Southwestern Archaeology: Past, Present, and Future

CHRISTIAN E. DOWNUM

When the U.S. ended its war with Mexico, it gained a vast new western territory that included most of the region we now define as the Southwest. Neither the American public at large nor the U.S. government had a precise understanding of what they had rather suddenly acquired. What were the natural treasures and economic potential of this harsh and remote environment? How could it be navigated? Who were its native peoples, what was their history, and how did they live?

It was in this context that the scientific investigation of the Southwest and its prehistory began. The discipline of Southwestern archaeology, thus, has a long and fascinating history, in many ways paralleling but in many ways distinct from larger trends in American archaeology. The many changes in goals, techniques, methods, and institutions that have shaped the discipline through the years have led us to an ever more sophisticated set of research questions, many of which form the basis for papers included in this special issue.

The Beginning: Explorations Pre-1900

In a technical sense, Southwestern archaeology might be said to begin in the late 1840s and early 1850s, when a series of U.S. military expeditions discovered and recorded a number of "ancient monuments," including pueblos, cliff dwellings, and adobe structures. The first serious attempts at deciphering the Southwest's prehistory, however, date to the mid-1890s, when the Smithsonian Institution's Bureau of American Ethnology (BAE) organized a series of expeditions to locate and explore the region's prehistoric ruins.

These investigations were concerned primarily with tracing the connections between contemporary Native American groups and the abandoned dwellings that dotted the Southwestern landscape. Partly motivated by scientific interest, but also with an eye toward using such historic information to guide the U.S. government's "Indian Policy," BAE researchers employed a "direct-historical" approach to investigation. In this approach, a principal source of information for establishing the cultural affinities and histories of prehistoric ruins was contemporary Native American oral tradition. Thus, although no tab had any sort of formal training, BAE researchers often interviewed both ethnographers and archaeologists.

A major shortcoming of the BAE archaeological program was a general absence of reliable information that would allow sites to be placed in time. The Bureau's archaeologists were either unaware of, or unwilling to use, techniques of stratigraphic excavation and seriation that had provided relative chronologies in other regions of the world. Furthermore, many of the BAE interpretations depended on the particular ethnographic experiences of the individual researchers. John Wesley Powell, for example, had worked among the Havasupai and tended to interpret prehistoric ruins in northern Arizona as ancestral Havasupai homes. Jesse Walter Fewkes, having worked among the Hopi, saw the same ruins as pueblos occupied during ancient migrations of the Hopi. Much of the variability in prehistoric ceramics was similarly interpreted. Although there was some recognition that different styles of pottery might have preceded or followed one another in time, most variability was attributed to differences in clan or tribal affiliation, and not time (Fig. 8 and cover).

The late 19th and early 20th centuries also saw a number of reconnaissance surveys conducted by free-lance anthropological adventurers such as A. H. Pinochet, Alphonse Bandelier, and Carl Lumholtz. These individuals, often working alone and with only minimal institutional support, were keen chroniclers of the Southwest's landscapes, peoples, and ruins (Fig. 2). Sadly, at the same time that these explorers were systematically documenting the appearance of prehistoric sites, others were destroying them for personal gain. Damage often came at the hands of commercial pot hunters seeking artifacts for sale in retail shops or even by mail order; but many ruins were also systematically looted by well-organized, large-scale operations.

Figure 1. Ruins of Cliff Palace, Mesa Verde, Colorado, as it appeared in the early 1890s. This cliff dwelling and many other spectacular prehistoric sites, once threatened with destruction by pot hunters, are now preserved as national parks and monuments.

Photo by Juan de Jolla, courtesy of Museum of New Mexico

Figure 2. An 1883 watercolor of the Hohokam platform mound site of Pueblo Grande, painted by pioneer Southwestern ethnographer and archaeological Adolph Bandelier. At the time this painting was made, Bandelier was conducting a reconnaissance of the Southwestern ruins for the Archaeological Institute of America.

Modern maps of Pueblo Grande, today preserved as a City Park in Phoenix, Arizona, show that Bandelier's rendition was exceedingly accurate and detailed. (Similar platform mounds are discussed in Rice and Beberman's article, this issue.)

University of Arizona Library, Special Collections

Figure 3. This 1994 advertisement for the sale of prehistoric artifacts illustrates the problem of commercial looting in the Southwest. The 1996 Antiquities Act curtailed these activities to some extent on federal lands, but looting on both public and private property continues to be a problem.

From Records of the Past (new defunct magazine)
sprung up, dedicated to excavating, preserving, and promoting local ruins.

In spite of these developments, there was still no reliable chronology for Southwestern ruins, and most field studies continued to be oriented toward collecting museum-quality artifacts rather than gathering information about prehistoric life. Nonetheless, the sheer volume of survives excavations was revealing the general outlines of spatial variability in Southwestern ruins and artifact styles (Fig. 4). Consequently, the concept of prehistoric culture areas began to emerge. Time relationships were also being discerned, albeit dimly. It was known, for example, that pithouses had generally preceded pit-houses as architectural forms, and that a "Basketmaker" culture was earlier than a later pottery-producing "Pueblo" culture.

The gradual accumulation of such knowledge meant that some scholars were increasingly discontented with the rather limited goals of the direct-historical approach associated with the BAE. A growing appetite for solid chronologies of cultural evolution was accompanied by the perception that the prehistory of the Southwest might be longer and more complex than previously assumed. There soon arose a series of methodological and theoretical advances that would launch Southwestern archaeology on a new and highly productive course.

Twentieth Century Changes

Around the turn of the century, several developments imposed order on this chaotic situation. On the legal front, the Antiquities Act of 1906 granted the U.S. President power to preserve archaeological sites as national monuments, and established criminal penalties for unauthorized excavations on federal land (Fig. 1). Although the law was difficult to enforce across the vast expanse of federal lands in the Southwest, it did put an end to the plague of blantly commercial looting.

Changes were also felt in the scientific arena. An important factor was the establishment of local institutions taking an active role in field research, education, and publication. Among these were state universities and museums (e.g., the Universities of Arizona, Utah, and New Mexico), and private research foundations, such as the School of American Research, founded in 1908. Amateur antiquarian societies also embarked on their first project in Southwestern archaeology, a 100,000-reconnaissance survey of the Mesa Verde area sponsored by the Archaeological Institute of America.
of numerous local subtribulations centered on major drainages. Second, the first Pecos Conference was held at the Forked Lightning Ruin near Pecos Pueblo in 1927. This meeting of prominent Southwestern archaeologists was convened by Kidder for the purpose of systematizing the classification of cultural periods, and developing a standardized nomenclature for pottery types. The rules of nomenclature that resulted imposed consistency on what had been a proliferation of confusing cultural labels and pottery names, and gave an effective framework for communicating descriptive information.

The Development of Tree-Ring Dating

Meanwhile, a major effort was underway to develop an absolute chronology of prehistoric events from the ring patterns encoded in prehistoric building timbers of juniper, pine, and fir. Conceived in 1911 by astronomer A.E. Douglass (Fig. 6), tree-ring dating is based on the way variation in annual growth ring thickness in many tree species is tied to variation in local climate conditions. Master sequences of growth rings are assembled by matching the ring patterns of trees that overlap in age. By mid-1929, Douglass and his archaeological colleagues had pieced together lengthy historic and prehistoric series of tree-ring widths, the former from living trees and historic structures, the latter from prehistoric pithouses and pueblos. On June 22, 1929, at the Whipple Reino in Showlow, Arizona, the historic and prehistoric tree-ring chronologies were linked, and the precise calendrical dates for many of the Southwest’s most prominent ruins were instantly revealed.

If the creation of probe-based chronologies was the first chronological revolution in the Southwest, the perfection of tree-ring dating was surely the second. Southwestern archaeologists now had a degree of chronological control—down to the precise year of pueblo or pithouse construction—that was unprecedented in the study of ancient prehistoric societies anywhere in the world. Better yet, the tree-ring dates associated with a particular pottery type could be extended to sites where that pottery was found, even in the desert regions that lacked datable tree species. Now, for the first time, it was possible to calibrate absolute rates of cultural change, and assess the contemporaneity of such changes across broad areas.

The Classification of Prehistoric Cultures

With standardized systems of cultural classification and pottery nomenclature, and with the refinement of tree-ring dating, Southwestern archaeologists embarked on an energetic program of exploration, excavation, and conceptual development. In fact, the years from the 1920s until World War II might well be considered among the most critical of the discipline. In little more than a decade, there came a rush of cultural classifications, ceramic taxonomies, and interpretive frameworks that still exert a profound influence on Southwestern archaeology.

Critical to the success of the pre-World War II Southwestern scholarship was the foundation of privately funded archaeological research institutions, which would set the tone and pace of research. From 1927 to 1937, four such entities were born: the Amerind Foundation, in Draggon, Arizona; the Museum of Northern Arizona, in Flagstaff (Fig. 10); the Gila Pueblo Archaeological Foundation, in Globe, Arizona (Fig. 7); and the Laboratories of Anthropology in Santa Fe. Each was a powerful local force in Southwestern archaeology, dispatching field expeditions to conduct surveys and excavations, systematizing variability in architecture and artifacts, and publishing reports and monographs at an astounding rate.

By the late 1930s, each had revealed the basic material attributes and time relationships of prehistoric culture units across the Southwest. The terms “Anasazi,” “Hohokam,” “ Mogollon,” and “Patayan” were coined to describe the basic “roots” of prehistoric cultures, from which sprang a dazzling array of regional cultural variants. The classification system also embraced cultural fragments of somewhat uncertain origin such as Sinagua, Mimbres, and Colonia. Gone was the old, monolithic Basketmaker-Pueblo model of Southwestern prehistory, and in its place was a more complicated scheme of multiple independent cultural origins and dynamic intercultural transactions in the form of migration, diffusion, and trade.

This was also a time of intensive studies of prehistoric ceramics. Using the taxonomic frameworks formalized by the first Pecos Conference, institutions across the Southwest collected and analyzed literally millions of potsherds, grouping them into pottery types believed to have temporal and cultural significance. The outcome was a series of pottery guides or handbooks, offering basic information on the distribution, styles of decoration, and composition of prehistoric ceramics. Such issues were central to cultural classification, since it was thought that ceramic variability provided important clues to the movements and interactions of prehistoric people. Pottery studies were tremendously aided by compositional assessments, chemical analyses, and manufacturing experiments conducted by pioneering ceramic scholars such as Anna O. Shepard and Harold S. Colton.

Toward the end of the 1930s, the emphasis on cultural classification was coming under fire. In particular, cultural anthropologists such as Julian

Figure 7. Harold and Winifred Gladwin (fifth and sixth from left) and a group of unidentified visitors at the headquarters of the Gila Pueblo Archaeological Foundation, Globe, Arizona. Founded by the Gladwins in 1928, the Gila Pueblo was an institution devoted to the full-time study of Southwestern prehistory. Of the four major cultural "roots" in the Southwest recognized during the 1930s—Anasazi, Hohokam, Mogollon, and Patayan—two were formally defined by the Foundation's young staff archaeologist, Emil Haury. Of special interest is the fact that this foundation was housed in the reconstructed ruins of a prehistoric pueblo—hence the name Gila Pueblo!

Courtesy of Arizona State Museum, University of Arizona, neg. 174066.
Steward and Clyde Kluckhohn were thwarted by what appeared an excessive concern in American archaeology with artifact classification and a neglect of anthropological issues such as social organization and causes and processes of culture change. However, whatever might have come from such musings would have to wait. World War II effectively put an end to field research everywhere, and debates about the proper goals of Southwestern archaeology were forced to await the war’s conclusion.

Post-War Archaeology

After the war, Southwestern archaeology seems to have been split between two courses of action. Much of Southwestern archaeology from the late 1940s until well into the 1960s reflects this schism. The majority of activity was focused on culture-historical studies in the vein of pre-war investigations. Studies in ceramic taxonomy and cultural classification were expanded, more often than not in the peripheral areas of the Southwest that had not been covered in pre-war investigations (Fig. 9). Most seemed satisfied with these research directions.

Still dissatisfaction with this program was also evident, with roots probably stretching back to the critiques that had appeared in the late 1930s and early 1940s. One of the era’s most expressive statements of this dissonance was a 1950 Chicago Field Museum publication by John Rinaldo and Paul S. Martin entitled Sites of the Reserve Phase. The final chapter of this report was devoted to exploring such issues as Mogollon social organization, postmortal descent rules, and other anthropological topics previously considered inaccessible through use of archaeologically dated data. Concerns with prehistoric social organization could also be detected in settlement pattern studies, which began to appear in the literature after the mid-1950s.

The New Archaeology

The 1960s and much of the 1970s marked a contentious period of adjustment in the techniques, methods, and goals of archaeology. The New Archaeology movement that arose from these discussions brought real and lasting changes to Southwestern archaeology. First and perhaps foremost was the replacement of descriptive, qualitative assessments of cultural configuration and change with quantitative, statistically based inferences. Closely related to this were changes in sampling strategies. The museum-based research program had relied on one or a few “typical” sites (usually the larger ones) for intensive study, on the assumption that these could provide the basis for generalizations about an entire culture or phase of the culture. The New Archaeology demanded that a statistically valid sample of sites be drawn, so that variability between sites could be statistically assessed rather than assumed. This required that more attention be paid to the entire range of site sizes and functions, not just the large, spectacular, or well-preserved settlements. Finally, by viewing cultures as adaptive systems, composed of functionally dependent, interacting subsystems, the New Archaeology insisted that rigorous attention be paid to previously ignored or poorly understood matters such as prehistoric social organization, diet, demography, and health (Fig. 11).

Though the early years of change were relatively peaceful, later debates were marred by polemic, leading to polarizations of culture-historians and New Archaeologists, and obscuring the true relationship—a sequential and dependent one—between the study of culture history and culture process. Also, the New Archaeology’s relentless insistence on adaptation and an explicitly materialist bias ignored or downplayed the potential importance of ideology and unique historical events. Native American ceremonial and belief systems were therefore often removed from the “scientific” equation of cultural change, leading to an arbitrary and—from many Native Americans’ point of view—perplexing and insulting breakage of the links between contemporary and prehistoric cultures. Finally, the rather limited geographical scale over which prehistoric adaptive systems were studied often diminished the scope of investigations, limiting the possibility for holistic perspectives that might allow for interregional and perhaps extra-regional connections and influences.

Cultural Resource Management

Beginning in the middle 1960s, new federal legislation brought important changes to Southwestern archaeology by profoundly altering the scale and scope of field investigations, and re-arranging institutional frameworks. These laws, collectively referred to as Cultural Resource Management (CRM) legislation, laid the legal and institutional foundations for a massive influx of federal money for the excavation, study, and preservation of archaeological sites in the path of development (Fig. 12). Given the Southwest’s tremendous growth in the past decade, there have
account for the abandonment of villages, settlement systems, and sometimes even entire regions of the Southwest. Such questions, some as old as the discipline itself, indicate that although Southwestern archaeology may have solved many of its most basic "what, where, and when" questions, many of the most sophisticated "how" and "why" questions remain unresolved.

Fortunately, recent trends portend significant progress toward the solution of such questions. First, there is the massive scale of many recent and ongoing field studies, most in the context of CRM research. These investigations promise to bring the temporal and spatial patterns of Southwestern prehistory into focus. As clearly the picture of regional interaction as never before. Second, sophisticated new analytical techniques and methods are providing an unprecedented understanding of issues such as environmental change, agricultural and subsistence practices, ceramic manufacture and exchange, village growth and organization, diet and health. A third major development is an intensification of interest in the archaeology of northern Mexico, historically one of the most frustratingly underinvestigated areas of the greater Southwest. New field projects and discoveries there may give important clues regarding the nature of the interaction between the Southwest and the northern frontier of Mesoamerica, and thus help answer the old question of internal versus external processes of cultural development in the Southwest.

Recently, Native Americans in the Southwest have recently begun to exert significant influence on not only the conduct, but also the content of Southwestern archaeology. Now federal and state laws mandate important changes in the treatment of prehistoric human remains, and Native American tribes and nations in the Southwest are taking an increasingly active role in field archaeology and archaeological interpretation. The lasting consequences of these developments are unknown, but it seems likely that Native American viewpoints will play an ever more important role in shaping excavation and laboratory procedures, as well as our interpretations of Southwestern prehistory.

Conclusion

In reviewing the long and often contentious history of Southwestern archaeology, it is sometimes easy to overlook the legacy of archaeological accomplishments that have occurred over the past century. The Southwest is one of the most well-documented archaeological regions in the world. If Southwestern archaeology today has one major problem, it is that our empirical understanding of the prehistoric past is so refined that attempts at explaining this past are constrained by a daunting body of facts. This is not a particularly commendable situation, however, and if the papers in this volume are any indication, there are plenty of Southwestern archaeologists ready to accept the challenge.