Title
Archaeological Research in the Context of Cultural Resource Management: Pushing back the 1990s

Permalink
https://escholarship.org/uc/item/6cm5p86g

Journal
Journal of California and Great Basin Anthropology, 14(1)

ISSN
0191-3557

Author
Elston, Robert G

Publication Date
1992-07-01

Peer reviewed

Archaeological Research in the Context of Cultural Resource Management: Pushing Back in the 1990s

ROBERT G. ELSTON, Intermountain Research, P. O. Drawer A, Silver City, NV 89428.

ARCHAEOLOGICAL research is an essential aspect of cultural resource management (CRM), yet CRM too often neither fosters nor demands research of the highest quality. This paradox stems from no single condition, but is due variously to historical and institutional factors that, among others, include a poor understanding of the CRM system among archaeologists, lack of quality control, and elitist attitudes. In spite of wide recognition that such maladies are inimical to the general health of archaeology, they have been chronic since CRM took off in the 1970s (cf. Lipe 1978; Keel 1979; Renfrew 1983; Brose 1985; Fowler 1986; Knudson 1986; Dincauze 1988; Myhrer 1990; Rafferty 1990). The longevity of these ills indicates a tendency to accept them as *status quo*, which I suggest is reinforced continually by the combined institutional inertia of academia, the public bureaucracy, and the private sector. This often imperceptible, creeping quiescence resists movement, fosters apathy, lowers expectations, and reinforces stereotypes, while suppressing the excitement of doing archaeology and the joy of intellectual pursuit. It is not a witting conspiracy for the most part, but both its agents and its victims can be identified by the code words, *Yeah, but what can you do?* Such passivity does not threaten CRM, now enshrined in law and regulation; rather, it allows CRM archaeology merely to serve the special interests of its constituents: grease for the wheels of bureaucracy, a warrant for archaeological elitism, and a source of cash flow.

I am convinced that no true archaeologist wants a debased CRM system; my purpose here is to urge colleagues to be more active in preventing it. I suggest that archaeological work of the highest quality is possible within the present system, but only if we each take responsibility for it. If we want the system to provide a better environment for research, each of us must push for the necessary institutional changes. In the following pages, I discuss certain problems I have encountered doing CRM research, conducting my contracting business, and interacting with colleagues. I simultaneously criticize and cheerlead, hoping to stimulate discussion, inspire the cynical, encourage the demoralized, and urge us all to shove back against the forces of inertia, egoism, and mediocrity.

THE PLACE OF ARCHAEOLOGICAL RESEARCH IN CRM

It has been 25 years since passage of the National Historic Preservation Act which codified oversight for cultural resources on the federal level and gave birth to CRM as we know it. The legislative and regulatory infrastructure of CRM is in place on the federal level and on numerous state levels as well. Yet, many archaeologists fail to operate effectively within the CRM system because they misunderstand its nature and purpose (Brose 1985:371), often as a result of poor training.

Legislation creating CRM programs was justified not to facilitate archaeological research,

but to preserve and manage resources of national historical heritage. Support for "pure" archaeological research was left to the National Science Foundation (NSF) and other traditional granting institutions, and CRM was given to the bureaucracy to incorporate into comprehensive federal land management policy (Knudson 1986). As a result, responsibility for CRM lies with senior land managers, such as Forest and Park supervisors, District and Area managers, and so forth.

While many land managers are highly supportive of CRM, many others inclusively lump archaeologists (including those on their own staff) with all the other "ologists" who get in the way of promoting minerals development, timber harvests, livestock production, flood control, etc. (Schneider 1992). Managers who appreciate the goals of CRM, when discharging their statutory and regulatory responsibilities, tend to be strongly oriented toward conservation and preservation (Fowler 1986; Knudson 1986). Because of their charge to manage public resources, managers must know the number, location, status, and National Register significance of the sites, or *cultural properties,* in their jurisdiction; which sites are likely to be impacted by agency programs or public land use and whether any can be avoided; the level of effort required if mitigation is necessary; which properties can be open to public access, and so on. This focus on information and data is why managers often may be more intrigued by the ability of models to predict site location than they are in the intellectual content of such models (Kohler and Parker 1986:441). Thus, grant-supported archaeologists should not be surprised to find themselves treated by a federal or state agency as just another land-user when applying for permits to conduct research.

If, from the viewpoint of a manager, the role of the archaeologist is simply to facilitate management decisions by providing technical data and their interpretation, where does archaeological research, asking questions and seeking answers in a structured way, fit in CRM? As it happens, the way that a cultural property must be managed is determined by its eligibility for nomination to the National Register of Historic Places. As fuzzy as National Register significance criteria are (Fowler 1986:175), they demand attention to the scientific value of cultural properties (Goodyear et al. 1978). A highly formal approach to consideration of cultural properties has evolved, and we know it simply as "Section 106 review." The level of effort devoted to Section 106 review is tied to the size, complexity, and often, political sensitivity of the undertaking compelling it. But in every case, Section 106 review demands some level of inventory, evaluation, assessment of effects, and consideration of adverse effects. Thus, CRM must evaluate scientific values, and either collect them, or preserve them in place. It must identify pertinent research problems (with specific reference to existing preservation plans and relevant literature), state research goals and expectations, and describe research strategies that incorporate appropriate field and analytical methods (Hardesty 1986).

THE QUALITY OF CRM ARCHAEOLOGY

Archaeological research, then, is not only possible in the CRM context, it is mandated by the CRM system (McGimsey and Davis 1977; Brose 1985; Aikens 1986). Yet, the view is widely held that CRM archaeology often fails to meet either the goals of research or of CRM and is inferior to academic research (Schiffer and House 1977; Fowler and Jennings 1982; Fowler 1986; Grayson 1988:121; Thomas 1988:365). To what extent is this true, and how do we know it?

Standards of Performance

The degree to which a particular CRM study advances cultural resource management, or makes an intellectual contribution to archae-

ology, depends on well-defined management and scientific goals, good archaeological practice, and some means of monitoring and correcting performance. It is easy to judge certain aspects of performance for individual CRM projects. because goals and criteria are spelled out in laws, regulations, scopes of work, and contracts: either a product of a certain kind is delivered by a certain date for a certain sum, or it is not. By these mundane measures, many CRM projects are successful. In contrast, mundane performance of grant supported research is not monitored. We have no way of knowing, for instance, what proportion of NSF grants fail to yield "products" such as dissertations or published papers, since these data are not tracked (John Yellen, personal communication 1990).

Nevertheless, it is not so much mundane performance to which critics of CRM refer, but the sublime. Most of us agree that the same intellectual and practice standards should apply to CRM- and grant-supported archaeology but, although many CRM studies are excellent by any measure, some are wanting. The significance and intellectual content of academic research is judged and corrected through peer review, but this is not true in CRM. While one might reasonably infer (as I do) that the overall quality of CRM research suffers from lack of peer review, nevertheless, the frequency and magnitude of good and bad CRM research has not been assessed objectively (but see Fowler 1986). One might argue that CRM contributes less to archaeology than does academic research, because CRM research is cited less frequently in the refereed literature. This may be true (although I am unaware of a citation analysis that confirms it), but lack of citations may be as much a function of elitism and poor dissemination of CRM literature, as an indication of performance or value.

I certainly do not disdain academic archaeology, or claim that CRM archeology is a paragon of scientific research. I suggest, however, that because each domain employs different (and largely untabulated) measures of performance, there is presently no useful way to compare CRM and grant supported research. Thus, CRM research will be best served by identifying specific problems and deficiencies. Inclusive, unfavorable comparison of CRM with academic research is just bar talk.

Small Projects

A frequent reproach for CRM is the conduct of small-scale projects involving inventories of well pads, seismic lines, borrow pits, and the like, for which an explicit research design usually is not required. From a purely archaeological point of view, this seems to be "a mindless search for locations . . . little more than a numbers game" (Fowler and Jennings 1982:113), mere "fact gathering" that is "viewed with a tinge of disdain in some quarters" (Bettinger and Raven 1986:87).

This criticism altogether misses the point: such projects are not undertaken to answer archaeological questions, but rather to identify and preserve potential sources of archaeological data. Archaeological methods are applied to nonarchaeological management problems. Discovery and recordation of sites allows the immediate needs of CRM to be accomplished by simple avoidance for all sorts of undertakings with sufficient flexibility for redesign, without having to assess scientific value in great detail. This management strategy may be short-sighted in terms of *archaeological research*, but developing a research design for every small inventory would be redundant. As it is, these incidental inventory data presently serve to check bias in sampling designs (Thomas 1988: 361-379), plot distributions of particular artifact types in time and space (Simms 1983; Elston and Budy 1990), or simply to gain a general understanding of the archaeological record of a particular area (Renfrew 1983:7; Elston 1982,

1986). Their more productive integration and interpretation into archaeological frameworks must await development of regional or management unit research designs, and the infrastructure needed to implement them. In the meantime, the locations of recorded sites are known; avoided, they remain for those who need to examine them later. Bettinger and Raven (1986:87) argued that because uninformed fact gathering is bad archaeology, it is vacuous to insist that: "any information saved is better than all information lost." The alternative is to sacrifice some unknown portion of the archaeological record.

Causes of Poor Performance

We all have heard of the CRM study from Hell in which the research design is boiler plate, the fieldwork botched, the analysis spurious, the interpretations cribbed, and the whole thing wretchedly reported three years late at a four hundred percent cost overrun. Fortunately, these monstrosities truly are rare. It is more common (and more destructive) for researchers to deliver the minimum called for.

Some critics blame poorly executed projects on constraints imposed by management needs, or on project location, but there is no *inherent* reason for these to diminish the quality of properly conducted CRM research (Keel 1979). It is true that CRM archaeology is project driven, rather than problem driven, that contract and agency archaeologists do not get to choose the areas in which they work, that they cannot focus on a single, narrowly defined problem, and so on. These drawbacks are balanced usually by opportunities to work with adequate budgets, to discover what different project areas offer in the way of problems, to see which existing methods and theories are applicable in a variety of contexts, and to innovate new approaches demanded by the exigencies of sampling, fieldwork, and analysis within the compressed time frames usual to CRM projects

(cf. Elston and Budy 1990). Indeed, the demands of archaeological research in CRM have advanced sampling and predictive modeling, field methods, analytical techniques, development of theory, and use of new technology (cf. Goodyear et al. 1978:168; Ahler and Christensen 1983; Kohler and Parker 1986; Rafferty 1990).

Inadequate funding and performance time (Hardesty et al. 1986), and the imposition of ill-conceived research designs by agencies or proponents, are sometimes blamed for poor performance, but no contractor is compelled to accept such conditions. Confronted with an opportunity to bid on an underfunded or badly planned project, the ethical obligation of the responding archaeologist is to suggest positive alternatives (cf. Fowler 1986), and if these cannot be successfully negotiated, to bow out. In most cases, CRM projects are funded as well or better than grant-supported research. Moreover, while timely execution of a project demands good management, technical expertise, adequate funding and, often, innovation, it does not require lowering performance standards, or skimping on data collection (*contra* Grayson 1988:121).

Most important to the overall quality of CRM archaeology are the attitudes and qualities of the individuals and institutions who perform it. A few archaeologists are truly incompetent, venal, or arrogant; many more are inexperienced, fearful of the bottom line, or worried about the Manager. When we undertake a project on behalf of an agency or proponent, such mundane concerns sometimes can make us lose sight of our fundamental responsibility as archaeologists: to do our best by the archaeology (Knudson 1986:404) and to be its advocate.

There are many temptations to do otherwise. Contractors can increase profits by bidding low to get the contract ("low-balling") and then do the least amount of work possible. It is sometimes easier for agency staff to allow man-

agement to be hostile to CRM programs than to demonstrate the importance of CRM in the overall mission of the agency and of the efficacy of long-term management goals. Unchecked, these behaviors ultimately sabotage the purpose of CRM, forcing out the good in both contracting and agency programs. In contrast, doing the best archaeology we can serves the resource while at the same time engenders the credibility required to serve our proponents and agencies effectively.

Cultural resource managers have sufficient means to ensure that contractors and other archaeologists meet performance standards and stipulations, including withdrawal of permits, civil action, and criminal prosecution. Failure to reject shoddy reports or to discipline sleazy contractors are signals that agency staffs have not done their jobs. Sometimes the recommendations of agency archaeologists are ignored by their managers. Sometimes this suggests that politics are at work; managers are subject to political pressure that trickles down to staff (Schneider 1992). Obviously, the archaeological community must resist special interest political and economic pressure on CRM by exerting its own political pressure. But often, the failure of managers to maintain quality control is simply a symptom of overload.

OVERLOADING THE CRM SYSTEM

The last decade has seen decreasing budgets and staffs among state and Federal agencies, while demands for CRM services have increased drastically. For instance, the mining boom in northern Nevada and the population growth in the southern part of the state have strained the ability of BLM archaeologists to conduct even reactive management (Myhrer 1990:29-30).

Increased workloads result in lack of time for agency archaeologists to monitor fieldwork or to review final reports (Hanes 1986). As a consequence, the review process falls increasingly on the shoulders of the State Historic Preservation Office (SHPO). Since SHPO offices in the western states receive hundreds of reports each year, close attention to them all is impossible. In order to cope with these demands, both SHPOs and federal agencies have come to rely on detailed performance guidelines for fieldwork and reporting that lets all parties know what is expected. Guidelines are most specific for small projects conducted without detailed research designs. Often, small project reports are considered adequate when they arrive with a stipulation that fieldwork was performed in the prescribed manner and all the blanks are filled in the site forms.

Large projects usually are given more latitude for creativity and are subjected to greater scrutiny; research designs, data recovery plans, and final reports are reviewed, and the process can work well (Aikens 1986). Nevertheless, reviewing tends to be done by the same small group of agency archaeologists, with the result that CRM research generally is not subjected to the sort of broad-based critical examination received by NSF proposals or refereed publications. Hanes (1986:220) believed that lack of peer review for CRM work in the Great Basin is a function of professional organizations too small to take it on. But no matter what their size, professional organizations ordinarily do not provide peer review except of papers submitted to, and books reviewed in, professional journals. Because it is a means of quality control, peer review is more properly the responsibility of SHPOs and federal agencies.

In fact, there *is* a peer review mechanism for CRM that is provided by the Department of the Interior, Departmental Consulting Archaeologist (Keel 1989). While this program demonstrates the *possibility* of peer review for CRM, it is not a model for research quality control in its present form. Currently and historically, it is implemented only upon request by a federal agency when some program or project has attracted public attention or needs conflict

resolution. At one review per year, it is too infrequent, and because everyone is paid to participate, too expensive (each review averages about $10,000). Moreover, its goal is to evaluate the *conduct* of federal projects (Bennie Keel, personal communication 1990), and it devotes most attention to management rather than to scientific domains. Nevertheless, a leaner, meaner, obligatory version, more frequently applied, would serve nicely for agency CRM program review. It is needed to help keep managers on the right track and their archaeological staff up to speed.

The addition of smaller scale peer review of CRM research designs and project reports would help relieve agency staff of some of the review burden, apply a broader perspective and a more critical point of view to research, and encourage both contractors and agency archaeologists to extend themselves. Ideally, these would be done *gratis* as a professional contribution just like those done for NSF or *American Antiquity*. Peer review also would afford more participation in the larger archaeological community for those of us who, like many agency staff in the Great Basin, are stationed in small rural communities far from university libraries and populations of other archaeologists, where it is difficult to maintain networks of colleagues and to stay as current as one needs to be.

Peer review for CRM does entail potential conflict of interest between archaeological peers who compete for contract work, but then, so does academic peer review by colleagues competing for grant money. This can be mitigated by use of anonymous reviewers and reviewers from outside the region, allowing those reviewed to avoid review by peers whom they feel have an ax to grind and allowing a review board to reach the final conclusions about the quality of plans and reports. Another potential problem is fitting peer review into the accelerated schedules of CRM projects, but this is merely a procedural issue.

CRM LITERATURE

There is resounding, unanimous agreement that the products of CRM archaeology (reports and voluminous data files) are poorly circulated and arduous to obtain (Janetski 1986). It is difficult to understand why, in the present age of instant communication and personal computing, this situation should continue another moment. Perhaps there are so many solutions (put all existing CRM literature on CD ROM and circulate; submit all reports on floppy disk; put a title and abstract data base online, etc.), that the archaeological community, like the proverbial ass that starved to death standing between two bales of hay, will fail to make up its collective mind until it is too late. In the meantime, no researcher is absolved from the obligation to seek out and review CRM data and literature pertaining to his or her research area. As inconvenient as it can be, obtaining these materials is possible, and certainly less expensive than repeating the work. No one can be considered a scholar who reads or cites only refereed publications, ignoring the enormous body of information residing in the CRM literature.

Most archaeologists agree that there is a need for greater public participation in archaeology, and that such participation should include educational programs and materials; in fact, the National Park Service maintains a computerized data base and provides an annual listing of such programs (cf. Knoll 1990). Nevertheless, the frequent calls to set aside some proportion of funds from each CRM contract or project budgets are perhaps more politically correct than practical, since they seldom acknowledge the problems entailed in such endeavor. Calls for mass media archaeology are made often in the complete absence of market research (McManamon 1990) needed to identify the public (or publics) to be served and what it wants to know about CRM archaeology.

Nor is there much attention to what sorts of media should be employed—pamphlets, picture books, video tapes, comic books, exhibits, computer games, posters and supplemental text for school programs are just a few possibilities.

The true costs of production (which must vary widely among different types of media) seldom are quantified, although ten percent of project budgets frequently is proposed. Whether such funds will be deducted from those available for scientific studies, or added on from some other budget, will have to be decided by each agency. Of course, we will want to know whether this requirement will apply equally to agency projects, projects supported by grants, and those financed by land users, and archaeologists may wish to discuss whether all scientists (biologists, geologists, soil scientists, etc.) working on public lands with government funding will be involved. Finally, who will create these works? To write for a mass audience, to tell a story simply and illustrate it in a way lay people find attractive and clear is an art most archaeologists do not posses; even fewer of us are cinematographers.

Hatoff (this issue) regards it as ironic that, in contrast to publicly supported research, the projects supported by the privately funded National Geographic Society gain the most public attention. Ironic, perhaps, but no accident, because the National Geographic Society is in the *business* of mass communication; their projects are chosen with that in mind and set up for it from the outset, and their media are supported by advertising and subscriptions. I agree that it is vital to do more in this direction, but we need a coherent policy based on facts, not wishes.

ARCHAEOLOGICAL EDUCATION

From my perspective as an employer of archaeologists, there is a tendency for postgraduate anthropology programs to skimp on course work emphasizing practice (field and laboratory methods), and to completely ignore the need for managerial skills or knowledge of the system in which archaeology is conducted. These deficiencies often are justified by assuming students eventually will "pick it up if they need it." This was perhaps a viable strategy when virtually all archaeologists taught in universities, but large numbers of archaeologists now are employed in nonacademic jobs. Consequently, a person with a fresh M.A. or Ph.D. in anthropology may go directly to an agency or contracting firm unprepared for work in full-time research or management. Archaeologists going to academic jobs may be ill-equipped to deal with bureaucracies, ethics, project management, and technical aspects of archaeological research.

Kevin Rafferty (1990) recently has outlined what graduate archaeologists need to know, to which I add a few items from my own experience. Let me say that I do not expect journeyman performance from someone newly hatched. In my shop, inexperienced people are viewed as apprentices, but it is beneficial for us both if they arrive with a general conception of how the game is played and knowledge of the equipment that is used. Conceiving the game entails knowledge of the CRM system and the Section 106 review process with which one interacts in various ways all of one's professional life: the institutions and their obligations to cultural resources, the enabling laws, and the regulations as they are implemented by at least the major federal agencies (National Park Service, Forest Service, Bureau of Land Management [BLM], Bureau of Indian Affairs [BIA], Bureau of Reclamation, Corps of Engineers, U.S. Fish and Wildlife Service). I do not, however, advocate a requirement to take formal courses in "The Anthropology of Modern Institutions" (McLeod 1990) or "Interface Management" (Knudson 1991). Departmental seminars and colloquia are perfectly adequate vehicles for descriptions of the regulations, politics, and sociology of the Federal bureaucracy, and strategies for dealing

with indifferent or hostile managers. Students will be well served by exposure in such venues to agency and contract archaeologists who have created successful programs and faced ethical conflicts.

Archaeologists with advanced degrees, especially those working in contract firms, are expected to assume leadership and management roles. To the extent new archaeologists have any management experience, it usually has involved supervising field crews, but different skills and knowledge are called for in organization and direction of laboratory work and writing, proposal preparation, and interaction with bureaucracies, clients, and proponents. At the least, students can be guided to the Business Administration library and texts concerned with work group dynamics, conflict resolution, and project management (Rafferty 1990). It is important for new archaeologists to understand the critical nature of deadlines in agency, and especially, contract archaeology. After funding, performance schedules constitute the single most significant constraint on quality of performance and economic viability.

Descriptive and expository writing is essential for all archaeologists, yet few just out of school write well; most have never edited another's manuscript. Graduate archaeologists must understand the purpose of a research design and understand how a good research design is constructed. This means they must also know something of contemporary theoretical and methodological approaches in archaeology. I often find inadequate technical training among applicants for staff level jobs, particularly with regard to writing and editing, computer skills, quantitative analysis, use of technologically advanced equipment, and in geomorphology, soils and stratigraphy. Dirt is the scaffolding of the archaeological record. A complete archaeologist knows the genesis and transformations of soil in landscapes, and can describe them.

Academic colleagues often tell me that there are so many other demands on student time made by core Anthropology curricula, that courses teaching the essential crafts of archaeology are difficult to introduce into existing graduate anthropology programs. But this is exactly the point. As archaeology becomes increasingly professionalized, higher proportions of postgraduates are following nonacademic careers where the broadest possible anthropological education has less value than specific skills needed to practice contemporary archaeology. If core curricula are not adjusted to acknowledge this reality, anthropology programs cannot serve the needs of graduates, the public, or the discipline.

ARCHAEOLOGICAL ELITISM

Academic elitism is a form of internal stratification common in most professions, serving to protect the status and power of an elite group in the competition for jurisdiction and control of work (Abbot 1988:59-85). It is interesting to consider the reluctance to change archaeological curricula in light of the common elitist strategy described by Abbot (1988:68), wherein a theoretical education is demanded that is in some degree irrelevant to practice, at the same time the knowledge and practice of the subordinate group is criticized (the "tinge of disdain" mentioned previously). The elite persists in contrasting CRM and academic archaeology unfavorably, despite the best efforts of many archaeologists to emphasize how the two are complementary (Dincauze 1988; Rafferty 1990). This "pernicious elitism" (Brose 1985:377) drives a wedge between academic and CRM archaeologists that prevents effective communication and action on problems of mutual interest, and is disheartening to nonacademic archaeologists who buy into it.

Reasonable people recognize good archaeology, whomever does it (Fowler and Jennings 1982:176; Brose 1985:372). But separating the

good from the other is made difficult when academics, those in perhaps the best position to provide constructive criticism and leadership, refuse to read CRM literature, because, *a priori*, they know it is atheoretical, unreliable, undigested, and poorly written. Inclusive pejorative or condescending references to the use of CRM data may sometimes slip into the speech or writing of even the best intentioned (cf. Thomas 1988:365). Invidious comparisons, wherein the thoughtful care and goodness of academic archaeology is contrasted with the blindly empirical, hasty badness of CRM archeology (Grayson 1988:121) may serve to make the critic feel superior, but contribute nothing toward improvement of the quality of CRM research. Moreover, they insult nonacademic archaeologists doing good work. Particularly destructive is inculcation of the idea that anything but an academic career is failure for postgraduates. This abuse virtually assures the demoralization of those taking nonacademic jobs and seriously interferes with recruitment of top graduates into CRM archaeology.

Elitism is difficult to overcome because it is covert, perhaps even unconscious, yet perfectly justified to the elitist. Perhaps the best counter is to point it out, politely; I am convinced that it is a mistake to ignore it.

CONCLUSIONS

CRM is a rubric for the body of laws, regulations, and bureaucratic structure that regulates, and to a great extent supports, the practice of archaeology in the United States at the present time. Thus, CRM is not just a context for those who perform contract archaeology, or for those who toil in federal agencies. CRM is a context in which *every* archeologist who holds a federal, state, or local permit works. The sooner and more widely this is recognized, the sooner we will be able to shape CRM into a better environment for archaeological research. The distinct institutional bases

for CRM and academic research always will insure differences that can be a source of strength for the discipline. The myth that CRM archaeological research is inherently inferior to academic research must be discarded; academic archaeologists must be encouraged to assume the active, positively critical role that they can perform, and CRM archaeologists must decline to do anything but their best.

I am convinced that we cannot accomplish these goals and elevate the overall quality of CRM research without peer review. No matter how well written, guidelines and regulations alone merely specify minimum standards, all too often ensuring, in the bureaucratic context of CRM, that only minimum standards are met. Worse yet, guidelines tend to become reified, forcing the protean business of archaeological research into a narrow, static mold. Peer review assumes the community of archaeologists is best qualified to judge the significance and quality of archaeological research, while, ideally, it assures that evolution of method and theory will be attended as it occurs in the discipline. Of course, we all know that peer review is not a panacea. But here is the challenge: can we do away with rules specifying research design *minimums*, adopting instead, a system in which excellence is expected, poor performance is weeded out, and a positive critical atmosphere established?

Until routine peer review of CRM research is instituted, every archaeologist should assume responsibility for commenting on reports, especially on those that are substandard or deficient in some way. Feedback lets authors and agencies know how they can do better. Similarly, archaeologists should comment on the performance of agency programs, particularly those unduly influenced by political pressure. Thoughtful letters evaluating programs can be usefully addressed to all levels of management, ranging from the agency archaeologist to the District Manager or Forest Supervisor, to

Cabinet secretaries. Letters to Senators and Congressmen can produce results very quickly.

Finally, let us all expect the best of ourselves and each other. A career in mediocrity is a personal choice; nothing in any system compels it. It is possible to do first class archaeology in CRM, but *you and I* have to make it happen.

ACKNOWLEDGEMENTS

REFERENCES

Abbot, Andrew
  1988 The System of Professions. Chicago: University of Chicago Press.

Ahler, Stanley A., and Robert C. Christensen
  1983 A Pilot Study of Knife River Flint Procurement and Reduction at Site 32 DU508, a Quarry and Workshop Location in Dunn County, North Dakota. Department of Anthropology and Archaeology, University of North Dakota. Report to the Bureau of Land Management.

Aikens, C. Melvin
  1986 Findings of the SAA Regional Conference on Great Basin CRM Archaeology. In: Current Status of CRM Archaeology in the Great Basin, C. Melvin Aikens, ed., pp. 245-250. Reno: Bureau of Land Management Cultural Resources Series No. 9.

Bettinger, Robert L., and Christopher Raven
  1986 The Great Basin in California: The Inyo-Mono and Surprise Valley-Honey Lake Subregions. In: Current Status of CRM Archaeology in the Great Basin, C. Melvin Aikens, ed., pp. 67-96. Reno: Bureau of Land Management Cultural Resources Series No. 9.

Brose, David S.
  1985 Good Enough for Government Work? A Study in "Grey Archaeology." American Anthropologist 87(2):370-376.

Dincauze, Dina
  1988 Complementarity between Public Archaeology and Academic Archaeology. Bulletin of the Society for American Archaeology 6(4):1-2.

Elston, Robert G.
  1982 Good Times, Hard Times: Prehistoric Culture Change in the Western Great Basin. In: Man and Environment in the Great Basin, David B. Madsen and James F. O'Connell, eds., pp. 186-206. Society for American Archaeology Papers No. 2.

  1986 Prehistory of the Western Area. In: Handbook of North American Indians, Vol. 11, Great Basin, Warren L. d'Azevedo, ed., pp. 135-148. Washington: Smithsonian Institution.

Elston, Robert G., and Elizabeth E. Budy
  1990 Research Perspectives. In: The Archaeology of James Creek Shelter, Robert G. Elston and Elizabeth E. Budy, eds., pp. 9-24. University of Utah Anthropological Papers No. 115.

Fowler, Don D.
  1986 Cultural Resource Management in the Great Basin: What Have We Learned? In: Essays in Honor of Jesse D. Jennings, C. J. Condie and Don D. Fowler, eds., pp. 171-178. University of Utah Anthropological Papers No. 110.

Fowler, Don D., and Jesse D. Jennings
  1982 Great Basin Archaeology: A Historical Overview. In: Man and Environment in the Great Basin, David B. Madsen and James F. O'Connell, eds., pp. 105-120. Society for American Archaeology Papers No. 2.

Goodyear, Albert C., L. Mark Raab, and Timothy C. Klinger
  1978 The Status of Archaeological Research Design in Cultural Resource Management. American Antiquity 43(2):159-173.

Grayson, Donald K.
  1988 Danger Cave, Last Supper Cave, and Hanging Rock Shelter: The Faunas. An-

thropological Papers of the American Museum of Natural History 66(1).

Hanes, Richard C.
1986 Quality Control. In: Current Status of CRM Archaeology in the Great Basin, C. Melvin Aikens, ed., pp. 219-232. Reno: Bureau of Land Management Cultural Resources Series No. 9.

Hardesty, Donald L.
1986 Research Design. In: Current Status of CRM Archaeology in the Great Basin, C. Melvin Aikens, ed., pp. 193-201. Reno: Bureau of Land Management Cultural Resources Series No. 9.

Hardesty, Donald L., Thomas J. Green, and La Mar W. Lindsay
1986 Contract Archaeology. In: Handbook of North American Indians, Vol. 11, Great Basin, W. L. d'Azevedo, ed., pp. 256-261. Washington: Smithsonian Institution.

Janetski, Joel C.
1986 Dissemination of Information and Public Awareness. In: Current Status of CRM Archaeology in the Great Basin, C. Melvin Aikens, ed., pp. 233-241. Reno: Bureau of Land Management Cultural Resources Series No. 9.

Keel, Bennie C.
1979 A View From Inside. American Antiquity 44(1):164-170.

1989 Department of the Interior Departmental Consulting Archaeologist. Interagency Activities: The Peer Review Program. Federal Archeology Report 2(1):1-9.

Knoll, Patricia A. (ed.)
1990 Listing of Education in Archaeological Programs: The LEAP Clearinghouse. Washington: U.S. Department of the Interior, National Park Service.

Kohler, Timothy A., and Sandra C. Parker
1986 Predictive Models for Archaeological Resource Location. Advances in Archeological Method and Theory, Vol. 9, Michael B. Schiffer, ed., pp. 397-452. New York: Academic Press.

Knudson, Ruthann
1986 Contemporary Cultural Resource Management. In: American Archaeology Past and Future, David J. Meltzer, Don D. Fowler and Jeremy A. Sabloff, eds., pp.

395-413. Washington: Smithsonian Institution Press.

1991 Interface Management in Environmental Management. Committee of Anthropologists in Environmental Planning News 2(1):1-3.

Lipe, William D.
1978 Contracts, Bureaucrats and Research: Some Emerging Problems of Conservation Archaeology. In: Archaeological Essays in Honor of Irving B. Rouse, Robert C. Dunnell and Edwin S. Hall, eds., pp. 121-147. New York: Mouton Publishers.

McGimsey, Charles R., III, and Hester A. Davis
1977 The Management of Archaeological Resources: The Airlie House Report. Washington: Society for American Archaeology.

McLeod, J. R.
1990 The Anthropology of Modern Institutions. Anthropology Newsletter 31(8):32.

McManamon, Francis P.
1990 The Many Publics for Archaeological Publication. National Park Service Cultural Resource Management Bulletin Vol. 13, No. 4, 1990 as reprinted in Society of Professional Archaeologists Newsletter 15(12):2-3.

Myhrer, Keith
1990 A Review of Fifteen Years of CRM on BLM Land in Southern Nevada. Bureau of Land Management, Stateline Resource Area, Las Vegas District, Nevada, Cultural Resources Report 5-1990.

Rafferty, Kevin
1990 CRM Archaeology and the Southern Great Basin. Nevada Archaeologist 8:11-17.

Renfrew, A. Colin
1983 Divided We Stand: Aspects of Archaeology and Information. American Antiquity 48(1):3-16.

Schiffer, Michael B., and John H. House
1977 Cultural Resource Management and Archaeological Research: The Cache Project. Current Anthropology 18(1):43-68.

Schneider, Paul
1992 When a Whistle Blows in the Forest . . . Audubon 94(1):42-49.

Simms, Steven R.
  1983   The Effects of Grinding Stone Reuse on
          the Archaeological Record of the Eastern
          Great Basin. Journal of California and
          Great Basin Anthropology 5(1):98-102.

Thomas, David H.
  1988   The Archaeology of Monitor Valley 3:
          Survey and Additional Excavations.
          Anthropological Papers of the American
          Museum of Natural History 66(2).