Architecture

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Architecture is the "principal fact" of Chaco Canyon. It was Chaco's astonishing ruins that first attracted archaeological attention to the canyon in the 1890s. Pueblo Bonito has 650 rooms; even in ruin, it stood five stories tall. And Chetro Ketl, a stone's throw away, was equally large and impressive. The more the early explorers looked, the more they found—a dozen huge buildings in the canyon bottom, more perched atop the bleak wind-swept mesas, and hundreds of smaller ruins dotted almost every low hill or terrace along Chaco Wash.

The first excavations at Pueblo Bonito produced wonderful artifacts. Excavations at Pueblo del Arroyo, Chetro Ketl, Kin Kletso, and—much later, Pueblo Alto—were frustrating because these ruins did not produce the huge quantities of turquoise, the exotic Mexican artifacts, and the remarkable caches of ceremonial objects that had been found at Pueblo Bonito. But the buildings themselves were recompense for the hot, hard labor of hauling away tons of rubble and collapsed roofs to expose labyrinthian rooms, hallways, and kivas.

Chetro Ketl provides a good example. Despite Chetro Ketl's reputation as an archaeological "dry hole" (few spectacular artifacts, compared to nearby Pueblo Bonito), teams of students from the University of New Mexico returned, summer after summer, to excavate and clear its awesome architecture. Chetro Ketl was a gigantic building, almost as big as Pueblo Bonito, and also reached five stories along its tall rear wall. A huge Great Kiva was prominent within its plaza; the plaza itself was artificially raised at least ten feet above the natural floodplain. Along the public, most prominent wall facing that plaza, ancient builders had constructed a monumental colonnade, modeled on similar public colonnades in Tula and other central Mexican cities, far to the south. The Chetro Ketl colonnade was the only such feature known in the eleventh- and

twelfth-century Southwest. A suite of “roads” ran from Chetro Ketl to massive masonry ramps and elaborate wooden stairs, mounting the cliffs behind the huge building. From atop those cliffs, viewers ancient and modern have seen that the Great Houses were designed with great geometric formality. Pueblo Bonito and Chetro Ketl are giant “Ds,” one oriented north and the other south. The shape of the buildings was clearly a major design factor, to be appreciated and understood only from the cliffs above.

And the cliffs are still a favorite viewpoint. Chaco’s artifacts are housed in distant museums, but the buildings themselves draw more and more fascinated visitors to remote Chaco Canyon. Even today, the trip is arduous, but few who make it are disappointed. The ruins of Chaco Canyon are quantitatively and qualitatively different than any other pre-Columbian sites in the United States. Pueblo Bonito and Chetro Ketl established Chaco as an architectural marvel.

Indeed, Chaco is where the idea of a ruin as an “exhibit in place” was first undertaken in the United States. Left alone, an excavated site will inevitably crumble back into ruin. After excavation, ruins were stabilized to solidify the fragile ruins for decades and decades of public use and enjoyment. Ruins stabilization does not reconstruct buildings, but, instead, minimally treats walls to prevent deterioration. Chacoan masonry was massive and well-crafted, but the mortar was local mud. When that mud is exposed to rain and snow, the walls (missing their original protective roofs) must collapse. An exposed wall can be “capped” with a few layers of stone set in an impervious soil-cement, to prevent rain from attacking the structure from the exposed top. The magnificent Chacoan masonry patterns can be “repointed” with small amounts of soil-cement carefully inserted between stones, where the mud mortar is exposed, to keep rain and snow from seeping in through the wall’s face. Even sandstone wears out and, sometimes, eroded stones must be chiseled out and replaced. These and other techniques keep exposed walls standing without altering their original appearance, but ruins stabilization is a constant effort. Each year, the winter’s damage must be assessed and corrected.

Neil Judd, from the Smithsonian Institution, was the excavator of Pueblo Bonito and an early pioneer of “ruins stabilization.” Slightly later, Edgar Hewett (a remarkable popularizer of Southwestern archaeology) and his colleagues from the Museum of New Mexico demonstrated remarkable ingenuity in bracing a series of kivas, built one over the other, exposed during excavations at Chetro Ketl. Today, sixty years later, the ingenious field engineering still holds fast, and visitors marvel at huge kivas stacked like pancakes, free of the earth and rubble that supported them in ancient times. Later, the National Park Service’s Ruins Stabilization Unit was based at Chaco, and developed many of the standard practices and techniques in the very specialized field of ruins stabilization.

When the Chaco project excavated Pueblo Alto in the 1970s, the park’s stabilization crew worked alongside the archaeologists, preserving what was exposed. These men came from local Navajo communities around the park. Many had worked for the park, restoring the fragile masonry of the ruins, for many years. Some had learned their craft from fathers or uncles who had worked on these same ruins in decades past. These craftsmen are vanishing treasures. Science can provide better mortars and engineering analyses, but masonry skills cannot be taught from studies or
textbooks. Masonry skills must be learned through long apprenticeships and, with urban opportunities luring young Navajo people away from the Chaco area, there may not be a “next generation” of Chaco masons to care for ruins. That would be a loss to the national heritage and Pueblo history, but also to the Navajo people since Chaco’s ruins figure prominently in several Navajo origin myths.

The buildings are undeniably Pueblo—indeed, Chaco is where the Pueblo style of massed, terraced rooms around a plaza first began. Pueblo people know these buildings best, and Chaco figures prominently in the traditional histories of Pueblos from Hopi to the Rio Grande. But other cultures can contribute to the appreciation of Chacoan building, and add new perspectives to its architectural wonder. The Navajo tell compelling stories about the “Great Gambler” who ruled all the tribes around Chaco from his palace at Pueblo Alto—a story recalling long distant history? Archaeologists, another “culture” alien to Chaco, but equally fascinated by it, analyze the buildings for labor costs, solar adaptations, astronomical alignments, and architectural patterns of rooms and suites to decode the social and political structure of their ancient residents.

One perspective that archaeology brings to Chaco is a global comparison, for archaeology is the study of ancient peoples everywhere, not only in the Southwest. The Chaco Synthesis Project is compiling information on monumental constructions in nonindustrial societies around the globe, to better understand Chaco as one of many examples of human achievement. Chaco was not the pyramids of Egypt, nor was it Stonehenge. But, with additional studies, it has become increasingly clear that Chaco was special, unusual, even unique among the world’s societies. We are having trouble finding parallels in the Old World or the New. Eventually, to be sure, the cross-cultural study will allow us to “contextualize” Chaco among the world’s many architectural achievements, but we may have to create a new category for Chaco’s Great Houses.

Participants in Chaco Synthesis Project Conferences