

Us and Them?: Late Precontact Social Dynamics in Mule Creek, New Mexico

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Introduction

The Upper Gila region of Southwestern New Mexico was home to a substantial population during the 14th and 15th centuries but has seen comparatively little archaeological research. Archaeology Southwest (formerly the Center for Desert Archaeology) began work in this region in 2008, focusing on Mule Creek, New Mexico, with the goal of shedding light on late precontact migration and the large 14th-15th century Salado settlements in the Upper Gila. Four seasons of fieldwork and collections-based research have expanded our understanding of the Salado or Cliff Phase (c. AD 1300 - 1450) occupation and of the complex social dynamics in Mule Creek immediately prior to the Cliff Phase.

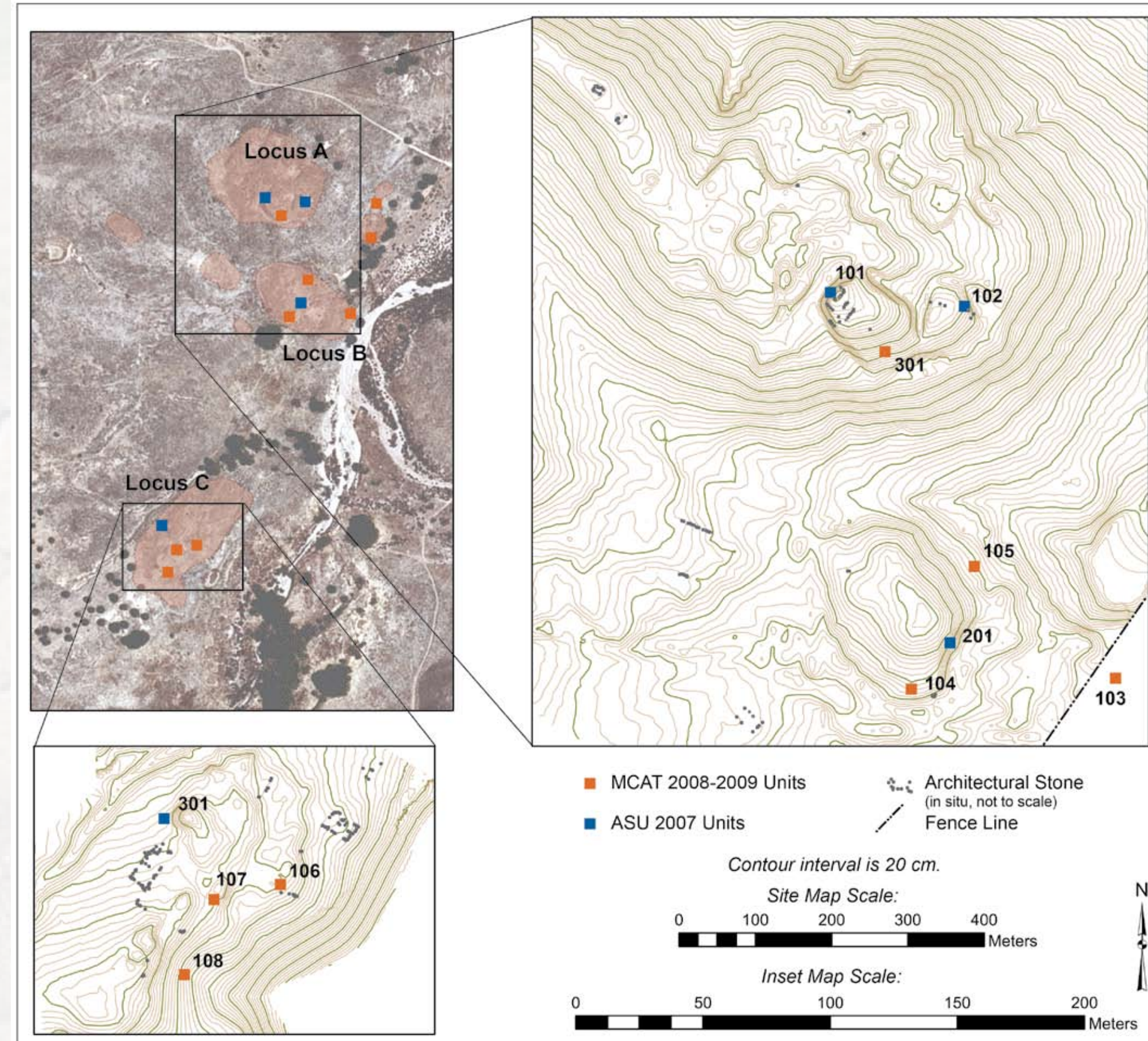
The Fornholt Site

The final component of Mule Creek's Fornholt site consists of two 13th to early 14th century room blocks, together totaling about 60 rooms, overlying an earlier Mimbres Classic and pithouse component. The larger, southern room block surrounds a depression that appears to be a great kiva. Parts of the same room block stand two stories in height. We carried out limited testing and extensive mapping in 2009 and 2010. More extensive excavations in 2011 exposed sections of four rooms and portions of the great kiva. One of these rooms was a burned storage room in the two-story portion of the pueblo, containing a substantial quantity of carbonized maize cobs. Excavations in the great kiva uncovered the corner of an interior wall, suggesting the presence of a wide bench or a nested interior structure. Additional excavations planned for 2012 will clarify the internal layout and features of this somewhat unusual structure.

Fornholt's clearest affiliation is with contemporary Tularosa Phase sites to the north and west. The masonry and floor features at the site, as well as the shape and orientation of the great kiva, all resemble those at sites in the San Francisco and Blue River valleys. While there are Tularosa Phase occupations at the Gila Cliff Dwellings (Anderson et al. 1986) and at WS Ranch in Alma, NM (Robinson 1992), Mule Creek is certainly near the southern edge of the distribution of Tularosa Phase sites.



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Mule Creek Obsidian in Regional Context

The Mule Creek drainage has multiple draws, including a high water table and easy access to nearby ecotones. It is most distinguished, however, by the Mule Creek obsidian, found in local tuff deposits and adjacent drainages. The Mule Creek obsidian is made up of three chemical groups: the Mule Mountains, Antelope Creek, and North Sawmill Creek groups. Of these, the Antelope Creek group appears to be the most often circulated, though all three sources produce tool-grade stone. Previous research has shown a dramatic increase in the circulation of Mule Creek obsidian in the 13th and 14th centuries.

A project currently underway at Archaeology Southwest compares archaeological Mule Creek obsidian frequencies during this time period over a wide geographic area. Preliminary results indicate that Mule Creek obsidian, especially the Antelope Springs group, occurs in frequencies greater than what one would expect from a distance decay model. For example, Gila Pueblo (AZ V:9:52) contains roughly equal proportions of Mule Creek/Antelope Creek and Superior obsidian, though the Superior source is significantly closer. Sites such as Davis Ranch (AZ BB:11:36) and Reeve Ruin (AZ BB:11:26) in the San Pedro River valley and University Indian Ruin (AZ BB:9:33) in the Tucson Basin all contain higher percentages of Mule Creek obsidian than predicted by distance from available sources. In the San Pedro, use of Mule Creek obsidian is strongly correlated with Kayenta migrants, who entered the area in the late 13th century and interacted with local communities in a variety of ways. The current project investigates the proposition that these Kayenta migrants formed a diasporic network that circulated Mule Creek obsidian throughout the southern Southwest. The distribution of Mule Creek obsidian may have been determined more by the structure of this social network than by concerns about source distance.

Conclusion: Social Dynamics in Mule Creek and the Upper Gila

The work described here provides new insight into the late precontact Upper Gila region. Maverick Mountain series ceramics and a perforated plate, hallmarks of Kayenta-Tusayan migration, were present at the 3-Up site and were produced locally throughout the Upper Gila. Ongoing obsidian sourcing research will clarify the ways in which Mule Creek obsidian may have been exchanged among migrant communities throughout the Southwest. Research at the Fornholt and 3-Up sites also provides information about the social context in Mule Creek immediately prior to migration. Although both sites have the same types of 13th century ceramics, they differ architecturally, suggesting connections to or affinities with separate regional traditions. Ongoing research will further explore this 13th century social boundary. If Fornholt was still occupied when migrants arrived at 3-Up in the late 13th or early 14th century, its residents do not seem to have interacted with the newcomers. Fornholt seems to have been abandoned by the early 14th century, while 3-Up remained occupied until the depopulation of the region, sometime in the 15th century.

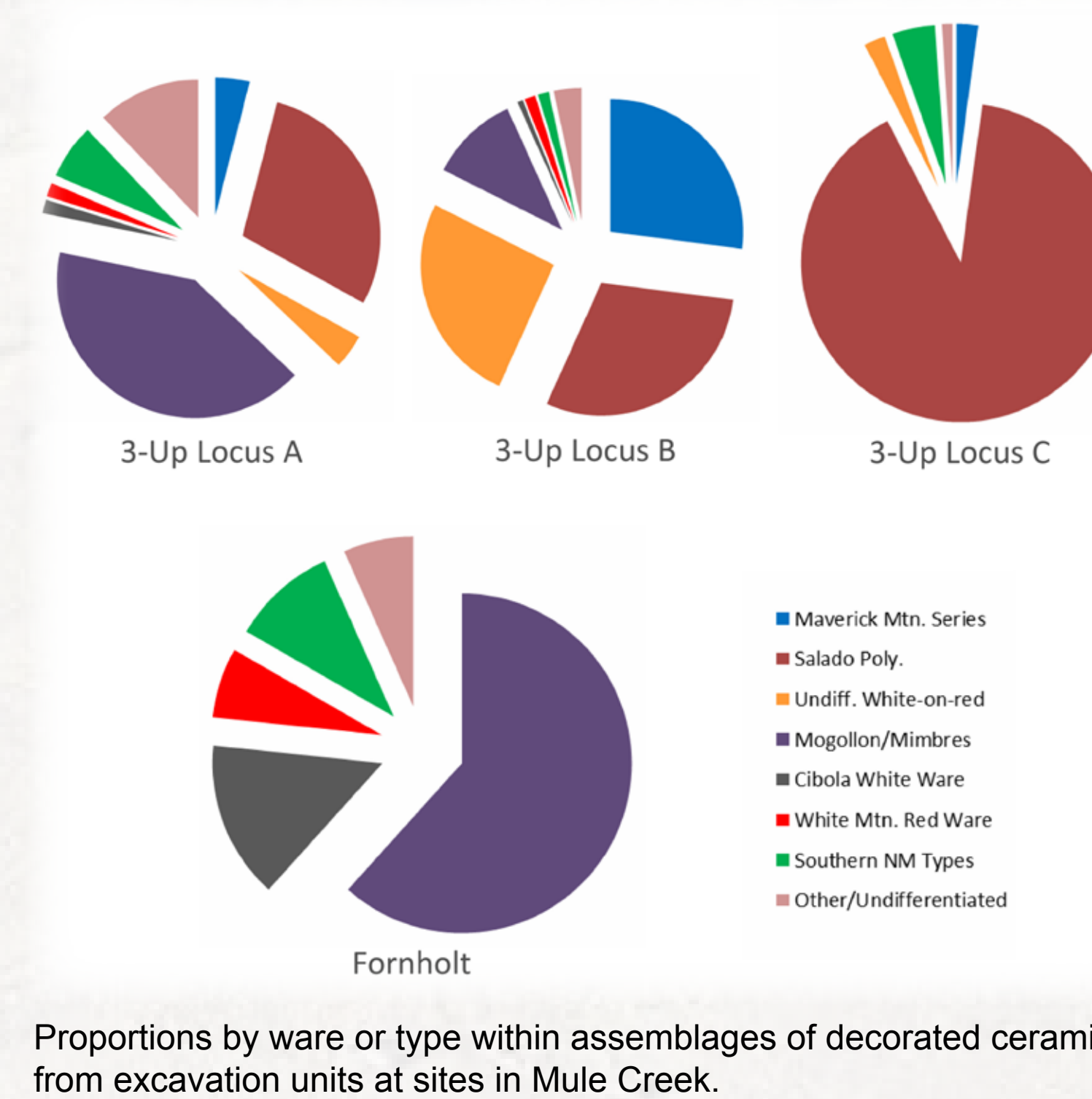
The 3-Up Site

The 3-Up Site consists of several residential loci on a group of hills and ridges overlooking Mule Creek, including a substantial Cliff Phase component at Loci A, B, and C. Several areas of the site have been highly impacted by heavy machinery. We carried out limited testing in non-architectural areas in 2008 and 2009. Earlier testing was carried out by Arizona State University.

We have only limited information about the 13th century occupation at 3-Up. Masonry architecture is present at both Locus A and Locus B. Bulldozer cuts at Locus A exposed adobe architecture associated with 13th century ceramics beneath masonry walls (Schollmeyer et al. 2007). This 13th century use of adobe is a connection with contemporary Black Mountain Phase sites to the south and east, in contrast to Fornholt's "Tularosa" appearance.

Ceramic Assemblage Comparisons

Both 3-Up and Fornholt have Mogollon and Mimbres ceramics that indicate pithouse and Classic Mimbres occupations. Both also have non-local Cibola White Ware and White Mountain Red Ware, as well as more southerly types like El Paso Polychrome and Playas Red Incised, which are common on 13th century sites in southern New Mexico. However, Fornholt has no Maverick Mountain Series or Salado Polychrome sherds, wares that are common at 3-Up.

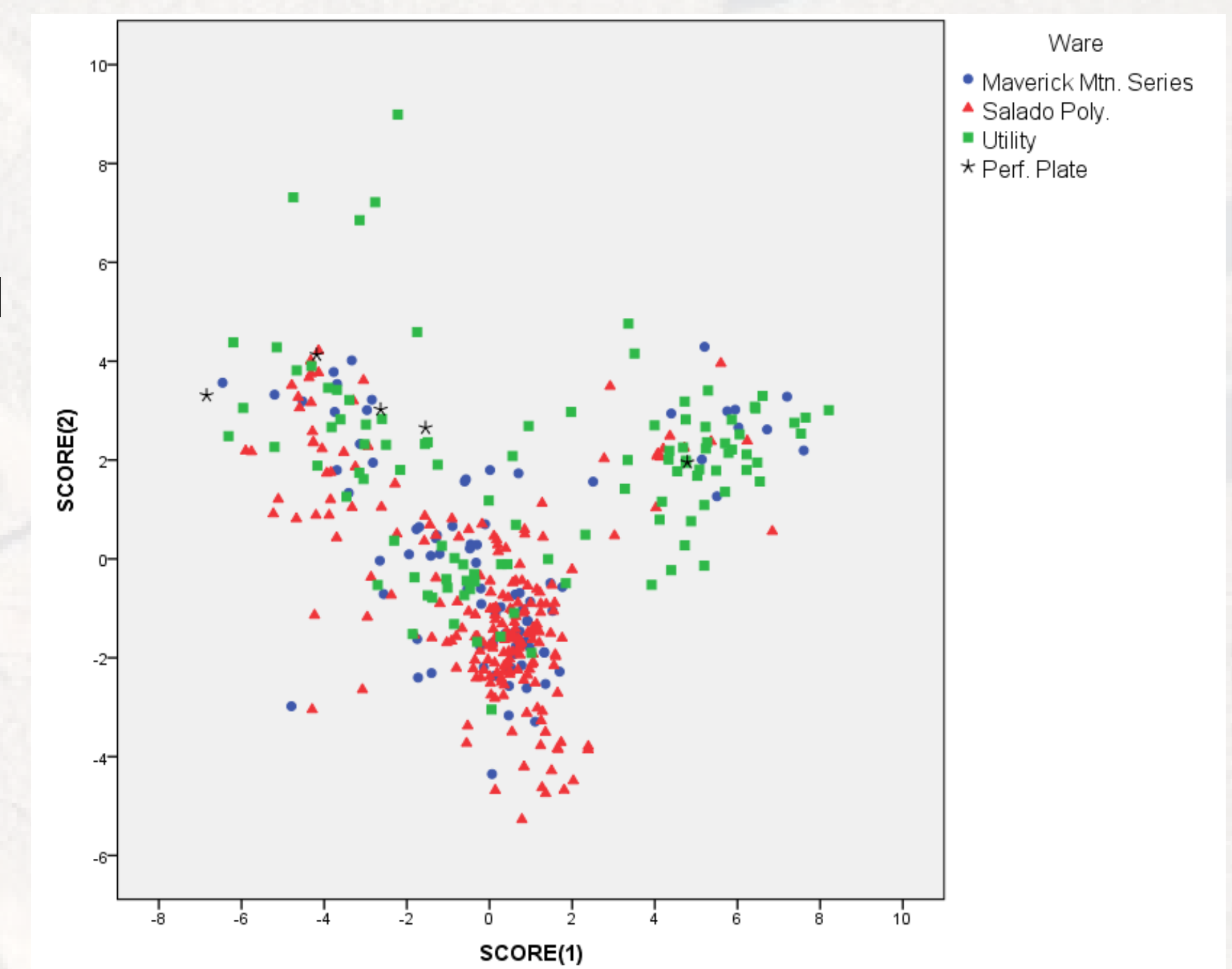


Proportions by ware or type within assemblages of decorated ceramics from excavation units at sites in Mule Creek.

Ceramic Sourcing

Our compositional studies focus on sites in the greater Upper Gila region with Cliff Phase components. This includes 3-Up in Mule Creek and nine other sites in the Cliff, Redrock, and Mimbres valleys. We supplemented the Upper Gila and Mimbres samples with a smaller sample of sherds from the Safford Basin, Sulphur Springs Valley, and Gila Pueblo.

We submitted a subset of nearly 500 sherds, plus several clay samples, for NAA at the Archaeometry Lab at the University of Missouri Research Reactor. The compositional data point to widespread local production of Maverick Mountain Series and Salado Polychrome vessels. Each sampled site probably made at least some of these decorated wares using locally available clays and tempers that potters also used for utility wares. While our sample of perforated plates is quite small, they too likely had multiple production locales. Further analysis of the NAA and petrographic data should allow us to tie groups of samples to particular production areas and trace exchange within the study area.



Plot of discriminant scores for all utility ware, perforated plates, Maverick Mountain Series, and Salado sherds from sites in the Upper Gila and Safford areas. Discriminant analysis used log transformed data for 30 elements as measured by NAA. The plot demonstrates that, while there are some groupings in the data, these are not primarily by ware.

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