

Two Chaco-Style Great Houses on Cedar Mesa -- with Kayenta Pottery

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The Et Al and Owen Great House sites on Cedar Mesa, Utah have architectural features that point strongly to "Chaco" influences. In contrast, the presence of Kayenta pottery, often dominating the ceramic inventories, raises questions that are difficult to resolve.

Cedar Mesa is in southeastern Utah an area that includes the most northwestern Chaco Outliers. This figure shows the Bluff, Et Al (42Sa18431), and Owen (42Sa24584) sites, as well as the HST (42Sa28201) site, a likely isolated Great Kiva.

The Et Al, Owen, and HST sites are shown here in relation to the core quadrat sampling of the Cedar Mesa Project, carried out in the 1970s (Lipe and Matson 1971; Matson and Lipe 1975, 1978; Matson, Lipe, and Haase 1988,1990).

In 2009 we mapped the three sites and collected lithics and ceramics from selected features as shown on this Et Al map. In addition Bill was able to locate and classify ceramic samples collected from the Et Al site in the 1980s by Winston Hurst and the late Richard Ambler.

I am going to briefly describe the Et Al and Owen sites, and then the HST site, focussing on physical description and dating. Then I will turn to the issue of

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Kayenta ceramics at these sites.

The Et Al site is a "big bump" located in the central portion of the Anasazi occupied area of Cedar Mesa. It is a very organized multi-room, multi-storied room block, with the typical north wall, southern orientation. In size and formality it contrasts strongly with the typical small mesa-top habitation sites of the late PII and P III periods on Cedar Mesa.

A distinctive Chaco feature is "blocked-in" kivas and Et Al has one very good one and a so-so one. Both of these are much larger than the typical Cedar Mesa kiva, with the map showing 7.5 and 6m diameter circles.

The row of rooms at the north part of the room block is an attribute typical of Chacoan Great Houses. The eastern rooms range up to 4 x 4.1m, very large for Cedar Mesa, and comparable to the 3.5 x 3.5m of feature 56 at Bluff (Cameron 2008).

The masonry consists of large, well-shaped sandstone blocks with little "mud" mortar needed, again unusual for Cedar Mesa. Two course-masonry walls are demonstrated here, in a second story doorway. Although core and veneer masonry is not visible at Et Al, the first story walls are also not exposed.

The tree-ring dates are shown here. Most of the wood is very highly eroded and so are far from cutting dates. I see these as representing an initial building in the very late 1000s, then a hiatus and rebuilding in the very late 1100s or early 1200s. Key to this understanding are these three dates (16,18, 20 in Bold)

which are all "secondary beams" from room 5. Numbers 16 and 18 are vertical "props" as illustrated on the right. These are small, relatively un-eroded, and so should be both relatively close to cutting dates and very late in the use of the site.

An initial occupation in the late 1000s and reoccupation in the very late 1100s is in accord with the ceramics. Explaining this dating requires a short review of the Cedar Mesa ceramic sequence.

The core ceramic sequence on Cedar Mesa is based on these 47 sites first analyzed in 1977. We clustered the sites of the first two dimensions of the metric multidimensional scaling (shown here) of a data matrix of 14 decorated types (Matson et al. 1990). The four clusters resulting are the Redhouse phase, circa 1225-1270, Woodenshoe, 1165-1225, Windgate circa 1065-1110, all three dominated by Mesa Verde ceramics, and the Kayenta dominated Clay Hills phase (1090-1140) (Matson et al. 1990). The time direction thus goes like this, between the Mesa Verde and Kayenta distributions.

One would expect that Windgate would be the initial "Chacoan" occupation. Windgate is dominated by Mancos B/W, and Mesa Verde Corrugated types, but Black Mesa B/W and San Juan Red Wares are also present. This is the complex that is found associated with the building of the Bluff site.

How do our Et Al collections fit with the Cedar Mesa sequence? This

composite figure shows the apparent temporal placement of the larger Et Al features collections. EF 2 , EF 5, and EF 13 appear to be "Woodenshoe", EF 3 and 8 between Woodenshoe and Windgate, and EF 16, early Clay Hills or Windgate.

One of Bill's critiques of the use of Mean Ceramic Dating and seriation to place single ceramic assemblages in time is that both give a single point estimate for even a long occupation -- or even for an occupation - hiatus - reoccupation sequence. This leads to the question whether any of the Et Al features on this figure are "mixed collections." One way to look at this issue is to mix the relevant phases and see where they place on the Cedar Mesa Project seriation.

On this figure we see the location of the likely Woodenshoe-Windgate (WoWi) and Woodenshoe-Clay Hill (WoCH) mixtures. Note that no feature appears to be close to the Woodenshoe-Clay Hills mixture. Et Al Features 3 and 8 are essentially at the same location as WoWi, suggesting that they may be a mixture.

How to check this possibility? In 1990 we suggested in 1990 (Matson, Lipe and Haase) a check by comparing a seriation using Mesa Verde ceramics only and one based on Kayenta ceramics only. If the seriation locations are different between the alternative seriations, mixture is supported. In our case, Windgate occupation, hiatus, Woodenshoe re-occupation is the likely situation.

These two seriations, Kayenta and Mesa Verde based, show that Et Al Feature 3/8 is much earlier in the Kayenta seriation (middle Clay Hills) than in

the Mesa Verde ceramics (middle Woodenshoe), as expected if it is a mixture of Woodenshoe and Windgate. Note that Owens Feature 9ab does not move staying in Windgate.

This digression supports the hiatus interpretation, but can not be said to be conclusive. Moving on to look at other "Chacoan" features.

As most of you will hear from the Till and Hurst presentation, roads are well represented on Cedar Mesa. This figure shows those adjacent to Et Al. Note also the location of the possible Great Kiva. Other "earthworks" such as mounded middens (Features 3 and 7), which are often thought of as Chacoan attributes are present (Cameron 2008; Warburton and Graves 1992). This is a photo of the road to the south of Et Al.

The possible Great Kiva depression is shown here. We attempted to do some amateurish GPR'ing at all three sites in 2009, but failed to get useful information.

Perhaps the most specialized feature at Et Al is no. 17, used for making arrow points. Although the number of tools, shown here, along with bifacial reduction flakes and tertiary flakes, is minimal, the debitage categories and material types contrast strongly with that found elsewhere at Et Al, as shown in these two tables.

The abundant biface reduction flakes show biface making is a definite function. No similar features or "site" was found in the Cedar Mesa Project as far

as we can tell making this feature unique.

Feature 16, a Kayenta "Clay Hills" hot spot, shown here has approximately 50% Kayenta 50% Mesa Verde pottery, can either be thought of as another specialized "Feature" or a Kayenta member of the Et Al community.

In summary, Et Al has many "Chacoan" attributes, including layout, blocked-in kivas, multi stories and appropriate dating with predominant Mesa Verde ceramics. The Great Kiva depression is not very certain, nor is the inferred occupation - hiatus - reoccupation sequence.

Owen Site

The Owen site (Severance 1999) is another "big bump" as shown here in this rendition. It is located about 15 km north-northwest of Et Al. It is similar to Et Al, being very large for Cedar Mesa, with a good north-wall, multi-storied and at least one inferred road.

In some ways, it is quite different with the presence of a large depression immediately to the south of the room block. Bill and I think that almost all of you would agree that this is a Great Kiva depression if you visited it. The indicated diameter on this map is 13.5m. Notice, though, unlike Et Al, no "blocked in" kivas are present although at least one kiva (Feature 4) is nearby to the east, with another probable (Feature 3), to the northeast.

The room plan, shown here, is Bill's inference. The sandstone at Owen is

softer and less erosion resistant than at Et Al so that no walls could actually be mapped. Nonetheless, it is a multi-storied, and very regularly laid out.

The general dating of the site as late P II as shown here by the "OF" feature locations on the seriation. Most of these features are Kayenta Clay Hills rather than Windgate. Feature 8 appears to be a mixture of Windgate and Kayenta ceramics dating to about 1100. Please note the location of our next site, HST, in the middle of the Clay Hills cluster. Feature 9ab, directly south of the Great Kiva depression appears to be middle Windgate here, with the least Kayenta pottery of any Owen collection. Feature 9ab was interpreted by Bill as having a small P III component but as noted earlier, did not "move" in the Kayenta and Mesa Verde only seriations. A single modified late P III Mesa Verde B/W sherd was present south of the Great Kiva.

Essentially we have a late PII site with primarily Clay Hills Kayenta pottery to the north and east of the room block and a mixture of Windgate and Clay Hills to the south. Whether the Great Kiva depression was also used in P III times, or was just a "shrine" is unclear.

Owen is similar to Et Al, but without as clear Chacoan attributes and without evidence of reoccupation. The absence of "blocked-in" kivas and the abundance of Kayenta ceramics stand out as differences.

HST Site

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The H.S.T. site is north of Et Al and linked with it by a road that will be described by Till and Hurst. The HST site appears to be an isolated Great Kiva with Clay Hills ceramics. An alternative interpretation is that it is an unusual eroded Clay Hills jacal Prudden Unit.

The ceramics were analyzed in the field by Bill. The typed decorated sherds were very dominated by Kayenta forms; Sosi, Dogoszhi and various Tsegi Orange Ware sherds. I sent a map and the ceramics in an e-mail to Jeff Dean who replied that he was aware of no Pueblo Kayenta Great Kivas anywhere (Dean 1996:40). A test of the presence of a Great Kiva, by remote sensing or otherwise, is clearly in order.

If this is an isolated Great Kiva, it is unique in that it is associated with primarily Kayenta pottery of late P II times. What does this mean? What are the feasible explanations?

Kayenta Ceramics and Chacoan Sites

One interpretation is that Clay Hills pottery represents Tusayan people. One might infer, if this is the case, that Tusayan people would participate in Great Kivas on Cedar Mesa (HST and Owen sites) but not "blocked in" kivas. This would account for the "blocked-in" kiva absence at Owen, yet "regular" kivas adjacent. Both Mesa Verde and Kayenta pottery adjacent to the Great Kiva at the Owen site would point to the Great Kiva integration of both "people" in the

greater community. Of course, that interpretation is difficult to square with the HST site.

If we look at Et Al in this light, the site appears to be a conventional Chacoan Outlier, very similar to, but smaller, than the Bluff site. But what about Feature 16? Only 60m away from the room block, apparently coeval, yet with equal amounts of Tusayan and Mesa Verde wares. If the inhabitants of Cedar Mesa did not make ceramics at this time -- although they did later -- it is difficult to see the radical swings in abundance only a few tens of meters distant on the basis of which trade ware was most available that year. Obviously, sourcing both the Cedar Mesa Kayenta and Mesa Verde pottery is important, a project Donna Glowacki is directing.

Conclusions

Both Et Al and Owen sites have an impressive list of "Chacoan Great House" characteristics. By saying so, we are including Cedar Mesa into the Chaco system without inferring any particular relation with the Chaco Canyon or Aztec centres.

The late P II surge of Kayenta ceramics to the north of the San Juan river is the subject of a separate paper presentation by Bill and Donna Glowacki. The common interpretations of this surge, trade or people, do not fit easily with these three sites on Cedar Mesa.

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Note: This draft differs from Draft 5 (which was the bases of the SAA presentation) only in a correction on the tree-ring dates from Room 5 at the top of page 3.

References Cited

Ahlstrom, Richard

1985 *The Interpretation of Archaeological Tree-ring Dates*. PhD dissertation, University of Arizona, Tucson.

Cameron, Catherine M.

2008 *Chaco and After in the Northern San Juan: Excavation at the Bluff Great House*. University of Arizona Press, Tucson.

Dean, Jeffrey

1996 Kayenta Anasazi Settlement Transformations in Northeastern Arizona. In *The Prehistoric Pueblo World A.D. 1150-1350*, edited by Michael A. Adler, pp.29-48. University of Arizona Press, Tucson.

Kantner, John and Nancy M. Mahoney (editors)

2000 *Great House Communities Across the Chacoan Landscape*. Anthropological Papers of the University of Arizona, No. 64, University of Arizona Press, Tucson.

Lekson, Stephen (editor)

2006 *The Archaeology of Chaco Canyon*. School of American Research, Santa Fe

Lipe, William D.

2006 Notes from the North. In *The Archaeology of Chaco Canyon*, edited by Stephen Lekson, pp.261-313, School of American Research, Santa Fe.

Lipe, William D., and R. G. Matson

1971 Human Settlement and Resources in the Cedar Mesa area, S. E. Utah. In *The Distribution of Prehistoric Population Aggregates*, edited by George Gumerman, pp. 126-151. Prescott College Anthropological Reports, No. 1, Prescott.

Magne, Martin P.R.

1985 *Lithics and Livelihood: Stone Tool Technologies of Central and Southern Interior BC*. National Museum of Man Mercury Series, Archaeological Survey of Canada No. 133. Canadian Museum of Civilization, Ottawa: .

Matson, R.G., and William D. Lipe

1975 Regional Sampling: A case study of Cedar Mesa, Utah. In *Sampling in Archaeology*, edited by James Mueller, pp. 124-143. University of Arizona Press, Tucson.

1978 Settlement Patterns on Cedar Mesa: Boom and Bust on the Northern Periphery. In *Investigations of the Southwestern Anthropological Research Group: An Experiment in Archaeological Cooperation*, edited by Robert C. Euler and George J. Gumerman, pp. 1- 12. Museum of Northern Arizona, Flagstaff.

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Matson, R. G., William D. Lipe, and William R. Haase, IV
1988 Adaptational Continuities and Occupational Discontinuities: The Cedar Mesa
Anasazi. *Journal of Field Archaeology* 15:245-264.

1990 *Human Adaptations on Cedar Mesa, Southeastern Utah*.
<http://www.anth.ubc.ca/research/research-facilities/laboratory-of-archaeology-loa/pdf-library/matson-lipe-and-haase-1990.html>

Severance, Owen

1999 Prehistoric Roads in Southeastern Utah. In *La Frontera: Papers in Honor of Patrick H. Beckett*, edited by Meliha S. Duran and David T. Kirkpatrick, pp.185-195.
Archaeological Society of New Mexico Papers No. 25. Albuquerque.

Warburton, Miranda and Donna Graves

1992 Navajo Springs, Arizona: Frontier Outlier or Autonomous Great House?
Journal of Field Archaeology 19:51-69.