

Ruins Preservation: More than Stuffing Mud

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Ruins preservation efforts in the American Southwest have mainly focused on the treatment of historic fabric (i.e., walls). The practice of preservation was left to the masons, with some direction from archeologists. Early on, archeologists thought they were masons, doing much of the work themselves. Sidewalk cement and creative reconstruction best describe their early efforts at stabilization. In the last 10 years, National Park Service (NPS) specialists have embarked on an ambitious program of ruins preservation under the title “Vanishing Treasures.” Although this program has provided much-needed preservation treatment for masonry ruins, more could be done to better understand and interpret prehistoric culture through the study of architecture as artifact. The underlying value in ruins preservation is the interpretation of culture—that the details revealed through architectural documentation may hold a window to the past that has yet to be opened.

The Past

Over the past 70 years, NPS has embarked on a ruins preservation program that was more stabilization than preservation, and more creative reconstruction than accurate portrayals of historic properties. This practice can be found throughout the Southwest; examples primarily from Grand Canyon National Park will be used here to illustrate that point. The first archaeological excavations and stabilization at Grand Canyon occurred in 1930 at Tusayan Ruins. This site, located 23 miles east of the South Rim Village, was one of the first sites excavated and treated by an archeological research group called Gila Pueblo. Emil Haury, then a graduate student, was instrumental in the excavation and stabilization of the site. Harold Gladwin, later associated with the Museum of Northern Arizona, also played a prominent role in the project. As we look at the site today, we can see a small pueblo, constructed of unshaped Kaibab limestone boulders, with considerable portland cement visible at the mortar joints. The kivas, identified as “A” and “B,” bear little resemblance today to those described during the archeological excavations (Haury 1931). As a matter of fact, Tusayan Ruins is the proud owner of a cement sipapu in the reconstructed kiva, along with a central fire hearth completely out of scale with the size and construction

described by Haury. The features are more likely reconstructions based upon the notions of the workers in 1930 rather than interpretation of the features based upon archeological evidence. Common past interpretation of the site also suggested a second story, something unlikely given the lack of substantial foundation rocks.

The early classification of structures likely provided an inherent bias toward a particular way of thinking about the architecture, potentially limiting the possibilities based upon the system in use. While early archeologists focused on architectural style as one element of attempting to classify archeological sites, they recognized the differences in puebloan architecture and its inferences toward clan societies. In *A Study of Pueblo Architecture in Tusayan and Cibola* (first published in 1891), Victor Mindelleff attempted to describe the various architectural styles he observed at the Hopi and Zuni villages, looking specifically at construction style in his analysis. In his discussion of the site of “Tebigkihu (Fire House),” he says:

As the plan clearly shows, this pueblo is very different from the typical Tusayan villages that have been previously described. The apparent unity of the plan, and the skillful workmanship somewhat resembling the pueblo of the Chaco are in marked contrast to

the irregularity and careless construction of most of the Tusayan ruins. Its distance from the center of the province too, suggests outside relationship; but still the Tusayan traditions undoubtedly connect the place with some of the ancestral gentes... (1989:57).

In describing Shumopavi, Mindeleff states:

[T]he stonework of this village also possesses a somewhat distinctive character. Exposed masonry, though comparatively rare in this well plastered pueblo, show that stones of suitable fracture were selected and that they were more carefully laid than in the other villages. In places, the masonry bears a close resemblance to some of the ancient work, where the spaces between the longer tablets of stone were carefully chinked with small bits of stone, bringing the whole wall to a uniform face, and is much in advance of the ordinary slovenly methods of construction followed in Tusayan (1989:75).

From all accounts, in Mindeleff's opinion, the masonry work in Zuni far exceeded the work in Hopi, although both groups represented puebloan communities.

The Present

Let's look at the range of masonry ruins at Grand Canyon identified archeologically as puebloan, primarily late PII-early PIII. If one looks at the architecture (similar to how one looks at projectile points or ceramics) as artifact, how would one be able to classify all of the sites being examined as ancestral puebloan? Some masonry ruins, tens of miles apart, show remarkable similarities, suggesting the same cultural traditions, if not the same people, were responsible. Other masonry structures, some in close proximity, show no similarities at all. From the ruins at Tusayan to the granaries at Nankowep, the granaries in

Marble Canyon to the pueblos at Unkar, the only common thread in the architecture seems to be that they are made of stone. Material types differ, mortar styles differ, masonry techniques differ, yet all are looked at as representing ancestral puebloan occupations sometime between AD 1050 and 1200. Surely, there is more to the architecture than just expedient construction. And more to the Kayenta Branch of the Ancestral Puebloans than the 60% stone and 40% mud described by Dean (1969).

Vanishing Treasures

The Vanishing Treasures program has allowed NPS to focus much more heavily on the specifics of architecture than ever before. But has the emphasis been on the people who made the structures or is there too much focus on the rocks and mortar joints? Can the level of documentation done for Vanishing Treasures provide a window on greater understanding of the prehistoric inhabitants of these places, possibly allowing us to discretely identify subgroups within the Kayenta family?

Vanishing Treasures is an NPS ruins preservation initiative focused on forty-one national parks, monuments, historic sites, and recreation areas in the arid West. The initiative aims to address the backlog of maintenance work needed on the resources, and at the same time develop a permanent, professional work force to manage and maintain the sites. In general, Vanishing Treasures resources are in a ruined state, have intact architectural fabric, are not occupied or utilized for their original function, and are part of a park's enabling legislation or are listed or eligible for listing on the National Register of Historic Places (NPS 2002). Typical Vanishing Treasures resources include pueblos, cliff dwellings, churches, and forts. The long-term goal of the initiative is to develop a sustainable infrastructure capable of maintaining the Park Service's ruins.

Between its inception in fiscal year 1998 and the end of fiscal year 2001, the initiative added 48 new permanent archeologists, masons, craftspeople, architectural conservators, engineers, and architects in 22 parks. In the same five years, 65 projects, with a total

value of \$3,958,500, were implemented in 27 parks.

Understandably, the Vanishing Treasures initiative (and Grand Canyon National Park) has focused on backlog maintenance and putting personnel in place to complete work. Prior to any stabilization, detailed architectural documentation is completed to document the current condition of the resource, previous treatments, and original construction techniques. Many ground-breaking techniques in architectural documentation have been developed within the Vanishing Treasures initiative. For example, photographs are scaled and rectified in CAD (computer-aided design) software, allowing archeologists to produce wall profile drawings more accurate than ever before. Laser "scanning" of structures produces the most accurate and detailed two-dimensional representations of sites and features ever possible. Standardized data collection has produced one of the most detailed and consistent sets of information about prehistoric architecture in the Southwest. Additionally, detailed documentation of past and current treatments enables managers to define original elements and those added during stabilization.

But have we lost the "why" in our rush to develop the "how" of architectural documentation? Vanishing Treasures discussions and publications about documentation tend to focus on technique rather than content. With all of the detailed data being collected about Vanishing Treasures resources, we have a unique opportunity to study architecture in ways that were never possible before. In many instances, documentation standards and techniques that were identified and developed in a few parks have spread to other parks working on Vanishing Treasures projects with only minor modifications. An enormous, and very consistent, dataset is being collected.

In the 1980s and early 1990s, Nordby and Metzger (1991) and others developed a holistic approach to ruins preservation that emphasizes detailed documentation and analysis of architecture as artifact in conjunction with treatments. They developed a series of research questions for both structures and

sites. In general, these questions seek to understand construction techniques and original sociocultural organization by recording the elements of architecture, engineering, and construction found in the sites and structures. This concept has guided the Vanishing Treasures program and the research questions in this document have been adopted by many parks.

But in general, preservation guidelines and practice stress treatment and documentation standards with minimal attention to the research questions guiding them. Little mention of research questions can be found in the draft NPS ruins preservation guidelines (Nordby and Metzger 1998). The present authors believe the development of research questions should play a more central role in ruins preservation. Why are we preserving ruins if not to increase our understanding of the people who built them and make sure the story we tell the public is as accurate as possible? We must clearly define what questions remain unanswered and the particular data needed to answer those questions. This is especially true for Vanishing Treasures parks that have had little scholarly study of prehistoric and historic architecture. Mesa Verde and Chaco tradition architecture has been studied extensively while Kayenta architecture remains largely ill-defined. In 1969, Dean described Kayenta architecture as 60% mortar and 40% stone based on work at Betatakin and Keet Seel. Little work has been done since that time to either refute or support this contention.

The research model developed by Nordby and Metzger (1991) provides an excellent foundation for studying architecture in great detail. This paradigm addresses the questions most commonly asked of architecture by archeologists. However, most of the questions focus on the site or structure, not where it fits within a regional perspective. Further, no clear link exists between a particular research question and what data should be collected to answer it.

To build on this foundation, additional questions should be developed based on park-specific research designs and common

regional questions. This was touched on earlier in the paper, but a summary of potential questions is appropriate here. The following list focuses on issues that could be addressed by architectural documentation completed in parks in Northern Arizona, but these could easily be expanded to other regions of the West. Many of these questions could be addressed with only minor changes or additions to the architectural documentation currently completed by most parks.

A primary topic of interest is cultural boundaries and cultural identity, both between and within identified archeological traditions. Is there truly a pan-Kayenta architectural style? Does Dean's (1969) characterization of Kayenta architecture as 60% mortar and 40% stone hold true? From the examples from Grand Canyon presented earlier, it does not appear so. If that's the case, can discrete groups be identified through the detailed analysis of architecture? If so, what attributes need to be considered and how should information be collected to address the question? Is it possible to identify specific clans or families based upon architectural style? How can Native American oral traditions enlighten us about the prehistoric architecture? A second broad research category is temporal change. What can we discover from sites with intact architecture that have yet to be excavated? What can we learn from surface artifacts, tree rings, and other datable material?

Finally, the growing Vanishing Treasures dataset should be analyzed with these questions in mind. It is necessary to take a step back from the mortar joints and chinking stones to see the people who made them. In addition to sharing methods for collecting architectural data, publications, conferences, and symposia should discuss why the data are collected and how the data are being used. Outside researchers should be encouraged to use the data to conduct detailed analyses. These analyses should include a re-examina-

tion of the full suite of archeological remains from a site—architecture, ceramics, and other cultural material.

As we look at the possibilities for new interpretations of cultural heritage through the architecture of masonry ruins, we may be looking too hard and too far. Maybe the answer to the variety of masonry styles lies in a very simple truth told to Mindeleff by his Hopi colleagues. They related to him that “the Hopituh, after being taught to build stone houses, were also divided, and the different divisions took separate paths. The legends indicate a long period of extensive migrations in separate communities; the groups came to Tusayan at different times and from different directions....” Can we find the remains of those paths running through our parks?

References

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