



MONTEZUMA CASTLE

Castle A

Only a few hundred yards to the southwest of Montezuma Castle lay the ruins of a second cliff dwelling—Castle A—that when standing was twice the size. Destroyed in a fire that caused the dwelling to peel away from the cliff face and collapse in upon itself, Castle A yielded little in terms of answers when excavated in the 1930s. Recent re-evaluation of the pottery collected in 1934 and new dates for the site, however, are beginning to form a picture of at least the demise of Castle A.

The 1934 Excavation

Led by Earl Jackson and assistant Sallie Pierce (later Sallie Van Valkenburgh), the 1934 excavation of Castle A involved clearing and mapping of the upper-story cavate rooms hollowed into the cliff face, excavation of the lower rooms buried under the rubble of the collapsed upper rooms, and digging several test trenches in front of the ruin.

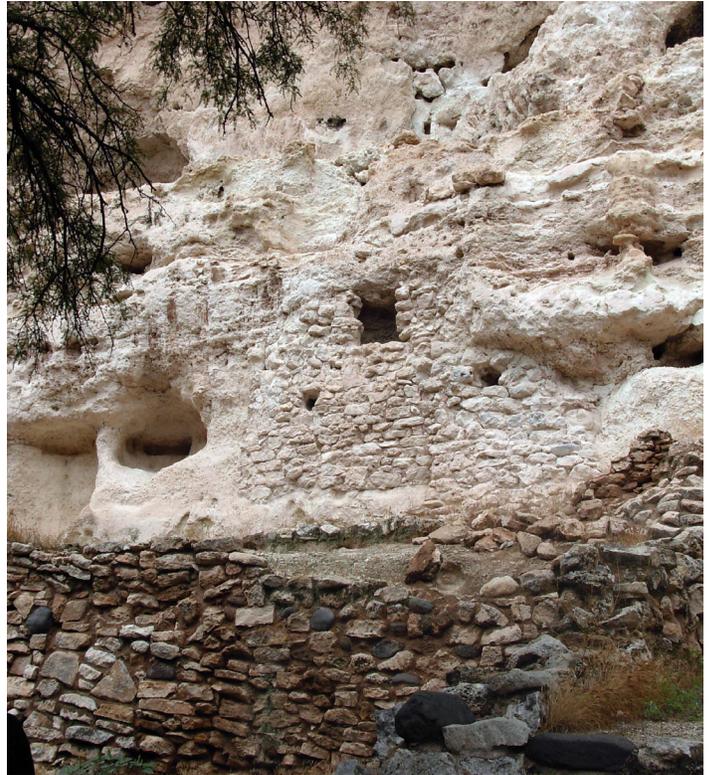
Thousands of pottery sherds, along with other artifacts and food remains, were recovered from the debris. These suggested Castle A was occupied from A.D. 1200 or earlier to perhaps A.D. 1350 or 1400, bringing researchers to the conclusion that Castle A was older than Montezuma Castle, but likely occupied, at least for a time, concurrently (Jackson and Pierce 1941; Jackson and Van Valkenburgh 1954:Table 3).

When compared to the estimated 45 rooms of the dwelling, the artifacts found in Castle A were considered relatively scarce, suggesting a “leisurely leave-taking” by the inhabitants (Jackson and Van Valkenburgh 1954). Accumulated sediment found in the lower rooms also led Jackson and Van Valkenburgh to conclude that the site had long been in disuse when the fire razed it to the ground. Writing of the scenario in their early reports, Jackson and Pierce (1941) submitted the following:

[Castle] A... undoubtedly burned down. Every room excavated on the lower level had fragments of burned ceiling timbers on the floor. This burning of ceilings, and subsequent collapse would have caused the masonry walls to buckle and fall inwardly, as they appear in some cases to have done. With them went a good section of the cliff.

...likely high waters or heavy rains flooded the people out of the lower section of their house, causing them to abandon it for the higher rooms of the same building or to flee to the sister house, Montezuma Castle.

OVERVIEW



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The remnants of Castle A in 2010.

A Catastrophic Event

As Jackson and Pierce proclaimed, without doubt, Castle A burned to the ground. But were they correct in that the catastrophe happened after people had already moved out of the dwelling? This has remained one of the primary questions about Castle A for the last 80 years, and one that only recently have archaeologists had the chance to re-address.

New Evidence

In 2011 and 2013, Montezuma Castle National Monument had the opportunity to sample burned plaster still adhering to cliff face and submit it for archaeomagnetic dating, a type of dating that assesses when thermal events (e.g., fires) occurred by comparing the alignment of iron particles in the sample to known alignments of the Earth’s magnetic field in the past.

Analysis of the samples returned a series of date ranges, the most reliable of which were A.D. 1375-1415 and A.D. 1370-1395 (Cox 2011, 2014). Castle A, therefore, appears to have burned in the last quarter of the fourteenth century. But was the dwelling still occupied?





Tom Windes (left) and Matt Guebard (right) sampling the burned plaster of Room 2 for archaeomagnetic dating.

To answer this question, National Park Service archaeologist Matt Guebard turned to the ceramic artifacts collected during the 1934 excavation of the site, focusing on the types for which manufacture dates were within range of the archaeomagnetic dates (Guebard 2014).

Guebard re-analyzed 205 pottery sherds, including varieties of Winslow Orange Ware, Roosevelt Red Ware, Jeddito Yellow Ware, and White Mountain Red Ware. Jeddito Black-on-yellow proved to be the most common type, but unfortunately had a production range too extended for use in determining when Castle A was last occupied. The next two most common types dating to this period (Homolovi Polychrome and Awatovi Black-on-yellow), however, have end dates of A.D. 1375—one of the dates produced by the archaeomagnetic samples.

Three sherds of Los Muertos Polychrome, which have a start date of A.D. 1390, account for the latest pottery found on the site. Taken together, therefore, the ceramic evidence is consistent with Castle A still being in use up to the burning of the dwelling between A.D. 1375 and 1395.

A New Sequence of Events

Jackson's and Pierce's (1941) interpretation of the fire at Castle A having occurred after the dwelling was no longer occupied hinged on the presence of sediment found between the floors and fallen roof beams in some of the lower rooms. However, a careful review of their reports suggests that in many cases the supposed flood deposits were absent. In rooms 3 and 3a, for example, the burned ceiling beams rested directly on the floor,

with no mention of other deposits made. Even in rooms containing flood deposits, such as Room 5, Jackson and Van Valkenburgh (1954) commented “only the slightest traces of a burned ceiling had been preserved from action of water,” suggesting deposition of the flood sediments *after*, rather than before destruction of the dwelling.

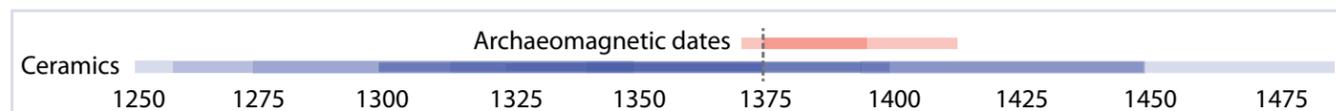
Other evidence exists too to suggest that although flooding certainly occurred at Castle A, and probably more than once, the flood deposits on which Jackson and Pierce made their interpretations were more recent than the fall of Castle A. For example, amongst a fairly substantial number of other artifacts in Room 2a—one of the rooms containing “two to 4 inches of water-washed sand and lime dirt”—was found a “broken Brown-on-yellow bowl.” This vessel could have only been Jeddito or Awatovi Black-on-yellow, types used up to A.D. 1375 and beyond. The presence of this bowl indicates Room 2a was likely still in use and not flooded out at the time of the fire.

Finally, based on the archaeomagnetic dates, the burning of Room 2, located on the ledge directly above Room 2a, occurred between A.D. 1375 and 1395, or at the latest, A.D. 1415. Given that this room had at least one other above and was tied to the rest of the dwelling via the cliff face, masonry walls, and roofs, it is most reasonable to assume, as Jackson and Van Valkenburgh (1954) did, that Castle A burned and collapsed during a single catastrophic event, albeit one that happened prior to the deposition of any flood deposits within the rooms.

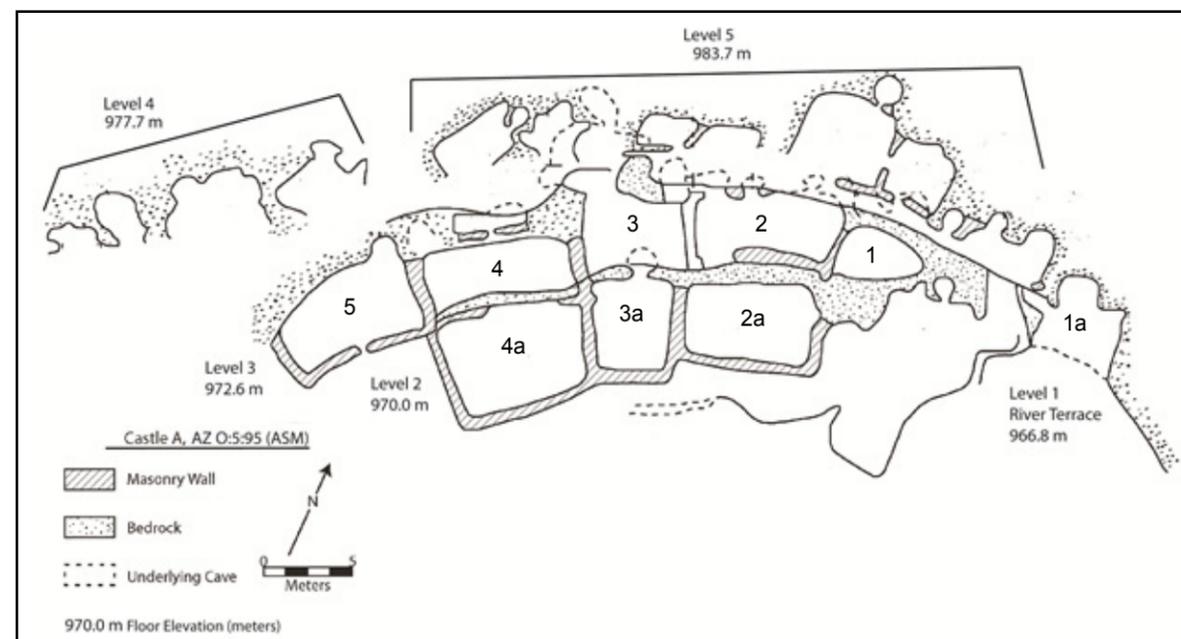
Accidental or Intentional?

As Guebard (2014) argues, the combined evidence indicates that Castle A *was* still occupied when the dwelling burned to the ground. But was the fire an accident or the product of violence?

The thoroughness with which Castle A burned suggests intentional destruction rather than accidental (case in point, samples used in archaeomagnetic dating have to reach a minimum temperature of over 1,000 degrees F to be viable). While intentional burning of dwellings prior to a move was not uncommon in the Southwest during this period, comparison of the floor assemblages suggests burning of the site in the context of violence. Room 4a, for example, thought to have been abandoned a fair time prior to the rest of the site (Jackson and Van Valkenburgh 1954), had only a tiny 3/4 grooved axe, a large bowl, and parts of two large plain ollas on the floor. Room 3a, however, had two large plain ollas,



Overlay of date ranges for late decorated ceramics from Castle A compared to the archaeomagnetic date ranges.



Plan view map of Castle A, after Wells and Anderson (1988:Figure 2.5).

a large metate, still positioned as it would have been in use, a basin metate, an antler, three manos, two bone awls, parts of several stone hoes, and a large basket on the floor. Other rooms, including Room 2a with the “broken Brown-on-yellow bowl,” and rooms 3, 4, and 5, all had comparatively complete floor assemblages.

Room 3a also offers a final clue about the timing and nature of the fire. Jackson and Van Valkenburgh (1954) reported the supine, extended skeleton of an elderly male found lying on the floor of the room, buried by ceiling material above, but with only a few charred bits beneath and without the accompaniment of material goods. Questioning why the bones were not burned, the two proffered a number of explanations, including burial sometime after the fire. Other explanations exist, however—perhaps the man succumbed to the smoke of the fire, was struck by falling debris, or was simply trapped as the ladder, the only means of exiting the room, burned. Collapse of the roof shortly thereafter would have buried his body, thereby protecting it from the flames and leaving the bones unburned.

The greater number of items in the occupied rooms, including those that could easily have been moved (the basket in Room 3a, for example) suggests, contrary to the conclusions of Jackson and Van Valkenburgh (1954), that the occupants of Castle A did not have opportunity to remove their belonging before the fire. Taken in conjunction with the fact that a person also appears to have been left unburied in an occupied room, it would seem that the destruction of Castle A was the result of intentional violence.

Given the regional context, this may well have been the case. Beginning around A.D. 1250, warfare in the Southwest be-

came more prevalent than ever before (Lambert 2002). Small sites were left in favor of large aggregated residences, and by the early 1300s, in many places this pattern was tied to increases in unburied bodies, scalping, male deaths, and art depicting shields, bows, and other war iconography (Kohler et al. 2014; LeBlanc 1999; Schaafsma 2000).

The Verde Valley was not immune. During the same period in which Castle A burned, hilltop forts with defensive architecture such as loopholes and perimeter walls, had become common, as had large, concentrated settlements (Guebard 2014). So too is there evidence of direct conflict, including at Castle A itself, where two males sustained multiple injuries consistent with violent contact (Jackson and Van Valkenburgh 1954). These two men were buried outside Castle A and therefore cannot be linked directly to the fire that destroyed the dwelling; their injuries, however, provide indisputable evidence that violence was not unknown at Castle A (Guebard 2014).

After the Fall

Even if the residents of Castle A fled to the less accessible Montezuma Castle, as suggested by Jackson and Pierce (1941) in their flooding scenario, they did not stay long. Although Yavapai and Apache oral histories and a growing body of archaeological evidence indicate the ancestors of these people remained in the Verde Valley, Montezuma Castle and essentially all of contemporaneous pueblos of the region were no longer inhabited by probably no later than A.D. 1450.

Some people may have remained behind, joining the ancestral Yavapai and Apache people living in the Verde Valley. At Castle A, however, the abundance of Jeddito Yellow Ware and

Winslow Orange Ware suggests strong ties to the Little Colorado River and Hopi areas to the northeast. Hopi migration traditions recorded as early as late 1800s by Fewkes (1898) and still recounted today also include the Verde Valley and other southern locations as *Palatkwapi*, described as both a time and place of origin (Bernardini 205:74). The Hopi Bearstrap and Water clans in particular express ties to the Verde Valley, Montezuma Well, and Montezuma Castle. Like many others, therefore, the surviving residents of Castle A may have left the Verde Valley for lands to the northeast.

Summary

Using the descriptions from the 1934 excavations, the new archaeomagnetic dates, and Guebard's (2014) re-analysis of the ceramics from Castle A has allowed for new interpretations about the timing and nature of the fire that razed Castle A—namely that the dwelling likely burned while occupied and in the context of violent conflict in the late 14th century. Archaeologist Matt Guebard is continuing his research along these lines, and the National Park Service has begun working with tribes associated with Montezuma Castle National Monument to collect and present oral traditions about Castle A, with the hope that together, traditional and archaeological knowledge will ultimately provide a comprehensive history of the occupation and destruction of Castle A.

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Restoration

A single room (Room 5) was restored while the others at Castle A were being excavated in 1934. Materials used in the restoration consisted of rocks from the rubble and mud made from lime dirt and river sand, along with sycamore, willow and cottonwood for the roof beams and roof (Jackson and Van Valkenburgh 1954).



Room 5, as reconstructed in 1933-34. The reconstruction was later dismantled and the walls returned to their heights as they were at excavation. Photo by the National Park Service.



The excavated floor surface of Room 5 prior to restoration. Photo by the National Park Service.