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Archaeology and Anthropology in the Twenty-First Century: Strategies for Working Together

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Will archaeologists and anthropologists work together to meet the major challenges facing our profession, and the human species we study so intently, in this new century and millennium? Will the traditional holistic approach to anthropology, which includes archaeology as a full partner and participant, exist a hundred years from now? Or even in 30 or 40 years? Some have claimed that anthropology as a discipline may become extinct. Will it be viewed by future historians of science as an idealistic scholarly enterprise that emerged in the mid-nineteenth century as the result of and in reaction to Western colonial expansion and that was rendered obsolete by the end of that era as a result of the disappearance (or homogenization) of distinctive human cultures around the world, the internal diversification and specialization of its practitioners, and the perception that its subject matter became increasingly irrelevant in the modern world? These challenges to anthropology's continuation as a profession, and archaeology's participation within it, require our serious attention.

My answers are unabashedly optimistic. Anthropology will both endure and prevail, and archaeology will remain an important part of it. Archaeology has important lessons to teach the world about what it has meant to be human down through the ages, and as such it is inextricably linked to anthropology. Anthropology is about people and culture, and archaeology is the best and only way to understand the lives and cultures of the vast majority of people who have ever lived. We owe it to people past and present to convey to the world an understanding of the sense and purpose of these lives—of where we have come from and what we have experienced as a species. Anthropological training is essential to read and interpret the record of the past effectively. Because of the rich perspectives anthropology has to offer, if we continue to make its message known and appreciated, I am confident that it will still be taught in universities a century from now and that archaeology will be there with it.

But the work and commitment of many people will be needed to meet and overcome the challenges that we face as a profession. Like earlier leaders in our profession—Benedict, Boas, Harris, Kroeber, Malinowski, and Mead, to name a few—we and succeeding generations must be willing to tackle big issues and forcefully and cogently present our findings. We must always keep before us the broader goals of anthropology and the reasons the field's continued existence is so important, both to archaeologists and to humanity in general. Anthropology can provide important help in resolving some of the major challenges facing our species, such as the impacts of climate change, long-term land use, racism, genocide, the reasons for religious, technological, or organizational change, how our present actions and societies are shaped by our biological and cultural heritage, and so on.

We are a diverse and occasionally fractious bunch of scholars, however, and many of us are ensconced in research, administration/management, or teaching that of necessity is often very narrowly focused. We nevertheless must look to the big picture and basic tenets of anthropology, even as we conduct our more focused daily lives. Change occurs one person at a time, and each of us can make a difference; each of us, through conscious action or unconscious inaction, will be the agents of change for our field in the years to come. I offer my views about where we as archaeologists and as anthropologists should be going and some strategies on how to get there, acquired from 30 years of work in cultural resource management that has been strongly shaped by anthropological training.

A Historical Perspective

In the twentieth century North America's leading prehistoric and historic archaeologists never doubted the strong relationship between archaeology and anthropology; indeed, they invariably championed it. Philip Phillips (1955:246–247), one of the leaders of prehistoric southeastern archaeology, made this relationship clear when he wrote, "archaeology is anthropology or it is nothing." Likewise, when Lewis Binford (1962) launched the New Archaeology, his seminal paper was entitled "Archaeology as Anthropology." Binford was building on, in part, the earlier work of Walter Taylor (1948), whose "conjunctive approach" in *A Study of Archaeology* was a call for more anthropological interpretation in archaeology. Stanley South's (1977:1–15) *Method and Theory in Historical Archeology* echoed Taylor and Binford in advocating a scientific and anthropological approach to historic archaeology, arguing that major questions of cultural change and evolution could be explored by historic as well as prehistoric archaeology. By word and deed, these and other leading figures within the archaeological profession stayed engaged with anthropology and contributed to some of our field's greatest accomplishments. By so doing, they have done much to keep archaeologists within the anthropological fold.

The relationship between anthropology and archaeology was eloquently stated by Kent Flannery (1982) in his classic "Golden Marshalltown" paper, which was first presented before the membership of the American Anthropological Association as the 1981 Distinguished Lecture. Flannery argued that the concept of culture (encompassing all four subfields) was an essential unifying framework for scholars responsible for finding, documenting, and interpreting the remains left behind by past cultural systems and produced by a wide range of behaviors. Anthropology's holistic approach to human behavior thus makes some exposure to the discipline an essential part of archaeological training and research.

Anthropology emerged from European/Western colonial experience (Wolf 1982) and from evolutionary and historical particularistic/descriptive theoretical perspectives. Just as the diverse peoples with whom sociocultural anthropologists work live in a world of rapid social change, CRM archaeologists also operate in an environment of rapid change, one in which vast numbers of sites are being lost and the few they study are frequently destroyed within hours or days after fieldwork ceases. This has created a sense of urgency and dedication among many archaeologists, since what gets accomplished at threatened sites will likely be the only information ever obtained from them or, more unnerving still, from their entire regions.

Modern archaeologists also made significant contributions to ethnography and anthropological theory; hunter-gatherer studies offer one example (e.g., Binford 1978, 2001; Kelly 1995; Yellen 1977). Archaeology and sociocultural anthropology thus are linked by a commitment to examine the diversity of human cultures in the face of challenges presented by a rapidly changing world. Indeed, that a modest fraction of the papers in *American Anthropologist* combine approaches and findings from two or more subfields (Borofsky 2002), in a research world as focused and fragmented as anthropology can be, is reassuring rather than disheartening, and these papers offer examples of integrated research we all should emulate.

A Personal Aside: How Anthropology Shaped My Career

My career mostly has been in CRM archaeology, and it has taken a different trajectory from that of my colleagues in the academy. I came to anthropology as an undergraduate at Case Western Reserve in the late 1960s after abortive majors in physics, biology, and classics. An introductory course my sophomore year impressed on me the breadth of anthropology, including both scientific and humanistic approaches to explore and think about the world. Anthropology focused on major questions of human existence, such as why people fight wars, practice religion, or organize themselves the way they do in groups and cultures. The major historical figures of the field were not afraid to tackle big questions or challenge accepted stereotypes about race or culture, and this appealed to my 1960s-era idealism. From my own experience, a well-taught introductory course can be crucial to recruiting new members to our profession.

After graduating I volunteered on archaeological field projects in southwestern New Mexico for several months (Anderson 1973; Fitting et al. 1972). I began my first full-time job in archaeology in 1974 at the South Carolina Institute of Archaeology and Anthropology in a research assistant's position largely funded by CRM work, which was just beginning to appear. With the guidance of some good archaeological mentors, such as Drs. Robert L. Stephenson, Leland Ferguson; Albert C. Goodyear, and Stanley A. South, all of whom had broad anthropological training, I conducted field and laboratory research and published a few papers. This led to an as-

sistantship with the Arkansas Archeological Survey that enabled me to complete an M.A. in anthropology at the University of Arkansas. Although most students were focused on archaeology, the Arkansas M.A. program required courses in all four subfields of anthropology, and the relevance of the other subfields to archaeology was impressed on us on a daily basis through instruction and example. While at Arkansas I worked on the Zebree site, an early Mississippian period village that was literally draglined away around us during the final 1976 field season as part of a Corps of Engineers channelization project. This research helped us explore the emergence of Mississippian culture in the central Mississippi Valley (Morse and Morse 1977, 1990). I also assisted Martha Rolingson on collections from the Late Woodland Toltec mound group in central Arkansas that was being made into a state park.

As an employee of the Arkansas Archeological Survey, I was fortunate enough to have sustained interaction with Hester A. Davis and Charles R. McGimsey, who ran the survey and also taught a course in public archaeology that every archaeology graduate student took. Davis and McGimsey taught us about historic preservation laws, but they also taught the "politics behind the laws," the important details essential to successful resource protection and lobbying efforts, the building of a constituency to ensure the long-term support of research and conservation programs, and doing projects in compliance with historic preservation legislation—the basic training in how most of the archaeology conducted in this country over the past 30 years has come about. I thus realized very early that CRM offered exciting research opportunities, sometimes with massive levels of funding, and that an M.A. degree was (and still is) sufficient for a person to be a principal investigator and direct such work. I also quickly learned that the way to continue these opportunities was to do the best possible research and to write informative and interesting reports that touched on the lives of past peoples and not merely the description of artifacts and features, so that the funding agencies could see that their money was actually telling us something about past human behavior.

Those early experiences strongly colored my approach to archaeology; specifically, they impressed on me the opportunities and challenges that can come about through an involvement in public archaeology and CRM and the need to do the best possible research on threatened sites. They helped me understand the role broad anthropological training can play in the production of meaningful research results, the importance of multidisciplinary research and teamwork in the interpretation of complex archaeological sites, the crucial role mentors play in our training, and why we should always strive to inform and involve the public in our research. Working on threatened sites—and most of those I worked on were destroyed soon after we left the field—is a sobering lesson in professional responsibility. When you only get one shot at a site, you had better try to figure out how that landscape was used and collect as much high-quality data as you can. No one will be going back. To this day, I think archaeologists should excavate only threatened sites or, if the sites are protected, where the good will and support created through well-conceived interpretation can justify the destruction caused by excavation.

After the Zebree project was over in 1977, I caught the wave of the CRM boom and took a job for the next six years with a firm in Michigan, Commonwealth Associates, Inc. Here I learned to direct progressively larger survey and excavation projects (Anderson et al. 1982; Anderson and Schuldenrein 1985). By the early 1980s, however, I realized that I needed to go back to graduate school if I was to do archaeology better, from an anthropologically informed perspective. The University of Michigan was known for outstanding training in anthropological archaeology and, under the guidance of James B. Griffin, had produced some of the very best southeastern archaeologists. The University of Michigan (as has North Carolina in recent years) also accepted experienced CRM archaeologists, an educational model James B. Griffin initiated after World War II, to provide further training for the generation of archaeologists that emerged during the New Deal era. Starting in 1983 I spent three years in Ann Arbor in a truly intensive exposure to all four subfields of anthropology, an integral part of the Michigan doctoral program. I read more ethnography and ethnological theory in those three years than I would normally otherwise do in a decade. The faculty instilled in me that to interpret the archaeological record well, we must have an understanding of human cultural variability and the interpretive potential of sociocultural, linguistic, and biological anthropology. The importance of advancing anthropological knowledge through sound focused research and broad general thinking—and that we were all anthropologists in spite of our specializations—was expounded by faculty in all subfields.

In 1986, coursework done and dissertation started, I took a job with another CRM company, this time in Atlanta: Garrow and Associates, Inc., for whom I directed a major survey project in northeast Arkansas, examining approximately 90 miles of the L'Anguille River channel margin, and wrote two major archaeological syntheses

(Anderson and Joseph 1988; Anderson et al. 1988). Realizing that I would never get my dissertation done while working a typical 60- to 80-hour CRM workweek, I applied for fellowships. In 1988, while working for the National Park Service, which had offered me an internship, I was awarded a dissertation fellowship from the Department of Energy's Oak Ridge Associated Universities' Laboratory Graduate Participation Program (anthropologists are renowned for tapping unusual funding sources). The DOE fellowship, which I took while on leave from the NPS, gave me an office in the Savannah River Plant facility near Williston, South Carolina, the rural community where I now live. Through my connection with the Savannah River Plant I participated in the initial archaeological survey of the 328-square-mile complex (Hanson et al. 1977). I completed a dissertation in 1990 that focused on chiefly cycling—how and why these kinds of societies emerge, expand, and collapse (Anderson 1990a, 1994)—and that drew heavily on data from all four subfields of anthropology. This work was also a synthesis of Mississippian archaeology in the Savannah River basin, with much of the data obtained from CRM work. Although much archaeological fieldwork and analysis is of necessity often specialized and highly focused, in my view it should also address larger anthropological questions.

Once my dissertation was completed, I returned to the National Park Service's Technical Assistance and Partnerships Division (the successor to the old Interagency Archeological Services program), where I remain to this day. Over the past 12 years I have commuted from rural South Carolina to first Atlanta and then Tallahassee, Florida, where I now work at the Southeast Archeological Center. Under the mentorship of fine archaeologists and resource managers like John Ehrenhard, George Smith, Bennie Keel, Frank McManamon, Dick Waldbauer, and a host of other dedicated people in state and federal agencies, I have handled contract administration and oversight for millions of dollars worth of work the government has had performed by private companies or universities, done extensive writing and teaching on CRM, conducted a fair amount of archaeological fieldwork on federal lands, worked on several major overviews of CRM-based research on federal installations, and written synthetic papers and volumes on southeastern archaeology from time to time (e.g., Anderson and Mainfort 2002; Anderson and Sassaman 1996; Sassaman and Anderson 1996).

My career has largely been in the private sector and government; yet it has been profoundly shaped by anthropological training. Doing CRM well means following in the finest tradition of American archaeology and anthropology. I thus think of myself as an anthropologist—and not just because the word is centered on all three of my college diplomas but because of my commitment to the broader goals of the discipline.

Challenges Facing Archaeology and Anthropology

But now, what about the role of archaeology within anthropology? If we as archaeologists are to be anthropologists first, there must be some sense and consistency as to what being an anthropologist is and how anthropologists are to be trained. This is a major challenge facing our field. What are we actually about? Are we to be defined as anthropologists by our training in the four traditional subfields (a position I endorse)? Or by training as now occurs in some departments where the faculty are so specialized or polarized that students are exposed to only one or two subfields? What being an anthropologist is needs to be better defined, even for those of us within the field.

Anthropology, and archaeology within it, needs to rise to the challenges facing our global civilization if it is to remain credible. Earlier anthropologists, such as Boas, Benedict, and Kroeber, drew upon anthropology to take on the big questions and issues of their times. They stood for cultural relativism and argued passionately against racism, totalitarianism, and injustice. We should do no less, and archaeology can play an important role. Major issues that need our involvement include examining and mitigating the impact of global climate change and human population growth on both the archaeological record and human cultural diversity, by assisting in the development and implementation of sound cultural and environmental resource management programs. Many older problems are also still with us, like genocide, racism, and ignorance, that require constant challenge. In our research and writing, and in our public outreach, we should explore these issues wherever possible and teach our students that they provide legitimate directions to pursue.

As archaeologists, we are uniquely suited to letting the world know the short- and long-term consequences of patterns of climate change, technological innovation, warfare, slavery, racism, gender relations, genocide, pollution, and landscape modification, or of even seemingly more mundane things like diet, refuse disposal, and sanitation, all of which are studied in detail by anthropologists and archaeologists alike. The broad interest in William Rathje's Garbage Project (Rathje and Murphy

1992) is one such example. This research has direct payoffs in waste management, a burgeoning problem for our civilization, and informs us a great deal about ourselves in the process. Global population growth and resulting environmental deterioration (i.e., deforestation, desertification, erosion, species extinction) are also very real concerns that are leading to unprecedented losses of archaeological resources and traditional lifeways. Reservoir construction globally, for example, is devastating archaeological resources and local communities alike, in the valleys where much of humanity has lived for millennia, and the profession is fortunate that a few inspired individuals and groups are doing all they can to rise to the challenge of finding a solution (e.g., Hassan and Brandt 2000). There is great potential for archaeologists, sociocultural anthropologists, and linguists to cooperate in threatened areas.

Global climate change may likewise lead to tremendous losses of cultural resources—sites and societies alike—in the near future, through sea level rise drowning low island and coastal areas or through broad shifts in rainfall and vegetation patterns. Archaeology, with its long view, has much to offer (e.g., McIntosh et al. 2000). The impact of changing rainfall patterns on prehistoric cultures is now being studied worldwide (e.g., Dean 1996), for example, and the effects of El Niño are being followed well back in time to the Middle Holocene (e.g., Caviedes 2001; Fagan 1999; Sandweiss et al. 1996). Many scholars modeling the impacts of climate on society commonly use samples encompassing conditions over no more than the past 20, 30, or 50 years, however, because that is the time depth of high-quality climate station, crop yield, fire frequency, and other data. There have been fluctuations in climate over this interval, to be sure, and the results of such studies are extremely valuable. Nevertheless, the past centuries and millennia are replete with far more dramatic examples of climate change, in both duration and intensity, whose impacts can be documented in the cultures of the times (e.g., Wigley et al. 1981). Interannual variation in rainfall, for example, had a significant effect on crop yields and through that the history of settlement at Spanish Santa Elena in South Carolina, Roanoke Island in North Carolina, and the Jamestown colony in Virginia (Anderson et al. 1995; Stahle et al. 1998). All were established during unusual periods of drought, as reconstructed by local bald cypress tree rings. The first colony was abandoned, the second lost, and the third struggled precariously during its first decade.

The effects of century- to millennium-scale fluctuations like the Little Ice Age and the Medieval Warm Interval have been well documented (e.g., Fagan 2000; Grove 1988; Hughes and Diaz 1994). A lesson from archaeology is that their impacts on culture are not uniform. The Medieval Warm Interval period in the western United States, for example, has been inferred to have been a time of severe disruptions in local societies (Jones et al. 1999), whereas in the Eastern Woodlands it witnessed the development of complex societies (Anderson 2001; Smith 1990). A decadal-scale event that could have fairly profound implications for our own civilization should it happen is the rapid onset of pronounced cold or warm intervals, called "Dansgaard-Oeschger events," when average global temperature can change by as much as 8 to 10 degrees Centigrade within a human lifetime (Dansgaard et al. 1989; Dansgaard et al. 1993). Both the onset and end of the Younger Dryas—a dramatic return to colder and highly variable climatic conditions at the end of the last glaciation—are now known to have occurred within a few years to at most a few decades (e.g., Grafenstein et al. 1999). Profound impacts are evident within the Paleoindian occupations in North America just before and during the Younger Dryas, such as the demise of Clovis, the extinction of megafauna, and dramatic changes in technological organization and mobility (Anderson and Faught 2000; Fiedel 1999, 2000; Meltzer 2001, 2002; Taylor et al. 1996). Archaeologists can help people to think about change at such temporal and spatial scales, while at the same time benefitting from collaboration with sociocultural and biological anthropologists, along with scholars from other fields working on environmental issues (Anderson 2001; Fagan 1999, 2000; McIntosh et al. 2000; Sandweiss et al. 1999).

Our greatest challenge in the short run, of course, is probably justifying support for what we do within universities and in the public and private sector. Keeping anthropology departments and enrollments viable, environmental legislation in place, and career opportunities plentiful for our graduates are all critical issues we must face. As Jane Hill (this volume) has noted, we must avoid being pigeonholed into the "savage slot" and as representatives of the primitive, trivial, or arcane; instead, we must show that what we do is important to contemporary society. What we do is important, but we must be around—our field has to survive—to have an impact.

How Do We Deal with These Challenges?

Change comes about through individual action, and serving as a positive example is probably the most important thing we can do. We must be good mentors to

students and younger colleagues who are the future of the profession. We pay back those who helped us by remembering and passing on the things we learned from them (this is also called "paying forward"). The skills needed to do archaeology well in the twenty-first century have been spelled out in detail (e.g., Bender and Smith 2000), and students entering the field are increasingly aware of what they need. Academic departments, besides offering solid training in anthropology, should offer training in public archaeology, resource management, and professional ethics—if not in specific courses, then as values incorporated into every lecture and research project.

We should be guided by the ethical principles espoused by our leading professional organizations (e.g., Lynott 1997). We must take stands against looting and for sound resource management, recognizing that the threats facing archaeological resources are the same as those before our colleagues in the other anthropological subdisciplines. We must teach and encourage writing, analysis, public speaking, and leadership skills, as they relate to the dissemination of knowledge and the advancement of our field. We must communicate what it is we as archaeologists actually do and that we are deeply committed scientists and humanists, not the mindless curio collectors or rough-and-tumble adventurers the public media make us out to be (Fagan 1995, 2002; Sabloff 1998). We need to be better at linking the past peoples we study with the living people now occupying the study areas. And we must publish responsibly for both our colleagues and the educated public alike and curate our collections and records properly.

Successful anthropological archaeology is done by teams of specialists, and one of our strengths lies in coordinating multidisciplinary research, particularly projects involving all four subfields and beyond. Anthropology, and particularly archaeology, is increasingly a team sport, requiring people who can work and play well with others. Archaeologists and other anthropologists—the good ones at least—are polymaths in their study of human culture as well as the basic premises of many different fields of endeavor, exemplifying what Jane Hill (this volume) calls "the Americanist tradition...of anthropological integration." Archaeological projects are no longer one-person enterprises, run by heroic figures overseeing hoards of unskilled workers. Although ethnographers may still sometimes work alone, particularly during their period of participant-observation, their findings are increasingly generated by and interpreted through the efforts of many colleagues and specialists.

Specific Strategies for Implementing Change

Rethink Publication and Promotion Policies

All anthropologists need to rethink what we consider the important products of our profession, starting with our scholarly writings. In my opinion we need to produce more monographs and syntheses and probably far fewer short technical papers. Although I have written many professional papers, I think the books and technical monographs I have been involved with, most of which are survey or excavation reports with occasional syntheses, will probably have the greatest enduring value. Monograph writing is a critical skill for both sociocultural anthropologists and archaeologists. These are the primary technical documents of our field, recounting what was found where and what it means, to the best standards of the time. Major reports will be read for decades if not centuries, and well-curated collections can be used by generations of scholars. Many short papers, and almost all theoretically oriented articles, in contrast, are historical curiosities within a few decades at best, in part because they become progressively more inaccessible but more typically because they are superceded by better ideas or newer findings that usually subsume and recount the results of earlier work. Short technical and theoretically oriented articles shape the field and are unquestionably important, but our profession also soon passes them by.

Monograph writing seems to be something of a dying art in archaeology and anthropology, at least outside of CRM circles, probably in large part because of the way departments and museums grant tenure and promotion. Someone who excels at publishing numerous refereed journal articles may typically be better perceived and promoted faster than someone writing one or a few solid books or monographs over the same interval. Yet what are the lasting monuments of our field? *We, the Tikopia; Handbook of the Indians of California; Argonauts of the Western Pacific;* and *The Nuer*? Or the many fine but now largely forgotten shorter articles Firth, Kroeber, Malinowski, and Evans-Pritchard wrote and published in the best journals of their time? *Star Carr; Olduvai Gorge*, vol. 3; and *Archaeological Survey in the Lower Mississippi Alluvial Valley*? Or the many excellent journal articles Grahame Clark, M. Leakey, and Phillips, Ford, and Griffin produced? These are not just rhetorical questions, because our publication strategy as a profession defines who we are and how we are perceived. By fragmenting and dispersing our research findings

into progressively more technical, abbreviated, and obscure publications, we make it harder for ourselves and the rest of the world to find out, much less understand, what we are doing. If our field itself is perceived as fragmenting (e.g., Lightfoot 1995), our writing habits are at least partially to blame. While there is nothing wrong with writing articles, we must also try to encourage and reward the production of more substantial reports and syntheses.

Make Ourselves and Our Work More Accessible to the Public

Beyond writing more substantial technical works, we must also present the findings of our work where they can be readily accessed and noticed: in books and articles, on the web, through interactive displays, and even in popular media like radio, television, and movies (Fagan 2002; Jameson 1997; Sabloff 1998; Thomas 2000). As Brian Fagan, David H. Thomas, and others have so often and elegantly argued, we must make an informed citizenry enthusiastic about archaeology by showing that what we do is not only interesting but also can sometimes be extremely relevant to their lives. The public is willing to listen to our stories, and we must work at being better at telling them.

One way to make our work more accessible is to encourage greater on-line publication both in technical and popular versions. That is, wherever possible, we should post on the web downloadable copies of our reports, papers, bibliographies, and course outlines, as well as pictures and thoughts on where our current research is going. Popular summaries of technical projects, be they funded by the National Science Foundation or CRM, can be made a contract requirement. The public is interested in our projects, and web sites dealing with archaeology are tapped by large numbers of people. I get several messages a week from lay people who have seen things posted on our NPS SEAC web site (www.cr.nps.gov/seac/seac.htm). The more open our literature, furthermore, the more likely it will be examined and appreciated, by our colleagues and the public alike, and the better our field will be understood as a science. Most of our technical work published in copyrighted journals or books, in contrast, is read by no more than a few hundred of our colleagues, most of whom are archaeologists. If we also emphasize and reward broader publication, including placing our efforts on the web, what we do will become increasingly accessible to, and understood by, larger and larger numbers of people.

Continue the Production of Advanced Degrees

As far as I am concerned, the world would be a lot better place if there were more, not fewer, anthropologists in it. I do not at all agree that we need to reduce the numbers of M.A.s and Ph.D.s in anthropology, as some have argued—just the opposite! We should try to produce far more. But we must honestly inform our students, undergraduate as well as graduate, what employment options their degrees will provide. Minimally, an undergraduate anthropology degree demonstrates a good liberal arts background with which a person can successfully go into many professions. Graduate degrees can fulfill the same role, and if graduates choose to do something other than anthropology with their life, and are happy with their choice, they should receive our blessing. To cite one well-known case, Kurt Vonnegut, who began his studies in anthropology, went on to a career in creative writing, and the world is certainly not the poorer for it.

But if we are to maintain our credibility as individuals and as a profession, we must also make sure that those who want to become anthropologists and archaeologists receive advice and training for the kinds of jobs actually available. Otherwise we are doing a disservice to our students and to our profession, being deceitful to our heirs, and diminishing ourselves in the process (Schuldenrein 2000). It is a poor parent who does not train his child for the real world, much less even tell him what it is like. As mentors we must place our students' best interests foremost, which can only be in the best interest of our field.

Cooperate with Our Anthropological Colleagues

Archaeologists are typically a distinct minority in departments of anthropology, and they certainly are in government agencies, so cooperation with colleagues is unquestionably the best way to achieve our goals (in the government, fortunately, it also helps to have a host of laws mandating what we do). One way to enlist the support of our anthropological colleagues is to emphasize the mutual benefits of continued enrollments and increased departmental resources. Another is to involve sociocultural and biological anthropologists in our research and for us to get involved and interested in theirs. Cooperating with our colleagues, showing respect for and acknowledging the value of what they do, and actively enlisting them in the training of our students is a more effective strategy for effecting change than challenging their relevance or ignoring their work.

A middle-ground approach for archaeologists is to take what is relevant from our anthropological heritage, rather than divorcing ourselves from it completely. McGimsey (1994:2), for example, has suggested the development of overview courses in subjects such as "Linguistics for Archaeologists," "Physical Anthropology for Archaeologists," "Cultural Anthropology for Archaeologists," and even "Anthropology for Archaeologists." Although this is an interesting suggestion, my experience suggests that even a basic exposure to the other subfields from one or a few core courses will quickly demonstrate their relevance to archaeology. Our colleagues in these subfields, however, need to be willing to help archaeology students see and appreciate their relevance, and archaeologists, of course, must return the favor by explaining what archaeology contributes to the other subfields of anthropology and to the wider world.

As a practical matter, a wide range of anthropologists will be needed to help interpret the archaeological record. For example, biological anthropologists will continue to study human remains, while the role of plants and animals in past societies will continue to be best interpreted by scholars with at least some training in anthropology and history as well as in the natural sciences. Within academic departments, archaeologists can offer their considerable experience with interdisciplinary and intradisciplinary research.

Emphasize That Learning Continues beyond Graduate School

The M.A. degree is archaeology's primary professional degree, the union card and driver's license of the CRM world (Pyburn 2000; Schuldenrein 2000). A license to practice, it does not, however, guarantee employment or long-term success, or even the ability to conduct complex archaeological research effectively. The knowledge and skills needed to do archaeology well have far outstripped what can be absorbed in a four-semester M.A. program. The same, of course, can be said of the Ph.D., but the incubation period for a doctorate is so much longer that students normally acquire a much wider range of teaching, research, and (frequently) CRM skills simply to support themselves. M.A. programs as presently structured can point people in the right direction and offer basic instruction and guidance, but the rest is pretty much up to the individual. In today's archaeology, what must be learned and what is taught have probably never been as far out of proportion. Students should understand that success in archaeology—the ability to do archaeology well over the course of a lifetime, while commanding a fairly comfortable middle-class lifestyle and a retirement income above the poverty level—requires serious commitment and hard work and a lifelong dedication to learning. Formal training in anthropology is an essential part of the process, but we must also emphasize that part of responsible scholarship and doing archaeology well means keeping abreast of major developments in the other subfields of anthropology, as well as in other areas of research in general. The M.A. or Ph.D. degree is just a step on the way; though admittedly important, these milestones are not by any means the end of the journey.

Emphasize the Value of Anthropology to Archaeologists Trained in Other Fields

In the United States there are now departments of archaeology and graduate programs devoted to teaching applied or CRM archaeology that are largely or partially divorced from traditional anthropology departments. Federal guidelines require a graduate degree in any of a number of disciplines, along with moderate field and reporting experience, for persons who direct CRM projects. Many practitioners of historical or industrial archaeology, for example, have degrees in history or American civilization, although training within departments of anthropology still predominates in these fields (Majewski, this volume). Many underwater archaeologists are from degree programs where course requirements in anthropology likewise vary appreciably. Classical and medieval archaeologists, furthermore, may never take anthropology or even anthropological archaeology courses, and the reverse is of course also true for many anthropology students. Finally, archaeology is increasingly practiced by people with interdisciplinary degrees that merge a number of disciplines, such as geography, history, and anthropology. Training in anthropology clearly is not essential to conduct archaeology in the United States.

We should, however, encourage all archaeologists, of whatever persuasion, to at least consider what anthropology has to offer and incorporate some knowledge of the field into basic training and educational regimes. What is it about anthropology that enables one to do archaeology better than one might perhaps do otherwise? In the absence of detailed written records produced by the people under study, anthropological training is about the only guide we have to interpret the archaeological record they left behind. Even in highly literate cultures, documentary evidence rarely touches on the lives of the vast majority of the people. Although archaeologists do

not need in-depth training in anthropology, knowledge of the discipline will enable them to do archaeology better than they might otherwise.

Encourage the Development of Career Survival Skills

At the advanced undergraduate and graduate level, the education of archaeologists and other anthropologists needs to include more emphasis on what I like to call real-world professional skills. These include such things as learning where the money comes from that enables us to do archaeological research and teaching and how to tap those funds; the importance of participating in professional organizations and attending their meetings; the value of presenting and publishing papers; how to develop realistic and achievable project research designs and budgets; how to carry out field research in such a way as to maximize information recovery within these same budgets; how to write up project results within reasonable time frames; and how to disseminate project results to professional and public audiences. Other valuable skills for archaeologists in particular, but of value to practitioners in all of the subfields, include some knowledge of preservation law, geographic information systems/computer applications, statistical analyses/quantitative methods, project/personnel management, and technical writing. Training in archaeological professional ethics is absolutely essential (Lynott 1997; Lynott et al. 1999). Members of all the subfields should work together in marshaling these skills and resources and use them to advance anthropology.

Students also need to be taught that academic employment is not their only legitimate career option. Those in academia who still represent CRM employment as little more than a fallback position for graduates who cannot find a teaching position do a grave disservice to the entire profession. There are many important archaeological specializations to choose from, not the least of which are in curation, records management, CRM, and the analysis of a wide array of artifact categories and other forms of evidence. More students should have opportunities to be interns in CRM firms, museums and curation facilities, state historic preservation offices, or government agencies, and those organizations should be willing to pay them for their efforts. My own career was greatly furthered by these kinds of opportunities. Good CRM reports or collections analyses should be held up as examples to be emulated, and we need to be training people in the monitoring and peer-review procedures necessary to ensure that such high-quality work continues.

Archaeological field schools should ensure not only that students learn how to dig and process artifacts carefully, but also that they have some exposure to the diversity of activities that go into successful field archaeology. The research agenda being explored and the linkages between the questions asked and the procedures used to collect the data to answer them should be fully articulated as part of field school training. Students should learn how to operate total stations, GPS receivers, and digital cameras; to describe soils effectively and take appropriate notes and samples; to understand teamwork and chains of command; and, above all, to know when to ask for help. Fieldwork is a continuing apprenticeship; we all learn new ways of doing things on each project. A single field school rarely gives people the training to do archaeology well. Learning field research methods, like keeping abreast of publications and advances, is thus also a lifelong effort.

Emphasize the Importance of Archaeological and Anthropological Theory

Our theoretical perspective shapes the kinds of research questions we ask, the data we collect, the kinds of reports we write, and what we consider sound explanation. Accordingly, we must teach our students to take theory seriously, and we ourselves must write about it in such a way that it is accessible. That is, we must show how theory can be applied in real-world archaeological situations to collect and analyze the kind of data needed to answer interesting questions. Modern anthropological theory, through an examination of topics such as agency and praxis, for example, explores how culture continually defines itself and how, in the process, it changes over time, subjects directly relevant to archaeology (Clark 2000; Dobres and Robb 2000; Pauketat 2000; Sassaman 2000). Gillespie (this volume) correctly notes that in this regard, anthropological and archaeological theory are indeed converging, at least on the cutting edges of research and thinking (see also Gosden 1999). While descriptions of artifacts and features will continue to dominate our technical reports, this should not be at the expense of holistic attempts at interpretation. Archaeology offers a dynamic and exciting perspective for our anthropological colleagues because we explore cultural change at a variety of temporal and spatial scales (*sensu* Braudel 1972, 1980). Practical applications of archaeological theory to real-world field, analysis, and reporting situations should be an integral part of our work.

My own theoretical perspective is somewhat eclectic (albeit with a strongly positivist, scientific, processual,

historical, and materialist basis). Many theoretical approaches to exploring the past have been proposed, and we must try to find what is useful in each. I am interested in a wide range of cultural phenomena, operating at a variety of temporal and spatial scales, encompassing the human occupation of eastern North America from initial colonization to the near-present. Yet I have found that theoretical approaches that work well at one scale or area of interest rarely do well at another. Thus, agency, history, cultural materialism, and evolutionary theory all appeal to me. Archaeology may be a science (it is to me), but informing our colleagues and the public about what it is we do sometimes requires a literary and humanistic effort. The practice and presentation of archaeology, like the rest of anthropology, is increasingly diversified, but I do not think this is a bad thing. It would be very limiting if there were only one way of thinking, exploring, and writing about the past, and this is one benefit of archaeology's continuing relationship with the rest of anthropology.

Emphasize the Value of Ethnography and Cultural Anthropology

Some knowledge of cultural anthropology, particularly ethnography and ethnology, is in my opinion essential to successful archaeological practice (see also Barfield, Terrell, this volume). Ethnographic description and analysis serves as a continual source of insight and inspiration. One needs to know the range of variation in human societies and how they operate to have any hope of exploring these societies in the past. To develop models of societies for which there are no ethnographic parallels, we must be able to think outside of the traditional anthropological box—the world of the recent ethnographic past. If we are to do paleoethnography well, however, we must first know the ethnographic sample (e.g., Binford 1978, 1980, 2001; Kelly 1995).

If one is studying complex societies, the Polynesian and African ethnographic and historical literature can be as instructive about human behavior in hierarchical settings as the more classical accounts from Sun Tzu to Machiavelli. Firth's (e.g., 1936) writings on Tikopia offer perhaps the best example of what life in a simple chiefdom might be like, while Sahlins's (e.g., 1985) work exemplifies the range of variation and reasons for change in more complex Polynesian societies. Classic studies of culture change exist, such as Leach's (1954) *Political Systems of Highland Burma*, documenting how fairly rapid change in organizational complexity can occur, or Kelly's (1985) *Nuer Conquest* that suggests how small changes in practices such as how bridewealth is reckoned can have a profound impact over time. Perhaps the most remarkable thing about reading ethnographies and studying sociocultural anthropology is that it teaches us how much human behavior leaves little or no trace behind. Ethnography, properly examined, can provide a perspective on the kinds of questions archaeology is suited to answer—and the kinds that it is not. Actualistic ethnographic studies can also help us better understand how the archaeological record was formed and modified (e.g., Binford 1978; Yellen 1977).

Emphasize the Value of Biological Anthropology and Linguistics

Archaeology and biological anthropology are closely linked, and not just because archaeologists recover some of the tangible evidence examined by the latter specialists. The contributions of biological anthropology to the understanding of past cultural systems are considerable and encompass such issues as the resolution of patterns of diet and health, stress and long-term repetitive actions in daily life, and physical/genetic relationships between peoples (Larsen 1999; see also Armelagos, this volume). The relationship between archaeology and linguistics is, of course, equally important. Historical linguistics has long been used to infer relationships between groups of people and to delineate patterns of group movement. Some of the most classic comparative studies of twentieth-century European archaeology were directed to linking broad patterns of language and culture (e.g., Childe 1950, 1957; Renfrew 1987). Reconstructing protolanguages can help us understand the earlier histories of peoples, while lexicostatistics (glottochronology) can provide some hints of the relative, if not absolute, age languages and hence peoples diverged. Analyses of New World colonization and migration routinely explore evidence from archaeology, biological anthropology, and linguistics (e.g., Bonnichsen and Turnmire 1999; Greenberg et al. 1986).

Emphasize How CRM Archaeology Has Benefitted Anthropology

The modern CRM boom has led to the employment of a great many anthropologically trained archaeologists. That the number of anthropology departments and faculty has increased markedly in recent decades is at least in part due to the fact that their students can find jobs. This same boom has greatly expanded our knowledge of the archaeological record in North America, including

findings of broad general interest and a database useful for exploring interesting and important research questions. The number of archaeological sites formally recorded in state site files since 1970 in the southeast, for example, has grown from under 10,000 to over 200,000, and of these, thousands have been tested and hundreds intensively excavated. These data are invaluable for looking at questions of changes in settlement, subsistence, and organization over time (e.g., Milner et al. 2001). Those working to bring order to these data—the site file managers, curation specialists, and synthesizers of all kinds—play an invaluable role in modern archaeology (Anderson and Horak 1995). Just as distilling the primary ethnographic literature has yielded impressive results (e.g., Ember and Ember 1992; Kelly 1995; Murdock 1949), North American archaeology's burgeoning array of primary site and artifactual data has been used to develop models of everything from Paleoindian colonization (Anderson 1990b; Dincauze 1993) to Mississippian exchange (Brown et al. 1990) to historic farmstead location (Brooks and Crass 1991). These data are valuable not just to North American archaeologists because, as Barfield (this volume) notes, primary data can be used to develop models that transcend the material from which they are drawn.

Cooperation between the CRM world and the academy can yield major benefits to both. It is no coincidence that some of the strongest anthropology graduate programs in the country are located at universities where there are internal or nearby CRM organizations capable of employing large numbers of students. CRM projects support appreciable research by students and faculty alike, as Doelle (this volume) notes. CRM work can fund graduate students as part of project budgets, and students can be encouraged to prepare class papers, theses, and dissertations based on this work. Many anthropology M.A. and Ph.D. degrees, in fact, have been awarded over the past 30 years for research based on CRM work. My own Ph.D. dissertation in the Savannah River valley involved the synthesis of data from over 100 surveys and almost 7,000 sites, as well as from almost 20 large-scale excavations, and almost all these data were collected through CRM projects. CRM has given us a research database unequaled anywhere else in the world; its potential is vast, and its use by students and colleagues can only benefit our profession.

Flannery (1982) noted some 20 years ago that if you want to learn the archaeology of any part of the United States, you must explore the CRM literature and interact with contract archaeologists. Competence in modern American archaeology, in fact, mandates knowledge of the substantive contributions made through CRM in one's research area. Archaeologists must accept that it is an honorable, not a "fallback," option to be employed somewhere other than in a department of anthropology. I am proud of the jobs I have held in archaeology and know full well that what I do is important and legitimate. When CRM jobs are filled by people who are poorly trained and motivated, however, because they are taught their positions are second-rate, it does a disservice to employer and employee alike and to our profession in general. Although there are many dedicated professionals in CRM/public archaeology, we need many more such people.

Recognize That Dealing with Affected Peoples Is Making Archaeologists Better Anthropologists

As Ferguson (this volume) elegantly argues, historic preservation legislation in the United States, notably NAGPRA (the Native American Graves Protection and Repatriation Act) and the modification to the National Historic Preservation Act mandating a consideration of traditional cultural properties, along with similar legislation in other countries, is linking archaeologists, biological anthropologists, and native peoples together as never before. Archaeologists, along with biological and sociocultural anthropologists, must consider the effects of their work on living peoples and consciously strive to avoid causing harm, and they must also ensure that our work informs and inspires. This mandate calls for closer collaboration among the subdisciplines. Perhaps the best thing to come from this is the development of what Ferguson describes as "reciprocal archaeology," an archaeology whose results are of interest and value to more than just other archaeologists.

Training in ethnographic field procedures and ethics, specifically how to act in the best interest of informants and affected peoples, is certainly relevant. NAGPRA consultation is not a capitulation by archaeologists to the forces of antiscience. Instead, it is putting archaeologists back in touch with descendant communities whose history they care so deeply about. It can teach us about other ways of viewing the world of the past and the present, giving archaeologists insights we might otherwise never derive. Just knowing that people deeply care about what it is we do can be inspirational, and it makes me want to try even harder to maximize what we can learn from these opportunities and make the work useful and relevant. If the archaeological literature were to be read by more than a few specialists, I suspect there would be a dramatic improvement in the quality and clarity of our technical writing.

Consultation is also an essential part of identifying and assessing traditional cultural properties. This is teaching archaeologists things about how the landscape was used and perceived, which are likely irresolvable through traditional research approaches. We know, for example, that Paleoindian groups were drawn to special places on the landscape, commonly interpreted for their value in promoting interaction, mating network maintenance, and subsistence pursuits or raw material replenishment. However, little attention has been devoted to the probable ceremonial or ideological importance of these sites. The same is true of our interpretations of prehistoric land use in subsequent periods as well. If a site does not have obvious ceremonial architecture or artifacts, it is frequently interpreted in purely functional terms. Archaeological reconstructions therefore do not typically correspond to Native American tribal beliefs about their past, forcing an assessment of what these differences mean. Our explanations are only the better with increased consultation.

Conclusions

Archaeology has benefitted by its association with anthropology and the exposure to a diverse array of theoretical perspectives and approaches to studying human behavior. I have no doubt that anthropology will rise to the challenges of this new century and millennium and that archaeologists will come to better understand the lives of those who came before us. To recognize the lessons of anthropology is to help maximize what can be learned from the archaeological record itself. Anthropology is a field whose practice does make the world a better place, if only through instilling the thought that there are many acceptable ways of being human. This is one archaeologist who is proud to call himself an anthropologist.

Acknowledgments

I wish to thank Susan Gillespie and Deborah Nichols for inviting me to participate, for waiting so patiently for me to come through with my essay, and for offering many sound comments. I also thank my colleagues Mary Pohl, Mike Russo, Ken Sassaman, and George Smith, and several anonymous reviewers, for useful thoughts in its preparation. Some of the ideas presented herein appeared previously, in somewhat different form, in an essay (Anderson 2000) in *Teaching Archaeology in the Twenty-First Century*, edited by Susan J. Bender and George S. Smith (2000). That book should be required reading for anyone entering archaeology or who teaches anthropology students. I also want to express my deep appreciation for the intensive mentoring I received at the University of Michigan and the active concern the faculty had for the students. I owe Richard Ford, John Speth, Milford Wolpoff, Henry Wright, and many others a debt I can never truly repay. Finally, my thanks to Robert Dirks, whose effective teaching of "Introduction to Anthropology" long ago helped open a new door.

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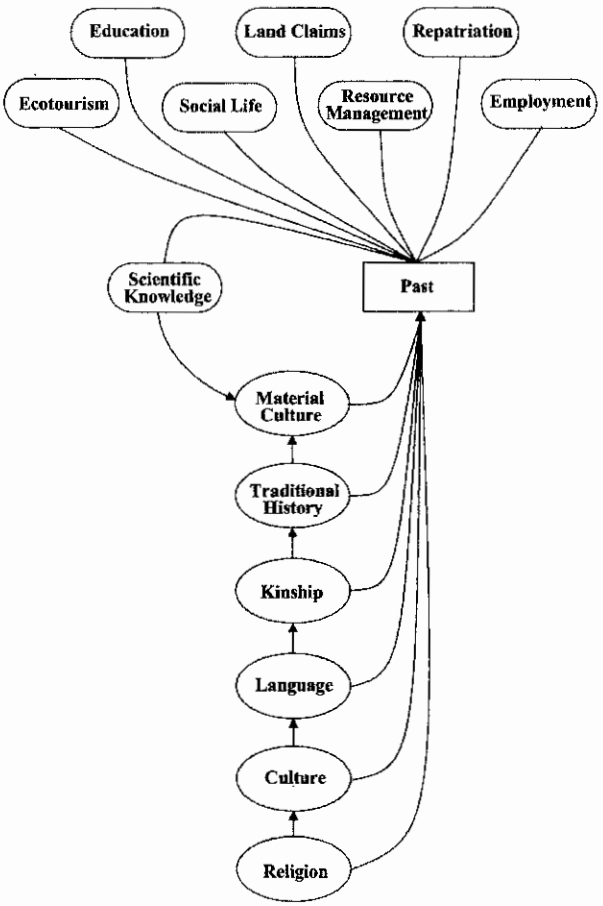

2003
Archeological Papers of the
American Anthropological Association, Number 13