When the Spanish Conquistadors first entered the northern American Southwest (northern Arizona and New Mexico and southern Utah and Colorado) in 1540, they encountered communities of farmers living in massive pueblo villages. Yet, for hundreds of years, prior to the fourteenth century, the ancestors of these pueblo people had lived in small hamlets averaging some fifty rooms. It was only near the early years of the 1300s that an abrupt transformation occurred and they began living in these large mud settlements of a thousand or more rooms. This startling increase in settlement size radically transformed pueblo life from one that had been characterized by hundreds of small villages widely scattered over the whole of the northern Southwest, to a cultural landscape where pueblo people lived in relatively few large settlements concentrated in the Rio Grande Valley, on the Hopi mesas, and around the present day pueblos of Zuni, Acoma and Laguna. This paper addresses the question of why this revolution in settlement size occurred and how it led to the origins of the great pueblo architectural style.

For decades, the widely accepted explanation for the origin of these great pueblos has been a simple story of a great drought in the late 1200s that devastated the regional farming economy of the large population living in the Mesa Verde region in what is now southern Colorado and Utah. This drought, the story went, forced its peaceful inhabitants to abandon their old homes and migrate south into northern New Mexico and Arizona, where they constructed a new style of huge aggregated pueblos and here they continued their peaceful lives.

I said this was a simple story, but remember the old saying: “Seek simplicity and distrust it.” New research in climatology, history, ethnography and archaeology has forced a rethinking of the old story of a peaceful pueblo people affected by a great drought who migrated south to originate the big pueblos.

Basic to this old story was the assumption that pueblo people were profoundly nonviolent. This notion was reinforced by Ruth Benedict in her classic book Patterns of Culture, in which she wrote: “the Zuni [who for her represented all pueblos] …have no place for… force of will...or the disposition to take up arms against a sea of troubles.” Rather, she wrote, they are “incorrigibly mild.”

Yet, when the Spanish entered the Southwest in the 1500s this was not at all what they encountered. More exactly, they found experienced, committed pueblo fighters who were willing to go to great lengths to protect their communities. At Acoma, for example, the Spanish
came upon a high plateau holding a pueblo village which, as they wrote, contained, “two hundred warriors-robbers who were feared throughout the land.” Around their hilltop village they had constructed a shielding wall behind from which they could hurl down rocks in numbers so large that no army could reach the top.

Throughout their occupation, the Spanish recorded cases of pueblo aggression and conflict. For example, Adolph Bandelier, the pioneering Southwestern anthropologist, found that war played an “…important role…in pueblo life.” He described that during their clashes with others the pueblos used shields, bows and arrows, war clubs, and strong buffalo hide helmets worn by their warriors. He also wrote about their scalp societies, scalp dances, warrior societies, war chiefs, war dances and war gods.

Bandelier concluded that conflict was not just present but was a pervasive part of pueblo life.

The Spanish legends also describe the belligerence of which pueblo people were capable. One Laguna tale begins: “Long ago the people…were ready to fight…some men were brave…and…not at all afraid to die…they never ran away from a fight. Everyday the Navajo and Apache [who historically were pueblo adversaries along with neighboring pueblos] would come to steal…people would call for help from the war chief. When a Navajo is killed they always take his scalp and carry it home, sometimes displaying it on a pole in the plaza. Every night…they danced the war dance.”
The archaeological record also provides confirmation of pueblo conflict, as admirably demonstrated in Steven LeBlanc’s book Prehistoric Warfare in the American Southwest. He identified widespread discord among the pueblos, especially during periods of drought. And, he records evidence for massacres, the rapid construction of defensive settlements, burned kivas, and the fiery destruction of villages. Some archaeologists feel this evidence can be explained in other ways, but none have marshaled the substantial data necessary to refute LeBlanc’s argument, which is why his book is such an important contribution to Southwestern archaeology.

Lawrence Keeley’s book, War Before Civilization, documents that conflict among traditional people—like the pueblos—was common worldwide, even a regular part of their life. All traditional people, he reports, resort to raiding, theft, and fighting whenever their vital interests are at stake. This work puts pueblo aggression in the wider context of more universal violent behavior and underlies my whole argument regarding the origins of the big fourteenth century pueblos.

In the arid Southwest, good climate was critical to the success of traditional farming, and pueblo people continually struggled to control the capriciousness of their weather through prayerful ceremonies for rain and fertility. A graphic example of what they feared was discovered in the late 1920s from the study of ancient tree rings. This data led to the recognition that the Mesa Verde region endured a great drought in the latter part of the 1200s, leading archaeologists to conclude that the “Great Drought,” as it became known, was the cause of the region’s abandonment by ancestral pueblo people, formally referred to as the Anasazi. Because large pueblos, built in the 1300s, had been discovered to the south just following the drought, many archaeologists assumed these had been built by the fleeing Mesa Verde people.

One of the recent challenges to this story has come from new discoveries about climate change in deep ice cores drilled in the Greenland glacier. These cores have revealed two significant findings that relate to the ancient pueblo story. First, they show that climate change can come quickly, lurching dramatically from one stage of weather to another. And, second, they confirm that there were two quite different climatic periods over the time of ancestral pueblo development.

The ice cores confirm what other studies have shown that beginning about A.D. 900 and lasting to about A.D. 1270 the climate in the northern hemisphere became warm, moist and excellent for farming. Climatologists call this the Medieval Warm Period and historical records from Europe provide important comparative information that sheds light on what happened in the American Southwest during this climatic episode.

Beginning about A.D. 900, a pattern of superb weather began in Europe, resulting in bountiful harvests, a quadrupling of the population, and a flourishing economy that supported the construction of grand architectural works like the soaring medieval cathedrals. In the American Southwest this same remarkable climate also greatly improved the economy of the ancestral pueblo people. These warm, moist centuries produced exceptional harvests and a similar rapid growth in population over the next three hundred years. With the demographic increase, small farming hamlets were built everywhere, even in locations we now think of as marginal, like the bottom of the Grand Canyon, where I have excavated several settle-
ments from this time period and where we know from surveys that hundreds more exist. The favorable weather of the Medieval Warm Period also led to a great population increase in the Mesa Verde region.

However, after three hundred years of incomparable weather, and a population boom, a new and destructive climatic episode abruptly arrived. This was the devastating Little Ice Age that emerged first in the late 1100s and lasted well into the 1700s. A similar downturn in climate was also recorded in great historical detail in Europe at this time. By 1300 Europe had entered a period of deep cold and dreadful storms. Harvests plummeted, malnutrition was common, diseases were rampant, and starvation was so common that millions died. Bands of ravenous, homeless men roamed the countryside, plundering for food and creating a landscape of violence.

In the Southwest, the Little Ice Age brought a similar period of cold, resulting in a decline in harvests, widespread famine, devastating raids and incidences of violent carnage. Its effects first appeared in marginal regions like the Grand Canyon, where in the late 1100s there was a sudden decline in population and dramatic evidence of extreme anxiety when nearly inaccessible rock mesas were used for the planting and storing of food, apparently as a safeguard from thieving pueblo neighbors. The presence of these defensive locations coincided with the rapid drop in population, suggesting a time of trouble, famine and raids, with many people either dying from starvation, killed during raids for food, or moving away, no longer able to live off their withered land. Eventually, by whichever course, or a combination of them all, the Grand Canyon and the whole northeastern segment of ancestral pueblo territory had become completely depopulated.

While pueblo life was vanishing in the northwest, it was flourishing on the more fertile lands to the east, in the Mesa Verde region. However, by 1250 this area also began feeling the damaging force of the Little Ice Age, and over the next decades it too was eventually struck by cold, famine and violent raiding for food. To protect themselves from attack by neighbors, the people of Mesa Verde first moved out of their vulnerable mesa top villages and into the protection of cliff overhangs where they could build a new kind of defensible dwelling. But the unyielding bad weather soon overwhelmed them even here with the same sequence that had affected their cousins to the west. They experienced deep cold, famine, and finally raids by desperate neighbors in search of food. Eventually these raids destroyed whole villages. The starvation and brutality fatally devastated the Mesa Verde population, as it had at the Grand Canyon, and in the end, the once lush Mesa Verde region could no longer sustain a farming life.

In the face of famine and carnage, those who survived moved out, not in great conquering columns, but as small bands of stragglers seeking survival in warmer lands to the south. Now the Little Ice Age had taken its lethal toll on the whole northern part of the Southwest, which by the late 1200s was a cold and deserted landscape, with only ruins as a reminder of its great pueblo past.

There was still a pueblo population to the south, however, in the Rio Grande Valley and further west to Hopi country. This area survived the earliest decades of...
the Little Ice Age because of its lower latitude and warmer temperatures, which somewhat moderated the increasing cold. Nevertheless, archaeological research has demonstrated that these more southern settlements also experienced drought, drastically reduced harvests, malnutrition, frenzied attacks by starving neighbors, and the burning of villages to expel competitors. Horrible as their conditions were, they were not as fatal as those that had depopulated their whole northern pueblo region from the Grand Canyon to Mesa Verde. The slightly more ameliorated climate in the south allowed them to continue to farm successfully. They also arrived at an architectural innovation that allowed them to survive the raids that intensified in the fourteenth century.

In the Rio Grande valley, pueblo people had lived in diminutive, open sided hamlets that had been designed for the bountiful, peaceful times of the Medieval Warm Period. But, with the onset of the Little Ice Age, these small defenseless villages became a liability. So, if the pueblo people were to survive, they had to transform the way they lived.

This transformation took the form of larger, stronger and safer settlements for protection to house more warriors. This is the kind of settlement I excavated at Arroyo Hondo, five miles south of Santa Fe, New Mexico. It began about 1300 and ultimately expanded to a thousand rooms in response to the new landscape of violence that came with the famine and raids brought on by the Little Ice Age. In establishing this new type of great pueblo, the local people first found an extraordinary location that contained all the essentials for making a living - water, farmland, and a wide range of surrounding ecological zones that held an exceptional variety of plants and animals. In addition, the builders focused on critical qualities of defense. The location they chose was positioned at the edge of a deep arroyo whose steep sides would slow access to any attackers. Its elevated position provided good sight lines in all directions, reducing the possibility of sneak assaults.

To ensure their safety further, they incorporated into the architecture of their settlement several defensive features, some of which were new. They planned a larger plaza around which they then constructed blocks of rooms for more households and a greater fighting force than could be accommodated in their former hamlets. No doors were built into ground floor rooms. The only access was through a roof opening by way of ladders that could be pulled up after the family was inside. Each residence then became a tiny stronghold. Entry to the plaza also was made more secure by abutting the corners of the four surrounding room blocks to form a solid barrier that could only be entered through a single gate, which could be closed in time of danger. The surrounding back wall of each room block, with no openings, created another strong barricade against raiders.

This combination of walls, gates and a strategic placement made Arroyo Hondo Pueblo a fortress in addition to being a working community. This citadel was situated above the surrounding landscape, large enough to hold
more warriors than any settlement in the region. It also maintained a vast surrounding territory of some eighty square miles in which its settlers could farm, hunt and gather, and which served as one more buffer against outsiders.

Others instantly recognized the Arroyo Hondo stronghold’s success in holding off raiders. Neighboring villagers soon flooded in to join the original settlers for protection and rapidly built, adjacent to the original plaza room block, additional plazas and residences. These resulted in a growing series of adjoining fortified units, each adding more warriors to protect the new town. Over a relatively short time Arroyo Hondo pueblo acquired nine bordering plazas that held nearly one thousand villagers, more than ten times the size of most earlier hamlets.

As the Arroyo Hondo Pueblo fortress rapidly attracted more neighbors and grew in size, this new town presented a serious menace to other smaller villages in the region. Ultimately other settlements replicated Arroyo Hondo’s size, construction and defensive location in order to protect themselves more effectively. Throughout the Rio Grande Valley, and to the west, traditional hamlets were abandoned and almost overnight new fortified towns appeared. This radical replacement in design completely changed the once peaceful pueblo homeland of hundreds of small scattered villages into a province of relatively few big, brawny, competitive towns. These were not utopian communities built by peaceful migrants from Mesa Verde, as the old story proposed, but sanctuaries for local people seeking protection during a time of regional chaos. Throughout the fourteenth and fifteenth centuries these large competitive settlements continued to raid one another for scarce food, which may have given rise to new, aggressive elements in ancestral pueblo culture like scalp taking, scalp dances, war chiefs, warrior societies, and war gods. This then is the Native American life the Spanish found when they arrived in the northern Southwest: pueblo people living in large fortified settlements interacting in a region of conflict.

The Little Ice Age and the famine and belligerence it provoked turned pueblo culture upside down and could have destroyed its will, or brutally have ended the old way of pueblo life. But throughout their centuries of suffering, pueblo people in some way remained resilient. This resilience eventually allowed them to reemerge, not as passive survivors, but as buoyant victors with robust, flourishing communities filled with music, dance and spirituality.

I wonder if Alfred North Whitehead was correct about this kind of ordeal and renewal when he wrote:
“There must be a degree of instability which is inconsistent with social life, but on the whole, the great ages have been the unstable ones.” I feel this thought holds true for the ancient pueblo farmers of the northern Southwest who lived a precarious life with the onset of a rapid climate change with its resulting famine and conflict.

But in the end they triumphed over these adversities and successfully evolved a thriving, imaginative, and devout existence. It is this extraordinary emergence of a vibrant way of life that arose out of the depths of turbulence that is the powerful lesson I take from the contentious origins of the great pueblo architectural style.

References

Castaneda, Pedro de. 1922. The Journey of Coronado, 1540-1542, From the City of Mexico to the Grand Canon of the Colorado. Translated by George Parker Winship. Fulcrum Publishing.


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