usefulness', though again one could ask 'to whom?' But it does perhaps help us temper easy assumptions of any general and benevolent value for the discipline. After all, for some, anti-archaeology – what archaeologists are disposed to call 'looting' - may be of positive benefit (Hollowell 2006). For many others, probably the vast majority of people, archaeology sensu stricto - discovering things about the past by digging, or looking at bits of stone and pot in a museum – is irrelevant and unnecessary, or may even be positively harmful, but certainly hardly 'useful', practically or otherwise. This of course goes for large numbers of people in the USA (Newport 2006; 2009) and elsewhere, including the UK (BBC 2006). Polls suggest that almost half of people prefer and indeed accept literalist readings of ancient texts or traditional stories in which the past is already (and often supposedly completely) known. One suspects the proportion would be even higher on a global basis. Such faith-based 'knowledge' broadly excludes rational argument about the nature of the past as it might look from an archaeological position. Although people commonly hold sometimes conflicting beliefs, any idea of aspiring towards different, or more realistic, or more inclusive, or constructed or contestable pasts through the medium of archaeology, is presumably ultimately meaningless to such believers. For a further large section of the population, archaeology *qua* archaeology is simply something that they do not come into contact with, have no interest in, and would not miss if it disappeared tomorrow except for increased repeats on television channels. One answer to the question therefore might be a very qualified 'yes', realizing that the usefulness of archaeology, if any, may well be mostly confined to a small well-educated elite, people looking and behaving very much like, well, us.

But others, notes Dawdy, propose that at least some archaeology offers the chance to critique the 'historical conditions of inequalities in the present' (p. 135). No one should doubt the sincerity of such practitioners, but archaeology is not necessarily the most effective way to do so, though it may be the most obvious and indeed accessible platform for those who are archaeologists in the first place, and especially those who are resident in academia. But sometimes these justifications tend to smack of special pleading: archaeogenetic study of indigenous peoples will help understand the source of their health problems better (and act as a continuing source of research funding...); environmental archaeology will show the long-term damage we are doing to the planet (which excuses our funded collaborations with those self-same developers...). This is not to dismiss the historical perspective, but I remain unpersuaded that such interventions demonstrate unequivocally the usefulness of archaeology. They tend to come from quite specific interest groups and be somewhat narrow in scope. Of course archaeology informs us and the public more generally if they wish, but it is a very roundabout way of ascertaining facts about the modern world and combatting its inequalities, and Dawdy's arguments about action being at least partly substituted by archaeologies of apology resonate with recent statements by historians, too. Margaret Macmillan (2009, 30) argues, 'If we look back too much and tinker with history through apologies, the danger is that we do not pay enough attention to the difficult problems of the present'. Apologies for and about the past are also nuanced by disciplinary history. In Europe archaeologists feel tainted, or threatened, by the connection of the discipline with Kossinna and extremes of nationalism. In colonial contexts, and especially those where the colonizers are still dominant, such as the Americas and Australia, there is added guilt since the origins and relative prominence of 'historical archaeology' are so obviously associated with the production of recent settler history and a very particular take on a 'national story'. Where does self-awareness become self-obsession? When does concern become apology? When does intellectual ambition become hubris or perhaps disciplinary delusion - the wish to be considered useful?

A decade ago I wrote,

If we are to expand the possibilities of histories, the range of human potentialities, and insist on archaeologies as constructions of human becomings, not essential and pre-determined destinies, then archaeology... has a role to play in informing, inspiring and eventually empowering people, by demonstrating that pasts, presents and futures are made, not given (Pluciennik 1998, 823).

Margaret Macmillan expresses her view of the value of history more succinctly: 'If the study of history does nothing more than teach us humility, scepticism, and awareness of ourselves, then it has done something useful' (Macmillan 2009, 169). That archaeology and history should work like that is a nice idea! But note that such 'scepticism' has to be of the proper kind. Arguments that there may be 'another explanation' but one which is different to that espoused by those who 'claim to have uncovered the truth once and for all' (Macmillan 2009, 170) simply will not wash with very large sections of the population who feel no need for evidence-based justifications, or rather believe that sacred texts or traditional stories provide all the evidence required. Polemics such as those quoted above, however, ask that others play by the same rules. They require, for a start, that those people, generally, will read such material, know their lines, have access to and similar evaluations of the same kinds of resources, and have similar motivations and desires to construct empirically sound and reasonably rigorously argued pasts. It assumes that for the parties involved, people's interests in outcomes and knowledge of the kinds of acceptable arguments will be broadly aligned in a rational, sociological, political and moral sense (LAW 1997). Given the large numbers of people who believe in irrational human histories, whether involving mythical origins, recent creationism (Creation Museum 2009) or the intervention of aliens in human affairs, that seems a big ask. Ask a community or a public what, if anything, they want archaeology to do, and you may well get an answer that it is difficult to live with as an archaeologist. Help with development for jobs! Support our territorial claim (Curta 2001)! Argue in court for our essential identity (Field 1999)! There is surely a coherent argument that can be made that if you really want to be useful, you would be better off setting any interest in history and archaeology on one side, and rather concentrating on present injustices and explicitly political actions aimed directly at emancipation and a better future. Dawdy argues for the second – but wishes to keep the first, the archaeology too, and I am not sure that the logic works.

One can, of course, do both the archaeology and the politics. If one is trained as an archaeologist – as a certain kind of intellectual – one might choose to use one's skills in an explicitly political way; say, to provide employment, tourist trails, economic benefits and possibilities, community involvement. But one should not confuse that with archaeology as an intellectual endeavour attempting to understand the past. The former is using archaeology as a tool – and no doubt a useful one in certain circumstances – but it could equally and perhaps more usefully be gardening, or building, or teaching small business skills, or starting up a credit union. The 'usefulness' does not reside in the archaeology, but in the way the archaeologist chooses to use it. It is also very clear that tourism (and here see Crick 1985), economic development and so forth are not unambiguous forces for good, and liberal bourgeois notions of what constitutes a 'community' and the values associated with it may look very different from the inside, or indeed from other and often more knowledgeable disciplines.

Supposing we turn the question on its head and ask 'what difference would it make if there were no archaeology practised?' Clearly, human societies can quite happily and successfully exist without it, and have done so for tens of thousands of years: archaeology is a methodology, a profession, a discipline, which can reasonably be argued only to have become possible as part of modernity (Thomas 2003). There are much broader philosophical questions which could be asked: is the sense of a past necessary for humans as a basis for an imagined or internalized trajectory, whether for personal identity or for social collectivities - that is, history. Archaeology could then be considered simply as a subset of, or a particular methodology for constructing, such histories (narratives) and perhaps justified as psychologically 'useful' in that way. Archaeology would then simply be the way in which the construction of 'histories' and narratives is facilitated at this particular juncture, but if history sensu lato is a necessary part of being human, then we could certainly deem archaeology 'useful'. There are, though, plenty of other ways to construct histories, and again it is not clear that archaeology would have any particular claims or merits. Despite attempts by Dawdy to make archaeology useful in a different way, I remain unconvinced by her claims that archaeology can directly help us produce better 'adaptations' to contemporary and future environmental problems. Apart from my dislike of the terminology, I cannot see that it takes an archaeological project to inform us, for example, that extensive building on flood plains is likely to end in mishap. Such projects may well be interesting, but largely insofar as they help us explore the past, rather than deal with predicted futures. The citation of headlines from Archaeology magazine also seems a red herring: journalistic milieux, as is well known, have their own requirements (Gero and Root 1990), and attention-seeking should not necessarily be confused with a shift in the zeitgeist. Using the archaeological past to somehow predict the future, or draw lessons for it, is far too simple an answer for my liking, and quite possibly ends up in repetition rather than future-oriented action (cf. Davies 2006, 1-20). If we could really slot in data from the past and crank out 'useful' answers, then studying archaeology would not be nearly so interesting.

What, then, if anything, does archaeology do that is genuinely and uncontroversially useful? I think we are led to the conclusion that it is of undoubted intellectual value, but among a circle that is largely restricted to other archaeologists and those in related disciplines. For people with such interests (and they do not have to be professionals), archaeology arguably can help provide alternative perspectives in time and space. Intellectually, it can offer places to think from and to reflect about difference (as can ethnography, sociology and history), and which may help us individually reach a perhaps more balanced view of our situation and those of others. In that arcane and narrow sense, archaeology can be considered as useful or even a force for good within some forms of intellectual life, as could just about any other discipline that involves thinking. The political role of intellectuals has been long debated (Gramsci 1971; Mannheim 1956; for archaeology see Hamilakis 1999; Hamilakis and Duke 2007; Pluciennik 2001), and one would hope that the value of that is accepted in a positive sense by many in our discipline too. But we should not have to be defensive about intellectual or cultural endeavours more generally. I am not some kind of fundamentalist utilitarian in human affairs: I do not think that every activity we undertake should be demonstrably, directly and practically useful. The world would be both poorer and more painful if everything had to be justified by some spurious use-value - many of us are all too aware of what is ignored or devalued within so-called 'audit economies' (Shore and Wright 1999; Hamilakis 2007, 21–22). But let us be straightforward here: archaeology specifically is mostly useful for 'us'. Any greater or more general claims are difficult to justify, and we would be all the intellectually stronger for the honest recognition of such limitations.

Acknowledgements

My thanks to Dave Edwards for much-appreciated discussion and references.

Note

¹ Gallup Poll, May 2006: 'A recent Gallup Poll shows that almost half of Americans (46%) believe that human beings did not evolve, but were created by God in their present form within the last 10,000 years or so ... There has been surprisingly little change over the last 24 years in how Americans respond to this question. Between 44% and 47% of Americans have consistently agreed with the third alternative, that God created human beings in their present form within the last 10,000 years or so. Between 35% and 40% agree that man evolved with God's guidance, while between 9% and 13% believe that man evolved, but with no guidance from God' (Newport 2006). Gallup Poll, February 2009: 'On the eve of the 200th anniversary of Charles Darwin's birth, a new Gallup Poll shows that only 39% of Americans say they "believe in the theory of evolution," while a quarter say they do not believe in the theory, and another 36% don't have an opinion either way. These attitudes are strongly related to education and, to an even greater degree, religiosity' (Newport 2009).

Contemporary relevance and community engagement

Margaret C. Nelson

Is archaeology useful? Shannon Dawdy suggests that in the application of our knowledge to contemporary issues we find the utility in archaeological work. While I believe there are many ways archaeology is 'useful' beyond this application, I will pull that thread, illustrating the applications of archaeology to contemporary issues at the interface of society and environment. I then examine a few of Dawdy's concerns about the failings of archaeology.

Contemporary issues and the long-term perspective of archaeology

Archaeology brings time depth to an array of issues from migration and resettlement to climate change and environmental impacts of human actions. While study of the ancient past might seem irrelevant to contemporary concerns in light of globalization and rapid technological change, archaeology provides a long-term, historically contextualized view of numerous socialecological transformations (e.g. Hegmon *et al.* 2008; Kirch 2005; Miller *et al.* 2009; Redman and Kinzig 2003; Van der Leeuw and Redman 2002). The long-term view does not provide predictions for future courses but it does provide an example, an experiment of sorts, by which we can come to understand processes and relationships better and critically examine assumptions.

While a variety of studies use archaeological research to contribute perspective to modern issues of the relationship between society, environment and climate (Briggs et al. 2006; Costanza et al. 2007; Crumley 1994; Kirch 2005; McIntosh, Tainter and McIntosh 2000; McGovern et al. 1988; Redman and Kinzig 2003; Redman et al. 2004; Tainter 2008; Van der Leeuw 1998), I wish to illustrate this approach with an example of the work we are doing at Arizona State University. Our study of long-term relationships between ecosystems and social systems in pre-Hispanic contexts examines key concepts employed by scholars and policy-makers in the Resilience Community (Anderies, Janssen and Ostrom 2004; Hegmon et al. 2008; Janssen and Anderies 2007; Nelson et al. 2006; Nelson et al., forthcoming; Spielmann et al., forthcoming). The concern of the Resilience Community is with the promotion of social and environmental policies that contribute to resilience - flexibility in responding to uncertain future conditions and avoiding catastrophic transformations (www.resalliance.org). So what drives our research are their issues, which we can examine over long time spans and then offer insights back to the resilience perspectives of that community. Our understanding of the archaeology is also enhanced with this collaboration.

We have focused on three issues that are common in the literature of the Resilience Community: the effect of rigidity on the scale of social–ecological change (Hegmon *et al.* 2008), the nature of the contribution of social and subsistence diversity to resilience (Nelson *et al.* 2006; Anderies, Nelson and Kinzig 2008), and how resilience to some conditions can create vulnerabilities

to others - or the robustness-vulnerability trade-off (Janssen and Anderies 2007; Nelson et al., forthcoming). 'Resilience' refers to the ability of a system to absorb disturbances without losing its identity (Folke 2006) and its capacity to buffer change while maintaining essential structures and functions (e.g. Holling, Gunderson and Ludwig 2002). The concept originates in ecology (Holling 1973) but recently has been advanced by Resilience Alliance researchers and is finding its way into scientific and policy forums (Adger 2006; Folke 2006; Janssen and Ostrom 2006; Janssen et al. 2006; Young et al. 2006).

I illustrate our approach by describing the results of three studies by our research group of archaeologists, modellers and social and environmental scientists. We have used archaeological information from six regions in the south-western US and northern Mexico spanning AD 450 to 1600 - Mimbres, Mesa Verde Salinas, Zuni and Hohokam in the US south-west, and LaQuemada in the Malpaso Valley in Zacatecas, northern Mexico. Although the case studies are set in broadly similar arid environments and share a reliance on maize agriculture, the cases display varying degrees of investment in physical and social infrastructure and different historical patterns of change.

Rigidity

To address the effect of rigidity on the scale of social-ecological change, Hegmon led our research group in a cross-case comparison of three sequences – Hohokam, Mesa Verde and Mimbres in the US south-west - to ask why certain transformations were much more dramatic and fraught with human suffering than others (Hegmon et al. 2008). This question is as relevant today as it has been for centuries, even millennia. One answer, suggested by the Resilience Community, is a concept known as the 'rigidity trap', by which certain (often human-dominated) systems resist change and suppress innovation, eventually resulting in severe transformations. The results of our analysis supported this relationship; we looked at rigidity in three domains (kinds of integration, social power and material conformity) and found that the most severe transformations, with the greatest human suffering, were associated with the highest degrees of rigidity (Hegmon et al. 2008). We found that lack of flexibility, suppression of innovation, and resistance to change delayed transformation for some time, but not forever. While this 'resilience' concept informed archaeological interpretation, our work also informed the Resilience Community. One case in particular offered insights about why rigidity develops.

First, we suggested that rigidity develops with an absence of social options The large irrigation system of the Hohokam region (the largest in pre-Hispanic North America), which was the focus of the rigidity of that system, was in place for nearly a millennium before the major institutional and demographic collapse of Classic-period Hohokam. Prior to the Classic, people engaged in a large regional network, which gave them contacts across southern Arizona (Abbott, Smith and Gallaga 2007). Faced with problems with river irrigation, the regional network offered options: they could draw on this network for goods and for relocation to other areas. But by the Classic period, that network had ended, and people probably had few contacts outside their immediate area, making decisions to leave more difficult. Their isolation contributed to rigidity.

Second, we suggested that rigidity develops with attachment to traditions Henrich (2001) and Kohler, Van Buskirk and Ruscavage-Barz (2004), in their discussions of conformist transmission, suggested that conformity is self-perpetuating; once established, conformity begets further conformity. Janssen, Kohler and Scheffer (2003) also comment on attachment to tradition using the concept of the 'sunk cost' effect, which refers to resistance to abandoning a long-established course of action even when it is clearly disadvantageous. They argue that sunk costs may have contributed to the vulnerability and collapse of ancient societies. Both of these factors could have been in effect in Classic Hohokam society. People lived in the same places with the same technological and sociocultural traditions for generations. While such conformity can be a positive contributor to cooperation, conformity can suppress innovation and be a factor in rigidity. I will return to this point later.

Third, we suggested that rigidity can develop as a result of a trade-off Recent work on robustness – which focuses on performance characteristics – is reaching the conclusion that robustness in one realm is often achieved at the cost of vulnerability in another (Anderies 2006; Anderies, Janssen and Ostrom 2004). More specifically, the Hohokam canal irrigation system was highly robust to fluctuations in rainfall because it provided a buffer from temporal variation. But that robust buffer contributed to the creation of a system that was increasingly vulnerable to other social and ecological perturbations. There are always trade-offs.

Diversity

To address the nature of the contribution of social and subsistence diversity to resilience, we used archaeological information from across the south-western US and northern Mexico. The resilience literature, drawing heavily from ecology, uses concepts of diversity defined in terms that are thought to enhance resilience in ecosystems by absorbing disturbance and by regenerating and reorganizing the systems following disturbance. To extend these ideas about diversity to social change is complex (Walker *et al.* 2006, 6). There are aspects of diversity (e.g. material culture styles) in human systems that do not conform to strict definitions of either functional or response diversity. In addition, diversity in both ecological and social contexts can be expensive, and in social contexts it may detract from the capacity for collective action. In our research, we consider diversity in two general arenas: socially constructed diversity and subsistence-resource diversity.

Socially constructed diversity The 'rigidity trap' I just discussed involves suppression of innovation in order to resist change, with the result that eventual transformations are severe (Hegmon *et al.* 2008). We extended our focus on understanding the factors that contribute to rigidity by examining the relative advantages of diversity and collective action in different settings, and the role of material culture diversity.

Currently, we are evaluating the hypothesis that lack of symbolic diversity, as expressed in material forms, contributes to vulnerabilities toward severe transformations. Across our cases, we focus on finding the times and places in which material diversity was lowest and on determining whether these contexts immediately preceded severe transformations. We have found that across the south-western cases, where leadership is not institutionalized and often not strongly hierarchical, symbolic diversity, as expressed in the heterogeneity of painted designs on ceramic vessels, is strongly negatively correlated with population density - the highest population levels are associated with the lowest levels of ceramic diversity. And we found that the contexts of highest population density in conjunction with least ceramic diversity immediately preceded the most severe transformations (although not in every case). We can understand the relationship between population density and ceramic homogeneity in these relatively small-scale systems as a way to encourage conformity and contribute to collective action. This 'advantage', however, may ultimately contribute to severe transformations – major declines in population and collapses of social institutions.

Subsistence-resource response diversity We examined the contribution of food resources to reducing vulnerability under varied climatic conditions (Anderies, Nelson and Kinzig 2008). In parts of the pre-Hispanic southwestern US and northern Mexico considerable effort was devoted to agave cultivation (see e.g. Fish et al. 1985), even though the annual caloric contribution of agave may have been minor. Our research examined this apparent paradox in terms of the different planting-harvesting cycles of maize and agave and especially their differing susceptibility to rainfall fluctuations in the Malpaso Valley area of northern Mexico. Using modelling we found that diversifying cultivated foods by adding agave to a maize-based system was beneficial in reducing vulnerability to climate change only under a limited array of climatic circumstances. In the Malpaso Valley, agave could reduce vulnerability to low rainfall conditions when variability in rainfall is also low. Otherwise the extra work of agave farming did not contribute to resilience. We also examined a variety of agave taxa and found that 'given the labor investments required, highly diverse but randomly assembled communities may actually be less useful than less diverse assemblages with a careful "matching" of climatic and plant physiological conditions. In other words, there are real "transaction costs" associated with maintaining a diverse assemblage' (Anderies, Nelson and Kinzig 2008). Diversity in the responses of essential food resources to climatic change and fluctuation may be more important than simple plant-food diversity as a contributor to the resilience of subsistence, just as it is to the resilience of ecosystems (Scholes and Walker 1993; Walker et al. 2006).

These three studies bring a long-term perspective to issues of concern in contemporary policy-making. Our long-term sequences help us see that:

1. Isolation can contribute to rigidity and eventually to the severity of collapse and transformation. That is certainly a lesson worth keeping in mind in today's world as we grapple with global connections.

- 2. Diversity and conformity in the social realm have trade-offs: conformity may be a positive contributor to cooperation and consensus-based decision-making, yet conformity as the suppression of innovation may contribute to rigidity and the magnitude of transformation. Again, a relevant lesson as we consider the values we hold regarding conformity and diversity.
- 3. Diversity has costs as well as benefits. In the subsistence realm it may be more productively examined in terms of the responsiveness of plants to varied climate conditions than as a simple function of the number of plant kinds. What kind of diversity we promote in today's world is as important as the simple value of diversity.

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.

Doubts and concerns

I agree with Shannon Dawdy that archaeologists have much to offer. She also expresses concerns about the politicization of archaeology as well as archaeologists' interests in consulting with numerous communities and constituencies. My perspective on these concerns differs from hers.

The first concern has been expressed by numerous archaeologists, who are attentive to how archaeologists represent the past and how modern agendas influence archaeological questions and interpretations. Dawdy asks whether there is a 'safe way to apply archaeology to contemporary social or political conditions without the risk that it will be harnessed for ill' (p. 132). 'Once we open the door, accepting that archaeology should be useful, can we control the uses to which it is put, and by whom?' (p. 132). I believe that the answer is 'no' regardless of whether we see archaeology as useful. Much of our work is on public record and can be seen by others as relevant to their issues whether we engage in those issues or not. We cannot be certain that our work will not be misused or our insights manipulated to serve a particular political end. We can, however, acknowledge the influence of contemporary politics on our ideas and reflect on the way we use words and concepts as well as the way others interpret what we say. From my own experience, working in the southwestern US, I know that archaeological research on 'abandonment' of villages, locales and regions has been misinterpreted by non-archaeologists. The word 'abandonment' carries the connotation of giving up claim or ownership, which supports a political agenda of usurpation of Native American lands that are and have been their homelands for many centuries, whether they are formally occupied in the Euro-American sense or not (see Nelson and Schachner 2002).

Her second concern, about the involvement of archaeologists with local communities and with heritage, is misguided, from my perspective. Dawdy argues that '[p]ublic archaeology and community archaeology are ultimately more self-serving than helpful' (p. 132) and that community archaeology

is an 'archaeology of apology' (p. 137). 'Can you imagine...political scientists going door to door to ask community members to be involved as collaborators in their research projects' (p. 138). Yes, I can. Public and private universities, community colleges, the National Science Foundation and many other research-funding institutions are calling for communityembedded research and for careful consideration of the impacts of research on society. At ASU, the NSF-funded Decision Center for a Desert City focuses on the integration of public and research concerns about water and water use. Political scientists, sociologists, geographers, ecologists and climatologists collaborate and consult with communities in the design of research and interpretation of outcomes from climate modelling to educational policy (Cutts, Saltz and Elser 2008; Gober 2008; White, Corley and White 2008). In addition, exceptional cultural resource management firms such as Desert Archaeology and Statistical Research, headquartered in Tucson, have active foundations that promote community involvement in research, preservation and education (www.cdarc.org; www.srifoundation.org). They proceed from the perspective that the value of archaeological work and archaeological resources is not to be determined solely by archaeologists. Their efforts document how research, resource management, education and community involvement can operate hand in hand. Collaborations with descendant and local communities such as the Center for Desert Archaeology's San Pedro Project (Ferguson and Colwell-Chanthaphonh 2006) and Statistical Research's Western Papaguería research (Altschul and Rankin 2008) are but two examples that have benefited everyone.

So I conclude, as does Dawdy, that archaeology can contribute much to informing our thinking about contemporary issues, but I believe, in contrast to Dawdy, that we can and must accomplish this in partnership with varied communities and with concern for heritage and resource preservation. We have much to offer.

Acknowledgements

The ASU research described in the first section of this paper is supported with an NSF Biocomplexity grant (SBE/CNH 0508001) and generous sharing of data by Bill Doelle, the New Mexico Laboratory of Anthropology, the University of Arizona Tree-Ring Laboratory, the Coalescent Community Data Base Project, and Crow Canyon Archaeological Center.

> Archaeological Dialogues 16 (2) 163–169 © Cambridge University Press 2009 doi:10.1017/S1380203809990109

Back to the futurist. Response to Dawdy Carol McDavid

First I will offer a view of public archaeology which differs from Dawdy's perspective. Then I will respond briefly to one of her specific questions. Finally, I will comment on her suggestion for a futurist archaeology.

For the last decade and a half, and certainly since the turn of the millennium, people who practise public archaeology (worldwide) have been producing theoretically informed scholarship about what we actually do with our publics. Perhaps more importantly, they have been conducting critical examinations of *what this work with our publics does* – in terms of both archaeology as a discipline and social life more generally. There have been many publications, as well as countless conference sessions, most of which have featured critical, reflexive – and, yes, honest – assessments from people who call themselves (variously) public archaeologists, CRM archaeologists, archaeological heritage managers, archaeological ethnographers, cultural resource managers, archaeology educators, museum curators, journalists, website designers, community archaeologists and any number of other things. In short, the 'public archaeology' that Dawdy seems so sure of is not the public archaeology that I know.

So perhaps some discussion of definitions and scope would be helpful, although I should make it clear (as one who has practised public archaeology since the early 1990s) that I have no wish to advocate any particular definition as either fixed or inflexible (Jeppson and McDavid 2000; McDavid 2005). Our definitions (and, for that matter, our solutions to problems of the sort Dawdy raises) should always be historically situated, contingent and fluid (McDavid 2000; 2002). Even so, it is clear that public archaeology now extends far beyond its original agenda to promote the stewardship ethic (the history of which was well described by Friedman 2000). Public archaeology is no longer accurately defined as 'just' education or 'just' outreach, or for that matter 'just' heritage. Key issues (quoting from the masthead of the nine-year-old international journal *Public archaeology*) include (among other things):

...the sale of unprovenanced and frequently looted antiquities; the relationship between emerging modern nationalism and the profession of archaeology; privatization of the profession; human rights and, in particular, the rights of indigenous populations with respect to their sites and material relics; representation of archaeology in the media; the law on portable finds or treasure troves; [the] archaeologist as an instrument of state power; or catalyst to local resistance to the state.

Like any discipline, there is good work and bad, and I would admit that some of the writing about public archaeology has been on occasion a bit over-celebratory. Uncritical and glowing reports about working with kids at the site, for example, are indeed part of the literature (although I would say that this type of account was published more often in the 1990s than in recent years). I would also agree with Dawdy (see McDavid 2004a; 2004b; 2010) that doing public archaeology only to promote stewardship (that is, to promote itself) could be self-serving. However, I do not paint all public archaeology with the same wide and dismissive brush as she does. In addition, it is important to realize that promoting stewardship, serving public (or futurist) agendas and, even, 'rescuing' archaeology from 'the colonial and imperial agendas that once needed it' are not mutually exclusive programmes. Public archaeologists can and should do all of these things, and, most importantly, they do do them. So my own perhaps cranky objection to Dawdy's rather outdated view of public archaeology is very likely because we have differently informed views about what most public archaeology actually is. A definition that I have found useful (for the time being!) is that public archaeology can now be seen as any endeavour in which archaeologists interact with the public, and any research (practical, analytical or theoretical) that examines or analyses the public dimensions of doing archaeology.

It is interesting to note that using this definition, the current public archaeology literature now includes Dawdy's paper, because in it she is examining the public dimensions of archaeology and advocating certain types of change. Her recent paper in Historical archaeology (Dawdy 2008) could also be defined as a public archaeology paper – and a useful one. The part of the literature that she does not consider in her critique, however, includes hundreds of examples where archaeological and public archaeological work is indeed useful, and for very good reasons – reasons that our publics themselves (including our grassroots and local publics) have attested to. An extremely small sampling (other than the few she cites) includes:¹

- Using archaeology's time depth to combat environmental discrimination, to convince powerful state-wide agencies to give a low-income rural community in Alabama a voice in planning for pollution and flood control in their community (Derry 2003).
- Working with the families of missing people in South America as part of larger identification and reburial projects (Funari and Zarankin 2006; Zarankin and Funari 2008).
- Assisting descendant communities with *their* agendas to reclaim community history despite 'urban renewal' and insensitive gentrification (McDavid, Bruner and Marcom 2008; Mullins 2003; 2006).
- Using archaeology to support and inform community efforts to counter racist narratives and dismantle white privilege (Levin 2009; LaRoche 2009; Matthews 2008; McDavid 2007; Tennant 2007; Uunila 2003; Zimmerman and Echo-Hawk 2006).
- Using archaeology to create new conversations about class equity in America (Gadsby and Chidester 2007; Saitta 2007).
- Developing active roles for archaeology and heritage in 'overcoming structural violence and bridging conflicts' in the occupied Palestinian territories (World Archaeology Congress 2009) and in a changing South Africa (Jeppson 1997).
- Using the archaeology of homelessness to persuade local faith-based and governmental service agencies to develop more culturally sensitive programmes and centres for their homeless citizens (Zimmerman and Welch 2008).
- Helping revitalize communities through heritage tourism developments, and working with governments and NGOs to create opportunities for local empowerment in heritage tourism projects (Leader-Elliot 2001; Silverman 2002; Silverman and Ruggles 2007).

In this last arena, as Dawdy points out, in the past some archaeologists may have been 'squeamish' about collaborating with communities in tourism efforts; and some have left the 'economic development of tourism and monuments to others' (p. 140). I would suggest that for the most part this characterization, too, is outdated, and that many archaeologists are indeed contributing their 'anthropological sensitivity' to helping 'local communities have a voice in these developments' and, as well, are helping them to 'improve the conditions of their lives in ways that are important to them' (p. 140).

It is clear that the agendas for most of this work are not set only by archaeologists, as Dawdy alleges. When this work is also characterized as community archaeology (which is not always the case; community archaeology is but one form of public archaeology) it is usually not directed towards scholarly agendas as much as it is focused on creating public spaces for community voices, who can and do make of that space whatever they like or need.

This leads to my response to one particular comment that Dawdy makes, when she suggests that public archaeologists should (presumably always) 'fill out a protocol for an Institutional Review Board' (p. 138).² Again, it strikes me that her sense of what public archaeology 'is' varies from mine. First, it would be arrogant (and intellectually elitist) of me to ask the communities I work with to obtain Institutional Review Board (IRB) approval before telling me what they think about what I do – and it is precisely that sort of input that comprises much of my public archaeology practice. As we share ideas and interests common to us as citizens (as she puts it, discussing how archaeology can help in 'creating recognition for the contributions of African Americans or encouraging a more democratic society'; p. 138) should I attempt to control the 'powers and sentiments' that are 'unleashed' as I share the results of my archaeological research? This implies that I should hide behind the shelter of objectivity about my work in order to share it, or that I need to maintain some sort of gatekeeper role in how other humans understand and use my data. If archaeologists and our ethical clients (Perry, Howson and Bianco 2006, 445) are sitting at the same table in mutually empowered roles (which is what most of us who do public archaeology these days shoot for), who am I to ask these clients to sign a form that says it is OK for them to tell me what they think?

Second, there are matters of both logistics and appropriateness. Consider, for example, the major public archaeology project undertaken at the President's House site in Philadelphia in the summer of 2008 (LaRoche 2007; Levin 2009; Jeppson and Roberts 2009). Over 300,000 people visited the site while excavations were taking place, and archaeologists spent literally hundreds of hours talking to visitors about the project. Should site visitors have been required to sign informed consent forms before having conversations with archaeologists doing work that public taxes were paying for? Should archaeologists have sought IRB review before speaking to crowds of thousands at the mayor's request at Independence Hall on 4 July? Interactions like these (at difference scales, obviously) happen every day at archaeological sites across the country. Doing good public archaeology means not only seeking this type of communication, it means examining, analysing and understanding it: it is the dialogic space where archaeology becomes most meaningful.

So, is it fair for Dawdy to suggest that archaeologists obtain IRB review to do public archaeology work? The answer is sometimes – if and when it is appropriate and ethical to do so. It is not always appropriate and it is not always ethical. We need to remember that IRB approval is not the same as informed consent – and informed consent is indeed an issue that most of us

take very seriously. One needs substantial community interaction before even knowing what form proper informed consent should take.

In the contexts in which I work, I have no wish to be 'apologetically inclusive' (her words; p. 139) - I just want to be inclusive, and Dawdy is correct that oftentimes it is the archaeologist who invites publics 'in', not the other way around. However, even when archaeologists are the ones who come up with projects and invite communities to participate, we do not necessarily dictate the process, the result or even the research agendas. Our roles in any given context can, and should, vary, by need and by community desire. It is our responsibility to ask all of those we work with – as collaborators, as ethical clients and as fellow citizens - what sorts of solutions they need. Just because people may not think first about archaeology when considering solutions, this does not mean that archaeology cannot offer them.

I suspect Dawdy would agree with me that this process should always be a critical one, and to that end I have found useful analytical frameworks for community-based public archaeology in the community-organizing, or participatory action research (PAR) literature. Here Randy Stoecker has described three different roles for academics as they work in community projects: the 'the initiator', 'the consultant', and 'the collaborator' (Stoecker 1997). Although useful public archaeology can take place in all of these scenarios (McDavid 2009a; McGhee and McDavid 2009), one important insight that Stoecker offers is to question the notion that participatory projects are 'research'. In most cases, the archaeological research is only one piece of a larger enterprise, and the question of how, and whether, to obtain informed consent has to be decided on a case-by-case basis.

Finally, with regard to Dawdy's last question, 'can archaeology save the world?', and to her potentially useful suggestions about a futurist archaeology, first I should point out that a session entitled precisely that ('Can Archaeology Save the World?') was chaired by Jay Stottman at the Society for Historical Archaeology annual meeting in 2004, and a volume springing from that session is in the final stages of publication (Stottman 2010). Did we come up with monumental solutions then? No, of course not. But in that session, and many similar venues, we were not 'nervous', we were 'honest', we did attempt to apply our work to 'pressing contemporary problems', we did not 'delude ourselves' that our work was 'unproblematically uplifting', we did not overstate how 'truly helpful' (p. 141) our work is, and we did not 'hide from the fact' that constituency-building is part of what we do. As Paul Mullins put it in his discussant comments from that session (Mullins 2004b), 'consequential transformation might arise from apparently mundane interpretations and moments'. He also noted,

So the question is not really can archaeologists save the world: all knowledge effects change, whether it consciously aspires to do so or not. Instead the question is how will archaeologists consciously work to direct transformation while understanding that our constituencies will use archaeological insight in many different and unforeseen ways. This may not save the world, but it has and will continue to profoundly transform it.

In this view, 'changing the world' can take place in small steps, and small transformations. Even so, I applaud grand goals, and would elaborate on one before closing. This is the question of war – it is surely a big reason for the current atmosphere of doom which Dawdy describes as she begins her piece. How can what we know about warfare be useful to those who would wage it, unless there are mechanisms for them to learn what we know? An example of at least one archaeologist who is attempting to influence this sort of decision-making is John Carman, a senior lecturer in heritage valuation at the University of Birmingham, UK. Carman has been asked to provide deep-time insights (informed by his archaeological research in conflict archaeology) at an upcoming conference being sponsored by Birmingham's well-respected Security Studies group (Carman, personal communication). The conference, to include participation from the Birmingham University Centre for War Studies, is likely to reach those who do military planning in the UK. This is but one effort, and the point of mentioning it here is that John himself regards his 'Bloody Meadows' archaeological project as, in part, a form of public archaeology which links a pacifist archaeological perspective on warfare to contemporary concerns (Carman and Carman 2007). There are similar efforts from others who are working with the military on sites of past conflict, as was evident in the programme for WAC-6, held in Dublin last year (see http://www.ucd.ie/wac-6/). The place of archaeology in any of these emerging discussions may be small, but they represent a good start.

So I would ask Dawdy the same thing I asked in my recent review (McDavid 2009b) of Jeremy Sabloff's very good book *Archaeology matters*. *Action archaeology in the modern world* (Sabloff 2008): how can we operationalize a truly useful 'futurist archaeology'? Potential archaeological contributions to big-issue solutions were explored in great detail in Sabloff's book, and also in Barbara Little's recent books *The public benefits of archaeology* (2002) and *Historical archaeology*. *Why the past matters* (2007). One problem is, of course, that there is little support *within* our discipline for spending the necessary time to influence interests *outside* it. As Sabloff puts it, 'academic institutions generally do not reward the kinds of outreach that action archaeology entails as strongly as they could and should...[and] some scholars still regard any kind of applied work with a degree of leeriness, seeing it as somehow being less worthy than academic work' (Sabloff 2008, 109).

Aggravating this reality is another – that most contemporary archaeology takes place in commercial (often referred to as CRM) settings, where one might argue that it could work against the archaeological income stream to be vocal in either politics or policy. Local politics, of course, vary in this regard – I work in Texas, where property rights pretty much trump everything else, and woe betide any contract archaeologist who wants to be active in local policy planning if it thwarts developer-friendly local governments. It is here – in a critique of its capitalist realities – where I suspect my own comments about CRM (as one form of public archaeology) might intersect with Dawdy's, were we to explore it. I would agree with her that we need to think past 'preserving our careers' and instead find more ways to use 'archaeology to address specific social and environmental problems of the present day' (p. 140).

So to close my comments here, I hope that those of us who would support the type of public archaeology that Dawdy calls for, calling it futurist archaeology or whatever, will, first, become fully informed about the scope of work that has already taken place: understanding the broader context will enable the futurist to develop public archaeologies that are more productive and, yes, more useful. I hope we will then find ways to support and encourage our archaeological colleagues to take seats at the tables where policies are planned, ordinances and laws drafted, regulations implemented, and solutions found. By participating in these arenas, archaeologists would indeed be useful, and would be doing better public archaeology besides.

Acknowledgements

I am grateful to the colleagues who provided ideas and critique, both prior to and during the discussion and as I wrote this essay. All offered helpful input, most of which I took on board! My thanks to (among others) John Carman, Linda Derry, Jeff Fleisher, Pedro Funari, Patrice Jeppson, Herman Kluge, Barbara Little, Robert Marcom, Christopher Matthews, John McCarthy, Paul Mullins and Larry Zimmerman. Thanks also to the session organizers, Liv Nilsson Stutz and Ian Straughn, and to the journal, including Ton Derks, for sponsoring this session and the conversations which surrounded it.

Notes

- ¹ A few of the most recent examples, other than those cited elsewhere in this paper, would include Castaneda and Matthews (2008), Colwell-Chanthaphonh and Ferguson (2007), Derry and Malloy (2003), Little and Shackel (2007), Marshall (2002a), Merriman (2004a), Mortensen and Hollowell (2009), Shackel and Chambers (2004) and Smith and Waterton (2009).
- ² Institutional Review Board procedures were created for science research in response to US federal regulations; see Title 45, US Code of Federal Regulations, Part 46. Consider that in 2003 the Office for Human Research Protections/Health and Human Sciences (the federal agency enforcing the regulation), in conjunction with the Oral History Association and the American Historical Association, issued a formal statement that taking oral histories, unstructured interviews (as if for a piece of journalism), collecting anecdotes and similar free-speech activities do not constitute IRB-qualified research, and were never intended to be covered by clinical research rules. See Shopes and Ritchie (2003).

Archaeological Dialogues 16 (2) 169-171 © Cambridge University Press 2009 doi:10.1017/S1380203809990110

How can archaeologists usefully contribute to public policy **considerations?** Jeremy A. Sabloff

I would like to focus my brief remarks on Shannon Dawdy's very important third question, 'can archaeology save the world?' But to show my biases up front, I would rephrase it to read, 'how can archaeologists usefully contribute to public policy considerations on the future of this planet?', or perhaps just modify her question to say, 'how can archaeologists help save the world?' As one looks at recent books such as Newman, Beatley and Boyer's Resilient cities. Responding to peak oil and climate change (2009), Richard Heinberg's The party's over. Oil, war and the fate of industrial societies (2005), or Howard and Elisabeth Odum's A prosperous way down (2001) or key articles such as 'Ecology in times of scarcity' by John Day et al. (2009) or 'Tracking the ecological overshoot of the human economy' by Mathis Wackernagel et al. (2002), it seems clear to me that archaeologists could readily amplify the important arguments mounted by these authors and play a useful role in helping planners confront looming global cultural–ecological issues. It is not that these writers are unaware of archaeology and its potential contributions – Heinberg (2005, 34–38), for example, looks quite favorably on the work of Joseph Tainter – but that archaeological research could be more thoroughly and productively utilized.

I strongly believe that archaeologists should be at the table in public policy planning on crucial issues such as how a sustainable environment can be maintained in the face of rampant urbanism. In a world that has seen the percentage of this globe's population living in cities change from approximately 2.5 percent in 1800 to about 10 percent in 1900 to more than 50 percent today and increasing rapidly (Ponting 1991, 295; Kotkin 2005, 147), as new million-plus cities are being created every year in China (Perkins 2005), and megalopolises around the world are expanding rapidly, archaeology has, I feel, useful information and perspectives to share in discussions about sustainably supporting such urbanism (Sabloff 2008, Chapter 5; Smith 2008).

As many writers and commentators have noted in recent years (also see Margaret Nelson's comment in this dialogue), too much attention in policy considerations—especially economic ones—is paid to the short term (and often the very short term) at the expense of the long term. In a cynical vein, one might ask that given the recent outcomes of policy planning that have resulted from a reliance on economists and perhaps political scientists, why have some archaeologists and anthropologists not been at the planning table? One might argue in fact that one of the major problems in economists' contributions to public policy discussions is that economists seem to be generally unaware of archaeology and anthropology and usually ignore the cultural contexts of behaviour.

Thus I would argue that governmental planning, in particular, needs the long-term cultural perspectives that archaeology is uniquely positioned to offer. Some archaeologists are already moving in this direction. For example, among many others, I could cite Redman's *Human impact on ancient environments* (1999), Redman *et al.*'s *The archaeology of global change* (2004), Allen, Tainter and Hoekstra's *Supply-side sustainability* (2003), and the McIntosh, Tainter and McIntosh volume *The way the wind blows* (2000), as well as 'Sustainability or collapse. What can we learn from integrating the history of humans and the rest of nature?' by Costanza *et al.* (2007). Other scientists are also turning to archaeology in regard to policy discussion, as we can see, for instance, in Ruddiman's excellent *Plows, plagues, and petroleum* (2005).

More particularly, I could cite the research efforts of Van der Leeuw and colleagues in the global Integrated History and Future of People on Earth

Perhaps archaeologists could join forces in this regard with scholars in the relatively new field of sustainability science, especially in relation to scenario modelling of future trends in sustainability, which is a common form of such work. Archaeologists might be particularly helpful in examining various assumptions that are an essential aspect of these modelling efforts.

Does this mean that all archaeological research needs to be pointed in such directions? Clearly not. As Shannon Dawdy has pointed out, and as a number of archaeologists – myself included – have argued, archaeological research can be justified in many ways, from providing humanistic perspectives on the accomplishments of peoples of both the ancient and the recent past; to the preservation of humankind's diverse cultural heritage; to its relevance to key modern issues such as the nature of warfare, class differences and economic inequality, and nationalism. All I am suggesting is that more archaeologists should be willing to enter the realm of public policy on all levels – from the local to the regional to the national to the international (as was pointed out in the SAA discussion) – where their perspectives and expertise might be appropriate, and that long-term urban sustainability might be one such policy area.

This is a daunting charge and one that clearly is fraught with a number of potential political dangers. Yet I firmly believe that such risks will frequently be worth taking. As I have stated before, 'Archaeology cannot solve the world's ills, but it often can provide useful perspectives and, on occasion, real solutions' (Sabloff 2008, 28). Or, as Ronald Wright (2004, 56) has put it more eloquently, 'Archaeology is perhaps the best tool we have for looking ahead, because it provides a deep reading of the direction and momentum of our course through time: what we are, what we have come from, and therefore where we are most likely to be going.'

To conclude, in response to the editors' provocative question 'is archaeology useful?' my answer is: 'could be!'

Archaeological Dialogues 16 (2) 171–179 © Cambridge University Press 2009 doi:10.1017/S1380203809990122

Which crisis? Ulrike Sommer

When I was asked to comment on Shannon Dawdy's position paper entitled 'Millennial archaeology. Locating the discipline in the age of insecurity' I must admit that I was, even with the give-away 'millennium' of the title, thinking of the current economic crisis, the 'credit crunch' as it is known in Britain. Shannon Dawdy seems to describe a much more specific American crisis – the realization that the United States are not somehow outside history, that

they can be hit on their home ground and that their political and military hegemony is contested (and if you detect a certain European smugness there, you are probably right).

Issues like the preservation of the environment and global warming have been around in Continental Europe since at least the oil crisis of 1973 – I vividly remember the pictures of empty German motorways when 25 November 1973 was declared the first of four 'car-free Sundays'. This was the time when the Club of Rome described 'the limits to growth' (Meadows *et al.* 1972) and the Green movement gained power, finally turning into a political party in Germany in 1980 (see http://www.boell.de/stiftung/archiv/archiv-609.html, accessed 7 June 2009).

The Green movement never really gained influence in Britain, where North Sea oil had been discovered at that time. Thus, today, I cannot help an amused smile when customers in Britain start to discover that plastic bags are actually bad for the environment and turn – with commendable zeal – to reusable fairtrade bags, when 'jute, not plastic' ('Jute statt Plastik', a campaign started in 1976 in Switzerland by the 'Erklärung von Bern') was one of the catchwords of late 1970s in the West, and the East never had the resources to waste on unnecessary packaging, anyway.

For most of Central Europe, the 20th century ended with the events of 1989 and the fall of the Soviet Union and its political domination. While this certainly marked the beginning of an economic crisis in Germany, and while unification with (or the takeover of) the German Democratic Republic is regarded far more ambiguously than most outside observers imagine (on both sides of the former border), it also opened up new possibilities and new perspectives. The turning point for much of Central Europe was the year 1989 – and we are still trying to cope with the results.

Crisis

It has been said that if America sneezes, the rest of the world catches a cold (or worse), and the crisis has certainly caught up with us all, even if the effects seem more pronounced in Britain than in most other European countries. Archaeology has been hit hard. The Institute for Archaeologists (IfA), an independent professional organization, reports the loss of 670 archaeological jobs in Britain since the summer of 2007 (that is, 17 per cent of all jobs in commercial archaeology), approximately 540 between October 2008 and April 2009, with further losses expected in the upcoming months (see http://www.archaeologists.net/modules/news/article.php?storyid=376, accessed 7 August 2009).

Commercial archaeology is doing better in those European countries that have invested in infrastructure programmes. Actually, this is one of the reasons archaeology has been doing well in periods of economic crisis – it can be used as an 'economically neutral' job-creation program – putting men (and women) into work without producing competition for existing private firms. That it also produces 'pride in past achievements', be they local, regional or national, possibly more attractive than usual in times of crisis, is part of the heritage complex rightly criticized by Dawdy, though it is quite difficult to gauge the degree of intentionality there.

State of commercial archaeology

So what will be the impact of the current crisis on commercial archaeology? Planning Policy Guidance 16 (PPG16), the 1990 British legislative document that made archaeological excavations part of the general planning process and thus forced developers to fund archaeology (http:// www.planningportal.gov.uk/england/professionals/policy/policydocuments/ englandppgpps/7916pppg16, accessed 26 October 2009), has certainly led to a boom of commercial archaeology in Britain. This has had a profound influence on the development of archaeological methods and the outlook of archaeology. Commercial archaeologists are providing a service, getting prehistoric and historic remains out of the ground, or, even more welcome, demonstrating that there is no archaeology at all. Basically, this is not different from the removal of toxic waste. In principle there is quality control by county archaeologists and the Institute of Field Archaeologists (IFA; see www.archaeologists.net) that oversees individual units and strives to develop and defend professional standards, but these are rather weak tools in the face of 'economic realities'. My impression, admittedly based on extremely limited personal exposure and conversations with, again, only a limited number of colleagues, is that excavation standards in general have gone down since the introduction of PPG16. Commercially funded digs seem to be led by concerns of time efficiency and cost-effectiveness rather than by the ideals of 'good archaeology'.

This has led to increasing specialization, meaning that the actual digger is not necessarily interested or indeed versed in the identification and dating of finds, as this is the job of the finds specialist, and the write-up of the site will be done by somebody else altogether, who may have never seen the actual excavation. But if the 'dirty digger' is not required to interpret the features, but simply fill in a form, he or she may approach this procedure in a less intelligent and thoughtful way (cf. Bradley 2006, 3). Things get done by rote. The MOLAS system (http://www. museumoflondonarchaeology.org.uk/NR/rdonlyres/056B4AFD-AB5F-45AF-9097-5A53FFDC1F94/0/MoLASManual94.pdf) has been almost universally adopted, even if by now every unit probably runs its own, slightly different version. Single-context recording is seen as the state of the art, and indeed the knowledge of other ways of excavating and recording seems to gradually get lost. I have marked numerous essays by students utterly baffled by other traditions of excavation, more than once amusingly termed the 'culture-historical excavation method', which made me realize that not enough theoretical justification for excavation methods is being taught; they are simply learned by rote as 'the' system for doing things.

There has been a degree of dissatisfaction with the state of affairs, and many TAGs have seen sessions on the state of field archaeology and the development of excavation and recording systems, normally with a lot of interesting discussions, but no perspective for change or, indeed, even a way forward.

Publication is one of the other big problems. The problem of grey literature has received ample attention, even if it is no nearer to a solution. Archaeological archives, their upkeep and their accessibility present a similar or even bigger problem (see, for example, Merriman and Swain 1999; Swain 1998).

In theory, the present crisis might provide a breathing space, the chance to look at developments since the introduction of PPG16 in 1990 in more detail with a view to systematic restructuring, rather than the usual run-of-the-day haphazard additions and 'improvements' that are not led by any systematic perspective. But this is not something to be achieved by those hanging on by their fingernails. It would require the input of a professional body with financial security and the chance to develop a long-term perspective.

There is also the question whether those made redundant in the present crisis, presumably now retraining for other professions, will return to archaeology once the crisis is past. Jobs in commercial archaeology are badly paid, there are not many possibilities for promotion and it is badly linked to academic research and the theoretical development of the discipline. Thus what may be a chance for stocktaking and the development of a new agenda and perspectives will probably rather lead to a loss of experienced practitioners.

Academic archaeology

Although a number of British universities have commercial units, the connection between university and unit is often not very close (Bradley 2006). Discussions of methodology seem to be very rare, in any case. On the Continent, technical innovations are often introduced by the antiquities services, not the universities which do not teach much on practical matters. As a matter of fact, it was proposed some time ago that in the current crisis university departments of archaeology would become more and more redundant, as the need for archaeologists would drop with the declining building industry and practical teaching could be taken over by the antiquities departments themselves (Oexle 2004, 266–67).

Bologna

Probably the biggest threat to Continental archaeology comes from the Bologna Process, which reorganized academic education and introduced the BA as the first academic degree (Kellermann, Boni and Meyer-Renschhausen 2009). The new structure is partly based on the British model, although Britain (wisely, in my opinion) never joined the Bologna Process. Britain has a much lower lecturer–student ratio than is common in Europe, where many archaeology departments have to stretch resources to make sure a complete curriculum can be taught. Either several departments with different specializations (prehistory, archaeology of the Roman provinces, classical archaeology, western Asiatic archaeology) had to combine or joint courses are offered with disciplines outside archaeology proper, for example history, history of art or classical studies. This leads to a degree that has a wider scope but is not tailored to produce professional archaeologists.

While in Britain a degree in archaeology can be a basis for a career in the army or in banking, in Germany, and probably in most parts of Europe, a degree in archaeology qualifies you to be an archaeologist, and nothing else – and a BA in archaeology qualifies you for nothing, and certainly not a job in archaeology, as most employers would expect an MA, if not a Ph.D., even for a field archaeologist.

Should archaeology be useful?

This was actually the first question I came up with when I saw the *Archaeological dialogues* forum, and my immediate answer was 'no'.

I entirely agree with Dawdy on the problems of archaeology as heritage, although I do not think we need the example of Nazi Germany to make that point. Indeed, the dumbed-down history of research that is often used in this context is not very helpful. The relationship between archaeology and nationalism is far more complicated than usually acknowledged in tertiary accounts commonly used in overviews. In retrospect, the divide between the Good and the Bad – and the consequences of their actions – is made to look far too clear-cut. While we may all righteously disapprove of Kossinna and his nationalist and irredentist politics, there may be some of us who have used the occasional politically loaded expression in a grant application – whom does it harm, after all? It is far more fruitful to look at present-day uses of archaeological research.

At a closer look, the question about the usefulness of archaeology should rather be: useful to whom? One of the core questions of Shannon Dawdy's essay is whether archaeology is necessarily linked to nationalism. Again, there is a problem with the question itself, because it assumes that nationalism is unchanging and monolithic. The question is rather, which nationalism – and is all nationalism necessarily a bad thing? The nationalism of the emergent nations of 19th-century Europe or of the nations that tried to free themselves from European colonialism is certainly different from that of the imperial and colonizing powers of Old Europe.

When Frantz Fanon (1967, 154) described the psychological effects of colonialism on the colonized, he stated that the 'claim to national culture, history in the past does rehabilitate that [African] nation and serve as a justification for the hope of a future national culture' and thus a new, self-assured black identity (negritude). This statement rings uncomfortably essentialist in the present-day postprocessual climate and immediately invites the suspicion of manipulation and abuse of the past, but Frantz Fanon makes the point that colonialism not only rules the present, but the past as well. 'By a kind of perverted logic, it turns to the past of the oppressed people, and distorts, disfigures and destroys it' (ibid.).

Now there is no doubt that both colonial and anti-colonial ideologies distort the results of archaeological research. But I have to admit that I get tired of the complaints of archaeologists about evil politicians who twist the results of our pure research towards certain insidious ends. No research is value-free, and we constantly manipulate the interpretation of the past by the selection of the sites we dig, the methods we use and the interpretations we put on them. There is no neutral interpretation of the remains of the past, and neither should we strive for it. The point was forcefully made by Shanks and Tilley (1987a; 1987b). Two very different conclusions were drawn from these books:

- 1) that there is a need for an archaeology that is more aware of its inevitable ideological burden,
- 2) that everybody's interpretation is as good as our own.

Now I call the second one, which seems the more generally accepted, professional suicide and intellectual cowardice. But the first conclusion should lead, in my opinion, to a more responsible and politically aware archaeology.

Unfortunately, there still is no lack of people looking for origin stories. Many of the new postcommunist states want to reinvent their national identity, but a lot of the 'old' nationalism as well is still alive and kicking, looking for arguments that 'our nation is older than theirs'. The Internet is a fertile source here, though its influence is difficult to gauge. Certainly a lot of effort is put into the pursuit of this aim, characteristically ignoring source criticism and the history of research. Ideas one would have thought safely dead for generations dependably resurface in Wikipedia and related sites. A lot of the stuff produced looks rather pathetic and almost funny, but the problem is that 'cold' nationalism and its armoury can be activated at very short notice (cf., for example, Kohl, Kozelsky and Ben-Yehuda 2009) and then these things stop looking funny at all.

Archaeology not only works on the national level, it has also been used to bolster local, regional, ethnic and supranational identity (for example, of the European Union; Gramsch 2000). So it would be more appropriate to ask if archaeology is necessarily linked to identity formation.

Heritage

In order to justify its existence, presumably any science has to show its relevance to the present. But it certainly need not make this perceived relevance the core of its agenda. Dawdy underlines the self-serving nature of many outreach projects. I would add that it has also led to a certain neglect of the bodies and people already interested in archaeology: the traditional archaeological societies, volunteers and fieldwalkers. That is not to deny there have been interesting results in community archaeology – but probably the same results could have been achieved in projects containing no archaeology at all. For some reason, archaeology has been keen to present itself as inclusive in the sense that everybody can do it. This has nothing to do with inclusion and outreach, but rather with short-selling our professional experience and expertise. Why not encourage some more do-it-yourself surgery or nuclear physics instead.

Heritage is normally not an issue of our own choosing or making. But it seems a rather harmless concept easily exploited for more academic aims. We might feel guilty, but not very much: what harm is done, after all? But if we do not agree with its basic tenets – admittedly never expressed clearly anywhere, which is part of the problem – it is not enough simply to walk away from it. We have to show up what is wrong and why it is wrong.

There are several ways of constructing continuity between the past and the present, of which biological descent is only one (Sommer 2007). But the latter has dominated the discussion in the 20th century. 'Our common heritage' changes all too easily into 'the work of our ancestors'.

But even a narrative that avoids biological links and concentrates on the 'general progress of mankind' can easily slip into the colonialist/imperialist

mould, as the 'First World' is normally presented as the apogee of all human progress and the rest of the world is classified as 'less developed'. This is a problem that also besets the idea of 'World Heritage sites': while the UNESCO claims that 'World Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located' (http://whc.unesco.org/en/about/), the selection of sites is still severely biased towards location in Western Europe, and the monumental remains of 'ancient civilizations' dominate the humbler remains of more egalitarian populations presumably practising a more sustainable lifestyle. Indeed, I wonder which message sites like Hadrian's Wall or the German–Roman frontier (Limes) are supposed to present. A highly visible barrier to keep out and control 'less developed' barbarians built by an aggressive and exploitative empire seems hardly a monument to celebrate.

Any discipline that tells stories about the past is implicitly political.

So let's not only not do it, let's also be explicit about why we don't want to do it! There is a certain intellectual laziness in approaching some basic questions of archaeology. What is the relation between similarities of material culture and self-defined groups of whatever nature? Kossinna's well-known answer was that similarites in material culture equal (mainly) biological and cultural affinities, a point of view shared by Childe. This is anathema now, of course, and individual agency and the active use of material culture have taken centre stage, somehow to the detriment of the social side of agency theory. Often, we are not clear about that question ourselves, and definitely have not made enough effort to think about the presentation/explanation to outsiders/the general public.

Inside archaeology, the discussion of the concepts of identity, ethnicity and ethnogenesis (and to a lesser degree the dissolution of ethnic groups, which does not seem to have a proper name of its own) has reached a rather high level of theoretical awareness, if not always terminological sophistication (Shennan 1989; Olsen and Kobyliński 1991; Graves-Brown, Jones and Gamble 1996; Jones 1997; Pohl 1998; Smith 2003; Hakenbeck and Matthews 2004; Casella and Fowler 2005; Lucy 2005; Rieckhoff and Sommer 2007). Most of it is based on a constructivist approach, taking the work of Frederik Barth (1969) as its starting point. We interpret the definition and formation of ethnic groups as contextual and potentially very changeable, and we can take a long-term perspective on cultural cohesion.

Prehistoric ethnicity has huge implications for present-day ethnicity if it can show the different ways ethnic identity has been formed, and the different categories employed. Archaeology is also the only discipline with the time depth to show the changes in ethnic identity, which seems to be important in some periods of history and rather negligible in others.

But there is the implicit assumption that this is too complicated for the general public and that they require some dumbed-down version of it. Of course, to explain theories of identity formation is more complicated than simply selling heritage, continuity down the ages and unchanging tribal identity. But then, who claimed that public archaeology was easy? Neil Faulkner's (2008) recent scathing criticism of Holtorf's *Archaeology is a*

brand (2008) ('patronizing snobbery' and 'good old-fashioned elitism' – the assumption being that the masses are stupid and only interested in cheap thrills) might well be extended to many people practising heritage: it is an archaeology ad usum infantis. And it is hurting the public image of archaeology (see also Kristiansen 2008). I claim that we can be accessible without oversimplifying matters – but it needs a lot of thought and commitment. Public archaeology is not simply selling archaeology, but should be an academic subject with a proper academic background in its own right.

While I utterly agree with Shannon Dawdy's point that archaeology cannot change the world, or, as a student of mine succinctly expressed it, 'if you want to change society, you need a gun, not a fucking trowel', we should not restrict ourselves to 'safe' subjects.

While Neo-Druids and ultra-feminists may be mainly seen as eccentric and highly entertaining, demands for the reburial of Neolithic remains utilizing legislation intended for the remains of members of the First Nations (Blain and Wallis 2004; http://www.english-heritage.org.uk/aveburyreburialconsultation) are threatening archaeological research in a rather clever way. While postcolonial guilt has softened the discussion of reburial claims and the biological, rather than cultural, definitions of ethnicity used in parts of the relevant legislation, there seems to be no reason to avoid confrontation here. Maybe we have become too cautious, too polite. I am tired of this politeness, which also involves not really taking the other seriously, not seeing them as worthy of true opposition – and, in a way, cheapening the very real suffering of colonized people. The end of politeness also means that we are forced to define our own positions more clearly.

The interpretation of the prehistoric past by right-wing groups has not stopped with the Second World War. Re-enactment and reconstruction, theoretically still insecure, despite numerous attempts to the contrary (for example Exarc; see www.exarc.eu), and still not represented as an academic subject – but highly visible – are especially exposed here. In Germany, at least, demonstrations and re-enactment were definitely below the academic radar ten years ago. Gerhard Bosinski at Cologne University termed experimental archaeology the 'retreat into the practical sphere' ('Rückzug ins praktische'), implying that it was the resort of the academically challenged. While the attitude has changed, there is still no chair of experimental archaeology in Continental Europe. The belated enthusiasm of some academic archaeologists (e.g. Lüning 2005) has managed to ignore most of the theoretical discussion that has already taken place.

The recent scandal around the group Ulfhedar, which was employed by major German museums for public events, and which openly displays fascist symbols banned in Germany, is only one example here (Mölders and Hoppadietz 2007; Schlegelmilch 2007). What is needed is not retreat into useful applications, but open confrontation on a sound theoretical basis (Mölders 2008). What we need is a more publicized informed discussion of sources, of archaeology's political implications and of the ways the past is

constructed. In other words: talk about methods and problems instead of presenting badly researched 'pictures' full of unreflected stereotypes.

I remain doubtful about the kind of 'useful archaeology' advocated by Dawdy. While we should strive to address questions of current importance – and there is no question that we have a lot to contribute – we should not let ourselves be reduced to that area. And it is not as if we can escape politics this way: was New Orleans destroyed by Hurricane Katrina or by George Bush Ir?

In conclusion, I would claim that archaeology always is political and always should be political. I suspect that Dawdy would agree with that, as her final reference to Benjamin seems to indicate. I wish she had expanded a bit more on that theme. Archaeology needs to be more political, not less. But the very necessary loss of innocence (Clarke 1973) seems to have changed into a loss of confidence at the moment.

> Archaeological Dialogues 16 (2) 179-181 © Cambridge University Press 2009 doi:10.1017/S1380203809990134

The uses of archaeology. A plea for diversity Pedro Paulo A. Funari and Aline Vieira de Carvalho

Professor Dawdy's keynote speech addresses some of the main challenges of the discipline in the 21st century. Archaeology should not be self-serving, and it can even become dangerous, a possible consequence of a quest for its usefulness. A possible solution would be to focus efforts on environmental archaeology. Looking for ancient sustainable agricultural practices, for example, in order to better inform contemporary human adaptations, would be a path to follow. According to Dawdy, this useful, futurist archaeology finds a public ready for such an endeavour.

Perhaps it is time to read again Walter Benjamin (1974, 700): 'History is the subject of a structure whose site is not homogeneous, empty time, but time filled by the presence of the now [Jeztzeit]' (14th thesis, authors' translation).

Ieztzeit is difficult to translate into English, different from Gegenwart ('present'), so much so that the French use à-présent. As stresses Laurent Olivier (2008, 157), this is directly related to archaeology:

On considère que c'est la mémoire matérielle du passé qui est en question dans l'archéologie, et que la demarche archéologique consiste à étudier la construction de cette mémoire, à travers le temps. Dans ce cas, le présent, comme à-présent, devient effectivement le lieu central de l'interpretation du passé. C'est précisement l'approche que préconise Benjamin comme une solution à l'impasse à laquelle conduit l'historicisme.

The material memory of the past is the subject of archaeology and the archaeological endeavour is to study this memory through time. If so, the

present as the presence of now is at the core of the interpretation of the past. This is exactly the approach that Benjamin advocates to overcome the impasse of historicism (authors' translation).

The presence of now is a complex concept, opposed to a positivist passing of time (*khronos*), a full critical time (*kairos*) (Funari 1996, 51; Löwy 2005, 119). Whatever the translation, though, it refers to engagement with the present, with people, with interpretation. This means commitment to interaction with common people, indigenous groups, interest groups, and community groups, among a plethora of social agents. It also means critiquing the uses of the past for oppression and submission. The World Archaeological Congress is understood in this context as breaking with neutrality and positivism (Funari 2006). Anne Pyburn emphasizes (2008, 202) that 'perhaps the most important reason for archaeologists to engage with the public is to encourage practitioners to develop a greater reflexivity about what they are doing and why'.

Epistemologically, interaction with people is thus relevant. It is not a fashion; even less is it a PR strategy or a way of selling archaeology, as Dawdy sometimes hints. Rather than smoothing the relationship of archaeologists with strained communities, interaction serves both archaeologists and communities in their common concern with the presence of the now. Social conflicts and inner contradictions and violence are at the root of *Jeztzeit* and archaeology plays a role in fostering discussion, not suppression, of tensions (Zarankin and Funari 2008; Starzmann, Pollock and Bernbeck 2008). Public archaeology has nothing to do with forestalling controversy. On the contrary, as Kersel, Luke and Roosevelt (2008, 315) propose,

Local interaction and engagement may not be what archaeologists have focused on traditionally, but they should become priorities, as should reflexivity and introspection in analysing our own actions and how these actions (our physical presence and publications and reports) have direct consequences on economic systems and social networks.

The involvement of communities is thus an epistemological move, to learn with people, as Brazilian thinker Paulo Freire (1993) stated several years ago. It is no surprise that such practices and their epistemological consequences developed early and fast in Latin America, for peripheral contradictions and conditions are prone to produce critical knowledge. Latin America has produced innovative practices and extensive literature. Some of this literature is published in English, but most of it appears in local languages, such as Spanish and Portuguese. Unfortunately it is not widely referenced even by scholars working in Latin America and the Caribbean. Fortunately, locals, not Europeans or North Americans, have dominated the landscape of archaeological practice in Latin America and have created several innovative practices over the last few decades. Some of them coincide in a way with Dawdy's proposals, particularly in the archaeology of missing people and dictatorships (Funari, Zarankin and Salerno 2009). Social memory, public memory and archaeology (Little 2002; McDavid 2004c; Delle 2008, 86–88)

are here at work, fulfilling Benjamin's warning not to accept void time and an empty future. Contradictions within society, conflicts, diversity of interests and standpoints are rooted in those activities, aiming at a better, more diverse

Latin American experiences address a relevant issue raised in the keynote speech: environmental concerns. What is a river? What is a painted cave? What is a fossil? It is not only a natural taphonomic feature, from a modernist positivist perspective, but much more than that: the result of a myriad of conflicting interpretive subjects. Benjamin again helps us: 'To articulate the past historically does not mean to recognize it 'the way it properly was' (wie es eingentlich gewesen, Leopold von Ranke). It means to seize hold of a memory as it flashes up at a moment of danger' (6th thesis, authors' translation).

No proper real past environment can tell us how to manage the environment today. It depends on the standpoint, on the interlocutors: cui bono? Who benefits by it? There is thus no neutral, natural, objective, empirical, positivist adaptation to the environment, but there are different interests and standpoints on rivers, caves and rock art. Take the case of natives: archaeologists working with indigenous peoples produce new understandings of the environment, to use a word charged with naturalist connotations. Perhaps taba, a Tupy word, is closer to this emotive perception, like its possible Greek translation, oikos, home (Sampaio 1987, 318). Of course, it is used in our common concept of ecology (knowledge of our home). Eco-friendly is a good translation of another native name, Tabaré not by chance the surname of the present president of Uruguay! In other words, dignifying the standpoints of a variety of people is again a way of better understanding archaeology as inevitably concerned with power relations (pace Shanks and Tilley 1987a). The interaction with natives is an innovative feature of archaeology in the periphery. At Xingu, in the Amazon basin, archaeologists and other social scientists have been learning with natives. Empowering initiatives such as Xingu Cultural Workshop (http://oficinaxingu.ning.com/) show that working with the people is much more than PR, that it enlightens archaeologists, as we have proved ourselves.

Dawdy's keynote speech aimed at fostering discussion of the usefulness of archaeology and raised a series of challenges to all those concerned with producing knowledge with the people. Socrates' motto is still valid: only a critical life is worth living (Plato, Apology, 38). Dawdy's arguments, even when we do not share them, are a reminder to us all that diversity is much better, and safer, than the acceptance that there is only one, right way. Who decides what is right? It is much better to heed a variety of voices, and much less dangerous and authoritarian.

Acknowledgements

We owe thanks to James A. Delle, Barbara Little, Michel Löwy, Carol McDavid, Laurent Olivier, Anne Pyburn, Melisa Salerno, Michael Shanks, Andrés Zarankin. We must mention the institutional support of the Centre for Strategic Studies, World Archaeological Congress, São Paulo Science Foundation (FAPESP) and the Brazilian National Science Foundation (CNPq). Responsibility for the ideas is our own and we are solely responsible.

Archaeology. From usefulness to value Cornelius Holtorf

I have much sympathy for Shannon Dawdy's eloquent argument in favour of reorienting archaeology 'away from reconstructions of the past and towards problems of the present' (p. 140). The topic is timely, her argument sharp, and the discussion of the issues at hand benefits from them being put on the spot in rather dramatic fashion. I do not agree with those who might argue that such calls for more social relevance in a humanities subject are merely the symptom of an unhelpful but prevalent insecurity and demonstrate a lack of confidence in one's own academic abilities. At the same time, Dawdy's passionate and courageous argument would have benefited from additional analysis of the subject matter at hand. As it stands, I have two main reservations to her paper.

Firstly, Dawdy misses an important distinction, which is that between value and use. Archaeology is *valuable* when people enjoy it in some way, usually because they appreciate that archaeology is an equally exciting and meaningful practice generating significant stories that are simultaneously about both the past and the present (Holtorf 2007; Smith, Messenger and Soderland, forthcoming). By contrast, archaeology is useful when people employ it for their own particular purposes and gain concrete benefits beyond those deriving from stories about past and present as such. As Dawdy points out, such uses may be very dubious. The usefulness of Kossinna's method and account of prehistory for Nazi politics is well known. By the same token, archaeologists like D.G. Hogarth, Nelson Glueck and Max von Oppenheim proved useful as wartime spies supporting the colonialist and imperialist agendas of their governments in London, Washington and Berlin (Richter 2008). A list of significant heritage sites sent in 1998 under the 1954 Hague Convention by one country of the former Yugoslavia to UNESCO proved useful to another country in that each one of these sites was specifically targeted in order to undermine the population's morale (Stone, with Bajjaly, 2008, 7). And, arguably, in the preparation and aftermath of the recent Gulf War, archaeologists cooperating with the Allied forces were useful once again in order to make the occupation of Iraq more acceptable to politicians and citizens in the coalition states (Hamilakis 2009). On the other hand, some uses of archaeology, such as those improving contemporary agricultural practices, are, of course, not dubious or problematic at all (Isendahl 2008). What makes some uses of archaeology laudable and others debatable is first and foremost their association with different values and the agendas that derive from them. We therefore always need to ask to whom and to what archaeology's usefulness is valuable and why.

The meanings of value and usefulness overlap with each other, as uses are valuable and value can be useful, but the terms are not synonymous. The differences between the terms have been lost entirely in Dawdy's argument and led her to the catchy but misconceived one-liner that 'archaeology has

been very useful lately, but primarily to itself' (p. 138). The growing attention archaeology is giving to its own contemporary social context and to the people it affects - behind which Dawdy suspects archaeology's own selfinterests - have in fact first and foremost not made it more useful, but more valuable, and not to itself but to others. Surely the point of public archaeology and community archaeology is not to justify an essentially imperial, colonial and racist discipline that was otherwise useless, as Dawdy implies, but to appraise critically and in many cases celebrate archaeology's value to a wide range of constituencies (Merriman 2004a; Holtorf 2007; Svanberg and Wahlgren 2007; Ronayne 2007). I thus take public archaeology to mean something much more profound than merely public relations or public outreach – which is never altruistic wherever it occurs. Most academic disciplines may indeed not be sending out their professors, inviting community members to contribute to academic research proposals. But then again, most other disciplines do not commonly deal with something as cherished as a community's ancestral past - in fact the ancestors' very bones may be at stake - and as meaningful as a community's way of life and collective identity rooted in a shared past, even though that past might be presumed rather than reliably known.

My claim that Dawdy has sold short the value of archaeology to local communities and various other publics should not, however, take anything away from the pertinence of her overall argument concerning the need to consider archaeology's usefulness beyond constructing pasts and building heritage: what kinds of problems of the present can archaeology help in solving? In precisely what way is archaeology about the present rather than the past? Surely it is not sufficient that archaeology adopt the topics and ideas that enjoy currency in present society, as this may show little else than archaeology's entanglement in contemporary ideas (Wilk 1985). Indeed, the very desirability of being 'useful' - and the fact that this comes up in a commissioned debate just now – might just be the latest example of that same entanglement, linking archaeology to notions of profitability and revenue that of late have been governing Western economies in the face of competition from low-wage countries, especially in a state of economic crisis. But the burgeoning interest in the values of heritage and archaeology, as well as the trend towards applied archaeologies, might equally well be explained by a genuine concern archaeologists have gradually been developing for the role they play in contemporary society and the relations they establish with local communities.

My second reservation concerns a gap in Dawdy's analysis of archaeology's usefulness. She is right to insist that archaeology should be oriented towards contemporary problems and provide concrete benefits, beyond merely telling new stories in relation to the past - even though such stories are very significant, too (Holtorf 2007; forthcoming). She is also right to distinguish the uses of archaeological heritage from those of archaeological knowledge. Whereas the former may be useful for creating a pleasant environment for relaxation and rehabilitation, for cultural tourism or for sustainable social development in countries with strong internal tensions (Smith 2006; Lafrenz Samuels 2009), the latter may be useful for informing environmental policies, for achieving justice in court or for providing closure to the families of victims of mass murder (Rogers 2004; Gould 2007). Both dimensions of archaeological usefulness are important, and archaeologists will no doubt need to give more attention to them in the future than they do now. What Dawdy, like Sabloff (2008), overlooked is that archaeological methods and ways of reasoning, too, can be useful.

Excavation, for instance, can have additional benefits besides those it has as an academic method to secure evidence that helps academics reconstruct the past. Digging for, and discovering, clues from the past create opportunities for reflection and dialogue both among different participants and between participants and onlookers. Excavation is an exciting and multifaceted approach to investigating what metaphorically lies 'beneath'. It affects those digging in more ways than by merely providing data. Recovered artefacts can trigger memories and make the past tangible, even bring history to life by evoking past individuals who may have last handled the very same piece before you did. If the artefacts come from the recent past, they may refresh memories and facilitate sharing these with others, whether or not all these recollections are actually historically accurate (Arén et al. 2007). If they are from a more distant past, artefacts can provoke reflections about what it means to be human more generally, irrespective of which particular period the items in question may derive from. All this does not only provide beneficial experiences for each individual, but can also meet important social and cultural aims by giving pause for thought about the grand questions of the course of cultural evolution and human history and by stimulating contact and conversation across different generations and communities (Svanberg and Wahlgren 2007; Burström 2007). Indeed, it is in the area of method that archaeology can very well serve purposes of education, community cohesion and entertainment as suggested by Barbara Little and cited by Dawdy:

- Teaching archaeology may not make for better schools but it can make for better learning. Through integrating a wide range of methods and knowledge from various disciplines into holistic archaeological reasoning, students not only can be better motivated, but also can achieve broader educational goals (Synnestvedt 2008, 277–304). They do not simply learn archaeology, but they learn many different skills and insights with archaeology. This also applies to students with special needs (Downum and Price 1999, 230). By the same token, a recent project at Jämtland's Museum Jamtli in Sweden demonstrated that heritage can offer a stimulating learning environment that motivates unemployed young adults to continue studies and thus increase their chances on the labour market (Palomaa 2008).
- Archaeological projects can relieve racial, social, gender and other community tensions. Through digging, neighbours who belong to different communities can come together and learn to communicate with each other, whatever they may actually find and find out about the past (Synnestvedt 2008). Intriguingly, this can even happen retrospectively. It matters to members of communities today that a historical archaeology project investigating the history of archaeological study and commemoration at Franklin Court at Independence National Historic Park in Philadelphia

- found a significant involvement over time of African Americans, organized union labourers, Native Americans, female leaders and gay archaeologists (Jeppson 2006).
- For the past 15 years, millions around the world have been watching the highly entertaining documentary series Time Team on the British Channel 4.2 More than enough have been willing to pay £50 to the York Archaeological Trust for the entertaining experience of 'A Day on the Dig', or 50p for looking through the fence observing an actual archaeological excavation (Holtorf 2007, 19, 25). Whatever else it may have accomplished, archaeological research has certainly become a form of popular entertainment.

There are many other fascinating examples of archaeology's usefulness, yielding benefits from the heritage itself, from new research results and from research methodologies. William Rathje's classic Garbage project is an obvious highlight (Rathje and Murphy 1992), as are Clark Erickson's (1992) experiments with the ancient technique of raised field agriculture in South America, and the archaeologically informed marking of US Nuclear Waste Disposal Sites (Benford 1999, Part 1). Christian E. Downum and Laurie J. Price's (1999) summary of the state of applied archaeology at the end of the 1990s provides a good starting point, although it omits some work and surveys a very diverse range of studies - not all of which might truly be called applied and useful in the present sense at all. It is not clear to me, for example, to what extent cultural resource management, commercial archaeology and public outreach projects themselves 'apply' archaeology or make it useful to solving problems of the present. They rather seem to be techniques for preserving archaeological sites or the academic information they contain, financing archaeological research and communicating its results all of which may (or may not) be valuable and indeed useful, but it remains to be explained in what way.³

Over only the past five years much new research has been published that contributes to developing the field of useful and applied archaeologies in new and exciting ways. For example, in Places in mind Paul Shackel and Erve Chambers (2004) published a series of case studies for how public archaeology can be practised as applied archaeology, and Barbara Little and Paul Shackel (2007) edited a related volume entitled Archaeology as a tool of civic engagement, containing more topical studies of applied archaeology although it has to be said that a number of chapters in both volumes fall well into Dawdy's category of 'inventing traditions and building heritage' (p. 140) and lack other clear uses. Maggie Ronayne (2007) presented a brilliant example of archaeology's usefulness in an account of her long-standing involvement in the Ilisu Dam Campaign. She spells out how archaeological expertise can be beneficially applied in order to support the interests of local communities in south-east Turkey. Jeremy Sabloff (2008), too, contributed to the chorus of advocates for useful and applied archaeologies. He has argued forcefully and at book length that there should be more 'action archaeology' that 'matters' in the modern world. More exciting work is under way (Zimmermann and Welch, forthcoming). All these various applications of archaeology insist that the discipline is eminently useful. At the same time,

those uses should be distinguished from the values of public archaeology and community archaeologies that do not necessarily fall into the category of applied archaeology.

Nobody suggested that archaeology is the only answer to the world's problems and needs, but applied archaeology certainly can make a contribution. The sort of usefulness of archaeology, for which Dawdy gives some examples which I have supplemented, adds to the value of archaeology in present society. Usefulness is, however, always relative to specific values and agendas (in the plural) and never able to substitute for value (in the singular). Dawdy's paper is useful for Cambridge University Press's ambitions to sell a competitive product and pay wages to its employees, among other concrete benefits. But that usefulness, helpful as it is, relies on the values that carry higher education, academic scholarship and the market economy. CUP's benefits cannot substitute for the intellectual value to academic archaeology which Dawdy's provocations clearly have, too. Something similar might be said about the usefulness of public archaeology and community archaeologies: their value matters more.

Notes

- ¹ See also the Cultural Heritage without Borders project (http://www.chwb.org) and the PUSH project (http://www.pushproject.org).
- ² See http://www.channel4.com/history/microsites/T/timeteam.
- ³ The same point also applies to initiatives such as UCL's Centre for Applied Archaeology (http://www.ucl.ac.uk/caa).

Archaeological Dialogues 16 (2) 186–207 \odot Cambridge University Press 2009 doi:10.1017/S1380203809990158

Doomsday confessions Shannon Lee Dawdy

I want to thank the commentators for their thoughtful and diverse responses. I was originally worried that my intentionally provocative sally was going to either scratch a bundle of raw nerves or go over like a wet firecracker. Instead, the replies were all over a very interesting global map (with perhaps a few reactions at either extreme). To quote Mark Pluciennik, one could say of the total array of responses that 'where archaeologies might fit among such a constellation of uses and abuses is of course highly contextual and dependent on one's position in time, and space, and sociocultural and political situation' (p. 153). I will not be so bold as to try to contextualize each author according to their national original, institutional setting or academic training and research interests, since I think the intelligent reader can see these glinting through the responses. Instead, I will take this opportunity to contextualize myself. Despite my calls for honesty in the paper, I have not been entirely honest about the genealogy and context of my opinions. In the course of my confessional, I will also enunciate those places where I am humbled by the knowledge and activities of the responders and, of course, where I think I have been misunderstood.

My critique of 'public archaeology' is most decidedly coming out of a North American context of historical archaeology, towards which I aimed my sharpest barbs and thus not unexpectedly received some of the sharpest defences from fellow historical archaeologist Carol McDavid. European archaeologists, on the other hand (to judge from the commentators) may find that my critiques are simply not as applicable. My position has been shaped by 14 years of experience in New Orleans within cultural resource management, as the director of a public archaeology programme through the University of New Orleans (with public outreach, preservation and research responsibilities), and more recently as an academic research archaeologist who has worked extensively (if not always happily) with diverse local constituents and the media. These experiences included some very 'public' archaeology projects, such as an early, well-intentioned effort to do community archaeology through a summer camp programme for disadvantaged youth on a site that was home to an integrated private school run by a Creole of colour during the height of Jim Crow. That idealistic young archaeologist is still within me, but now more humbled – and more militant.

Unlike Holtorf, in my time in New Orleans I never found that archaeological projects 'can relieve racial, social, gender and other community tensions' (p. 184). Rather, if anything, public archaeology usually exacerbates them. And that is not such a bad thing. I would agree with Chris Matthews (2009), in his recent review of activist and community archaeology, that lively debate may be the most realistic and even desired outcome. So long as the conversation is not limited to 'whose heritage is it anyway?' This is a point of common ground between myself and Funari and de Carvalho, who say, 'It is much better to heed a variety of voices, and much less dangerous and authoritarian' (p. 181). I would agree with this entirely, but I have by and large not found that 'heritage archaeology' as practised in the US is tolerant of multiple interpretations or multiple voices. There is always a sifting and sorting of 'whose heritage is it really?', as we saw in the Kennewick Man and African Burial Ground controversies. And I would agree with Funari and de Carvalho that it is the dialectic between the planes of the presentpast-future that makes archaeology interesting. Benjamin, in fact, was a revolutionary who used an archaeological method to imagine an alternative, non-teleological future. He was charmed by, but did not accept, the mythos of capitalism. Although he embraced surrealism, I do not think he would have embraced the diversity of all the views of his contemporaries. Otherwise, his critique of fascism would have been empty. To fine-tune my own criticism in response to some confusion, my objections are not raised against 'diversity' in archaeological interpretation, but rather against the pervasive 'self-congratulatory' tone (Matthews 2009) one finds in the community and activist archaeology literature (I am afraid McDavid has not yet convinced me that the field has matured out of this stage). But my stronger concern is about the crypto-fascist implications of heritage archaeology (which, contra Sommer, is not an old-hat argument in the Americas), particular within the structure of state-sponsored archaeology. In the US, I worry that a reification of racial and ethnic difference is being accomplished through projects such as 'heritage archaeology' precisely because it serves the interests of a state



Figure 1 Katrina ruin in Lower Ninth Ward, New Orleans, October 2005. Photo by S. Dawdy.

based on census-gerrymandered voting districts and the myth that everyone is middle class. I am not clear about the institutional arrangements of the community archaeology projects defended by commentators such as Funari and de Carvalho or Holtorf, but I think any politically astute approach to 'useful' archaeology must reveal the structures of its own possibility. Some of the commentators seem to live or work in a world where the archaeologist is a free agent with no strings attached, able to live out their dreams of being a professional intellectual and community activist without any politically compromising structural constraints. That is not the world I know.

As Ulrike Sommer intuited towards the end of her comment, the tenor of my keynote was coloured by Hurricane Katrina and my experience attempting to work as a consultant between the local community, the state archaeology office and the Federal Emergency Management Agency during three intensive months immediately following the levee breaks. This was a transformative experience, and one, I will admit, that put me in a rather doomsday mood about the 'use' of archaeology.

For those of my colleagues who work in war-torn areas, I need not describe the phenomenological shock of a devastated landscape, particularly if it was a place they once called home (figure 1). The scars of the landscape were, of course, matched by those of friends and acquaintances dealing with unimaginable losses. Driving the mudcaked streets of New Orleans attempting to fill out historic preservation and archaeological site condition reports felt worse than useless when faced with the pleadings of shell-shocked residents on the street asking for much more immediately meaningful aid. On several

occasions, there was outright anger at the arrogance of those who deigned to prioritize history over the present in the rebuilding process. I would venture to say that if you were to truly listen to the community of New Orleans, the majority would vote that no provisions be made for archaeology whatsoever. Can community archaeology be no archaeology? In the four long years since the storm, this debate is not dead and the utility of archaeology in the face of poverty, racism and homelessness now exacerbated by the disaster and the decline of the tourism industry has not made its ethical defence any easier. Not, at least, the type of archaeology that raises the dead over the living.

Katrina has awakened me politically. But perhaps not to the same waking state of others who consider themselves radicals and do-gooders. The negative side of my new beliefs might be summed up by the sentiment of Ulrike Sommer's student: 'if you want to change society, you need a gun, not a fucking trowel' (p. 178). This is essentially what I have written elsewhere (Dawdy 2008), though perhaps committing Sommer's error of being too polite about it. Of course, in New Orleans we have enough guns. The city now leads the nation in murders (McCarthy 2009). This, too, is in part a consequence of the storm and the social and political failures that combined to make this a large-scale catastrophe (on the impossibility of separating natural and political disasters, see Dawdy 2006). The senseless daily deaths of young people in New Orleans, the vast majority of them African American, also helps put archaeology in perspective. In a city where the history of slavery and Jim Crow haunts almost every resident in their daily activities in the form of 'slave quarter' architecture, if not in the visible continuities of inequality in education, housing, medical care and job opportunities, do we really need heritage archaeology to also remind us of this past? Not only is this redundant, but I fear that for many what is missing is not the past – it is all around – but an imagined future. In this moment, what seems like a truly revolutionary possibility in New Orleans is to break with heritage, not to fetishize it any more.

I am reminded by an early experience I had in Louisiana in my earnest efforts to engage in community archaeology. I was working for a cultural resource management firm that did an annual excavation and open dig at the industrial campus of a rather notorious chemical company (curious sleuthers may check Salinger's Encyclopedia of white-collar and corporate crime (2004, 29-31)). As part of Louisiana's public 'Archaeology Week', we guided hundreds of local schoolchildren on a tour of our open dig on a plantation site. While giving my spiel about the sunup-to-sundown extremities of the sugar labour regime, a young African American high-school student burst into tears and walked away. When I asked her teacher later what was wrong, she said that the girl simply did not want to know that history. Ever since, I have asked myself, and now louder than ever, 'who I am to give that girl history?' It's okay if she doesn't want it.

Those like Carol McDavid who have worked assiduously on community archaeology in dialogic modes might answer that the young Shannon committed the error of monologue, not asking the community what stories they wanted out of the archaeology, or what projects they wanted to see undertaken. But the reality is, as the structural setting of that dig made abundantly clear, that the terms of excavation opportunity are often set

by forces much larger and more powerful than either the archaeologist or descendant community members. Nor, as the present condition of New Orleans makes painfully clear, is archaeology all that useful in addressing the most entrenched social problems, even those with clear historical roots. McDavid and Holtorf have listed some very laudable and interesting efforts to unite archaeology with environmental justice issues, but it seems to me that many of these are using archaeology or heritage as legal leverage with the ultimate goals being something other than recovering memory. Instead, they are geared towards something very pragmatic and presentist, such as halting or mitigating destructive development projects. In cases such as these, I would agree with Pluciennik that it is not the archaeology per se that is useful, but its collateral benefits, such as winning a recognition case, protecting homelands or developing the local economy. Joe Watkins, for example, makes an eloquent and convincing case that Native Americans have found archaeology very useful for specific legal battles as they have become increasingly sophisticated in using the US court system, while at the same time archaeology provides new source material for their own narratives of the past. I would love to see archaeology's usefulness in this way expand, eventually erasing the dividing line between archaeologists and the indigenous through training and empowerment, as has been happening among the wealthier tribes. However, my own experience is that the unique legal position of Native American groups as sovereign nations and as descendant communities with special rights under NAGPRA and other protections may not be generalizable to other contemporarily disadvantaged groups.

Another Katrina-related source of my cynicism and critique of 'public' archaeology comes from my attempt to persuade FEMA to apply a principle developed to protect Native American sacred sites called the Traditional Cultural Properties criterion. McDavid is right to point out that so much gets lumped under 'public archaeology' that the term is almost useless. One of my own points is that corporate and US nationalist archaeology hides under this innocuous title. So let me be clear here that this next critique is launched at the practice I will call 'government archaeology', which in the US covers all that work sponsored by federal agencies either directly or through contract firms.

One of the main tasks I was given in my post-Katrina role was to help come up with an 'action plan' for FEMA to deal with the devastated Lower Ninth Ward under historic preservation and environmental justice mandates. It was clear that this was important not because the Lower 9 (as locals call it) was particularly historic, but because it was particularly political.

In my report for FEMA, I made several recommendations. The first was that the structures in the area be considered part of a new historic district nominated for its contribution to events in history related to the civil rights movement (Ruby Bridges's entry into the Franz Elementary School during desegregation, famously painted by Norman Rockwell, took place here). Secondly, I recommended that FEMA invoke the Traditional Cultural Properties criterion defined by a site's 'association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the

community' (Parker and King 1998). Applying this criterion demands learning from local expertise and consulting with the community. I urged community consultation on the history of the unique local Social Aid and Pleasure Clubs, jazz clubs, and spiritualist churches which, most ethnographers would have agreed, were significant cultural practices in the neighbourhood.

Thirdly, I recommended that FEMA consider *not* isolating the Lower 9 in what they call their 'treatment measures', or ways of mitigating federal actions by spending dollars and doing feel-good projects like preserving isolated monuments or landmarks, or developing museum displays and memorials. It was the very isolation of the Lower 9 from other neighbourhoods in the city that so riled local activists. Further, despite the media depiction of the tragedy of the Lower 9 as epitomizing the racial disparities of our country, if you listened to local voices there was a desire to focus on issues of class over those of race.

FEMA declined to take up any of my recommendations and now most of the damaged structures in the Lower 9 have been razed with no mitigation in the form of archaeology or historic-register status. Among the many reasons I suspect are: (1) to define the neighbourhood as a historic district important for its role in the civil rights movement would dig up the fact of the federal government's role in undermining school desegregation in New Orleans; (2) taking a Traditional Cultural Properties approach would require consulting with the local community, which FEMA is loath to do because, as one colleague told me, they are likely to find a diversity of opinions and angry, 'irrational' suggestions within the community that they could not act upon; and (3) taking a historical view that stresses the complex racial history of the Lower 9 did not jive with the simplified 'black ghetto' image circulating in the media. I was told by another FEMA employee that although my report was very interesting, they 'didn't really need an academic history in order to do historic preservation'. Colleagues in the FEMA office were particularly dismissive of activist insistence that the lost heritage of the neighbourhood was as a multiracial working-class community (though my historical research showed this to indeed be true prior to the 1960s). In essence, a communitybased archaeology of the Lower 9 did not serve the public relations needs of the federal government, so it did not get done. So, to clarify, I am far from opposed to community-consulting in archaeology, but I am totally discouraged as to (a) its strong use-value in remedying contemporary social problems or (b) the ability of nationally backed archaeological projects to do anything except serve the interests of the state, even in the guise of embracing diversity. In the US context, racial division is useful, while any suggestion of class conflict is taboo.

As I hope this fuller explanation of my own context makes clear, commentators such as Wright, Funari and de Carvalho, and Sommer, who may have interpreted my admittedly broad-stroke paper as a retreat from politics, have missed my sharpest critique: that US nationalist archaeology marches on, virtually unopposed. This US context, of course, differs significantly from that of Europe, where, as Holtorf and Sommer make clear, the field is highly attuned to, if not tired of, the debate. It may surprise them to learn that American archaeologists are relatively ignorant of Kossinna, so

my effort indeed has been to try to get American and European archaeologists engaged in a dialogue about the differential politics that affect their practices. I have elsewhere stated, as Pluciennik does, that all archaeological politics are local and that context is everything (Dawdy 2005). Thus my retreat from heritage archaeology is not redirected towards the safe space of objectivism or academic autonomy. Rather, it marks a misgiving about how heritage gets used in the US context, where, at the very least, it risks becoming an apologist distraction from living injustices.

The move I want to make is a realignment of archaeology towards future utopian possibilities which I find more revolutionary than statesponsored nostalgia. The quite political (though anti-nationalist) thrust of my recommendations should also be clear from my agreement with Jeremy Sabloff that archaeologists need to be involved in policy-making. I will hold my ground on the point that policies regarding global warming and sustainability are more urgent and useful than policies about heritage. However, I would not think to contradict Rita Wright's point about the high international stakes involved in the looting and illegal trafficking of antiquities. There is a fine line to walk between claiming sites and artefacts as 'world heritage', which has a way of overriding local communities, and attempting to intervene when civil wars and international conflicts lead to a form of archaeological disaster. While the ethnic diversity within the hotspots she points to (Iraq and Afghanistan) brings up the problem of 'whose heritage is it?', this does not mean that we abandon efforts to help prevent looting and destruction. In fact, stewardship may be a useful idea to rescue, in the sense that one can be a steward of a land and its resources whether your ancestors arrived 40 or 4,000 years ago.

I have another confession to make, which is that I responded to this forum with some reluctance. This was not because the question was not interesting, but because I felt poorly qualified to answer it. I am not one of the many respected scholars who have published extensively on activist or public archaeology, nor do I have the expertise I would like to have to make a stronger case for futurist problem-solving archaeology. I am therefore extremely grateful to commentators Jeremy Sabloff and Margaret Nelson for filling me in on what so many scholars are already doing to apply their work to pressing supra-national problems such as global warming. Nelson's Resilience Community study seems to me an inspirational model for work that is simultaneously practical, utopian and intellectually fruitful. This is precisely the sort of thing I had naively hoped to spur. We need a 'wet' version of this type of study on the Gulf Coast to study the patterns of hurricane and flooding adaptation over the long term. At this time, there appears to be an issue of generational memory in both prehistoric and historic communities when there is a lull of more than 75 years in the hurricane cycle and settlements creep into more vulnerable areas. In this case 'tradition' may be adaptive! But so far, these are anecdotal observations that would benefit from the rigorous modelling undertaken in the Resilience study.

Thus I would like to end on an 'up' note that the outcome of this dialogue for me has been finding new sources for optimism in the training of indigenous and descendant archaeologists unafraid to exploit the collateral

benefits of archaeology and in the discovery of a larger community of futurist archaeologists I might call my own.

References

- Abbott, D.R., A.M. Smith and E. Gallaga, 2007: Ballcourts and ceramics. The case for Hohokam marketplaces in the Arizona desert, American antiquity 72, 461-84.
- Adger, W.N., 2006: Vulnerability, Global environmental change 16, 268-81.
- Allen, T.F.H., J.A. Tainter and T.W. Hoekstra, 2003: Supply-side sustainability, New York.
- Altschul, I.H., and A.G. Rankin, 2008: Fragile patterns. The archaeology of the Western Papaguería, Tucson.
- Anderies, J., B.A. Nelson and A.P. Kinzig, 2008: Analyzing the impact of agave cultivation on famine risk in arid prehispanic northern Mexico, Human ecology 23, 409–22.
- Anderies, J.M., 2006: Robustness, institutions, and large-scale change in social-ecological systems. The Hohokam of the Phoenix Basin, Journal of institutional economics 2, 33–155.
- Anderies, J.M., M.A. Janssen and E. Ostrom, 2004: A framework to analyze the robustness of social-ecological systems from an institutional perspective, Ecology and Society 9, 18. Available online at http://www.ecologyandsociety. org/vol9/iss1/art18/.
- Andrus, C.F.T., D.H. Sandweiss and E.J. Reitz, 2008 (1996): Climate change and archaeology. The Holocene history of El Niño on the coast of Peru, in E.J. Reitz, C.M. Scarry and S.J. Scudder (eds), Case studies in environmental archaeology, New York, 143-58.
- Anyon, R., T.J. Ferguson, L. Jackson, L. Lane and P. Vicenti, 1997: Native American oral tradition and archaeology. Issues of structure, relevance, and respect, in N. Swidler, K. Dongoske, R. Anyon, and A. Downer (eds), Native Americans and archaeologists. Stepping stones to common ground, Walnut Creek, 77-87.
- Arén, L., M. Burström, A. Gustafsson and H. Karlsson, 2007: Bäckebobomben. Minnen av Hitlers raket, Lindome.
- Arnold, B., 2006: 'Arierdämmerung'. Race and archaeology in Nazi Germany, World archaeology 38, 8-31.
- Arvidsson, S., 2006: Aryan idols, Chicago.
- Barker, G., and D.D. Gilbertson, 2000: The archaeology of drylands. Living at the margin, New York.
- Barth, F. (ed.), 1969: Ethnic groups and boundaries, Boston.
- BBC, 2006: Britons unconvinced on evolution (BBC Ipsos Mori poll report 26 January 2006) http://news.bbc.co.uk/1/hi/sci/tech/4648598.stm (17 April 2009).
- Benford, G., 1999: Deep time. How humanity communicates across millennia, New York.
- Benjamin, W., 1974: Über den Begriff der Geschichte, in Gesammelte Schriften, ed. R. Tiedemann and H. Schweppenhäuser, Frankfurt, 691–704.
- Benjamin, W., and R. Tiedemann, 1999: The arcades project, Cambridge, MA. Blain, J., and R.J. Wallis, 2004: No one voice. Ancestors, pagan identity and the reburial issue, British archaeology 78, 10-13.

- Boroff, P., 2006: Getty Museum says it will tighten policy of buying antiquities, 26 October 2006. www.bloomberg.com.
- Bovy, K.M., 2007: Global human impacts or climate change? Explaining the sooty shearwater decline at the Minard site, Washington State, USA, *Journal of archaeological science* 34, 1087–97.
- Bradley, R., 2002: The past in prehistoric societies, London.
- Bradley, R., 2006: Bridging the two cultures. Commercial archaeology and the study of prehistoric Britain, *Antiquaries journal* 86, 1–13.
- Briggs, J.M., K.A. Spielmann, H. Schaafsma, K.W. Kintigh, M. Kruse, K. Morehouse and K. Schollmeyer, 2006: Why ecology needs archaeologists and archaeology needs ecologists, *Frontiers in ecology* 4, 180–88.
- Burström, M., 2007: Samtidsarkeologi. Introduktion till ett forskningsfält, Lund.
- Carman, J., and P. Carman, 2007: From rhetoric to research. The Bloody Meadows Project as a pacifist response to war, in L. McAtackney, M. Palus and A. Piccini (eds), Contemporary and historical archaeology in theory. Papers from the 2003 and 2004 CHAT Conferences, Oxford, 2007, Oxford (BAR International series 1677), 110–14.
- Casella, E.C., and C. Fowler (eds), 2005: The archaeology of plural and changing identities, New York.
- Castaneda, Q.E., and C.N. Matthews (eds), 2008: Ethnographic archaeologies. Reflections on stakeholders and archaeological practices, Lanham, MD.
- Childe, V.G., 1936: Man makes himself, London.
- Chippindale, C., and D.W. Gill, 2000: Material consequences of contemporary classical collecting, *American journal of archaeology* 104, 463–511.
- Clarke, D., 1973: Archaeology. The loss of innocence, Antiquity 47, 6-18.
- Coleman, M., 1998: Tribes want remains reburied, *Albuquerque journal*, 11 December.
- Colwell-Chanthaphonh, C., and T.J. Ferguson (eds), 2007: Collaboration in archaeological practice. Engaging descendant communities, Lanham, MD.
- Copeland, T., 2004: Presenting archaeology to the public. Constructing insights on-site, in N. Merriman (ed.), *Public archaeology*, New York, 132–44.
- Costanza, R., L. Graumlich, W. Steffen, C. Crumley, J. Dearing, K. Hibbard, R. Leemans, C. Redman and D. Schimel, 2007: Sustainability or collapse. What can we learn from integrating the history of humans and the rest of nature? *Ambio. A journal of the human environment* 36, 522–27.
- Creation Museum, 2009: Creation Museum. Prepare to believe, http://creationmuseum.org/ (17 April 2009).
- Crick, M., 1985. 'Tracing' the anthropological self. Quizzical reflections on field work, tourism, and the ludic, *Social analysis* 17, 71–92.
- Crumley, C., 1994: Historical ecology. Cultural knowledge and changing landscapes, Santa Fe.
- Cuno, J., 2008: Who owns antiquity? Museums and the battle over our ancient heritage, Princeton, NJ.
- Curta, F., 2001: Pots, Slavs and 'imagined communities'. Slavic archaeologies and the history of the early Slavs, *European journal of archaeology* 4, 367–84
- Cutts, B.B., C. Saltz and M. Elser, 2008: Considering the cumulative impact of educational messages. Multiple organizations address water issues in Maricopa County, Arizona, Applied environmental education and communication 7, 40–50.

- Davies, M., 2006: Historics. Why history dominates contemporary society, London.
- Dawdy, S.L., 2005: Thinker-tinkers, race, and the archaeological critique of modernity, Archaeological dialogues 12, 143-64.
- Dawdy, S.L., 2006: The taphonomy of disaster and the (re)formation of New Orleans, American anthropologist 108, 719–30.
- Dawdy, S.L., 2008: Excavating the present, vindicating the dead, Historical archaeology 42, 152-56.
- Day, J.W., Jr, C.A. Hall, A. Yáñez-Arancibia, D. Pimentel, C. Ibañez Martí and W.J. Mitsch, 2009: Ecology in times of scarcity, *BioScience* 59, 321–31.
- Deagan, K., 1996 (1982): Avenues of inquiry in historical archaeology, in C. Orser (ed.), Images of the recent past. Readings in historical archaeology, Walnut Creek, CA, 16-41.
- Deetz, J., 1977: In small things forgotten, Garden City, NY.
- Delle, J.A., 2008: A tale of two tunnels. Memory, archaeology, and the underground railroad, Journal of social archaeology, 8, 63–93.
- Derry, L., 2003: Consequences of involving archaeology in contemporary community issues, in L. Derry and M. Malloy (eds), Archaeologists and local communities. Partners in exploring the past, Washington, DC, 19-29.
- Derry, L., and M. Malloy (eds), 2003: Archaeologists and local communities. Partners in exploring the past, Washington, DC.
- Diaz-Andreu, M., and T. Champion (eds), 1996: Nationalism and archaeology in Europe, London.
- Dongoske, K., M. Yeatts, R. Anyon and T.J. Ferguson, 1997: Archaeological cultures and cultural affiliation. Hopi and Zuni perspectives in the American southwest, American antiquity 62, 600-8.
- Downum, C.E., and L.J. Price, 1999: Applied archaeology, Human organization 58, 226–39. Available online at http://findarticles.com/p/articles/ mi_qa3800/is_199910/ai_n8873499/.
- Eakin, H., 2007: Treasure hunt, New Yorker, 17 December, 62-75.
- Echo-Hawk, R.C., 2000: Ancient history in the New World. Integrating oral traditions and the archaeological record, American antiquity 65, 267–90.
- Elliott, L., and D. Atkinson, 1998: The age of insecurity, London.
- Erickson, C., 1992: Applied archaeology and rural development. Archaeology's potential contribution to the future. Journal of the Steward Anthropological Society 20(1-2), 1-16.
- Erickson, C., 1998: Applied archaeology and rural development. Archaeology's potential contribution to the future, in M. Whiteford and S. Whiteford (eds), Crossing currents. Continuity and change in Latin America, Upper Saddle, NJ, 34-45.
- Evans, J.G., 2003: Environmental archaeology and the social order, New York. Fanon, F., 1967: The wretched of the earth, Harmondsworth (original French edition: Les Damnés de la terre, Paris 1961).
- Faulkner, N. 2008. Review of C. Holtorf, Archaeology is a brand! (2008), *Current archaeology* 29(217), 44–45.
- Ferguson, T.J., and C. Colwell-Chanthaphonh, 2006: History is in the land. Multivocal tribal traditions in Arizona's San Pedro Valley, Tucson.
- Field, L., 1999: Complicities and collaborations. Anthropologists and the 'unacknowledged tribes' of California, Current anthropology 40, 193-209.

- Fish, S.K., P.R. Fish, C.H. Miksicek and J.H. Madsen, 1985: Prehistoric agave cultivation in southern Arizona, *Desert plants* 7, 107–13.
- Folke, C., 2006: Resilience. The emergence of a perspective for social–ecological systems analyses, *Global environmental change* 16, 253–67.
- Ford, A., and J.A. Montes, 1999: Environment, land use, and sustainable development. The El Pilar archaeological reserve for Maya flora and fauna in Belize and Guatemala, *Mesoamérica* 20, 31–50.
- Fowler, D., 1987: Uses of the past. Archaeology in the services of the state, *American antiquity* 52, 229–48.
- Freire, P., 1993: *Pedagogy of the oppressed*. New revised, 20th-anniversary edition. New York.
- Friedman, E., 2000: Preface, in K. Smardz and S.J. Smith (eds), *The archaeology education handbook. Sharing the past with kids*, Walnut Creek, CA, 13–16.
- Funari, P.P.A., 1996: Considerações em torno das 'Teses sobre a filosofia da História' de Walter Benjamin, *Crítica Marxista*, 1, 45–53.
- Funari, P.P.A., 2006: The World Archaeological Congress from a critical and personal view, *Archaeologies* 2, 73–79.
- Funari, P.P.A., and A. Zarankin (eds), 2006: Arqueología de la represión y resistencia en America Latina (1960–1980), Córdoba.
- Funari, P.P.A., A. Zarankin and M. Salerno, 2009: *Memories from darkness*. *Archaeology of repression and resistance in Latin America*, New York (in press).
- Gadsby, D.A., and R.C. Chidester, 2007: Heritage in Hampden. A participatory research design for public archaeology in a working-class neighborhood, Baltimore, Maryland, in B.J. Little and P.A. Shackel (eds), *Archaeology as a tool of civic engagement*, Lanham, MD, 223–42.
- Galvin, R., 2004: The golden hoard. An ancient Afghan treasure is recovered, *Humanities* 25(6) (November–December), 11–16.
- Gero, J., and D. Root, 1990: Public presentations and private concern. Archaeology in the pages of *National geographic*, in P. Gathercole and D. Lowenthal (eds), *The politics of the past*, London, 19–37.
- Gober, P., 2008: Climate adaptation and water resource management in Phoenix, *Water resources impact* 10, 10–13.
- Gosden, C., 1994: Social being and time. Social archaeology, Oxford.
- Gould, R.A., 2007: Disaster archaeology, Salt Lake City, UT.
- Gramsch, A., 2000: 'Reflexiveness' in archaeology, nationalism and Europeanism, *Archaeological dialogues* 7, 4–19.
- Gramsci, A., 1971 (1929–35): The formation of the intellectuals, in *Selections from prison notebooks*, ed. and tr. Q. Hoare and G. Nowell Smith, London, 5–23.
- Graves-Brown, P., S. Jones and C. Gamble (eds), 1996: Cultural identity and archaeology. The construction of European communities, London.
- Guthertz Lizárraga, K., 1999: From social archaeology to national archaeology. Up from domination, *American antiquity* 64, 363–68.
- Haglund, W.D., M. Connor and D.D. Scott, 2001: Archaeology of contemporary mass graves, *Historical archaeology* 35, 57–69.
- Hakenbeck, S.E., and S.G. Matthews (eds) 2004: Reconsidering ethnicity.

 Material culture and identity in the past, Cambridge (Archaeological review from Cambridge 19(2)).

- Hamilakis, Y., 1999: La trahison des archéologues? Archaeological practice as intellectual activity in postmodernity, Journal of Mediterranean archaeology 12, 60–79.
- Hamilakis, Y., 2007: From ethics to politics, in Y. Hamilakis and P. Duke (eds), Archaeology and capitalism. From ethics to politics, Walnut Creek, CA,
- Hamilakis, Y., 2009: The 'war on terror' and the military-archaeology complex. Iraq, ethics, and neo-colonialism, Archaeologies. Journal of the World Archaeological Congress 5(1), 39-65.
- Hamilakis, Y., and P. Duke (eds), 2007: Archaeology and capitalism. From ethics to politics, Walnut Creek, CA.
- Hegmon, M., M.A. Peeples, S. Ingram, A.P. Kinzig, S. Kulow, C.M. Meegan and M.C. Nelson, 2008: Social transformation and its human costs in the prehispanic US southwest, American anthropologist 110, 313-24.
- Heinberg, R., 2005: The party's over. Oil, war and the fate of industrial societies, Gabriola, B.C.
- Henrich, J., 2001: Cultural transmission and the diffusion of innovations. Adoption dynamics indicate that biased cultural transmission is the predominant force in behavioral change, American anthropologist 103, 992-1013.
- Hiebert, F., and P. Cambon, 2009: Afghanistan. Hidden treasures from the National Museum, Kabul, Washington, DC.
- Hinsley, C.M., 1981: Savages and scientists. The Smithsonian Institution and the development of American anthropology, 1846-1910, Washington DC.
- Hodder, I., 1991: Archaeological theory in Europe. The last three decades, New
- Holling, C.S., 1973: Resilience and stability of ecological systems, Annual review of ecology and systematics 4, 2-23.
- Holling, C.S., L.H. Gunderson and D. Ludwig, 2002: In quest of a theory of adaptive change, in L.H. Gunderson and C.S. Holling (eds), Panarchy. Understanding transformations in human and natural system, Washington, 3-22.
- Hollowell, J., 2006: Moral arguments on subsistence digging, in C. Scarre and G. Scarre (eds), The ethics of archaeology. Philosophical perspectives on archaeological practice, Cambridge, 69–93.
- Holtorf, C. 2005. From Stonehenge to Las Vegas. Archaeology as popular culture, Walnut Creek, CA.
- Holtorf, C., 2007: Archaeology is a brand! The meaning of archaeology in contemporary popular culture, Oxford and Walnut Creek, CA.
- Holtorf, C., forthcoming: Heritage values in contemporary popular culture, in G. Smith, P. Messenger and H. Soderland (eds), Heritage values in contemporary society, Walnut Creek, CA.
- Isendahl, C, 2008: Applied agro-archaeological research in the Bolivian Yungas, SAA archaeological record 8(3), 21–27. Available online at http://www.saa. org/Portals/0/SAA/Publications/thesaaarchrec/may08.pdf# page=23.
- Jameson, J.H., Jr, 2003: Purveyors of the past. Education and outreach as ethical imperatives in archaeology, in L.J. Zimmerman, K.D. Vitelli and J. Hollowell-Zimmer (eds), Ethical issues in archaeology, Walnut Creek, CA, 154-62.

- Janssen, M.A., and J.M. Anderies, 2007: Robustness-tradeoffs for social–ecological systems, *International journal of the commons* 1, 77–99.
- Janssen, M.A., T.A. Kohler and M. Scheffer, 2003: Sunk-cost effects and vulnerability to collapse in ancient societies, *Current anthropology* 44, 722–28.
- Janssen, M.A., and E. Ostrom, 2006: Resilience, vulnerability, and adaptation. A cross-cutting theme of the human dimensions of global environmental change program, *Global environmental change* 16, 237–39.
- Janssen, M.A., M.L. Schoon, W. Ke and K. Börner, 2006: Scholarly networks on resilience, vulnerability and adaptation within the human dimensions of global environmental change, *Global environmental change* 16, 240–52.
- Jeppson, P.L. 1997: 'Leveling the playing field' in the contested territory of the South African past. A 'public' versus a 'people's' form of historical archaeology outreach, in C. McDavid and D. Babson (eds), *In the realm of politics. Prospects for public participation in African-American archaeology*, special issue of the journal *Historical archaeology* 31, 65–83.
- Jeppson, P.L., 2006: Which Benjamin Franklin yours or mine? Examining responses to a new story from the historical archaeology site of Franklin Court, Archaeologies. Journal of the World Archaeological Congress 2, 24–51.
- Jeppson, P.L., and C. McDavid, 2000: Abstract for invited presidential session, Public archaeology. International perspectives, debate and critique, Annual Meetings of the American Anthropological Association (archived at http://www.p-j.net/pjeppson/AAA2000/AAA2000.htm), accessed May 2009.
- Jeppson, P.L., and J. Roberts, 2009: A platform above and beyond the archaeology. Public archaeology at the president's house site. Paper presented at the Annual Meetings of the Society for Historical Archaeology, Toronto.
- Jones, S. 1997: The archaeology ethnicity. Constructing identities in the past and present, London.
- Jordan, P., 2008: Climate change, culture history and the rebirth of circumpolar archaeology, *Antiquity* 82, 208–11.
- Joyce, R.A., 2008: Critical histories of archaeological practice. Latin American and North American interpretations in a Honduran context, in J. Habu, C. Fawcett and J.M. Matsunaga (eds), Evaluating multiple narratives. Beyond nationalist, colonialist, imperialist archaeologies, New York, 56–68.
- Kehoe, A., 1999: Introduction, in A.B. Kehoe and M.B. Emmerichs (eds), *Assembling the past. Studies in the professionalization of archaeology*, Albuquerque, 1–18.
- Kellermann, P., M. Boni and E. Meyer-Renschhausen (eds), 2009: Zur Kritik europäischer Hochschulpolitik, Wiesbaden.
- Kennedy, R., and H. Eakin, 2006: Met chief, unbowed, defends museum's role, *New York times*, 28 February.
- Kersel, M.M., C. Luke and C.H. Roosevelt, 2008: Valuing the past. Peceptions of archaeological practice in Lydia and the Levant, *Journal of social* archaeology 8, 298–319.
- Keynes, J.M., 1936: The general theory of employment, interest and money, London.

- King, T., 1983: Professional responsibility in public archaeology, Annual review of anthropology 12, 43–164.
- Kintz, T., 2001: Archaeologists as intellectuals. Agents of the empire or defenders of dissent? In M. Pluciennik (ed.), The responsibilities of archaeologists. Archaeology and ethics, Oxford (BAR International Series 981), 47-55.
- Kirch, P.V., 2005: Archaeology and global change, Annual review of environment and resources 30, 409-40.
- Kohl, P.L. and C. Fawcett (eds), 1995: Nationalism, politics and the practice of archaeology, Cambridge.
- Kohl, P.L., 1998: Nationalism and archaeology. On the constructions of nations and the reconstructions of the remote past, Annual review of anthropology 27, 223-46.
- Kohl, P.L., 2007: The making of Bronze Age Eurasia, Cambridge.
- Kohl, P.L., 2008: Shared social fields. Evolutionary convergence in prehistory and contemporary practice, American anthropologist 110, 495–506.
- Kohl, P.L., M. Kozelsky and N. Ben-Yehuda (eds), 2009: Selective remembrances. Archaeology in the construction, commemoration, and consecration of national pasts, Chicago.
- Kohler, T.A., S. Van Buskirk and S. Ruscavage-Barz, 2004: Vessels and villages. Evidence for conformist transmission in early village aggregations on the Pajarito Plateau, New Mexico, Journal of anthropological archaeology 23, 100-18.
- Kolata, A.L., 2000: Environmental thresholds and the 'natural history' of Andean civilization, in G. Bawden and R.M. Reycraft (eds), Environmental disaster and the archaeology of human response, Albuquerque, 163-78.
- Kotkin, J., 2005: The city. A global history, New York.
- Kristiansen, K., 2008: Should archaeology be in the service of 'popular culture'? A theoretical and political critique of Cornelius Holtorf's vision of archaeology, Antiquity 82, 488-90.
- Lafrenz Samuels, K., 2009: Trajectories of development. International heritage management of archaeology in the Middle East and North Africa, *Archaeologies. Journal of the World Archaeological Congress* 5, 68–91.
- LaRoche, C.J., 2007: 'Walk with the ancestors'. Speech given by LaRoche as part of the Mayor of Philadelphia's Independence Day celebrations, Sunoco Welcome America Festival, held at Independence Hall, Philadelphia, Pennsylvania, 4 July 2007. Covered live by local television and print media, archived at http://www.ushistory.org/presidentshouse/news/inq070407.htm (accessed May 2009).
- LaRoche, C.J., 2009: Race, place and space at the president's house site, Philadelphia. Paper presented at the Annual Meetings of the Society for Historical Archaeology, Toronto.
- Latour, B., 1993: We have never been modern, Cambridge, MA.
- LAW (Lampeter Archaeology Workshop) 1997: Relativism, objectivity and the politics of the past, Archaeological dialogues 4, 164–98.
- Lawler, A., 2002: Afghanistan's challenge, Science 298(5596), 1195.
- Leader-Elliot, L., 2001: Heritage, tourism and integrity. Making it work, Bulletin of the Australasian Institute for Maritime Archaeology 25, 69-74.

- Leighton, M., 2008: Creating the Inca. Contextualizing the construction of archaeological objects and narratives in museums, Master's paper, University of Chicago.
- Levin, J., 2009: Excavating the president's house. Confronting slavery and freedom through archaeology. Paper presented at the Annual Meetings of the Society for Historical Archaeology, Toronto.
- Lilley, I., 2008: Apocalypse now (and avoid the rush). Human dimensions of climate change in the Indo-Pacific, *Archaeology in Oceania* 43, 35–40.
- Little, B. (ed.), 2002: The public benefits of archaeology, Gainesville, FL. Little, B., 2007: Historical archaeology. Why the past matters, Walnut Creek, CA.
- Little, B., and P. Shackel (eds), 2007: Archaeology as a tool of civic engagement, New York.
- Löwy, M., 2001: Walter Benjamin. Avertissement d'incendie: une lecture des thèses 'Sur le concept d'histoire', Paris.
- Löwy, M., 2005: Walter Benjamin. Aviso de Incêndio. Uma leitura das teses 'Sobre o conceito de história', São Paulo.
- Lucas, G., 2005: The archaeology of time. Themes in archaeology, London.
 Lucy, S., 2005: Ethnic and cultural identities, in M. Díaz-Andreu et al. (eds), The archaeology of identity. Approaches to gender, age, status, ethnicity and religion, London and New York, 86–109.
- Lüning, J., 2005: Die Bandkeramiker. Erste Steinzeitbauern in Deutschland, Rahden.
- McCarthy, B., 2009: Despite drop in crime, New Orleans' murder rate continues to lead nation, *New Orleans times picayune*, 1 June (online edition).
- McDavid, C., 2000: Archaeology as cultural critique. Pragmatism and the archaeology of a southern United States plantation, in C. Holtorf and H. Karlsson (eds), *Philosophy and archaeological practice. Perspectives for the 21st century*, Lindome, 221–40.
- McDavid, C., 2002: Archaeologies that hurt, descendents that matter. A pragmatic approach to collaboration in the public interpretation of African-American archaeology, *World archaeology* 34 (special issue, 'Community archaeology'), 303–14.
- McDavid, C., 2004a: Public archaeology as a pathway to understanding. Rethinking the heritage product. Paper delivered at Making the Means Transparent. Research Methodologies in Heritage Studies Conference, University of Cambridge.
- McDavid, C., 2004b: A pragmatic archaeology for collaboration and reform. The Yates Community Archaeology Project. Paper delivered at the Annual Meetings of the Society for Historical Archaeology, St Louis, MO.
- McDavid, C., 2004c: From 'traditional' archaeology to public archaeology to community action. The Levi Jordan Plantation Project, in P. Shackel and E. Chambers (eds), *Places in mind. Public archaeology as applied anthropology*, New York, 35–56.
- McDavid, C., 2005: Response to 'Careers in archaeology education', The SAA Public Education Committee Handout for the 2005 SAA CRM Expo. Society for American Archaeology, *Archaeology for the public* (SAA Public Web Pages Project), available online at http://www.saa.org/publicftp/PUBLIC/primaryDocuments/Comments_Carol_McDavid.pdf, accessed August 2009; see also at http://www.saa.org/publicftp/PUBLIC/home/home.html.

- McDavid, C., 2007: Beyond strategy and good intentions. Archaeology, race, and white privilege, in B. Little and P. Shackel (eds), An archaeology of civic engagement and social justice, Lanham, MD, 67-88.
- McDavid, C., 2009a: The public archaeology of African America. A pragmatic model for evaluating approaches, methods and results, in M.-L. Sorensen and J. Carman (eds), Making the means transparent, London, 217–34.
- McDavid, C., 2009b: Review of J.A. Sabloff, Archaeology matters. Action archaeology in the modern world, Collaborative archaeologies 2. In press.
- McDavid, C., 2010: Public archaeology, activism, and racism. Rethinking the heritage 'product', in J. Stottman (ed.), Archaeologists as activists. Can archaeologists change the world?, Tuscaloosa, Alabama.
- McDavid, C., D. Bruner, and R. Marcom, 2008: Urban archaeology and the pressures of gentrification. Claiming, naming, and negotiating 'freedom' in Freedmen's Town, Houston, Bulletin of the Texas Archaeological Society 79, 37-52.
- McGhee, F.L., and C. McDavid, 2009: Strategies of practice. Implementing postcolonial critique, CRM, public archaeology and advocacy, in U. Rizvi and J. Lydon (eds), Handbook on postcolonialism and archaeology, Walnut Creek, CA (WAC Research Handbook Series). In press.
- McGimsey, C., III, 1972: Public archaeology, New York.
- McGovern, T.H., G.F. Bigelow, T. Amorosi and D. Russell, 1988: Northern islands, human error, and environmental degradation. A view of social and ecological change in the medieval north Atlantic, Human ecology 16, 176-221.
- McGuire, R., 2007: Foreword. Politics is a dirty word, but then archaeology is a dirty business, in Y. Hamilakis and P. Duke (eds), Archaeology and capitalism. From ethics to politics, Walnut Creek, CA, 9-10.
- McGuire, R., 2008: Archaeology as political action, Berkeley.
- McIntosh, R.J., J.A. Tainter and S.K. McIntosh, 2000: The way the wind blows. Climate, history, and human action, New York.
- Macmillan, M., 2009: The uses and abuses of history, London and New York.
- Maher, N., 2008: Nature's New Deal. The Civilian Conservation Corps and the roots of the American environmental movement, New York.
- Mannheim, K., 1956: The problem of the intelligentsia. An enquiry into its past and present role, in E. Mannheim (tr. and ed.), Essays on the sociology of culture, London, 91-170.
- Marshall, Y. (ed.), 2002a: Community archaeology, special issue of World archaeology 34.
- Marshall, Y., 2002b: What is community archaeology? World archaeology 34, 211–19.
- Matthews, C.N., 2008: The location of archaeology, in Q.E. Castañeda and C.N. Matthews (eds) Ethnographic archaeologies. Reflections on stakeholders and archaeological practices, New York, 157–82.
- Matthews, C.N., 2009: Is archaeology political? Transformative praxis within and against the boundaries of archaeology, *Public history* 31, 79–90.
- Meadows, D.H., D.L. Meadows, J. Randers and W.W. Behrens, 1972: The limits to growth, New York.
- Merriman, N. (ed.), 2004a: *Public archaeology*, London and New York.
- Merriman, N., 2004b: Introduction. Diversity and dissonance in public archaeology, in N. Merriman (ed.), Public archaeology, London and New York, 1-18.

- Merriman, N., and H. Swain, 1999: Archaeological archives. Serving the public interest? *European Journal of Archaeology* 2, 249–67.
- Meskell, L. (ed.) 1998: Archaeology under fire. Nationalism, politics and heritage in the Eastern Mediterranean and Middle East, London.
- Miller, A., M. Barton, O. Garcia and J. Bernabeu, 2009: Surviving the Holocene crisis. Human ecological responses to the onset of the current interglacial, *Journal of anthropological research*, in press.
- Mölders, D., 2008: Archäologie als Edutainment. Können Reenactment und Living History historische Lebenswelten erklären? In I. Benková and V. Guichard (eds.), Gestion et présentation des oppida. Un panorama européen. Actes de la table ronde organisée par l'ÚPASC, Beroun, République tchécque, le 26 septembre 2007, Bibracte/Prag, 155–64.
- Mölders, D., and R. Hoppadietz, 2007: 'Odin statt Jesus'. Europäische Ur- und Frühgeschichte als Fundgrube für religiöse Mythen neugermanischen Heidentums? *Rundbrief der Arbeitsgemeinschaft Theorie in der Archäologie* 6(1), 32–48.
- Mortensen, L., and J. Hollowell (eds), 2009: Ethnographies and archaeologies. *Iterations of the past*, Gainesville, FL.
- Mullins, P., 2004a: African-American heritage in a multicultural community. An archaeology of race, culture, and consumption, in P. Shackel and E. Chambers (eds), *Places in mind. Public archaeology as applied anthropology*, New York, 57–70.
- Mullins, P.R. 2003: Engagement and the color line. Race, renewal and public archaeology in the urban Midwest, *Urban anthropology* 32, 205–29.
- Mullins, P.R., 2004b: Discussant comments for session 'Can Archaeology Change the World'. Comments presented at the Annual Meetings of the Society for Historical Archaeology, St Louis, MO.
- Mullins, P.R., 2006: Racializing the commonplace landscape. An archaeology of urban renewal along the color line, *World archaeology* 38, 60–71.
- Murray, T., 1999: *Time and archaeology*, London and New York (One World Archaeology 37).
- Nelson, M.C., and G. Schachner, 2002: Understanding abandonments in the North American southwest, *Journal of archaeological research* 10, 167–206.
- Nelson, M.C., M. Hegmon, S. Kulow and K.G. Schollmeyer, 2006: Archaeological and ecological perspectives on reorganization. A case study from the Mimbres region of the US southwest, *American antiquity* 71, 403–32.
- Nelson, M.C., K. Kintigh, D.R. Abbott and J.M. Anderies, forthcoming: Archaeology's long-term perspective on irrigation infrastructure and vulnerability, *Ecology and society*, submitted for review.
- Newman, P., T. Beatley and H. Boyer, 2009: Resilient cities. Responding to peak oil and climate change, Washington, DC.
- Newport, F., 2006: Almost half of Americans believe humans did not evolve http://www.gallup.com/poll/23200/Almost-Half-Americans-Believe-Humans-Did-Evolve.aspx (17 April 2009).
- Newport, F., 2009: On Darwin's birthday, only 4 in 10 believe in evolution. Belief drops to 24% among frequent church attenders. http://www.gallup.com/poll/114544/Darwin-Birthday-Believe-Evolution.aspx (17 April 2009).
- Odum, H.T., and E.C. Odum, 2001: A prosperous way down. Principles and policies, Boulder, CO.

- Oexle, J., 2004: Quo vadis Archäologie? In W.R. Teegen, R. Cordie, O. Dörrer, S. Rieckhoff and H. Steuer (eds), Studien zur Lebenswelt der Eisenzeit, Berlin and New York (RGA-Ergänzungs-Band 40), 461-69.
- Olivier, L., 2004: The past of the present. Archaeological memory and time, Archaeological dialogues 10, 204–13.
- Olivier, L., 2008: Le sombre abîme du temps, mémoire et archéologie, Paris.
- Olsen, B., and Z. Kobyliński, 1991: Ethnicity in anthropological and archaeological research. A Norwegian-Polish perspective, Archaeologia Polonia 29, 5–27.
- Oyuela-Caycedo, A., 1994: Nationalism and archaeology. A theoretical perspective, in A. Oyuela-Caycedo (ed.), History of Latin American archaeology, Avebury, 3–21.
- Pacifio, D., 2008: Archaeology and the public's interests at El Purgatorio, Casma, Peru. M.A. thesis, Department of Anthropology, University of Chicago.
- Paige, J., 1985: The Civilian Conservation Corps and the National Park Service, 1933–1942. An administrative history, Washington, DC. Available online at http://www.nps.gov/history/history/online_books/ccc/index.htm.
- Palomaa, S., 2008: X-press on tracks. Unconventional approaches to helping young adults – a bridge to the future. Unpublished report commissioned by
- Parker, P., and T. King, 1998: Guidelines for evaluating and documenting traditional cultural properties 38(2) (revised), Washington, DC, National Park Service.
- Patterson, T.C., 1999: The political economy of archaeology in the United States, Annual review of anthropology 28, 155-74.
- Perkins, D.H., 2005: Chinese development. A contemporary perspective. Paper presented at the Autumn Meeting of the American Philosophical Society, Philadelphia.
- Perry, W.R., J. Howson and B.A. Bianco, 2006: Summary and conclusions, in W.R. Perry, J. Howson and B.A. Bianco (eds), New York African Burial Ground Archaeology Final Report, Volume 1, Washington, DC, 444-55. Available online at
 - http://www.africanburialground.gov/ABG_FinalReports. htm. Accessed 15 May 2009.
- Pluciennik, M., 1998: Archaeology, archaeologists and 'Europe', Antiquity 72, 816-24.
- Pluciennik, M., 2001: Archaeology, advocacy and intellectualism, in M. Pluciennik (ed.), The responsibilities of archaeologists. Archaeology and ethics, Oxford (BAR International Series 981), 19-29.
- Pohl, W. (ed.), 1998: Strategies of distinction. The construction of ethnic communities, 300-800 AD, Leiden.
- Polk, M., and A.M.H. Schuster, 2005: The looting of the Iraq Museum, Baghdad. The lost legacy of ancient Mesopotamia, New York.
- Ponting, C., 1991: A green history of the world. The environment and the collapse of great civilizations, New York (paperback edition 1993).
- Potter, P.B., 1994: Public archaeology in Annapolis. A critical approach to history in Maryland's ancient city, Washington, DC.
- Povoledo, E., 2007a: An impasse in Italian talks over returning of artifacts, New York times, 26 March.

- Povoledo, E., 2007b: Princeton to return disputed art to Italy, *New York times*, 27 October.
- Povoledo, E., 2007c: Returning stolen art. No easy answers, *New York times*, 27 October.
- Povoledo, E., 2009: Getty ex-curator testifies in Rome antiquities trial, *New York times*, 20 March.
- Pyburn, K.A., 2008: Public archaeology, Indiana Jones, and honesty, Archaeologies 4, 201–5.
- Rathje, W.L., and C. Murphy, 1992: Rubbish! The archaeology of garbage, New York.
- Redman, C.L., 1999: Human impact on ancient environments, Tucson.
- Redman, C.L., and A.P. Kinzig, 2003: Resilience of past landscapes. Resilience theory, society, and the longue durée, Conservation ecology 7, 14. Available online at http://www.consecol.org/vol7/iss1/art14.
- Redman, C.L., S.R. James, P.R. Fish and J.D. Rogers, 2004: *The archaeology of global change. The impact of humans on their environment*, Washington, DC.
- Richter, T., 2008: Espionage and Near Eastern archaeology. A historiographical survey, *Public archaeology* 7, 212–40.
- Rieckhoff, S., and U. Sommer (eds), 2007: Auf der Suche nach Identitäten. Volk – Stamm – Kultur – Ethnos. Internationale Tagung der Universität Leipzig vom 8.–9. Dezember 2000, Oxford (BAR International Series 1705).
- Rogers, J.D., 2004: The global environmental crisis. An archaeological agenda for the 21st century, in C.L. Redman, S.R. James, P.R. Fish and J.D. Rogers (eds). *The archaeology of global change. The impact of humans on their environment*, Washington, DC, 271–77.
- Ronayne, M., 2007: The culture of caring and its destruction in the Middle East. Women's work, water, war and archaeology, in Y. Hamilakis and P. Duke (eds), *Archaeology and capitalism. From ethics to politics*, Walnut Creek, CA, 247–65.
- Rose, M., 2006: The Bosnia–Atlantis connection, *Archaeology* (online features). 14 June 2006. http://www.archaeology.org/online/features/osmanagic/.
- Ruddiman, W.F., 2005: Plows, plagues, and petroleum. How humans took control of climate, Princeton.
- Sabloff, J.A., 2008: Archaeology matters. Action archaeology in the modern world, Walnut Creek, CA.
- Saitta, D.J., 2007: The archaeology of collective action. The American experience in archaeological perspective, Gainesville, FL.
- Salinger, L., 2004: Encyclopedia of white-collar and corporate crime, Thousand Oaks, CA.
- Sampaio, T., 1987: O Tupi na Geografia Nacional, São Paulo.
- Sampson, D., 1997: (Former) Tribal chair questions scientists' motives and credibility. Available online at http://www.umatilla.nsn.us/kman2.html, last accessed 14 May 2009.
- Schlegelmilch, D., 2007: Making History. Bericht zu der Podiumsdiskussion 'Lebendige Wissenschaft oder verdeckte Propaganda? Germanendarstellungen zwischen experiementeller Geschichtsforschung und völkischem Gedankengut', Archäologische Informationen 30(2), 67–71.
- Scholes, R.J., and B.H. Walker, 1993: An African savanna. Synthesis of the Nylsvely study, Cambridge.

- Schuyler, R., 1976: Images of America. The contribution of historical archaeology to national identity, Southwestern lore 42, 27–39.
- Shackel, P.A. and E. Chambers (eds), 2004: Places in mind. Public archaeology as applied anthropology, New York.
- Shanks, M., and C. Tilley, 1987a: Re-constructing archaeology. Theory and practice, Cambridge.
- Shanks, M., and C. Tilley, 1987b: Social theory and archaeology, Cambridge. Shennan, S.J. (ed.), 1989: Archaeological approaches to cultural identity,
- Shopes, L., and D. Ritchie, 2003: Oral history excluded from IRB review. Application of the Department of Health and Human Services Regulations for the Protection of Human Subjects at 45 CFR Part 46, Subpart A. Archived from the original on 17 January 2008. See http://web.archive.org/web/ 20080117043701/http://alpha.dickinson.edu/oha/org_irb.html and http://web. archive.org/web/20080115224655/http:/alpha.dickinson.edu/oha/org_ irbupdate.html.
- Shore, C. and S. Wright, 1999: Audit culture and anthropology. Neo-liberalism in British higher education, Journal of the Royal Anthropological Institute (n.s.) 5, 557–75.
- Silverman, H., 2002: Touring ancient times. The present and presented past in contemporary Peru, American archaeologist 104, 881-902.
- Silverman, H., and D.F. Ruggles (eds), 2007: Cultural heritage and human rights, New York.
- Smith, B., 2006: Rock art tourism in southern Africa. Problems, possibilities, and poverty relief, in N. Agnew and J. Bridgland (eds), Of the past, for the future. Integrating archaeology and conservation, Los Angeles, 322–30.
- Smith, G.S., P. Messenger and H. Soderland (eds), forthcoming: Heritage values in contemporary society, Walnut Creek, CA.
- Smith, L., and E. Waterton, 2009: Heritage, communities and archaeology, London (Duckworth Debates in Archaeology).
- Smith, M.E., 2008: Ancient cities. Do they hold lessons for the modern world? Paper presented at the 73rd Annual Meeting of the Society for American Archaeology, Vancouver.
- Smith, S.T., 2003: Wretched Kush. Ethnic identities and boundaries in Egypt's Nubian empire, London.
- Sommer, U. 2007. Archäologie und sächsische Identität, in S. Rieckhoff and U. Sommer (eds), Auf der Suche nach Identitäten. Volk – Stamm – Kultur – Ethnos. Internationale Tagung der Universität Leipzig vom 8.–9. Dezember 2000, Oxford (BAR International Series 1705), 205–13.
- Spielmann, K.A., M.C. Nelson, S. Ingram and M.A. Peeples, forthcoming: Sustainable subsistence agriculture. The past is present, *Ecology and society*, submitted for review.
- Starzmann, M.T., S. Pollock and R. Bernbeck, 2008: Imperial inspections. Archaeology, war and violence, Archaeologies 4, 353-67.
- Steele, C., 2008: Archaeology and the forensic investigation of recent mass graves. Ethical issues for a new practice of archaeology, Archaeologies 4. Available online at http://www.springerlink.com/content/ m70w71nx35q35h11.
- Steinacher, T.L., and G.F. Carlson, 1998: The Central Plains tradition, in R. Wood (ed.), Archaeology on the Great Plains, Lawrence, 235–68.

- Stoecker, R., 1997: Are academics irrelevant? Roles for scholars in participatory research. Paper presented at the annual meetings of the American Sociological Society. Archived at http://comm-org.wisc.edu/papers98/pr.htm and accessed on 4 August 2009. A longer version was published in 1999 in American behavioral scientist 42, 840–54.
- Stone, P.G., with J.F. Bajjaly, 2008: Introduction, in P.G. Stone and J.F. Bajjaly (eds), *The destruction of cultural heritage in Iraq*, Woodbridge, 1–17.
- Stottman, J. (ed.), 2010: Archaeologists as activists. Can archaeologists change the world? Tuscaloosa, Alabama (in press).
- Sullivan, K. 2002: How Taliban art police got the wrong impression, *International herald tribune*, 3 January.
- Svanberg, F., and K.H. Wahlgren, 2007: Publik Arkeologi, Lund.
- Swain, H., 1998: A Survey of archaeological archives in England, London.
- Synnestvedt, A., 2008: Fornlämningsplatsen kärleksaffär eller trist historia, University of Gothenburg, Department of Archaeology and Ancient Culture.
- Tainter, J. A., 2008: Archaeology of overshoot and collapse, *Annual review of anthropology* 35, 59–74.
- Tennant, E.W., 2007: Imperial scholarship in historical archaeology. What critical race praxis can do for/with research into the Chinese diaspora. Paper presented at the Annual Meetings of the American Anthropological Association, Washington, DC. Session entitled Pathways to Justice. Exploring the intersections between the Global Justice Movement, Archaeology and Anthropology, chaired by Carol McDavid and Patrice L. Jeppson.
- Thomas, J., 2003: Archaeology and modernity, London.
- Törnqvist, T.E., T.R. Kidder, W.J. Autin, K. Van Der Borg, A.F.M. de Jong, C.J.W. Klerks, E.M.A. Snijders, J.E.A. Storms, R.L. van Dam and M.C. Wiemann, 1996: A revised chronology for Mississippi River subdeltas, *Science* 273, 1693–96.
- Trigger, B.G., 1980: Gordon Childe. Revolutions in archaeology, London.
 Trigger, B.G., 1986: Prehistoric archaeology and American society. An historical perspective, in D. Meltzer, D.D. Fowler and J.A. Sabloff (eds), American archaeology. Past and future, Washington, DC, 187–215.
- Trigger, B.G., 1989: A history of archaeological thought, Cambridge.
- Tringham, R., 1983: Review of: V. Gordon Childe 25 years after. His relevance for the archaeology of the eighties, *Journal of field archaeology* 10, 85–100.
- US Government, 2002: Notice of inventory completion for Native American human remains and associated funerary objects in the possession of the Colorado Historical Society, Denver, CO, *Federal register* 67(133), 45992–94.
- Uunila, K., 2003: Sukeek's cabin. Archaeology, a family's story, and building community, in L. Derry and M. Malloy (eds), *Archaeologists and local communities*. *Partners in exploring the past*, Washington, DC, 31–44.
- Van der Leeuw, S., 1998: The Archaeomedes Project. Understanding the natural and anthropogenic causes of land degradation and desertification in the Mediterranean Basin, Luxemburg.
- Van Der Leeuw, S., and C. Redman, 2002: Placing archaeology at the center of socio-natural studies, *American antiquity* 674, 597–605.
- Wackernagel, M., N.B. Schultz, D. Deumling, A. Callejas Linares, M. Jenkins,
 V. Kapos, C. Monfreda, J. Loh, N. Myers, R. Norgaard and J. Randers, 2002:
 Tracking the ecological overshoot of the human economy, *Proceedings of the National Academy of Sciences* 99, 9266–71.

- Wald, M.L., 2008: Tax scheme is blamed for damage to artifacts, New York times, 24 February, E1.
- Walker, B.H., L.H. Gunderson, A.P. Kinzig, C. Folke, S.R. Carpenter and L. Schultz, 2006: A handful of heuristics and some propositions for understanding resilience in socio-ecological systems, *Ecology and society* 11, 13. Available online at http://www.ecologyandsociety.org/vol11/iss1/art13/.
- Watkins, J.E, 2005: Through wary eyes. Indigenous perspectives on archaeology, Annual review of anthropology 34, 429-49.
- Watkins, J.E., 2000: Indigenous archaeology. American Indian values and scientific practice, Walnut Creek, CA.
- White, D.D., E.A. Corley and M.S. White, 2008: Water managers' perceptions of the science-policy interface in Phoenix, Arizona, USA. Implications for an emerging boundary organization, Society and natural resources 21, 1–14.
- Whiteley, P.M., 2002: Archaeology and oral tradition. The scientific importance of dialogue, American antiquity 67, 405–15.
- Wilk, R., 1985: The ancient Maya and the political present, Journal of anthropological research 41, 307–26.
- World Archaeology Congress, 2009: Overcoming structural violence (conference flyer announcing the WAC to be held in Ramallah, Palestine, 8-13 August 2009. Flyer available online at http://www.worldarchaeologicalcongress.org/ events/wac-congresses-mainmenu-43/249-wac-inter-congress-in-ramallahaugust-2009).
- Wright, R., 2004: A short history of progress, Toronto (paperback edition: New York 2005).
- Wright, R., I. Hanson and J. Sterenberg. 2005: The archaeology of mass graves, in J. Hunter and M. Cox (eds), Forensic archaeology. Advances in theory and practice, New York, 137-58.
- Wyatt, E., 2008: Four museums are raided in looted antiquities case, Los Angeles Gallery is focus of investigation, New York times, 25 January, A14.
- Young, O.R., F. Berkhout, G.C. Gallopin, M.A. Janssen, E. Ostrom and S. Van Der Leeuw, 2006: The globalization of socio-ecological systems. An agenda for scientific research, Global environmental change 16, 304–16.
- Zarankin, A., and P.P.A. Funari, 2008: 'Eternal sunshine of the spotless mind'. Archaeology and construction of memory of military repression in South America (1960–1980), Archaeologies 4, 310–27.
- Zimmerman, L.J., and R. Echo-Hawk, 2006: Beyond racism. Some opinions about racialism and American archaeology, American Indian quarterly 30, 461-85.
- Zimmerman, L.J., and J. Welch, 2008: Social problems and creating an archaeology of 'now', not just 'back then'. An archaeology of homelessness. Paper presented at World Archaeology Congress 6, Dublin.
- Zimmermann, L.J., and J. Welch, forthcoming: Displaced and invisible. Archaeology and the material culture of homelessness, Historical Archaeology.
- Zorich, Z., 2007: Iceland's unwritten saga. Did Vikings pillage their environment? Archaeology 60, 46-51.