Although the communities of the Mesa Verde region were largely self-sufficient economically, they were never isolated from events taking place elsewhere in the Southwest. This was especially true in the Pueblo II period, from 900 to 1150 CE. The Mesa Verde people watched from a distance as complex communities dominated by monumental “great houses” developed in Chaco Canyon to the south. As time went on, they became increasingly involved with Chaco, and a small Chaco-style great house came to be a central feature of many Mesa Verde communities. Then, in the early 1100s a massive great-house complex was built at Aztec, in what is now northwestern New Mexico. It signaled that the seat of Chacoan influence and power had moved to the Totah area, in the southern part of the Mesa Verde region (see map, p. viii). Despite being drawn into the large-scale Chacoan system, the Mesa Verde people maintained their distinctive culture, inventing new ways of doing things while continuing long-standing traditions.

Population Bust and Boom
As Richard Wilshusen noted in the preceding chapter, the boundary between the Pueblo I and Pueblo II periods, 900 CE, falls at a time when many people had moved out of the Mesa Verde region, probably following a southward shift in reliable summer rainfall. In the 900s and early 1000s, when population was sparse in the Mesa Verde region, it was booming south of the San Juan River, especially in and around Chaco Canyon. There, some families and lineages were accumulating land and status and were beginning to construct impressive great houses as ostentatious symbols of their power. Wilshusen suggested that the first Chacoan great houses might have been modeled after prototypes built in the 800s in the Mesa Verde region, from which some of the Chacoan people may have come.

Although much of the Mesa Verde region was deserted in the 900s and early 1000s, people continued to live in agriculturally productive areas such as the Mesa Verde proper and on some of the other mesas farther west. Rather than spread out over the landscape in individual family farmsteads, they tended to cluster in a few hamlets and small villages.

The Mesa Verde region began to grow rapidly again in about 1050 because families were doing better and having more surviving children and probably because some people were moving back to an area their ancestors had left several generations earlier. People cleared new land and also planted fields that had lain fallow for many years. Both the new settlers and those whose families had stayed in the area tended to live in small, one- or two-family homesteads close to their fields, rather than in concentrated villages (fig. 4.2). Their communities are visible to archaeologists as clusters of these small homesteads, often spread over several square miles. Frequently, the members of a community built a great kiva in order to have a place for ceremonies and other gatherings.

After about 1075 some community leaders began to build small great houses designed to show their familiarity with things Chacoan. In a survey of 36 central Mesa Verde–region communities dating
Figure 4.1. Looking west over the Great Sage Plain from a kiva in the Escalante great house, located at the Anasazi Heritage Center near Dolores, Colorado.
to the period 1050–1150, Mark Varien found that nearly 60 percent had a small Chaco-style great house as a central building. Additional examples occur in the Totah and perhaps other parts of the Mesa Verde region, and still others undoubtedly remain to be recognized by archaeologists.

By the end of the Pueblo II period at 1150 CE, the region was in the grip of a severe drought, and people had stopped constructing new Chacoan-style great houses. Population may have remained fairly steady during the decades-long drought, but families built few new houses—the tree-ring record shows that not many trees were cut down for construction timbers. People seem to have “hunkered down,” getting through the hard times as best they could.

**Architecture Evolves**

From around 750 to 1300 CE (the Pueblo I through Pueblo III periods), Mesa Verdean households hardly changed the basic pattern of their residences. These consisted of a few adjoined rooms on the ground surface, a pit structure to the south or southeast of these, and an ashy midden (trash mound) just beyond. Some families lived in single homesteads, others in clusters of such residences, and still others in small hamlets or villages where their homes were joined side by side (see fig. 3.5). Although families used this basic housing plan for centuries, from time to time they changed the way they built their homes, and the Pueblo II period was no exception.

Large, square pit structures, often called “proto-kivas,” had become common in the late 700s (Pueblo I). These were usually 12 to 20 feet in diameter and 3 or 4 feet deep, with the walls and roof extending somewhat above the ground surface. In the middle 900s and early 1000s (early Pueblo II), these gave way to smaller, circular pit structures, usually called “kivas” (fig. 4.3). These tended to be 10 to 15 feet in diameter and often were deep enough that their roofs sat flush with the ground surface. Thus, the roof could be part of the outdoor living space in front (just to the south) of the sur-
face rooms. Initially, these early kivas were unlined; their walls consisted of the subsoil into which the pit had been dug. Fresh air came in through a vent shaft to the south that was linked to the main chamber by a short tunnel—the same scheme used in the earlier protokivas. Also carried over from earlier times was construction of a small pit in the floor north of the central firepit. This "sipapu" is thought to have symbolized the emergence of Pueblo people from worlds below this one. Four wooden posts, often recessed into the pit-structure wall, supported the roof.

By the mid-1000s some kivas had roof supports of short masonry pillars or "pilasters" resting on a low bench that encircled the periphery of the structure. In the late 1000s and early 1100s (late Pueblo II), kivas were more commonly lined with masonry and were more elaborately built, often with a deep recess over the southern ventilator tunnel, giving the structure a "keyhole" shape in plan view. By this time, most kivas had six masonry pilasters spaced equally around the bench, supporting several courses of short timbers "cribbed" around the periphery of the structure, with the flat part of the roof resting on the cribbing.

The Mesa Verde people undoubtedly incorporated deep-rooted religious symbols into the design of their kivas. Their subterranean character, roof entries, and sipapu would constantly have reminded people of the belief that humans and other living things emerged from a world or worlds below the present one. The standard north-south orientation of the vent tunnel, central firepit, and sipapu, and of the residential unit itself, probably symbolized cosmological beliefs as well. Building kivas in an increasingly stylized and formal way is consistent with creating spaces appropriate for religious rituals. Scott Ortman (see chapter 12) makes a good case that people of the Mesa Verde region envisioned the earth as a bowl and the sky as a basket—beliefs that were represented by kiva architecture.

Abundant evidence exists that Mesa Verdeans used their kivas not just for occasional religious rituals but also for ordinary household activities. Artifacts left on some of the floors record corn
grinding, pottery making, and the manufacturing of stone tools. Food remains left in the hearths show that people cooked meals there, and they probably slept in the warm, underground kivas in the winter. Thus, these early Mesa Verde kivas differ considerably from those of the present-day Pueblos, which are used primarily for religious rituals by groups larger than individual families.

In the 900s and early 1000s (early Pueblo II), people continued to build surface rooms with post-and-mud (jacal) walls similar to those of the Pueblo I period. They built larger front rooms, sometimes with hearths, and used them as work and cooking areas and as sleeping places, especially in summer. They made the adjoining back rooms smaller and used them mostly to store dried corn. The Mesa Verdeans knew how to make stone masonry as early as the 700s, but in most places they did not use it in their houses consistently until the late 1000s or even the 1100s.
These architectural changes did not occur in lockstep throughout the Mesa Verde region. Stone masonry appeared earlier and more consistently on the Mesa Verde proper than elsewhere. In some places, families were still building unlined kivas and pole-and-mud surface rooms until the early 1100s. In general, people seem to have invested more time and effort in their housing in places where farming was most productive and population density highest. Archaeologist Michael Adler has argued that in such situations, rules for land tenure develop and people tend to stay longer in one place. They need long-lasting buildings to show that they have rights to a certain piece of land, even if they are not using it that season or year. When roofs can be supported by masonry walls instead of wooden posts sunk into moist soil, the structures last longer and are easier to maintain.

Two nearly contemporaneous settlements from the late 1000s and early 1100s clearly show these contrasts in types of construction and amount of time invested in buildings. Site 5MT8943, located south of Ute Mountain, was occupied briefly sometime between 1050 and 1120 (fig. 4.4). Its residents probably relied on runoff from summer rains to water their crops, and they expected to have to move their farming locations—and often their homes—frequently. Big Juniper House was inhabited between about 1080 and 1130 on the Mesa Verde proper (fig. 4.5). There, deep soils and reliable annual rainfall made dry farming successful in most years. Big Juniper House residents used much more masonry and made their kivas more elaborate and formal than did the occupants of 5MT8943.

**Conserving Water and Soil**

The Mesa Verde people were primarily dry farmers of the mesas, dependent on the rain that fell directly on their fields, although those who lived at lower elevations also relied on runoff after rains or
farmed in valley bottoms where water tables were high. They collected water for drinking, cooking, and other domestic uses from scattered springs and seeps in the canyons, supplemented during the wetter seasons by water from ephemeral pools and "water pockets" in exposed bedrock on the canyon rims (fig. 4.6). Hydrological engineer Ken Wright and archaeologists Jack Smith and David Breternitz have demonstrated that as early as the 800s, people on the Mesa Verde proper were organizing work parties to dig and maintain large earthen reservoirs that collected water from melting snow in the spring and from thunderstorms in the summer (see chapter 15). The reservoirs probably did not hold water year-round, but they would have reduced the times when domestic water was really scarce. They could also have been used for laborious "pot irrigation"—carrying water to individual corn plants during the dry early part of the growing season. Reservoirs became widespread over the larger Mesa Verde region during the Pueblo II period.

During the 1000s CE, farmers of the Mesa Verde region also began to conserve soil and water by building series of small check dams across ephemeral drainages and constructing low terraces at the bases of slopes (see fig. 1.2). In some places, they just laid rows of stones parallel to the slope contours. These devices slowed runoff after rains so that the water would soak into the soil, and they also helped control soil erosion—undoubtedly a problem in densely settled areas where much of the natural vegetation had been cleared for farming. These small, fertile plots might have provided some insurance against crop failure on the much larger dry-farmed fields, or they might just have been intensively cultivated "kitchen gardens" close to residences. Some of the check dams could also have helped recharge groundwater flow to nearby springs and seeps.

**Chaco Moves North**

By about 1075 CE (late Pueblo II), the political-religious leaders of many Mesa Verde communities were building structures that obviously imitated some of the architectural features of Chaco Canyon's ostentatious great houses and great kivas. Examples include Lowry Ruin (see pl. 6) and Chimney Rock Pueblo. Although large and architecturally impressive relative to the unpretentious houses that surrounded them, the Mesa Verdean great houses were quite small in comparison with
the massive buildings in Chaco Canyon proper, such as Pueblo Bonito and Chetro Ketl.

In the very late 1000s and early 1100s, however, several great houses fully the equal of those at Chaco Canyon were built in the Totah—the part of the Mesa Verde region that includes the valleys of the Animas, La Plata, and San Juan rivers near Farmington and Aztec, New Mexico. During several bursts of activity in the 1090s, well-organized work parties rapidly built the Salmon site (Salmon Ruin) overlooking the San Juan River. It has at least 110 ground-story rooms, with another 50 to 60 estimated for its second story. Between 1110 and 1120, an even more impressive great house (with well over 400 rooms) was built at Aztec, in the Animas River valley. Over the past 25 years, National Park Service archaeologists have discovered that Aztec West (fig. 4.8) is just one building in a complex of great houses, great kivas, roads, and ordinary houses that extends for several miles along terraces bordering the Animas valley.

Like the major great houses at Chaco, Aztec and Salmon display evidence that strong leadership was at work. They were built rapidly, according to a plan, with individual construction projects consisting of large blocks of rooms. In the roofs, the builders frequently used ponderosa pine beams cut to size in distant highland forests and carried to the Totah by work crews. Some of the smaller roof timbers were aspen, also imported from the mountains, even though cottonwood grew in abundance locally. These great houses and great kivas were built to be seen and to impress the viewer; the message was that great people must live in them. Steve Lekson has argued persuasively that the Aztec complex was located nearly due north of Pueblo Bonito in order to follow the north-south axis that looms large in Chacoan cosmology and religious symbolism and that is physically expressed in the “great north road,” which can still be traced partway between Chaco and Aztec.

Although the Chaco great-house style developed over several hundred years and some buildings in Chaco Canyon (Pueblo Bonito, for example) have long histories, this was not the case for the principal Totah great houses. Buildings of this size and elaborate Chacoan architectural style had not previously been seen in the Mesa Verde region. Their construction must have been directed by leaders who had more centralized power and hierarchical status than was typical during most of the long sweep of Puebloan culture history, both before and after the Chacoan florescence. Many scholars interpret the Aztec complex as indicating
that the seat of Chacoan religious and political power moved from Chaco Canyon to the Totah in the early 1100s. Several lines of evidence, from both the Totah and Chaco Canyon, support this conclusion.

But what about the many small Chaco-style great houses built in small communities throughout the central Mesa Verde area in the late 1000s and early 1100s? Were they administrative outposts of a conquering political system centered first at Chaco Canyon and then at Aztec? This view has been promoted by archaeologist David Wilcox and a few others. Or did they represent attempts by local leaders to enhance their rather modest status and power in their own communities by showing their connection to things Chacoan?

Like many of my colleagues, I think the bulk of the evidence favors the latter interpretation, at least for the great majority of the outlying communities that have Chaco-style great houses. Archaeologists Jim Judge and Wolcott Toll have proposed that local leaders gained status and religious influence by making pilgrimages to major ceremonies at Chaco or Aztec hosted by the politico-religious elites of those centers. The pilgrims might have contributed to the success of those elites by bringing food or by joining organized work parties to cut and deliver construction beams, build roads, or carry water, mud, and stones for additions to the major great houses. In turn, they might have brought Chacoan ceremonies, and perhaps tales of being honored and blessed, back to their home communities. Another mechanism for linking outlying communities with the major centers might have been arranged marriages that enabled Chacoan elites to create kin ties with leading families of communities in the Mesa Verdean "outback." Archaeological or biological evidence of such intermarriage would be hard to come by, but cross-culturally it is well documented as a way elites can extend their influence.

However the Chacoan system worked, it created conditions for the movement of goods—and probably people and ideas—around large parts of the northern Southwest. In the Mesa Verde region, more pottery from outside the area, as well as more exotic goods such as turquoise and shell ornaments, appears in sites dating to the late 1000s and early 1100s (late Pueblo II) than in those dating earlier or later (fig. 4.7). The pilgrimage system just described would have given people opportunities to trade with and find marriage partners among members of other communities.

The years of maximum Chacoan influence seem also to have been generally peaceful ones. During that era, most people in both the Mesa Verde region and the Chacoan heartland south of the San Juan lived in dispersed homesteads and hamlets clustered loosely around a central place dominated by a great house and great kiva. This was not a settlement pattern designed for defense against raiding parties, either from the major centers or from neighboring communities.

The End of Chaco and Pueblo II

The onset of a severe drought in the mid-1100s coincided with the decline of Chacoan influence in the northern San Juan. The latest dates for construction of an outlying Chaco-style great house are in the 1130s, from Escalante Ruin, a small but impressive building situated on a hilltop near Dolores, Colorado. Although the Aztec and Salmon centers continued to be occupied and some new construction took place at both in the 1200s, there were no more massive building projects using beams imported from distant mountains. Long-distance trade in pottery, turquoise, and other desirable items had declined by the late 1100s, and as Mark Varien notes in the following chapter, isolation of the Mesa Verde region intensified in the 1200s.

Some scholars, including Steve Lekson and David Wilcox, argue that the main Chacoan centers, either at Chaco Canyon (Wilcox) or at Aztec (Lekson), continued to play leading roles in the political, economic, and religious lives of Pueblo people in the Mesa Verde region and elsewhere in the Southwest through the 1200s. I (and many of my colleagues) see an alternative scenario, in which the Chacoan developments represent a rather short-lived experiment with a hierarchical society. In this view, a newly powerful political and religious elite emerged at Chaco Canyon about 1040, and for most of the following century it was...
able to extend its influence widely over the northern Southwest, eventually including the Mesa Verde region between about 1075 and 1135. The religious authority that was one source of the elites' power was undermined when the rains began to fail in the mid-1100s. The hard-pressed farmers of the hinterland became less motivated to make pilgrimages and to contribute the food and labor on which the elites depended.

The mid-1100s are marked by evidence of violence and instances of cannibalism at sites in the central Mesa Verde area. Several scholars, notably the physical anthropologist Christy G. Turner, have suggested that these incidents reflected the Chacoan elites' policy of using selective terrorism to extend and maintain political control over far-flung Mesa Verdean communities. The timing of most of these events indicates to me, however, that they were products of social and economic disruption caused by the deepening drought, the related collapse of Chacoan religious influence, and the weakening of local community leaders' authority.

The people of the Mesa Verde region must have experienced new opportunities and challenges as they coped with the short-lived Chacoan expansion into the region. When all was said and done, however, daily life in their scattered small communities was probably little changed. Memories of the great Chaco centers undoubtedly endured, and they might have promoted attempts both to preserve and to expunge practices and ideas derived from the Chacoan experience. But as Mark Varien discusses in chapter 5, the Pueblo III period that followed (1150–1300) was not just a continuation of patterns established in the preceding two centuries. Rather, both the Pueblo II and Pueblo III periods represent distinctive and uniquely Mesa Verdean chapters in the long and rich history of Pueblo people in the northern Southwest.

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The Mesa

Edited by David Grant Noble

A School of American Research

Popular Southwestern Archaeology Book

(2006)
Verde World

Explorations in Ancestral Pueblo Archaeology

School of American Research Press
Santa Fe, New Mexico