district, as happened in my hometown (we beat them). While we are cultivating these relationships, we can be sure to make these people aware that the historic house sits on a historic archaeological site. For archaeologists, as for others, working with such grassroots organizations is public education at its finest.

- Any "vision for the future" needs to take into account what has worked and what has not worked in the past. I have mentioned some of the actions with which I am most familiar. The political scene is changing as I write (November 2008). People’s attitudes may change; the laws and regulations may change. Archaeology is changing.

And last, something that has not been learned. Cultural resource management is now considered a separate career path for people who have academic training in archaeology. But the archaeology being taught in universities has not adjusted to this change. The skills and knowledge needed by archaeologists working under contract with agencies or private clients who require archaeological expertise are generally not taught in academic programs in most universities. Academia has yet to adjust to reality. This is not true, however, in the study of history and architecture. The field of public history was born from a need to train students of history in the areas of specialization created by the National Historic Preservation Act. There are now separate departments of public history in American universities, and there are specializations within architecture devoted to architectural history and historic architecture. Many more jobs are available in these fields than in academia. Anthropology departments have not been flexible, and increasing numbers of students are graduating with master’s degree specialization in archaeology but without acquaintance with the laws or proposal-writing, much less with how to advise bureaucrats and federal agencies in the management of the resources for which they are responsible. Academic archaeologists have not learned this lesson—yet.

A resource is something that is valued because it is or can be useful: "something that lies ready for use or can be drawn upon for aid" (King 2002:5). The starting point for thinking about how to manage archaeological sites as cultural resources is to consider what resource values these sites might have and how management can enable these values to be realized as public benefits. Archaeological resource values include preservation, research, cultural heritage, education, aesthetics, and economics. These are not hard-and-fast categories with impermeable boundaries; there is much fuzzy overlap among them, and different analysts might come up with somewhat different concepts (see, for example, discussions in Mathers, Darvill, and Little 2005). I refer to "values" rather than "significance" because I think that the first term is more general and encompasses the second and because in the United States the term significance tends to be defined by federal historic preservation policies and regulations (ACHP 2008; but also see Bruier and Mathers 1996). The National Register of Historic Places criteria that form the basis for assessing significance explicitly address research, heritage, and aesthetic values and can be interpreted to include educational value, so I do not intend to imply that my more general terminology is in opposition to these criteria.

What does value-based archaeological resource management imply in terms of what we might actually do? At the most basic level, it implies that
the starting point for management is to consider a variety of resource values when making choices about which sites to protect and how to manage them. It also implies that management programs should proactively take steps to ensure that public benefits are "delivered"—that is, to see that the public can in some way access the values that archaeological sites can provide and for which they presumably are being managed (Lipe 1984, 2000a; Little 2002, 2007a). Such access can be direct, as when researchers, culturally related groups, or lay people study or visit sites, or it can be indirect, as in dissemination of articles, images, accounts, and interpretations based on the archaeological record.

My frame of reference for thinking about values-based management for public benefits is derived substantially from my experience with federally administered public land in the western United States. Consequently, many of my comments are focused on that context for archaeological resource management. However, many of the issues faced by federal cultural resource managers apply in other settings as well.

In what follows, I begin with a general discussion of archaeological resource value and the role of authenticity. Next is a brief section on the contexts in which archaeological resource values are formed and accessed. In the main part of the chapter, I consider in more detail each of the six values already noted, with some comments on how current management approaches might be improved to better ensure that these values can be realized as public benefits. I draw examples largely from US public land contexts. Archaeological resource management requires numerous actors, including firms or individual consultants working under contract. In the US federal system, however, it is agency managers who are responsible for developing and maintaining programs for managing the archaeological resources controlled or affected by their agencies, including implementing sections 106 and 110 of the National Historic Preservation Act. Consequently, I often refer to "managers" as the primary agents in archaeological resource management while recognizing and in fact advocating that multiple other stakeholders need to be involved in these efforts as well.

The historic preservation movement grew up around the idea that preserving historic properties can ensure that their values remain publicly accessible over a long-term future. In fact, preservation, in and of itself, may be value enough for many people, much as establishing wilderness areas is supported by many who do not intend to visit, do research, or otherwise make direct use of such areas. In a larger perspective, however, in-place preservation of archaeological sites is generally a passive value—permitting but not ensuring the achievement of social benefits.

Preservation is thus an indispensable element in the archaeological resource manager's tool kit, but it is not the only element required for a resource management program to be successful.

A comprehensive (and idealized) archaeological resource management program requires (1) identifying sites; (2) assessing them in a frame of reference that considers both their intrinsic characteristics and their resource values as established within particular, historically developed social contexts; (3) responding to the potentially destructive effects of economic development by proactive planning and by selecting sites for preservation or for study, if they are to be destroyed; (4) taking active steps to promote preservation of the archaeological resource base in general and over the long term; (5) ensuring that records and collections resulting from the preceding steps are adequately curated; and (6) providing ways in which at least some segments of society can directly or indirectly access the resource values that were the reason for managing the sites in the first place. Because archaeological resource managers are not the sole arbiters of what constitutes value, they must maintain some type of two-way interaction with the segments of society most engaged in establishing and accessing these values. Effective implementation of the Section 106 process can contribute to achieving some of these goals but does not in itself constitute a comprehensive resource management program.

WHERE DO ARCHAEOLOGICAL RESOURCE VALUES COME FROM?

Resource value is not an inherent characteristic of archaeological sites, at least not in the same sense that site size or age or the distribution of artifacts and sediments is inherent. Assignment of value depends on particular socially and historically developed contexts or frames of reference (Darvill 2005; Lipe 1984:2). Assigning resource value also requires taking into account the particular intrinsic characteristics of the property in question, and ordinarily it depends on some confidence in the property's authenticity. Thus, a Puebloan archaeological site may be considered significant because it represents what scholars have decided is a particular architectural style from a particular time period. The site must have physical characteristics that represent this style and must date to the appropriate period. Further research may show that the characteristics of, say, the site's masonry do not conform to the assigned style, so the evaluation may change. Thus, recognition of value depends both on a culturally constructed context and on the specific characteristics of the property itself.

The dependence of archaeological resource value on context means
that the value assigned to a particular site or artifact is not immutable. To suggest another example, an archaeological site might be judged to have low research potential when viewed from the intellectual context of classic American processual archaeology but to have high research potential for postmodern interpretation and middling research potential for building a culture-historical sequence. The site will have been discovered in one sense as a physical entity, but its research value will be "discovered" only in another sense, that is, by inferring what one or more communities of scholars might see as its potential for productive research. Likewise, a descendant community might view the site as valuable because it represents important aspects of the group's history and social identity.

Since the 1960s, American archaeological research has shifted from a primary focus on individual sites "typical" of a particular period and culture to a focus on populations of sites in a locality or region. In this view, the research value of individual sites is largely as data points documenting variation within the population. This approach may lead to a lack of fit between the site-by-site evaluations typically made in compliance with federal historic preservation laws and the way researchers conceive of research value. Concepts of heritage value have also expanded to include, in some instances, historic cultural landscapes in addition to individual sites. Historic preservation policy and procedures are changing—though not always comfortably—to accommodate these shifts in archaeological resource values.

The question of authenticity is also an important one (see discussions in Lipe 1984, 2002). Since at least the emergence of modern Homo sapiens and quite possibly before, humans have used their physical environment as a kind of mnemonic database. This happened when people began to name and thus culturally appropriate features of the natural environment, and the process "took off" when cultural features and modifications began to be added to the landscape, thus greatly expanding the repositories for cultural memories. Archaeological sites generated by past societies remain as tangible, physically authentic links between cultural memories as understood in the present and the lives and cultures of the individuals and groups who left those sites in the past. Establishing authenticity is also essential if researchers are to claim that inferences made from study of a particular site pertain to the period and the sociocultural contexts being investigated.

A determination of authenticity is of course a present-day judgment, but one constrained by the characteristics of the site in question, as well as by socially endorsed standards used to infer or test authenticity. The important point is that authenticity—the demonstration or belief that a property has survived from some time in the past to the present day—has the power to provide both evidential and evocative connections between past and present. Such tangible connections to the past complement those based on historical accounts transmitted orally or through surviving documents. Authenticity thus contributes to all six types of resource value discussed here.

In the US cultural resource management (CRM) context, "integrity" is a key concept used in evaluating sites. However, what constitutes adequate physical integrity is highly relative to the kind of value being imputed. The archaeological record typically does not satisfy the "Pompeii premise" (Schiffer 1985, 1987) but results from numerous formation processes, some of which continue to be active. For example, data from sites that have been plowed, looted, or even substantially destroyed may be adequate for a variety of research questions. This is not to say that disturbance of archaeological deposits is unimportant—it may preclude some ways of accessing resource value. But again, assessment of "integrity" depends on what is proposed to be done with the resource, as well as on the degree of disturbance.

THE SOCIAL CONTEXT OF ARCHAEOLOGICAL RESOURCE MANAGEMENT

Those entrusted with the job of protecting and managing cultural resources must take into account how conceptions of archaeological value are formed in society; how well (and whether) these conceptions are represented by the laws, regulations, and policies that guide their work; which values and sites are important to which stakeholder groups; and how the interests of such groups in accessing various resource values can be met within the structure of existing law and policy. Sites from any given period are by definition nonrenewable resources, so there must also be a concern for providing public access to resource values in ways that do not remove or substantially erode the characteristics that made the properties worthy of management in the first place.

Government archaeological resource managers can use public laws and regulations as tools in pursuing values-based management, but these tools do not create the social contexts in which resource values are established and enjoyed. Hence, effective resource management often requires communication and cooperation with individuals, institutions, and groups from various communities. Such communities may be diffuse—for example, persons with a general interest in archaeology and history. In order to provide benefits to this type of community, the manager's interactions will most likely be with educators, writers, and other "interpreters" who bring...
information and insights about archaeology to a larger public. Also, managers interact with tribes, businesses, researchers, environmental groups, and other well-defined entities that have specific interests and concerns related to specific archaeological sites or land areas that contain sites.

Effective archaeological resource management thus recognizes that the resource values associated with archaeological sites and artifacts are largely defined by various stakeholder groups (see, for example, Ferguson, chapter 8, this volume; Mathers, Darvill, and Little 2005; Smith 2006). And effective management recognizes that it must have as a goal some type of public benefit, which in turn requires considering how this benefit might at least potentially be delivered. The publics this benefit from access to archaeological resource values are also stakeholders, although they are not necessarily the same as the stakeholder groups involved in defining the values. For example, traditional Native American communities may assign heritage meanings and value to particular sites. Members of the general public might be interested in learning about these traditional meanings and values, yet descendant communities might see satisfying this broader interest as intrusive or as destructive to their heritage. Resource managers, researchers, and archaeological interpreters must be sensitive to the possibility of such conflicts (see chapters 8 and 10, by Ferguson and Bridges, respectively, this volume).

Resource managers will be most effective if they recognize the stakeholder role and respect the agendas of the various communities that define and make use of resource values. In addition, however, they are responsible for encouraging and in some cases demanding that the stakeholder groups recognize the multiple values at play, as well as the need for long-term protection and management of the archaeological properties in question. This may require mediating conflicting demands made by various populations of resource users. Most often it is the demands of economic development that need to be balanced against other values, but in some cases there may be conflicts among research, heritage, educational, and aesthetic values. The complex demands of archaeological resource management thus require the manager to adopt a broad, multidimensional view of the contexts within which archaeological properties acquire resource value and through which various publics attempt to benefit from those values.

There are numerous discussions of types of archaeological resource value in the literature (for example, Bruier and Mathers 1996; King 1998; King, Hickman, and Berg 1977; Lipe 1984; Little 2002; Mathers, Darvill, and Little 2005; Smith 2006). The brief review that follows is intended to highlight several ways in which archaeological sites can be used as resources to produce information or experiences seen as meaningful by one or more communities within American society.

**Preservation Value**

Site preservation is in one sense a passive means directed toward the end of actively providing research, heritage, and other value-based public benefits. In another sense, preservation can stand as a value and benefit in and of itself; it demonstrably is seen this way by substantial numbers of people. And although those people may have a background awareness that sites can be useful for research, public education, heritage, and so forth, it is preservation that is their concrete, immediate interest. Organizations such as the Archaeological Conservancy and the National Trust for Historic Preservation have effectively responded to this generalized interest in preservation.

Volunteers can find an engagement with preservation personally rewarding and often can influence attitudes in their communities in favor of protecting sites from looting and vandalism. For example, in many Bureau of Land Management (BLM) public land units, people eagerly volunteer to become "site stewards" (BLM 2007a). Although law enforcement is an essential component of site protection, it would be counterproductive and in any case economically impossible to have large numbers of enforcement-qualified rangers patrolling the many thousands of sites on public land. Site stewards can help by reporting damage or other problems at sites. More important, they can serve as ambassadors for archaeology and site preservation through contacts with other public land users, as well as friends and neighbors in their communities. In southwestern Colorado, the area with which I am most familiar, the BLM’s 164,000-acre Canyons of the Ancients National Monument (CANM) currently has more than 50 enrolled site stewards. In the same area, the Anasazi Heritage Center (AHC, jointly administered with CANM) received more than 13,500 hours of volunteer help in 2006. And the AHC-CANM has partnerships with numerous local and regional groups for activities ranging from trail-building and maintenance to research (Lipe 2006a). Several other public land agencies offer the US Forest Service’s Passport in Time program (www.passportintime.com), which engages volunteers in cultural resource service projects. The National Park Service has its VIP (Volunteers in Parks) program, which may include cultural resource preservation projects (www.nps.gov/volunteer).

Mobilization of volunteers requires a substantial commitment of staff time from the land-managing unit. This may happen because some especially committed persons just “find the time” to do the necessary outreach and coordination with volunteers and groups. For such efforts to succeed
consistently and continue to expand, however, they need to be built in to staff job descriptions, and the people filling those positions must have the training needed to make them most effective. Engaging more volunteers in preservation-oriented work has a number of benefits, both for the citizens who become involved and for the missions of the public land agencies.

Only a fraction of the archaeological sites representing a particular period will have survived the winnowing of time, and those surviving are continually at risk from the forces of nature and from economic development projects. In the United States, regulations stemming from Section 106 of the National Historic Preservation Act establish widely used procedures designed to identify and take into account the cultural resource values of historic properties when federal undertakings are planned that might affect such properties. This process typically leads to identifying some sites as eligible for in-place preservation, insofar as that is feasible. Subsequently, some of these may be recommended for intensive recording or excavation before destruction. In some cases, preservation may ultimately be ineffective because of the cumulative effects of multiple projects. In this volume, Barker, Sebastian, and Chandler (chapters 4, 5, and 6, respectively) all discuss aspects of the Section 106 process and suggest improvements that take into account both the character of the archaeological record and the goal of providing societal benefits from archaeological resource management programs.

RESEARCH VALUE

Archaeologists and specialists from other disciplines have developed formal methodologies for making inferences about the human past based on systematic studies of the physical traces and remains preserved in the "archaeological record." These methodologies emphasize standard ways of gathering and analyzing empirical evidence to support conclusions. For the recent part of the historical continuum, documentary research may complement evidence gained from studying material remains. Archaeologists and other scholars also are increasingly attempting to analyze oral traditions as another complementary source of evidence. Conversely, some Native American scholars have begun to use oral histories and traditions as starting points for a critique of standard archaeological and historical scholarship (for example, Echo-Hawk 2000; Ferguson, chapter 8, this volume). And "indigenous archaeology" (for example, Watkins 2000) attempts to develop archaeological research methodologies based on integrating indigenous intellectual traditions of inquiry with those stemming from Western academia.

The primary contribution to society of formal research is accounts of the past based on methods of data collection, analysis, and inference that have been established within communities of researchers. The methods and results ordinarily are subject to critical comment within and across related disciplines. This criticism, reactions to it, and the continual flow of new data, ideas, and accounts give the results of formal research a dynamic, ever-changing quality. Formal research depends on socially constructed frames of reference that incorporate both explicit and implicit value judgments about what is important to study and what is a credible interpretation of the evidence. Although the "culture of archaeological scholarship" to a substantial extent crosses national and cultural boundaries, it tends to be associated with socially dominant groups and with intellectual traditions generally identified as "Western." Interpretive bias stemming from the sociology and history of archaeology cannot be eliminated, but the hope is that reliance on empirical evidence and the contentious and critical nature of the discourse (including critiques based on indigenous intellectual traditions) will correct or at least make transparent some of the biases that threaten sound conclusions.

Archaeological researchers form a community or set of communities that seek and receive benefits from access to the archaeological record. The inferences about the past that researchers produce are the principal source of broader public understandings of archaeologically based history and of the practice of archaeology. The large number of books, magazine articles, television productions, lectures, classes, museum exhibits, and Web sites devoted to disseminating the findings of archaeological research testify to the broad public interest in this type of inquiry and its results. The highly technical, contentious, and ever-changing qualities of formal research can be frustrating to those attempting to access its results from outside the research disciplines. These qualities also pose a challenge for writers and other interpreters who attempt to provide various lay publics with access to research results. However, the dynamism of research constantly provides such interpreters with new evidence and ideas. And clearly, over the past century, formal archaeological research has resulted in great increases in reliable knowledge about the human past and has continuously invigorated public interest in and understanding of that past.

Archaeological research often requires altering some aspects of the in-place archaeological record, and it thus may have an effect on site preservation. One reaction is the development of "conservation archaeology" (Lipe 1974, 2000a). There, the goal of on-site investigation is to obtain a large amount of relevant information while physically altering only small
portions of the archaeological record. This approach has become the norm in US archaeological fieldwork. Over the past several decades, adherence to a “conservation ethic” has been made easier by the development of sophisticated sampling methods, more intensive ways of investigating the in-place archaeological record (including use of remote sensing), and new and more productive methods of analyzing the artifacts and specimens. The rapidly rising costs of fieldwork, laboratory analysis, and curation have reinforced a conservative approach to excavation. Archaeological excavation remains the primary way to obtain certain kinds of evidence, but as it is conducted today, it makes a distinctly minor impact on the in-situ archaeological record relative to the effects of economic development, natural erosion, looting, and vandalism.

I think that there are three ways in which greater public benefits can be realized from the research values of archaeological sites that are subject to federal CRM actions: better dissemination of the results of CRM archaeology, encouragement of complementary investigator-initiated research, and better communication between researchers and interpreters.

**Disseminating the Results of CRM Archaeology**

Many of the technically best and most substantively informative archaeological studies currently being done in North America are those done in a CRM context. The thousands of studies done every year under these auspices produce thousands of reports. For projects that involve testing and excavation, these are often lengthy and extremely detailed, and they frequently include multidisciplinary contributions. Yet, the most significant results of much of this work often remain effectively hidden from other archaeological researchers, let alone from the general public. King (chapter 7, this volume) effectively reviews the problem and a range of possible solutions (see also chapters 6, 9, and 11 by Chandler, Mackey, and Grass, respectively, this volume; Lees and King 2007; Little 2007a). Most solutions involve allocating a small fraction of the funds currently spent on “compliance archaeology” not only to the broader dissemination of the detailed technical reports already required by contract but also to the production of topical and regional data syntheses of the type, for example, produced in Colorado in the late 1990s (see discussion in King, chapter 7, this volume). The only practical way to disseminate large technical reports is by posting them on the Internet; fortunately, this is also the least expensive way. Topical and regional syntheses can also be disseminated by this means, although their smaller size makes traditional monographic publication feasible as well.

In my opinion, it would be desirable and cost-effective (in the sense of yielding public benefits) for major projects to be required to produce one or more articles suitable for publication as scholarly articles or book chapters. If accepted, such publications would feed into the well-developed system of journals and presses that not only scholars but also educators, media specialists, and other interpreters rely on to find out “what’s happening” in archaeology. For example, the findings of the Dolores Archaeological Project that have made their way into the general Southwestern archaeological literature are largely those that were published in journal articles or book chapters after this multi-million-dollar project was completed (Lipe 2000b). These publications, however, were the results of individual initiatives, and few received any funding from the project itself. Such article-length works can be included in the final report(s) of major CRM projects “for the record,” but many are likely to be accepted for publication as well and therefore to be disseminated through the long-established scholarly publication systems that have developed to serve all research fields and ensure timely access to new research results.

It would also be productive for federal agencies having CRM responsibilities to build in more consultation with relevant portions of the archaeological research community at the beginning stages of major projects (see, for example, suggestions in Judge 2006). By “research community” I mean to include both CRM and academic archaeologists who are knowledgeable about the topic or area to be investigated. Archaeological research values are established within this larger community; advance consultation would help agency resource managers develop or select research designs that address significant problems in technically appropriate ways. This would in turn promote sharing of information generated by the projects and, ultimately, wider dissemination of these results (see chapters 6, 7, and 9 by Chandler, King, and Mackey, respectively, this volume).

**Contributions from Investigator-Initiated Research**

By “investigator-initiated research” I mean studies done outside the CRM system to address particular research problems. Ordinarily, such studies are done by researchers from universities, museums, or research centers, and they frequently involve grant funds awarded after peer review of research proposals. This approach to research characterizes American science in general and is responsible for some of its dynamism (Lipe 1978). In most areas, and especially on public land, investigator-initiated research will remain infrequent relative to CRM investigations, but it can deliver significant public benefits, not the least because it is done in social and
intellectual frameworks that promote publication. In many cases, such research can complement CRM-based research by focusing on areas or kinds of sites unlikely to be subject to intensive CRM surveys or "mitigation" studies. Public land managers are in a position to encourage such complementary research efforts by engaging in discussions with both academic and CRM researchers and by developing cooperative agreements with problem-oriented investigators.

Most public land resource managers attempt to accommodate well-justified applications for problem-oriented research permits under the Archaeological Resources Protection Act (ARPA). However, it is my impression that some managers take the position that research that physically alters the archaeological record should be undertaken only in the service of "mitigating" loss due to development projects or to recover data from sites that have been seriously damaged by looting. This position implies that obtaining new information about the past through problem-oriented excavation can never be a better reason for intruding on the archaeological record than, say, building a road, a power line, or a parking lot. This view seems an unfortunate interpretation both of a conservation ethic and of the social responsibilities inherent in the notion of cultural resource management (Lipe 2000a, 2001). This minority of cases in which proposals for problem-oriented excavations are given little consideration seems to me to result from seeing Section 106 compliance as discharging the agency's total responsibility in the cultural resource arena. ARPA, however, clearly treats investigator-initiated research as a legitimate use of archaeological sites on federal land, and this kind of research can often help agencies meet their obligations under Section 110 of the NHPA.

A recurring problem with investigator-initiated research is the lack of incentives, and often funding, for production of the kinds of detailed technical reports that regularly issue from CRM-based projects. Granting agencies and the academic community need to accept responsibility for reporting in some detail the archaeological contexts and analyses that support published conclusions. Again, the Internet can reduce the costs of making such technical reports available, but academic researchers (and administrators) also need to assign more importance to such reports and hence improve the incentives for their production. Resource managers can also specify a reporting requirement as a condition of granting an ARPA permit.

Improving Communication between Researchers and Interpreters

By "interpreters" I mean K–12 teachers, college and university faculty, journalists, visual media writers and producers, museum exhibitors, tour leaders, park rangers, backcountry guides, and others who rely on research results as they communicate with the members of various publics about archaeology. Some researchers also write for the public, lead tours, and so forth, and thus also serve as interpreters. Interpretation is not a one-way street—rather, it gives members of "the public" access to experiences, ideas, and information that they use in constructing their own understandings of the past. And many of the people who seek a better understanding of archaeology will do so through books and other media rather than through actual visits to archaeological sites.

As the review by Crass (chapter 11, this volume) demonstrates, the intermediary role of interpreter is a vital one in enabling various publics to gain something of educational value from archaeological research. In the United States and elsewhere, interpreters are increasingly attempting to include traditional cultural heritage perspectives, as well as those derived from application of formal research methodologies (which may increasingly be based on collaboration between archaeologists and representatives of indigenous communities, as Ferguson discusses in chapter 8).

I second the plea by Crass for archaeologists and archaeological resource managers to recognize the need to link journalists, video producers, and other interpreters with the most knowledgeable researchers from both the CRM and academic communities. They must also make every effort to ensure that interpreters understand and respect the interests of groups with related cultural heritage interests. And it is essential for archaeologists and resource managers to educate interpreters about the fragility of the archaeological record and about its legal protections so that the resulting public products do not end up encouraging inadvertent damage or looting.

CULTURAL HERITAGE VALUE

Artifacts and historic properties have great power to symbolize and represent the past, at least in part because they provide a physical, tangible link between past and present (Lipe 1984:4–6). This linkage and its symbolic and evocative effectiveness depend, however, on a context in which something is known about the past that is being represented and also about the object or property that serves as a link to that past. This knowledge can come from formal archaeological or historical research, or it can come from traditional sources such as oral traditions or documentary accounts that record traditional knowledge.

Some authors have emphasized the political character of cultural heritage as a way of asserting claims to particular visions of identity, at scales
We are beginning to see museum exhibits and popular accounts that "tell multiple stories" from traditional cultural perspectives, as well as from those of researchers. Public interest in traditional histories and indigenous views of archaeological sites extends well beyond the members of particular heritage communities. There are also opportunities for exploring similarities and differences in the assumptions and perspectives underlying archaeological and Native American interpretations of the archaeological record (for example, Tessie Naranjo 1995; Tito Naranjo 1999). Ferguson (chapter 8, this volume) makes a number of cogent observations and recommendations regarding ways in which the articulation and in some cases the integration of research, educational, and heritage interests can be pursued in projects involving Native American archaeological sites.

My sense is that the ability of tribes and individual Native Americans to participate fully in collaborative work with archaeologists is often limited by time and funding constraints, particularly on the Native American side. Archaeologists engaged in such collaborations may be able to justify this kind of work as part of their paid employment, but this is often not the case for Native American participants. As a practical matter, we need to find ways to diminish and eventually remove that financial obstacle.

**Aesthetic Value**

Humans very likely have species-specific preferences for particular combinations of form, texture, color, materials, and settings that contribute to the appreciation of a historic property for its aesthetic qualities. We also seem to have a fondness for novelty in that things "curious" catch the eye. Broadly speaking, the aesthetic value of archaeological materials thus runs the gamut from a fleeting interest in "curios" and "relics" to powerful aesthetic responses across multiple cultural contexts. Any innate preferences are always to some extent conditioned by culturally based standards and preferences. Some historic properties preserve characteristics that give clues to the aesthetic standards and preferences from the period in which the properties were created and thus can serve as representatives of past styles and modes of construction. People observing historic buildings and archaeological sites today will also evaluate them in terms of current standards and preferences, which may change over time (think of the late-twentieth-century reemergence of an appreciation for late-nineteenth- to early-twentieth-century architecture).

A visitor's positive response to the aesthetic qualities of an archaeological site may emotionally amplify the experience of making some kind of tangible contact with a valued past. Such responses might also make the visitor more receptive to whatever heritage- or research-related messages are on offer at the site. Aesthetic, or at least visual, concerns may lead some site managers to adopt dubious reconstructions of ancient sites or to "tidy up" the visual scene to the point of misrepresenting the site's original social and cultural context. In such cases, an imposed aesthetic may unintentionally or intentionally communicate that present-day worldviews and values are timeless and in some sense inevitable.

Aesthetic appreciation of sites can sometimes be gained without intruding on the fabric of the historic property itself. Many sites offer visitors the opportunity to experience aesthetic values by "just looking," and visitor management devices such as trails can often be constructed with little or no intrusion on the site's physical fabric. However, archaeological sites commonly are repositories of removable artifacts that some people value primarily for their aesthetic or at least "curio" qualities. Undocumented excavation focused on acquiring visually pleasing objects for the digger's private collection or for the antiquities market almost always compromises archaeological research values, and it may damage heritage, educational, and economic values as well. The majority of the artifacts from North American archaeological sites that make their way into the antiquities market come from looted Native American graves. Not surprisingly, Native Americans see this as one more way in which the dominant society perpetuates historical patterns of disrespect for and marginalization of their communities and their heritage.

Although aesthetic appeal may be a primary motivation for artifact collectors, in many cases there is also a contribution from historic interest, rarity, and the appeal of authenticity. Regardless of the precise mix of motivations, possessing beautiful and rare archaeological artifacts is seen as a benefit by the collector, who may in some cases be willing to make that benefit more public by showing the objects to friends and associates or by loaning or selling these for display in a gallery or museum. Most archaeologists oppose this type of public benefit because the market created by collecting supports looting, which works against translating most of the other types of archaeological value into public benefits. Bridges (chapter 10, this volume) discusses some of the ethical issues that archaeologists face if they do attempt to find common ground with those who excavate sites and possess artifacts outside the "public trust" assumptions (Knudson 1991) held by nearly all archaeologists and resource managers.

This is not the place to review the increasingly abundant literature on the damage to research, heritage, aesthetic, and educational values caused by the market in antiquities and the destructive looting of sites that feeds...
the market (for example, Atwood 2004; Brodie et al. 2006; Renfrew 2000). From the standpoint of archaeological resource management on US public land, much is yet to be understood about the motivations, demographics, and modus operandi of unauthorized diggers and collectors. Assuming that their motivations are primarily economic is likely to be off the mark in many and perhaps most cases (Goddard 2008a). Some research has been undertaken on these issues (for example, Ahlstrom et al. 1992; Colwell-Chanthaphonh 2004; Goddard 2007, 2008a, 2008b; Nickens, Larralde, and Tucker 1981), but much more remains to be done. This kind of “ethnoarchaeology” is important in order to assist in law enforcement but even more so to help design educational messages and alternative opportunities for contact with archaeology that may forestall looting.

EDUCATIONAL VALUE

The educational value of the archaeological record lies in its usefulness to people who wish to learn something about the past. Direct contact with archaeological sites and artifacts helps people visualize some aspects of past human life and experience a sense of personal connection to that past. Indirect contacts with archaeology through various media also clearly have much appeal and contribute to what people know and think about the past. People also bring previous knowledge and ideas to their direct and indirect encounters with archaeology; these preconceptions may or may not result from prior structured “education” about archaeology or history. Their encounters with archaeology may help them construct new perceptions of the past or may simply reinforce their preconceptions.

Not all archaeological sites are equally valuable for giving people a sense of having learned or experienced something about the past, and certainly not all sites provide equally good opportunities for the “show and tell” approach to on-site education. “Undeveloped” backcountry sites may be very effective in helping people reflect on the past and construct their own views of history. A great variety of archaeological sites can be effective in participatory education, which involves people in excavating, recording, or monitoring sites. The number of participants necessarily will be much smaller, however, than at, say, a “developed” site in a national park. Suitability for educational use may be a factor in decisions to preserve and to provide public access to particular sites and places. When archaeological sites are selected for direct educational use, cultural resource managers are obligated to develop ways of accommodating visitors without sacrificing the sites and without letting development and visitation compromise the values that are the focus of the educational experience.

“Archaeological education,” whether directed toward K-12 classrooms or toward society more generally, has emerged as a professional specialty in American archaeology, in part because of the effective efforts of the Society for American Archaeology’s Public Education Committee since its formation in 1989. A number of “how-to” books, media resources, Web sites, and curricula are now available for use by K-12 teachers and cultural resource managers (for example, Bender and Smith 2000; Davis 2001; Davis and Connolly 2000; Project Archaeology 2007; Smardz and Smith 2000). Resources that place more focus on historic buildings and sites include the National Register’s “Teaching with Historic Places” lesson plans (National Register of Historic Places 2007). In addition, there are increasing numbers of academic and general treatments of the theory, method, and practice of public education in archaeology (for example, Jameson 1997; Little 2002; see also links in the Society for American Archaeology’s Web page “Archaeology for the Public,” www.saa.org/publicftp/PUBLIC/home/home.html).

And of course the success of popular magazines such as Archaeology and American Archaeology, the numerous media treatments of archaeological topics, and the enormous number of Web sites featuring archaeology all testify to a great public interest in thinking and learning about archaeology. The most expansive conception of archaeological education would include general works that cause people to think about regional or even global culture history, such as Jared Diamond’s phenomenally successful books Guns, Germs, and Steel (1997) and Collapse (2005).

Educators in the broad sense, or “interpreters,” as I have called them, are in various degrees stakeholders in archaeological resource management. Archaeologists and public land managers need to recognize this role and establish to the extent possible a two-way dialogue with those individuals and groups who make a living bringing archaeological understandings to various publics. For example, educational trip leaders and backcountry guides may have valuable insights into which sites “work best” for public education. And their experience may enable them to provide advice on whether or how to “harden” or develop sites for high-frequency public access and how to subtly establish low-impact access routes at less frequently visited backcountry sites. Likewise, archaeological resource managers must require group leaders and guides to present accurate information about research and heritage and to ensure that the participants in their programs understand the fragility of the archaeological record and the importance of using proper “site etiquette” to protect it from damage.

Much of the work labeled as archaeological education has as one of its
objectives instilling an ethic of respect for and protection of the archaeological record. This assumes that students and adults will be more protective of archaeological sites if they understand how much can be learned from these through research and how important these are to the cultural heritage of some groups. Is this the case? Hollowell (2006:86) reported that "a quantitative study of eighty-four projects conducted in various (non-US) locations found that projects that included more public outreach reported higher incidences of looting in the area." She referenced an unpublished SAA meeting paper (Hollowell and Wilk 1995).

My own experience is that people often do not make the connection between liking archaeology and needing to protect archaeological sites from illegal digging or unregulated economic development. Even if they do understand the connection, they do not necessarily relate it to their own behavior. That is, some may love visiting archaeological sites and reading about archaeological research but still do not refrain from purchasing archaeological artifacts. Efforts to make explicit the linkage between buying artifacts and destroying sites may be seen as heavy-handed "guilt-tripping" and hence be counterproductive. It seems to me that we need considerably more research on what approaches might be most effective in converting an overall interest in archaeology into an aversion to the antiquities market and support for archaeological preservation in general.

Another area in which linkages are weak to the point of nonexistence is in public perceptions of cultural resource laws and policies. Admittedly, this is an arcane area sometimes poorly understood by archaeologists and resource managers themselves. However, these laws and policies are central to the way archaeological sites are protected and managed in the United States today, and they facilitate field research and the preservation of cultural heritage sites. My impression is that the majority of the people who visit archaeological sites on public land or who read about archaeological research and cultural heritage preservation in the United States are unaware of the dependence of these activities on federal cultural resource law and policy. There seems to be a much wider public awareness of federal laws and policies that affect wildlife and the natural environment than of those governing cultural resources. Threats to cultural resource law and policy do not readily result in opposition from those who otherwise care for archaeology. We need more discussion and research about how public interest in archaeology can be expanded to include the legal and regulatory structure that underpins federal archaeological resource management. The suggestions offered by Crass (chapter 11, this volume) for interacting effectively with the media about archaeological research can perhaps be extrapolated to this area as well.

ECONOMIC VALUE

Preserving and managing archaeological sites always involves comparing the economic costs of doing so with both the monetary and the nonmonetary benefits. Some sites may have positive economic values in that they can serve as attractions that draw crowds and support the development of tourism. Most sites have little or no direct visual appeal to visitors, even though they may be extremely valuable for research or cultural heritage and hence have the potential to contribute indirectly to public understanding and appreciation of archaeology. When archaeological sites are "in the way of" development, they are usually viewed by the developers and often by large segments of the local populace as having negative economic value—that is, protecting them will increase the project's costs without increasing its monetary benefit. It takes law, regulation, public opinion, or all three to weigh in on the side of nonmonetary archaeological values.

For archaeological sites that have appeal as tourist attractions, the lure of the aesthetic and the authentic enhances direct public engagement with archaeological values. These situations also create opportunities for marketing books, videos, classes, tours, and other media that can enable visitors to understand the site in broader contexts. In some cases, "cultural tourism" may allow visitors to interact with individuals or groups having a cultural heritage connection to the site(s). Archaeological tourism can make, and in many cases has made, a significant contribution to public appreciation of archaeology and cultural heritage and to public support for archaeological resource management. The articles collected by Rowan and Baram (2004) review the extensive literature on many aspects of "marketing heritage." Among the "downside" issues are physical destruction of structures and properties due to unwise overuse or overdevelopment, the creation of false or "hyped" histories and heritages, the promotion of looting at unprotected sites, and the overwhelming of local societies and traditional beliefs and lifeways through the effects of cultural tourism. The papers assembled by Derry and Malloy (2003) discuss the effects of both archaeological research and archaeological tourism on local communities, particularly those in the third world.

Besides providing opportunities for tourism, archaeology often has less obvious economic benefits. In some areas, the CRM profession, museums, colleges or universities, and independent research and educational organizations (such as Crow Canyon Archaeological Center in southwestern Colorado) are significant sources of local employment. People often move to areas that offer a variety of interesting things to do; this is especially true for retired and semiretired people. In many parts of the US West, these amenities may include opportunities to visit developed or backcountry
archaeological sites, to be a site steward or volunteer, or to participate in a local archaeological society. Archaeological employment and opportunities for engagement outside the standard “tourism” category should be taken into account in totaling up the economic benefits of archaeological resources.

SUMMARY AND CONCLUSIONS

“Management” is not a goal in and of itself but requires answering the question, “Management for what ends?” Archaeological resource management is justified to the extent that it benefits various communities and, ultimately, society as a whole. These benefits can be viewed as access to one or more of the values associated with archaeological remains. The principal types of resource value discussed here are research, cultural heritage, aesthetic, educational, and economic. Many people also adhere to a generalized preservation value that implicitly recognizes but does not explicitly call upon the other values. Legal and policy frameworks guide and constrain the way resource managers seek to provide access to these benefits; the policies and procedures generated by these legal frameworks provide means to achieve the larger ends of delivering societal benefits. Much of the discussion in this book is about whether and how the laws, policies, and procedures that guide archaeological resource management can be made to work more efficiently and effectively in service of that larger goal.

Archaeological resource values are socially constructed in contexts that include but usually are not strongly influenced by the public employees and institutions officially charged with management responsibilities. Resource values are not intrinsic characteristics of archaeological sites, but the historical authenticity and physical characteristics of the sites affect the assignment of resource value.

The actual use of archaeological sites as resources may involve direct contacts between people and the sites. Such use often does not result in attrition of the physical characteristics of the sites, but modest intrusions on their physical fabric (as in site stabilization and visitor access measures, as well as some types of research) may be justified through a kind of “cost-benefit” analysis. Larger numbers of people may benefit indirectly from archaeological values—for example, through articles, videos, images, and lectures that are ultimately based on contact with the archaeological record.

Archaeological resource managers can leverage their effectiveness by collaborating and forming partnerships with a variety of outside groups and organizations that recognize various values in archaeological sites and have stakes in the way sites are managed. To be optimally effective, managers must understand and be responsive to the resource value definitions and interests held by various groups and communities, as well as by the “general public.”

Rather than think about interested parties as lying “outside” a public agency's well-bounded CRM program, resource managers need to think of themselves and their programs as being “inside” larger social contexts within which people establish and seek to benefit from the resource values of the sites being managed. The manager’s responsibility is to design and carry out a program that delivers benefits to various publics while mediating conflicts over use and access and protecting the sites from unjustified attrition.

Many of the problems with US archaeological resource management that are discussed in this book (see especially chapters 4, 5, 6, and 9 by Barker, Sebastian, Chandler, and Mackey, respectively) seem to me to stem from a conflation of means (processes for complying with laws and regulations) with ends (achieving the broad public benefits intended by the laws and regulations). Problems also stem from insufficient recognition that resource values and hence public benefits are defined in social contexts that extend well beyond the regulatory frameworks and cultures of the agencies charged with managing resources on behalf of the public(s). Disciplinary specialists employed in CRM efforts may also take a too narrow view of the goals and social context of their work.

If producing greater public benefits for the time and money spent on archaeological resource management requires changes in current regulations, practices, and job descriptions, then such changes must garner public support and must be based on analyses that are sound in both a theoretical and a practical sense. I hope that this chapter and this book contribute to a productive rethinking of US archaeological resource management ends, means, and practices. This country’s archaeological resources are important to a large and diverse set of publics that, collectively, far outnumber those of us who call ourselves archaeologists or archaeological resource managers. In exchange for public support, our responsibility is to provide benefits to those publics in ways that optimize the use of nonrenewable archaeological resources over the long-term future.