

ARCHAEOLOGY SOUTHWEST *magazine*

CONTINUE ON TO THE NEXT PAGE FOR YOUR FREE PDF



Archaeology Southwest (formerly the Center for Desert Archaeology) is a private 501 (c) (3) nonprofit organization that explores and protects the places of our past across the American Southwest and Mexican Northwest. We have developed an integrated, conservation-based approach known as Preservation Archaeology.

Although Preservation Archaeology begins with the active protection of archaeological sites, it doesn't end there. We utilize holistic, low-impact investigation methods in order to pursue big-picture questions about what life was like long ago. As a part of our mission to help foster advocacy and appreciation for the special places of our past, we share our discoveries with the public. This free back issue of *Archaeology Southwest Magazine* is one of many ways we connect people with the Southwest's rich past. **Enjoy!**

Not yet a member? Join today!

Membership to Archaeology Southwest includes:

- » A **Subscription** to our esteemed, quarterly *Archaeology Southwest Magazine*
- » **Updates** from *This Month at Archaeology Southwest*, our monthly e-newsletter
- » **25% off purchases** of in-print, in-stock publications through our bookstore
- » **Discounted registration fees** for Hands-On Archaeology classes and workshops
- » **Free pdf downloads** of *Archaeology Southwest Magazine*, including our current and most recent issues
- » Access to our on-site **research library**
- » **Invitations** to our annual members' meeting, as well as other special events and lectures

Join us at [**archaeologysouthwest.org/how-to-help**](http://archaeologysouthwest.org/how-to-help)

In the meantime, stay informed at our regularly updated **Facebook** page!



Archaeology SouthwestTM

Volume 24, Number 3

Center for Desert Archaeology

Summer 2010

Social Identity in the Northern San Juan

Paul Reed, Center for Desert Archaeology

THE STUDY OF SOCIAL IDENTITY has emerged as an important issue in Southwestern archaeological research, as scholars replace outdated culture area concepts, such as Anasazi, Mogollon, Hohokam, or Sinagua, with a more sophisticated understanding of the social roles, interactions, and migrations of ancient peoples. Social identity is concerned with an individual's participation in various groups, such as a household, a kin group, a work group, or a religious organization. This approach considers many dimensions of identity, like age, sex, family, lineage, ethnicity, language, and religion. Inferring identity from archaeological data is a daunting task. Some identity markers, such as pottery, architecture, and clothing, may be detectable archaeologically, while many others, like language and specific group affiliation, are not.

In this issue of *Archaeology Southwest*, we will look at the changing social identity of the occupants of the Northern San Juan region during the period between about 800 B.C. and A.D. 1300. This area extends from southeastern Utah to southwestern Colorado, and into a small portion of northwestern New Mexico (see map on page 2). The Northern San Juan was first occupied in about 11,000 B.C. by Paleoindian big-game hunters. By 5500 B.C., the

residents of the area were practicing an Archaic hunting-and-gathering lifestyle. By the last centuries B.C., these groups either evolved into or were replaced by early



© Adriell Helsey

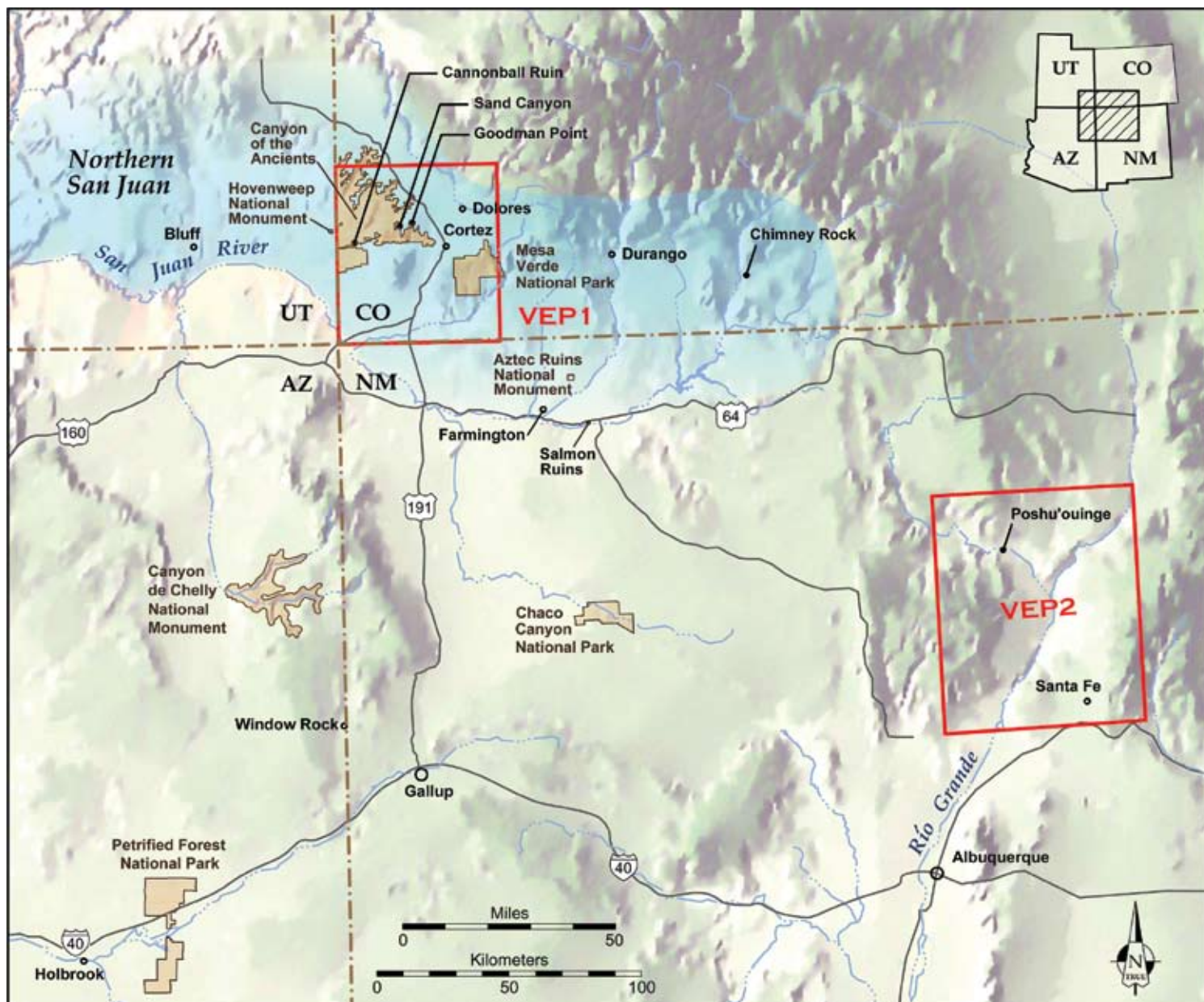
Yellow Jacket Pueblo, occupied from the mid-eleventh through the late thirteenth centuries, is the largest pueblo in the Northern San Juan, with 1,200 rooms, 195 kivas, 19 towers, a great house, and a great kiva. Some of the people who resided at Yellow Jacket manifested their connection to Chacoan social identity via construction of a Chacoan-style great house. However, most of the architecture and artifacts found at the site reflect the Mesa Verdean social identity common to the Northern San Juan.

Basketmaker people, who subsisted on both wild plants and cultivated crops. By the A.D. 600s, largely sedentary farmers had colonized many of the fertile alluvial valleys of the Northern San Juan. These Basketmaker III groups evolved into the later Pueblo I–III peoples that spread densely across the Northern San Juan,

Issue Editor: Paul Reed

Archaeology Southwest
is a Quarterly
Publication of the
Center for Desert
Archaeology





Map of the Northern San Juan showing areas and sites discussed in this issue of *Archaeology Southwest* (with contributions by Devin White).

with a peak population of perhaps 20,000 individuals at 1250. By 1300, this area was largely depopulated.

The Northern San Juan is particularly suited for exploring issues of past identity. From the earliest agricultural times, mobility was an important element of subsistence strategies. These early individual settlements were not large, and their inhabitants needed to maintain connections with many other groups to ensure access to marriage partners as well as many commodities, like food, pottery, and raw materials for stone tools.

With the emergence of a major cultural center in Chaco Canyon, the investment in specialized architecture that carried a strong message of cultural identity was visible across a large swath of the northern Southwest. A few cases of clear colonization and the spread of architecture and other aspects of the religious system focused on Cha-

co Canyon are documented for the Northern San Juan. In other cases, groups emulated the architectural patterns observed farther south. As we look across the region, we see evidence for a strong pattern of connection to Chaco at the large Middle San Juan great houses at Aztec and Salmon Ruins, on the southern margins of the Northern San Juan. In the Northern San Juan proper, however, Chacoan presence and influence was weaker. Trade and interaction with Chaco-derived groups to the south nevertheless had an effect that is clear in the archaeological record of the Northern San Juan.

Later, as the vitality of the Chaco Canyon center waned, power and ideological innovations shifted northward to places such as the Aztec community and sites in the Northern San Juan, like Yellow Jacket Pueblo and Far View House, and after 1240, Goodman Point Pueblo,

Sand Canyon Pueblo, and Cliff Palace. Ultimately, the population in the Northern San Juan declined, with populations moving to the Northern Rio Grande, as well as to other areas to the south and west. This transition was particularly profound, because many of the people's visible markers of identity were left behind when they moved to a new homeland.

The articles in this issue of *Archaeology Southwest* examine the continuities and discontinuities in social groups and how those groups expressed their identities. First, Mark Varien, Tim Kohler, and Scott Ortman present findings from the Village Ecodynamics Project, which uses computer modeling to study long-term interaction between Pueblo residents and the environment in the Northern San Juan, as well as the resultant changes in social identity.

Then Steve Lekson tracks the Northern San Juan's persistent but evolving social identity as he recounts the initial dominance of Chaco Canyon in the area, followed by the rise of the Aztec Ruins community.

Ben Bellorado explores the dynamic interactions among various groups of early Puebloan farmers in the Durango, Colorado area, as social identities evolved from the early Basketmaker II (circa 800–400 B.C.) into the late Basketmaker III and early Pueblo I (circa A.D. 750) periods. Next, Jim Potter discusses these early Pueblo I Durango-area farmers, tracking their social development and decline into the early A.D. 800s, when violence re-

sulted in the deaths of at least thirty-five people at the Sacred Ridge site.

Shifting focus to the eastern margins of the region, Jason Chuipka and Jerry Fetterman document resistance by local traditionalists to Chacoan newcomers at the Chimney Rock site, as evidenced through longstanding architectural styles. Brenda Todd reflects on another aspect of Chimney Rock, focusing on the Chacoan migrants' cosmological and ritual connections to the cycles of the sun, moon, and stars.

Cathy Cameron's research at the Bluff great house in the late Pueblo II and early Pueblo III periods paints a complicated picture of diverse social identities: probable Chacoan migrants interacting with people following the Kayenta and Mesa Verde cultural traditions.

Alison Bredthauer writes about the rare but important markers of social identity known as tower structures, which were constructed during the Pueblo III period (A.D. 1150–1300). Then Kristin Kuckelman provides an astute analysis of fractured social identity at the point of abandonment of the large, late Pueblo III villages of Sand Canyon and Goodman Point Pueblos.

Finally, Scott Ortman discusses the dramatic social transformation experienced by Northern San Juan groups as they embarked on a long-distance migration to Tewa-speaking villages in the Northern Rio Grande region, leaving behind much of their previously important material culture, as well as their identity.

The Village Ecodynamics Project

Mark D. Varien, Crow Canyon Archaeological Center

Timothy A. Kohler, Washington State University

Scott G. Ortman, Crow Canyon Archaeological Center

A NETWORK OF archaeologists, geologists, geographers, computer scientists, and economists is studying long-term interactions between humans and their environment as part of the Village Ecodynamics Project (VEP). The VEP examines the archaeological record of the northern Southwest between A.D. 600 and 1600. The first phase of the project, VEP I, ran from 2001 to 2004. Our research team recently began a second phase, VEP II, which will continue through 2013.

Using computer simulations, the VEP examines decision making at both the household and group levels. The modeling also emphasizes within-group collaboration and between-group competition to understand the role of group identity in the formation and maintenance of villages.

The VEP has two general goals. The first is to explain key aspects of Pueblo history. The second is to use what we learn about Pueblo history



Mesa Verde Black-on-white kiva jar (middle), framed by two Mesa Verde mugs. These vessels sit on the bench of a Pueblo III kiva at Salmon Pueblo. Although emblematic of the Mesa Verde era, these vessels were made in the Middle San Juan and do not reflect direct interaction with potters from the Northern San Juan.

Paul Reed

to better understand human social evolution, especially during the centuries following the adoption of agriculture.

The VEP uses an agent-based computer simulation that reconstructs the past climate; models the effect of climate and environmental change on agricultural production and the distribution of natural resources; and examines how people used these domesticated and wild resources. The “agents” in the simulation are households who “inhabit” our two study areas in 600.

The productivity of these various study areas varies each year because of changing climate and human influence on the environment. Our virtual farm families locate areas suitable for farming, raise domesticated turkeys, hunt wild animals, collect drinking water, gather wood for fuel, and exchange food with their neighbors. The parameters in the simulation can be modified to examine the importance of many factors.

We recently examined the effects of varying nine parameters with two values each, which resulted in running 512 simulations. The simulations were compared to a settlement model that used data about all known sites in the area and estimated when residential sites were occupied and how many people lived there. We compared the simulation runs with these real site distributions to determine which combinations of parameters provided the best fit between the real and simulated distributions, and how those changed through time. For example, we could see that the Basketmaker III and Pueblo I periods were similar in that settlement was “controlled” by a rapidly changing set of locational parameters, whereas the parameters controlling settlement behavior from the late Pueblo II period on were few and remarkably stable.

Some of the most important results of the VEP I study came from comparing the simulated settlement locations and sizes with those actually seen in the archaeological record of the population dynamics of the Mesa Verde area in the Northern San Juan. Our population estimates in-

dicate that the number of people living in the study area peaked at about 20,000 individuals in the early 1200s, and to our surprise, these estimates far surpassed the agent populations created by the simulation, suggesting that at their peak, the real population was under considerable stress. These results are discussed in the final VEP I report, now in press.

Although the VEP was not designed to specifically examine social identity in the Northern San Juan, several

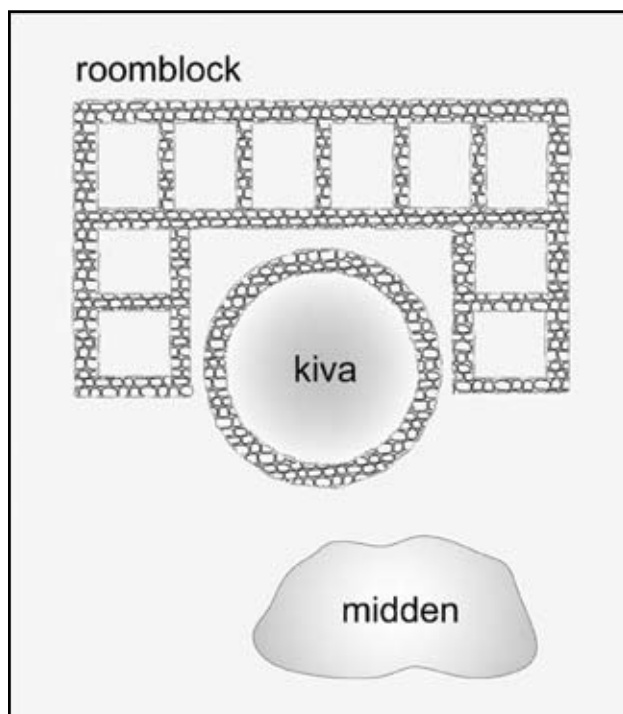
of our results are relevant to this issue. First, it appears that migration played an important role, with many episodes of people moving into and out of the study area. This suggests that the region was home to people who had different backgrounds and who may have spoken different languages at various times.

Second, although long-distance exchange was frequent and extensive during the Chacoan era (1080–1150), and this exchange linked the inhabitants of the Northern San Juan to a much larger world, these networks contracted significantly during the post-Chacoan era (1150–1280).

Third, over the same period, as more people crowded into the central Northern San Juan, a unique material culture complex developed. As defined by archaeologist

Bill Lipe, this complex includes canyon-rim villages with a bilateral layout; Prudden unit (see figure) household complexes; towers; D-shaped and circular bi-walled structures; south-facing household kivas with a southern recess, a bench, pilasters, and cribbed roof; pecked-block McElmo-style masonry; classic Mesa Verde Black-on-white pottery design; kiva jars; Mesa Verde-style mugs; the Mesa Verde Corrugated jar form; and scrapers made from the long bones of deer and other ungulates.

The increased isolation and concentration of the Northern San Juan population, and the development of a distinct culture, are all consistent with the formation of a distinct social identity. When Pueblo people migrated from the region during the 1200s, they left these traits and their identity as Mesa Verde people behind.



This redrawing of archaeologist T. Mitchell Prudden's early 1900s rendering of a typical small pueblo—known as a Prudden unit—consists of a dwelling, a kiva, and a midden. Prudden units as archaeological evidence of past households are one way that the VEP simulations of households can be compared with the known archaeological evidence.

Power, Polity, and Identity in the Northern San Juan

Stephen H. Lekson, University of Colorado, Boulder

YOU ARE OR WERE part of a family. That family was probably part of a neighborhood, and that neighborhood part of a community. Communities reside in counties, and counties in states, and states in our nation. Our social identities vary with each level: strongly and clearly with family, more vaguely and distantly with higher levels. We know, for better or worse, our standing

state, inspired by the real thing—states and empires far to the south in Mesoamerica. The lords of Tula, in Mexico, would have dismissed Chaco as a backwater, but to Northern San Juan residents, Chaco was the biggest thing around.

We can be sure that everyone in the Northern San Juan was aware of Chaco, even if not everyone had ever

been there. For a farming family on Mesa Verde, Chaco was eighty-five miles away, but it was not altogether distant. About 200 outlier Chacoan secondary centers—such as Bluff and Chimney Rock (pages 9–11)—were spread over the Four Corners, typically in the middle of farming communities. At Mesa Verde, for example, Far View House was a Chacoan outlier. Outliers were connected to Chaco by a network of roads and a complex line-of-sight communication system. Some outliers represent local elites; others were imposed on local populations by the central authority of Chaco. For a radius of about eighty-five or ninety miles around Chaco, bulk goods, like corn and pottery, underwrote the social and political system; beyond that ra-

dius, a political economy of elite, precious goods tied local leaders to the Chaco center.

Chaco hit its stride between 1020 and 1120. At its height, Chaco incorporated most of the Northern San Juan, including the Mesa Verde area. What is now Mesa Verde National Park was firmly encompassed by Chaco's world, as shown by the presence of Far View House, whose construction is typically Chacoan. While Mesa Verde's peoples had local ties, histories, clans, and legends, they also were citizens of the larger Chacoan world. Perhaps that was a point of pride. Perhaps that was a burden. Perhaps that was a small matter, hardly affecting daily life. Those are details that archaeologists have yet to discover. Nevertheless, at an important level, most farm-



Far View House in Mesa Verde National Park is one of the northernmost Chacoan outliers, perhaps built in the 1050s. Like many Northern San Juan great houses, it continued to be used and modified through the mid-1200s.

within our families. We are all Americans, but that allegiance—except during tax time and wartime—is rather more diffuse.

This was true as well in ancient times: a farming family in the Northern San Juan would identify most closely with its clan and community, but farming families surely acknowledged affiliations with higher-level societies and polities. In the early A.D. 1100s, for example, farming families would probably agree about the centrality of Chaco Canyon, though each family and community doubtless had singular notions of its relationship to Chaco.

What was Chaco? In the 1000s and early 1100s, it was very nearly a state: a small, imperfect would-be



Top: West Ruin at Aztec Ruins National Monument, viewed from the north, features a reconstructed great kiva within its plaza. The Hubbard site is visible in the lower right of the photograph. It is one of three Pueblo III specialized, probable ceremonial tri-walled structures at the monument. Right: This macaw feather sash was found in a cave in southeastern Utah. The feathers are from a scarlet macaw, and the backing is made from the pelt of a sub-species of tassel-eared squirrel, which ranges throughout northern New Mexico but not into southeastern Utah. The sash has been dated to 1080–1110, at the height of the Chacoan era. (Photograph by Steve Lekson; courtesy of Edge of the Cedars State Park and Kent Frost.)

ing families of the Northern San Juan strongly identified with Chaco.

About 1080, either the rulers of Chaco decided to shift their capital to the north or a political faction splintered off to form a rival center. Since monumental construction began at the new center around 1090 and ceased at Chaco around 1125, it seems likely that the whole capital moved. After a false start at Salmon on the San Juan River, a new city rose at Aztec: Chaco was recreated nearer the population centers of the Northern San Juan. However, although it may have been nearer, it was not central to those populations. Chaco was offset from the densest population centers; it was fifty miles from the Chuska Valley, for example.

Aztec was about fifty miles from the Mesa Verde breadbasket around Cortez, Colorado. With its city rising at Aztec, the “new Chaco” rebranded itself with distinctive bi-walled and tri-walled structures. Tri-walls were central to Aztec itself (see photograph above), and smaller bi-walled and tri-walled structures were added to the old Chacoan outliers to indicate allegiance to the new



capital. In the Northern San Juan, the bi-walled structure farthest from Aztec was only sixty-five miles distant—a marked decrease in scale from Chaco’s regional heyday. For a few decades, from 1090 to the mid-1100s, much of the Northern San Juan answered to Aztec.

But Aztec did not succeed. The first great buildings of the new city were barely finished when a calamitous drought hit between 1130 and 1180. Building continued in the new capital, but drought brought the polity to its knees. Aztec tried to hold its region together with force, but even that failed. With the demise of the larger polity, clan and family and community identities returned to primary importance; archaeologists call this the Mesa Verde period. Villages shrugged off Aztec, and then battled other villages over diminishing resources. Clans and villages fled the worsening conditions of the Northern San Juan, leaving en masse as early as the mid-1200s. By 1275, the exodus was general; by 1300, it was complete.

Identities were again redefined. As Northern San Juan people moved into existing communities from the

Hopi Mesas to the Rio Grande area, they shed their tell-tale ethnic markers. Things that had seemed important in the Northern San Juan were no longer made or used, including mugs, pitchers, “tri-walled” structures, “keyhole kivas,” and more. Former residents of the Northern San Juan deliberately rejected those distinctive artifacts and architecture as emblems of a failed past. These people, once Chacoan, then “Aztec,” and finally Northern San Juan, reinvented themselves as they joined Hopis, Zunis, and other Pueblo groups.

Landscape Use, Corn Ecology, and Identity in the Upper San Juan

Benjamin A. Bellorado, Abajo Archaeology and Winston Hurst, Inc.

EXPRESSIONS OF SOCIAL IDENTITY in the Upper San Juan were closely related to regional agricultural patterns across the ancient landscape. Corn ecology—encompassing ecological, economic, and social dimensions—became a defining factor of social identity during the early Basketmaker II period (800–400 B.C.). Since then, corn has been an integral part of the Puebloan diet, providing 60 to 80 percent of annual caloric needs, and also has had a profound influence on Puebloans' secular and religious life.

From 800 B.C. to A.D. 760, most of the inhabitants of the Upper San Juan lived in hamlets of one or two extended families. Through time, these populations routinely selected agricultural landscapes differently than other Northern San Juan groups. Specifically, Upper San Juan farmers developed corn that thrived in prime alluvial fan fields, whereas farmers in other parts of the Northern San Juan grew corn that relied on direct precipitation in non-runoff field settings. Over time, these differing agricultural approaches shaped and contributed to the unique local identities in the area.

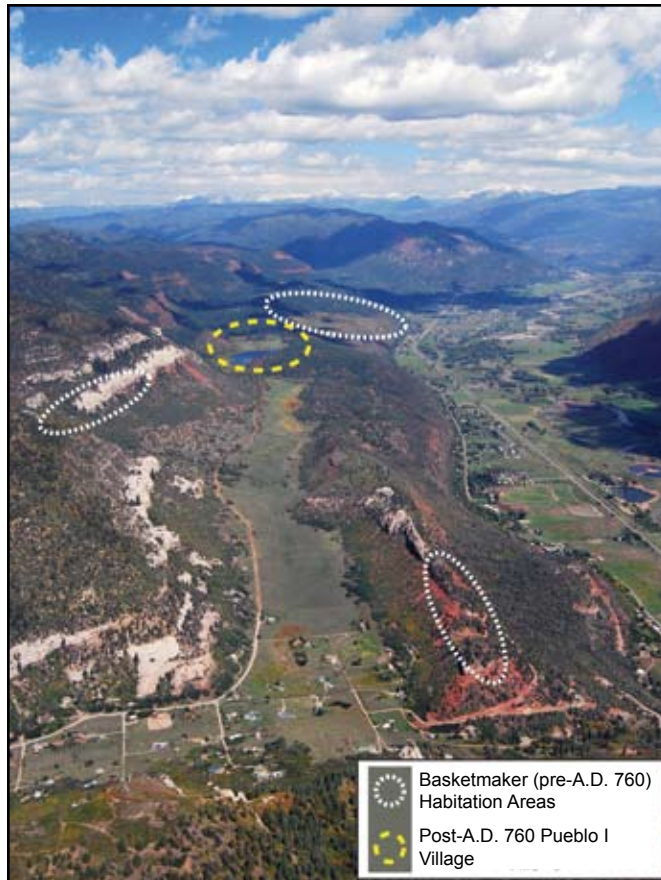
The alluvial fans farmed by the Upper San Juan people were situated where the natural topography concentrated subsurface moisture and drained away cold air, creating longer growing seasons; surface runoff from seasonal rains could easily be diverted onto corn fields. Low population densities prevented crowding on prime farmlands and allowed groups to use the best agricultural lands available.

When faced with shifts in climate, social conflict, or resource depletion, Upper San Juan family groups would pack up their corn seeds and other essentials and move

to similar locations elsewhere in the area. Periodic relocations ensured the overall sustainability of subsistence strategies for more than a millennium. These population movements likely occurred at regular but less frequent intervals over time, eventually taking place about every generation. During warm and dry periods, farmers focused on the Upper San Juan's upland valleys. In cooler periods, they relocated to similar settings at lower elevations.

Around 760, during a region-wide drought, the Upper San Juan became a refuge for groups of people in search of arable lands. Several hundred people moved into the Durango area, from local Upper San Juan settlements as well as from outside the region. For the first time in the area, larger groups of people settled

into permanent villages. Initially, populations relied on the same agricultural lands Basketmaker people had used for centuries. However, immigrants brought new ideas, technologies, corn varieties, and farming techniques. As a result, portions of the landscape outside the boundaries of the traditional alluvial fan fields could now be farmed successfully. As distinct groups mingled and corn varieties cross-pollinated, early Pueblo I farmers perceived the landscape in new ways and new identities emerged in the dynamic Upper San Juan.



Aerial view of ancient Puebloan settlement areas on high-elevation mesas and upland valleys north of Durango, Colorado. Note the location of the early Pueblo I village in the middle of the earlier Basketmaker site cluster. The groups who built these sites took advantage of these well-watered locales to practice agriculture. View is to the north, with the snow-capped San Juan Mountains in the background.

Benjamin Bellorado

Social Identity in an Early Village Setting

James J. Potter, SWCA Environmental Consultants

THE FIRST VILLAGES in the northern Southwest emerged in the early Pueblo I period, at about A.D. 770. At this time, aggregated villages represented a new type of settlement, offering a new set of social and economic options, and providing new cultural identities for those inhabiting them. Remarkably, these early villages were founded in settings that contained little or no previous population and were thus formed mostly of migrants.

to be considered a village. Occupying a large knoll at the west end of Ridges Basin, this village—known today as the Sacred Ridge site—covered about twelve acres and contained twenty-two pit structures, some of which were large enough to have been communal ritual structures. At the apex of the knoll were several unique architectural features, including a large, circular storage facility enclosed by a palisade and a multistory wood-and-adobe tower.

The second-largest settlement cluster was the Eastern Cluster, comprising twelve habitations at the base of Carbon Mountain. Two additional clusters—the North-central Cluster and the Western Cluster—were more dispersed than either Sacred Ridge or the Eastern Cluster. None of the clusters had the unusual architecture seen at Sacred Ridge. All of these roughly contemporaneous settlements formed what we call the Ridges Basin community.

At least some of the settlement clusters may have represented distinct biological and lineage groups, and possibly groups who maintained separate social identities. In addition, burial patterns, clay sources for pottery, and architectural differences, particularly in pit house shape and construction technique, suggest cultural distinctions among the various settlement clusters, especially between the Sacred Ridge site at the west end of the basin and the Eastern Cluster. Indeed, migrants from different areas of the Southwest

appear to have experimented with architectural form as a way to either become socially integrated into the larger population or set themselves apart.

Relationships among households and possibly among settlement clusters in Ridges Basin involved a certain degree of violence. The human remains recovered during the Animas–La Plata project were found on burned pit structures' floors and showed head trauma, possibly indicating violent death. Most dramatically, the violence culminated in a large massacre involving the death and mutilation of at least thirty-five individuals, whose remains were found in three pit structures at Sacred Ridge. The largest deposit of human bone occurred in a small structure at the eastern edge of the site and contained both a massive floor assemblage of butchered remains and a postabandonment layer of remains just above roof fall. Although previous work at sites such as Sambrito Village



Dramatic view of contrasting topography around Ridges Basin, south of Durango, Colorado. Mountainous landscapes and forested ridges form the uplands surrounding this dense Pueblo I settlement zone.

Alkali Ridge in southeastern Utah is one example of this process, and Ridges Basin in the Durango area of southwestern Colorado is another.

From 2002 to 2005, as part of the Animas–La Plata reservoir project, SWCA Environmental Consultants investigated archaeological sites in Ridges Basin, most of which dated to the early Pueblo I period. New groups began to arrive in Ridges Basin in the early 700s. Many of these migrants most likely came from areas to the south, such as the San Juan Basin. Others may have come east from the La Plata River drainage or Mesa Verde area, both of which had sizable Basketmaker III populations. By 770, Ridges Basin contained fifty to seventy-five households who lived in pit structures organized into several settlement clusters.

These clusters varied in size and degree of aggregation. One was large enough and tightly aggregated enough

and Burnt Mesa also produced evidence of violence, the Sacred Ridge assemblage of human bone is the earliest and by far the largest. In all, 14,882 fragments of human bone were recovered from this structure. This event oc-

curred close to the end of the Sacred Ridge occupation and near the time that the entire basin was depopulated, at about 820. Ancient Puebloan settlement never recovered in the area.

Social Orthodoxy in the Chimney Rock Great House Community

Jason Chuipka and Jerry Fetterman, Woods Canyon Archaeological Consultants

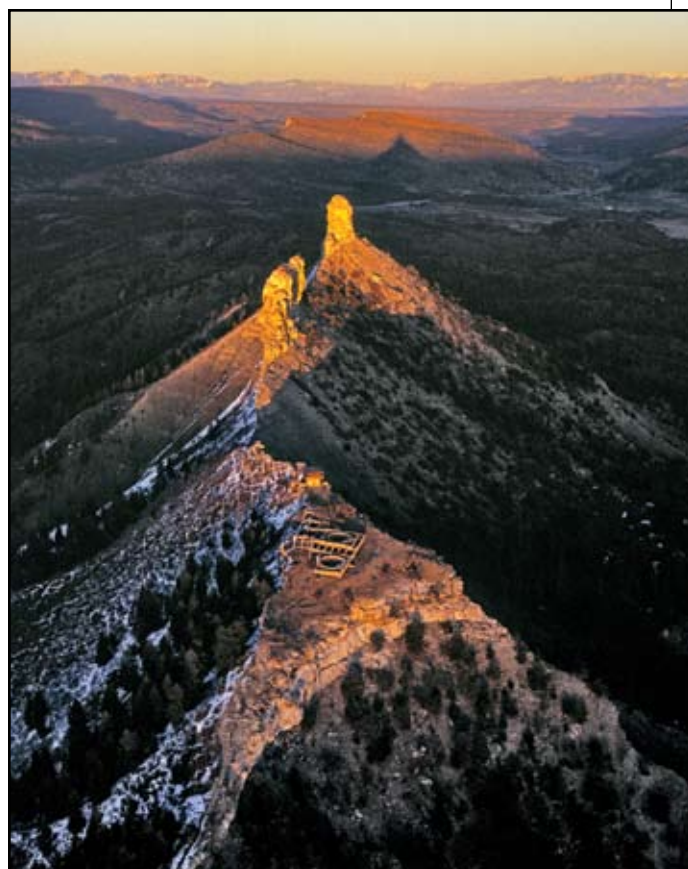
CALLED THE “ULTIMATE OUTLIER” of the Chacoan regional system, the Chimney Rock community is in the upper Piedra River drainage on the northeastern edge of the San Juan Basin. The first archaeological studies in the Chimney Rock area were conducted in the 1920s by Jean Allard Jeancon and Frank H. H. Roberts.

Between 1970 and 1972, the University of Colorado conducted a site survey and limited excavations in the area, under the supervision of Frank Eddy, in preparation for development of the Chimney Rock Archaeological Area for public visitation. The survey of the upper Piedra River identified hundreds of structures in eight site groups on and around Chimney Rock Mesa.

Based on the analysis of architecture and artifacts at these sites, Eddy believed that the Pueblo II period settlement (A.D. 900–1150) of Chimney Rock Mesa occurred in two phases. Pithouse villages on the lower elevations along the Piedra River floodplain and terraces were believed to date between 900 to 1050, whereas between 1050 and 1150, the population moved to higher locations along the spines of narrow, rocky ridges that coincided with the building of a great house. Eddy suggested that because of Chaco’s influence, pithouses were phased out, and that after 1050, only pueblos were built.

Recently, Woods Canyon Archaeological Consultants surveyed the upper Animas, Pine, and Piedra River drainages. Survey results challenge some of Eddy’s conclusions about the settlement history of the Pueblo II Chimney Rock community. Contrary to the idea of an abrupt pithouse-to-pueblo transition, new data suggest that the pithouse villages along the Piedra River were actually contemporaneous with the pueblos on the mesa top, including the great house. This is significant, because the persistence of pit structures during the Pueblo II period may be seen as an expression of social orthodoxy—adherence to traditional beliefs, values, and attitudes—that remained despite the Chacoan presence at the Chimney Rock great house. Among many cultures, social orthodoxy is a way to demonstrate historical continuity and legitimize traditional knowledge, ideology, and an established social order.

The type and the extent of Chacoan influence over this region has long been debated, with many arguments centered on the nature of Chacoan core-outlier interaction. Proponents of a regional perspective tend to view the Chimney Rock great house as an outlier constructed by Chacoan colonists in conjunction with expansion of the Chacoan regional system into the resource-rich northern frontier of the Ancestral Pueblos. Archaeologists disagree about how the system expanded. However, given that the Pueblo II population around Chimney Rock Mesa was composed primarily of descendants of earlier populations indigenous to the Northern San Juan, the retention of architectural and ceramic traditions



The Chimney Rock great house is a Chacoan outlier at the far northern reaches of Chacoan influence.

© Adriel Heisey

from the Pueblo I period (A.D. 700–900) exemplifies social orthodoxy.

If the construction of Chimney Rock Pueblo in the late 1000s involved marginalizing local populations, the conservatism of these populations may reflect an attempt

to preserve some degree of social power. By continuing the network of institutions, symbols, and actions in place prior to construction of the great house, these local groups partially resisted the Chacoan incursion while still allowing the “foreigners” to move into their home territory.

Chimney Rock, Chaco Canyon, and the Local Community

Brenda K. Todd, University of Colorado, Boulder

IDENTITY IS COMPLEX, multilayered, dynamic, and constantly being constructed by people, communities, and lived landscapes. The inhabitants of the Chimney Rock great house created their identities in the same ways that people do today: through their beliefs, homes, clothing, other material goods, everyday activities, interactions with others, and associations with the landscape and places around them. The resulting material record is intimately intertwined with the identities of the people who created it.

The Chimney Rock great house, built around A.D. 1076 and inhabited for about fifty years, was constructed either by Chacoan colonists or by local people supervised by individuals knowledgeable about Chacoan architecture. The structure

is characterized by Chacoan core-and-veneer masonry, has a formal layout, and is situated near two striking topographic features, Chimney Rock and Companion Rock. Participating in the construction of the great house would have shaped the identities of those involved, solidifying or breaking bonds between individuals and groups, making Chaco and all that went with it a part of the builders’ identities and making the builders a part of Chaco. The great house’s inhabitants lived their connections to Chaco through their use of Chaco-style pottery and pink chert from Narbona Pass, likely of symbolic importance in the Chacoan world.

Chimney Rock was linked to Chaco Canyon through both a tangible line-of-sight connection, via a signaling station at Huerfano Pass, and a less-tangible shared ideology. This connection is most strikingly illustrated by the spectacle of the moon rising between the massive stone chimneys east of the great house during the peak of the 18.6-year major lunar standstill cycle.

Wide, formal roads to Chaco Canyon suggest that processions and ritual gatherings occurred there during this period; similar activities probably took place at Chimney Rock. Pilgrims from near and far could have climbed the narrow causeway and ascended a steep stairway before cresting the ridge. After being granted access to proceed past a guardhouse, the pilgrims could have viewed the full moon rising between the towering chimneys from the great house. This astronomical event, perhaps representing ascension into the fourth Puebloan world through a sacred sipapu, would have defined relationships among Chacoan ritual specialists, pilgrims, and supernatural forces of the past and present.

The great disparity between the Chimney Rock great house and the architecture of the surrounding community makes clear the distinction between the Chacoan newcomers and local residents, who likely inhabited the

area for a couple of decades prior to the building’s construction. The arrival of the Chacoans to co-opt the power of the moon and the stone chimneys would have resulted in renegotiated identities on both sides. To varying degrees, the local people tolerated, emulated, participated with, or resisted Chaco. They allowed the Chacoans access to their high mesa and their resources, and may have assisted in, or at least not prevented, the construction of the great house. The negotiations of identity at the great house and surrounding community demonstrate that identity is always changing and is shaped by the relationships among individuals, groups, places, and polities.

John Ninneman



Moonrise during the lunar standstill between Chimney Rock and Companion Rock.

Bluff: A Borderlands Great House

Catherine M. Cameron, University of Colorado, Boulder

AN INTRIGUING MIX of architectural and ceramic elements was found during excavations at the Bluff great house between 1995 and 2004. This structure, which was built and occupied between A.D. 1075 and 1250, lay on the western margins of the Northern San Juan, on the northern frontier of the Chacoan regional system, and a stone's throw from the Kayenta region to the south. Excavations at the settlement—by the University of Colorado, with the Southwest Heritage Foundation and Abajo Archaeology—revealed the presence of different cultures that intermingled in southeastern Utah during the Pueblo II (900–1150) and Pueblo III (1150–1300) periods. The Bluff site could certainly be considered part of the broader Mesa Verde cultural area, but great house architecture suggests a strong Chacoan influence. In addition, Kayenta people, or at least significant quantities of their pottery, were present throughout the site's occupation.

One of the major questions we hoped to answer at Bluff—and a key question for all Chacoan outliers—was whether this settlement was built under the direction of people from Chaco Canyon. The population of the Northern San Juan grew significantly during the late 1000s and early 1100s, when many great houses were constructed, including the one at Bluff. An influx of people at the end of the 1000s, coupled with construction of Chaco-style buildings, indicates that at least some of the new residents in the Northern San Juan came from the San Juan Basin, where Chaco Canyon is located.

The Bluff great house has many architectural characteristics that suggest close interaction with or direct involvement of people from Chaco. These characteristics include a McElmo-style layout, consisting of a back wall that reached three or even four stories; large, tall, rectangular rooms; blocked-in kivas; and Chaco-style core-and-veneer walls, at least in the extensive eastern portion of

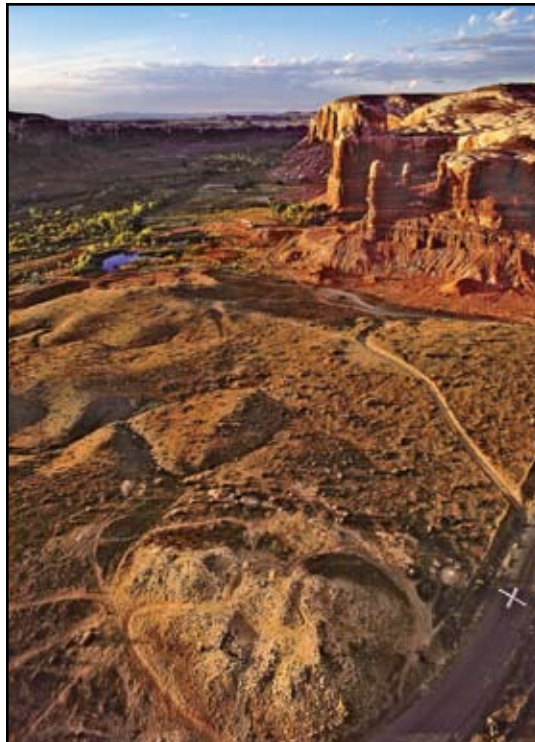
the great house. It is unclear whether interaction between Chaco and Bluff continued after its initial construction. Chaco was a place where foreign goods were brought and deposited; there are no obvious goods that were manufactured and distributed from Chaco. A macaw feather sash (page 6) found in a cave north of Bluff is tantalizing

evidence that the primary “goods” distributed from Chaco to aspiring leaders in its outlying regions were power and status.

In the late Pueblo II period, almost 30 percent of the white ware pottery and 20 percent of the utility wares at Bluff came from the nearby Kayenta region. In the Pueblo III period, Kayenta utility pottery was still present at Bluff, but white wares were not. The significant quantities of Kayenta pottery at Bluff may indicate the presence of Kayenta residents at the great house or its surrounding community. Architecture yields somewhat ambiguous clues regarding the presence of Kayenta people. The west end of the great house is constructed of single-width, edge-flaked masonry, which is characteristic of the Kayenta region, but is also found in the Northern San Juan. The west end of the great house was apparently the first portion to have been built, but

the eastern core-and-veneer part, a Chacoan trait, may have been constructed at almost the same time.

Groups moving north from the Chaco area may have instigated construction at Bluff, and some of the individuals who aided in the construction or lived there later may have been Kayenta people from across the river. While architectural and ceramic characteristics of cultures that archaeologists label Mesa Verde, Chaco, and Kayenta coalesced at Bluff, the social identities of the people who lived at the great house and its surrounding community may have been quite different and far more complex than those created by archaeologists.



© Adriel Heisey

Aerial view of the Bluff site looking northwest up Cottonwood Canyon. The great house is in the lower portion of the photograph, and the great kiva is just outside the photograph's left border. A prehistoric road ran from the western end of the great house up Cottonwood Canyon and across the mesa visible in the distance.

Rising Above: Pueblo III Towers and Social Identity in the Northern San Juan

Alison Bredthauer, University of Colorado, Boulder

NEW WAYS OF SIGNALING participation in the larger Puebloan world—including the construction of towers—emerged during the late Pueblo II–III periods (A.D. 1075–1300). In conjunction with research for my master’s degree, I studied late Puebloan towers across the Northern San Juan. I propose that, as the region experienced tremendous social change prior to depopulation in the late 1200s, the construction of towers allowed populations to negotiate power and mark newly evolved identities.

Northern San Juan culture can be likened to an American icon that is globally recognizable, Coca-Cola. Although Coke varies in its soda recipes, can designs, and bottle types, it is nevertheless distinctively American. Albeit on a much smaller scale, the residents of the Northern San Juan also created a suite of distinctive material culture—a “brand”—that was recognized by contemporary culture groups. As an architectural component of the Northern San Juan brand, towers share consistent patterns in their construction and location. Most towers are circular with a relatively consistent height and interior space, suggesting that a standard for tower construction was used across much of the region. The temporal continuity of circular structures indicates that this shape was important to Ancestral Puebloans. Earlier pithouses and formal kivas were both circular forms, and towers represent the next development in circular architecture. The circular shape of towers may have been a way of maintaining continuity with past Puebloan identities. Furthermore, because these towers are found at sites of various sizes, it is likely that their use permeated various levels of Pueblo society.

The variability shown in tower construction suggests that how towers were constructed mattered less than why they were built, as well as their presence on the landscape. Their interior space was probably used for various purposes, but the main reason they were constructed was their visibility. Building high structures allowed tower builders to signal their participation in the larger Puebloan world.

In the Northern San Juan, the construction of towers near water sources was a way to demonstrate the builders’ political, ideological, and economic power via their ability to restrict access to this scarce resource. Furthermore, towers allowed these groups to connect to the power and identity of the larger Puebloan region and legitimize their control over water.

Finally, it is interesting to observe that Four Corners migrants built no towers in their new homeland in the Northern Rio Grande after 1300. In fact, several hallmarks of Pueblo III material culture—such as mugs, small kivas, and towers (all circular shapes)—were left behind. Perhaps these traits were shed, along with previous social identities, as the migrants attempted to blend in with their new neighbors.



Alison Bredthauer



Wikimedia Commons

Top: Close-up of the foundation of a round tower at Dry Wash Overlook, in southeastern Utah. Bottom: Towers were constructed in various shapes and sizes, as illustrated by Square Tower (foreground, left) and Hovenweep Castle (background, right) at Hovenweep National Monument.

Social Identity and Environment in Late Pueblo III Communities in the Northern San Juan

Kristin A. Kuckelman, Crow Canyon Archaeological Center

AS IN ALL HUMAN SOCIETIES, social identity among Ancestral Pueblo peoples was a complex mosaic of both the fluid and fixed that existed and operated on many levels and at various scales. About A.D. 1250, just decades before the region was completely depopulated, monumental changes in both the natural and built environments of the residents prompted significant shifts in community identity. Puebloan identity—previously rooted in dispersed clusters of humble family farmsteads across rolling uplands—was greatly transformed by the construction of large villages in spectacular natural settings and by a dramatic elaboration of public architecture.

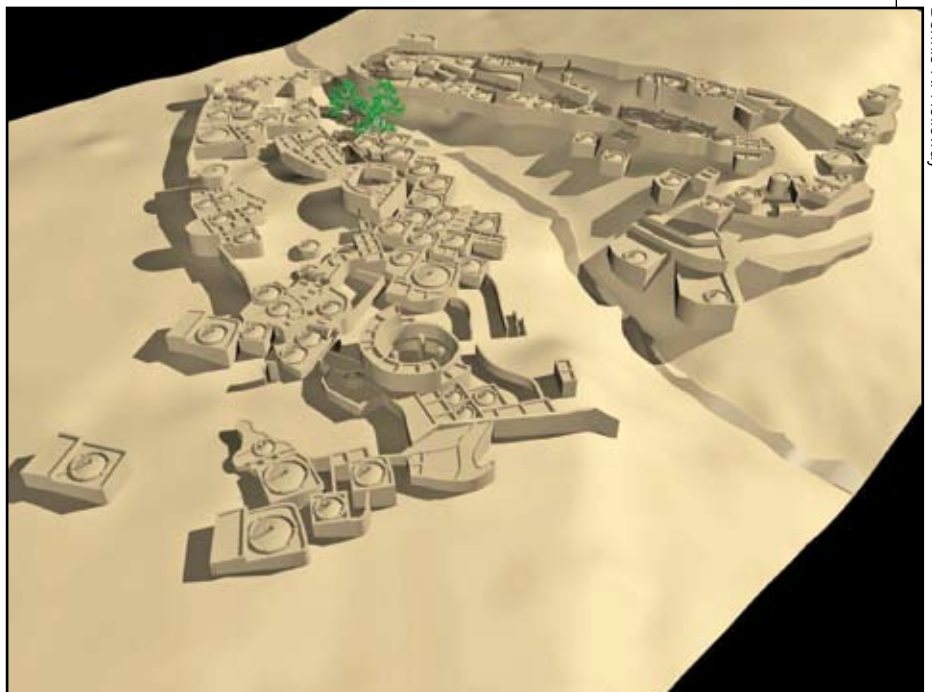
Northern San Juan communities centered at Goodman Point and Sand Canyon Pueblos controlled some of the most dependable springs and productive agricultural lands in the region. In the mid-1200s, residents overtly expressed control over these crucial natural resources by constructing large, fortified settlements around their springs in previously uninhabited, breathtaking, and symbolically powerful canyon-rim settings. This florescence signaled greater group organization and investment in the community that generated, shaped, and solidified a new community identity.

Massive masonry walls were constructed to enclose the large pueblos built at Goodman Point and Sand Canyon and to protect residents against attack. Such enclosures also created plazas and other bounded spaces while underscoring the social separation of those inside from “others” on the outside. Towers and other multistory structures allowed protected views beyond the pueblo walls and provided havens during attacks as well as enhancing community protection and strengthening group identity.

In addition to the traditional integrative structure—the great kiva—communities such as Sand Canyon and Goodman Point also built multistory, D-shaped, bi-walled complexes. These impressive buildings were constructed near the centers of villages in imposing canyon-rim locations that emphasized and augmented their ver-

ticality. The D-shaped layout of these complexes might have symbolized ancestral ties to Pueblo Bonito in Chaco Canyon, itself a D-shaped construction, and thus constituted a physical reference to a long-lived, widespread, and powerful system.

Such conspicuous public structures and spaces proclaimed and were a testament to the prosperity, status, power, and prominence of the community in the region



Dennis R. Holloway

Reconstruction of the large Sand Canyon Pueblo settlement. Community identity was exemplified in the proximity of these large buildings to life-sustaining springs and in the increase in the type and scale of public structures.

and distinguished those who designed, constructed, and controlled the use of such places. Furthermore, as symbols of propitiation to supernatural beings, these monuments implied favor and portended future prosperity. Community identity was also shaped, both consciously and unconsciously, by its leaders. Physical attributes of notable individuals enhanced community prestige through visible marks of special status bestowed and sanctioned by supernaturals. For example, a robust man who lived at Sand Canyon Pueblo had six toes on his right foot and might have descended from powerful Chaco leaders at Pueblo Bonito, a connection that would have shaped the identity of the Sand Canyon community.

However, across the Northern San Juan, the 1270s were a time of drought and associated subsistence stress. Competition for resources heightened intragroup loyalty and also sharpened social boundaries between groups. Deadly attacks on fortified villages might have been attempts to eradicate the social identity of the residents. Intra-regional violence intensified, signaling a catastrophic breakdown in regional integration that preceded depopulation of the region in about 1280. As kin groups splintered off and left the region, communities shattered and

the physical-environmental foundations of identity fell away. Most facets of social identity underwent massive shifts and reorganization as community members set off across the landscape.

Although fixed aspects of identity survived to see expression in new social and geographic contexts, such as the Northern Rio Grande, many aspects of community identity in the Northern San Juan were lost, subsumed, or transformed in myriad destinations and social milieus across the Southwest.

Illuminating Relationships between Northern San Juan and Northern Rio Grande Identities

Scott G. Ortman, Crow Canyon Archaeological Center

WHEN A. V. KIDDER published the first overview of Southwestern archaeology in 1924, he noted that the population of the Rio Grande drainage in New Mexico grew substantially as the population of the San

Grande communities or if they dwindled in place and thus contributed little to the Rio Grande Pueblos.

Neither scenario accounts for the archaeological record of the Northern San Juan as we know it today. For example, despite widespread violence and challenging climatic conditions, the Northern San Juan's residents in the A.D. 1200s appear to have been healthy and fertile. Also, even though the Northern San Juan population began to decline in the mid-1200s, at least 15,000 people still lived there in the 1270s; the entire population was gone by 1285. These patterns are not what one would expect if the population withered in place, or if the final emigration involved a gradual drift of small groups into existing communities elsewhere. At least some people must have moved very rapidly, and in large groups.

I have been puzzled by these contradictions for years. When I began working on my Ph.D. dissertation, I wanted to better understand why, if thousands

of people migrated from the Northern San Juan in the 1200s, archaeologists find so little evidence of Northern San Juan cultural influence at their destination, the Northern Rio Grande.



Poshu'ouinge is a Pueblo IV period ancestral Tewa village in north-central New Mexico. Recent research suggests that the ancestral Tewa people, and their language, came from the Northern San Juan. (Photograph by Charles Lindbergh, courtesy Palace of the Governors Photo Archive [NMHM/DCA], Neg. No. 130299.)

Juan drainage declined. He also noted that there were few indications of migration between the two areas. Ever since, archaeologists have debated whether San Juan populations were gradually absorbed into existing Rio

Based on studies I conducted for my dissertation, I think I have some answers. First, it appears that a large portion of the Northern San Juan population moved to the upper Rio Grande drainage. For example, I have found evidence of an especially close biological relationship between ancestral Tewa people of the Rio Grande and earlier Northern San Juan people. I have also identified Tewa place names for landforms and sites in the Northern San Juan that are associated with oral traditions stating that Tewa people came from these places. Finally, I have found a number of words in the Tewa language whose etymologies reflect symbolic elements of Northern San Juan material culture, even though these elements did not travel to the Rio Grande. It is difficult to see how these words could have had the histories they have had if the Tewa language had not been spoken in Northern San Juan sites. These patterns suggest that the Tewa language, and most of the ancestral Tewa population, originated in the Northern San Juan.

Second, it appears that the movement from the Northern San Juan to the Northern Rio Grande was associated with a dramatic cultural transformation. There is some continuity in material traditions between the two areas, but the dominant pattern is of a wholesale replacement of thirteenth-century Northern San Juan material traditions by newly invented traditions, existing Rio Grande traditions, and “reinvented” Northern San Juan traditions. What this pattern suggests to me is that Tewa identity originated through the migration of Tewa speakers from the Northern San Juan to the Northern Rio Grande. This scenario is consistent with Tewa oral tradition, and has a parallel in the formation of American identity in the



A more recent view of Poshu'ouinge.

1700s: most of the people in the thirteen colonies came from Britain and spoke English, but these same people began to think of themselves as Americans as a result of the American Revolution.

Perhaps the most important implication of my work is that it suggests human cultural diversity is much less genealogical than many archaeologists have tended to believe. For example, most languages are grouped into families in which various “daughter” languages have clearly descended from a single “parent” language, whereas the archaeological record consists primarily of distinct material culture traditions in various times and places. How should anthropologists reconcile these two radically different patterns? I have come to believe that social transformation associated with migration, as illustrated by the Northern San Juan-to-Tewa case, may be the key.

Supplementary online material for this issue is available at: www.cdarc.org/asw-24-3.

See the Center for Desert Archaeology website for more information: <http://www.cdarc.org>

AT THE CENTER FOR DESERT ARCHAEOLOGY, we envision a society in which the places of the past are valued as the foundations for a vibrant future. As such, it is our mission to preserve the places of our shared past. A private 501(c)(3) organization, the Center is supported through donations, memberships, and grants from individuals, foundations, and corporations. Center members receive an annual subscription to *Archaeology Southwest* and a host of other benefits. For more information or to join, contact Membership Coordinator Kate Sarther Gann at 520.882.6946, ext. 16, or kate@cdarc.org.

Board of Directors: William H. Doelle, Ph.D. (President and CEO), Al Arpad (Vice President), Peter Boyle (Treasurer), Bernard Siquieros (Secretary). **Members-at-Large:** Demion Clinco, Jeffrey S. Dean, Diana Hadley, Benjamin W. Smith, and Donna Taxco Tang. **Advisory Board:** Hester A. Davis (Arkansas Archaeological Survey, retired), Don D. Fowler (University of Nevada, Reno, retired), William D. Lipe (Washington State University, retired), Margaret Nelson (Arizona State University), William J. Robinson (University of Arizona, retired), James E. Snead (George Mason University), and María Elisa Villalpando (INAH, Sonora, Mexico).

Archaeology Southwest (ISSN 1523-0546) is published quarterly by the Center for Desert Archaeology. Copyright 2010 by the Center for Desert Archaeology. All rights reserved; no part of this issue may be reproduced by any means without written permission of the publisher. Subscription inquiries: 520.882.6946.

Back Sight

IDENTITY IS A COMPLEX TOPIC, as the authors of this issue illustrate so well. One reason that the Center for Desert Archaeology initiated a partnership with Salmon Ruins and hired Paul Reed as a Preservation Archaeologist a decade ago was to shape the Center's identity. We sought to demonstrate our commitment to the entire American Southwest, and we wanted to highlight one way in which what we call "preservation archaeology" can advance research with no impact on the archaeological record. At that time, the monumental excavations and community-based archaeology carried out by Cynthia Irwin-Williams in the 1970s remained unpublished two decades later. Today, there are three volumes that report on that material and another book about recent research related to Salmon and its neighboring settlements. This work, led by the guest editor of this issue of *Archaeology Southwest*, Paul Reed, represents an important step in developing the Center's identity as a leader in preservation archaeology.

Preservation archaeology emerges from the awareness that the archaeological record is a nonrenewable resource. It responds to the increasing threats from development, vandalism, and natural factors like erosion.

Because new research is essential to advancing the discipline, a preservation archaeologist chooses research strategies that minimize impacts to the archaeological record. Preservation archaeology is characterized by the use of surface surveys, re-examining existing collections in museums, using new questions and new methods, and employing minimally invasive methods when excavation is carried out. When new collections are made, it is essential that they be analyzed, fully reported on, and placed in a permanent curation facility so that future researchers will have ready access to them.

The Center's commitment to preservation archaeology includes sharing results with professionals and the general public. *Archaeology Southwest* is our flagship vehicle for distributing information about our own research and that of many others who are active in the American Southwest or Mexican Northwest.

Finally, protecting sites through ownership, holding conservation easements, and through educational and stewardship programs are an essential part of the Center's approach to preservation archaeology. As a young institution, the development of our identity and our core mission of preservation archaeology has been gradual. In 2011 we will be undertaking a more focused and intentional approach to the Center's identity. It promises to be an interesting process, and one that we will share with you.

back sight (băk sīt) n. 1. a reading used by surveyors to check the accuracy of their work. 2. an opportunity to reflect on and evaluate the Center for Desert Archaeology's mission.



© Adriel Helsey

A tower kiva and a great kiva undoubtedly helped to shape the identity of Salmon Pueblo's residents. Salmon Ruins plays a key role in the development of the Center for Desert Archaeology's identity.

William H. Doelle, President & CEO
Center for Desert Archaeology