The Search For Moho

In 1541 in what is now New Mexico, the Spanish explorer Coronado and his men attacked a Native American pueblo they called Moho. This resulted in one of the first significant battles between Europeans and Natives in the region. Historical accounts of Moho's location are vague, so the exact place of the battle is uncertain. Several researchers, all of whom are focused on different sites, think they have found it.

By Charles C. Poling

On a chilly autumn day above the Río Grande, archaeologists Mike Marshall and Clay Mathers are reconstructing the details of a 473-year-old assault at the ruins of Santiago Pueblo north of Albuquerque, New Mexico. "To the Tiguex Pueblo people who lived here it was a crime scene," Marshall says. "It was an unprovoked attempt to take everything they had, and it threatened their very existence. Our archaeological investigation is a long-delayed forensic examination of a complex series of siege and resistance events."

Approximately 200 Tiguex people died in 1541 when Francisco Vázquez de Coronado led a patchwork force, consisting primarily of Spanish and other European adventurers and native Mexicans, in an armed siege of a fortified pueblo they called Moho. A desperate and determined Native force had retreated to Moho to stage a last stand in the climactic two-month battle of the Tiguex War, one of the first major armed conflicts between Europeans and Native Americans in what is now the Southwestern United States.

"The consequences of the Tiguex War were real," Mathers says. "Almost certainly that's why the Spanish put the capital in Santa Fe and not here—there was such an intense loss of life here and they lost their stored food..."
supplies.’ Marshall adds, “This one pueblo affected the course of history” in the region.

Nobody knows exactly where this siege of Moho took place. Coronado and his chroniclers used one set of names for the area’s pueblos, and the connection between many of those names—including Moho—and the actual locations they describe, has been lost. Other, smaller battles took place in Coronado’s time, too, which complicates the search. Are the ruins now called Santiago the actual location of Moho, as Mathers and Marshall contend? Or was it roughly 11 miles south at another ruin, Piedras Marcadas, as archaeologist Matt Schmader speculates? Or are the historians Richard Flint and Shirley Cushing Flint right when they argue Moho was some 15 miles upriver from Santiago at what is now Basalt Point Pueblo, which sits atop Santa Ana Mesa, or some other site on that mesa? And where was Coofor (sometimes referred to as Coofer, as well as Alcanfor), the site of a major Coronado encampment and a geographic key to the puzzle?

“There wouldn’t be any Moho to look for if you didn’t have documents,” Richard says. “On the other hand, there was no map with an X on it. We can be pretty sure that it’s somewhere in the” greater Albuquerque area.

The documents also say the Coronado contingent camped nearby and provide the approximate distance from Moho to the related pueblo of Coofor. For years, these documents alone told the tale of Coronado. Only recently has archaeology revealed the Native American perspective.
The Coronado entrada, which lasted from 1540-42 and extended as far north as Kansas, proved to be a futile search for a wealthy civilization to conquer. No Spaniard or Mexican would return for 40 years. Tantalizing nuggets in the historical documents, which are riddled with holes and laced with ambiguities, inform the current archaeological investigations in New Mexico.

Coronado left Mexico with 375 European men at arms and some 2,000 indigenous Mexican soldiers. Few wore armor and among their weaponry they carried roughly a dozen swords, 20 crossbows, and 26 arquebuses (an early firearm shooting lead balls). Many of the Mexican soldiers wielded devastating, obsidian-bladed, mace-like macanas. The expedition brought horses, mules, and other livestock. Miscellaneous civilians tagged along.

By the winter of 1540-41, after a fight with the residents of Hawikku Pueblo in western New Mexico, the Coronado expedition was cold, hungry, and essentially freeload ing on the Tiguex, who lived in the area around present-day Albuquerque and were thought to number up to 20,000. Here the Spanish found a number of multi-storied, mostly adobe pueblos featuring enclosed plazas, palisades fortifying the entrances, ceremonial kivas, and farms in the floodplain.

When Coronado and his men settled in, the trouble started. After taking over Coofor, they demanded supplies, warm clothing, and blankets from the area pueblos. The Tiguex balked, complied, resisted, and eventually revolted. Skirmishes flared into battles. The Spanish exacted brutal retribution and even burned Tiguex men at the stake.

A group of desperate Natives found refuge at Moho. Coronado’s forces attacked, and were repulsed. They then hunkered down for a long winter’s siege. The Natives
subsisted on stored provisions and, because Moho lacked a permanent water source, drank rainwater or snowmelt until those sources ran dry. Here the details get sketchy. The Spanish documents report the Tiguex began digging a well, the walls of which collapsed on 30 people, killing them. After about two months, the remaining refugees fled at night only to be cut down by Coronado’s men or perish as they tried to cross the icy Río Grande. So ended the Battle of Moho.

Archaeologists excavated the Santiago site in 1934-35 in search of artifacts and features associated with Coronado. They found a number of metal artifacts but, according to Mathers, they lacked the expertise to connect them to the Spanish explorer. In 1986, a highway crew inadvertently exposed a Coronado encampment a few hundred yards west of Santiago. Bradley Vierra, who excavated the encampment, and Stanley Hordes, the historian who worked on the project, suggested that Santiago might be either Coofor or Moho.

Then in 1998 archaeologists working near Tallahassee, Florida, uncovered an encampment from the Hernando de Soto expedition that was contemporary with the Coronado site. The encampment, known as the Governor Martin site, yielded wrought iron, caret-headed nails that were similar to nails found at Santiago. The Flints, having examined items from the Coronado and de Soto encampments, as well as early 16th-century Caribbean sites, suggested that caret-headed nails were indicative of Spanish occupation prior to 1560.

The Flints’ suggestion was corroborated by Mathers and Charles Haecker’s archaeological research, which showed the nails were a telltale find identifying Coronado and other Spanish sites of this time period. The same goes for crossbow bolts, which are the copper tips of Spanish arrows fired from crossbows. Forty years later, when the next Spanish/Mexican expedition reached New Mexico, the arquebus had effectively replaced the crossbow and the Spanish were not using caret-headed nails.

After Vierra excavated the camp by the
highway, little happened with the Albuquerque-area Coronado sites until Schmader, along with Mathers, Haecker, and Chris Adams, made a breakthrough find in 2007, tying Piedras Marcadas Pueblo to Coronado. Piedras Marcadas sits a quarter mile from the Río Grande on a low, brushy rise. Schmader and Marshall both worked the site in the 1980s, using pottery sherds to date its occupation from a.d. 1200 through Coronado’s time. Though none of its architecture still stands, it had about 1,000 ground-floor rooms and a plaza that sprawled over eight acres.

Out of respect for contemporary Pueblo communities who consider the site an ancestral village, Schmader has restricted research to surface surveys, mapping, remote sensing, and test excavations, which includes a pit he dug that disappears into darkness 12-feet down. In 2007, while using remote sensing to discern the pueblo’s layout, a member of Schmader’s team found a rusty caret-headed nail. He showed it to the Flints, who confirmed the Coronado connection. “We’d always suspected it,” Schmader says, but prior to the discovery of the nail “we didn’t have the evidence.”

After that, Schmader and his colleagues used metal detectors to find dozens of 16th-century artifacts a few inches below the surface. Schmader has continued his investigation over the past seven years, finding over 1,000 artifacts from that period, such as nails, lead musket balls (some flattened by impact), copper crossbow bolts, chain mail links, a broken dagger tip, clothing fasteners, horse gear, and awls.

Schmader correlated the artifact distribution patterns with an architectural map created from the remote-sensing
data. This evidence spoke of a pitched battle. For instance, densely clustered military artifacts by an entrance suggest intense fighting at the palisade, which is mentioned in the texts. Schmader believes the high number of broken, bent, and flattened military objects and lost personal items indicate multiple skirmishes at Piedras Marcadas—a siege.

There is also a deep crater that contains most of a kiva as well as Spanish metal artifacts that could be Moho’s caved-in well. Perhaps the Tiguex attempted to dig the well inside an existing kiva. This crater hasn’t been excavated, and therefore it remains a mystery. Finally, if one accepts Santiago as Coofor, as Schmader suggests, Piedras Marcadas is the same distance from Santiago, according to the historical documents, as Moho was from Coofor.

Marshall says Santiago’s archaeological evidence tells the story of Coronado’s assault and the Pueblo Indians’ resistance. (The site is on land owned in part by The Archaeological Conservancy.) Since 2013, Marshall and Mathers have been working at the ruins in cooperation with Sandia Pueblo and the site’s other owners to complete a systematic and highly comprehensive survey. Part of this investigation, and the on-going consultation with the nearby contemporary pueblos of Sandia and Isleta, shed light on the Native American side of the Coronado entrada that, according to Marshall, has been seriously neglected by most scholars.

Using a metal detector, Mathers has found more than 500 objects, including chain mail fragments, flattened lead balls, crossbow bolts, a complete knife, horse gear, buckles, and caret-headed nails. The collection looks much like the Piedras Marcadas material, but with fewer personal items, Mathers says. Other findings include Native weapons such as stone battle hammers, axes, projectile points,
and sling stones, plus burnt adobe and 16th-century Pueblo glaze-ware pottery.

Santiago’s evidence, like that of Piedras Marcadas, indicates furious fighting at the two main entrances. The architecture suggests the Tiguex built the pueblo to defend against attacks. The archaeologists who excavated Santiago in the 1930s didn’t find a well, but they didn’t excavate the plaza, where it could be. Mathers says they also failed to document a deep depression that’s now obscured by development.

The Flints believe the siege of Moho happened at Basalt Point Pueblo, or possibly a neighboring site on Santa Ana Mesa, 200 feet above a daunting cliff overlooking the Rio Grande on present-day San Felipe Pueblo, about 30 miles northwest of Albuquerque. The Flints argue this location best matches the “on a height” description of Moho from Spanish documents written in 1545. The Spanish also described Moho as being “strong,” according to Richard, and they “equated strength of a fortification with being on a high, steep hill. There are hundreds of 16th-century and older examples of such fortresses in Spain.” He adds that the word moho means lichen, of which there is a heavy growth on the Santa Ana Mesa cliff. Neither Santiago nor Piedras Marcadas are perched on a hill or covered with lichen.

For their parts, Marshall, Mathers, and Schmader note that “height” could refer to a tall pueblo, and that the almost impenetrable basalt geology of the mesa seems to rule out digging a well. They also consider Basalt Point to lie outside the area the Spanish defined as the Tiguex province, in which Moho was located. “We believe eventually that archaeological and other data will demonstrate conclusively that Santiago is the best candidate for Moho,” Mathers says. He and Marshall intend to submit their evidence for publication in a peer-reviewed journal. Shirley Flint also thinks the location of Moho will be confirmed at some point by a combination of unequivocal historical and archaeological evidence. Schmader, on the other hand, thinks that the ambiguity in the archaeological and historical records is such that proving its location beyond a reasonable doubt could be impossible.

But he is sanguine about the outcome. “I’ve really gotten to where it doesn’t matter,” he says. He’s more intrigued by the similarity of artifacts at Piedras Marcadas and Santiago, since the documentation does not describe a big battle at Coofor. “Now it’s more of a mystery as to why the assemblages at Santiago and Piedras Marcadas are relatively similar if the sites had reasonably different activity on them,” he says. But then he concludes philosophically: “Advances lead to other questions.” And that’s what keeps the archaeologists digging.

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