At a Crossroads: The Goat Spring Archaeology Project, NM

Background
+ Goat Spring Pueblo was located along the trail connecting Western Pueblo and Rio Abajo villages (Figure 1).
+ Goat Spring Archaeological Project (GSAP) explores late Pueblo period (A.D. 1300 - 1680) cultural continuity and transformation during . . .
+ a period of demographic reorganization and expansion of regional networks in the 1300s
+ the early Spanish Colonial period
+ the Pueblo Revolt of 1680

Objectives
+ Petrographic analysis to help explore production, identity, and participation in regional networks over time.

Figure 1:
Regional map showing location of Goat Spring Pueblo and a selection of contemporary sites.

The Sample
+ All rims (N=##) examined binocularly to identify temper categories
+ One to three sherds from each temper category thin sectioned for petrographic analysis (N=30)
+ Ten local rock samples thin sectioned for comparison
+ Quantitative and qualitative analysis to determine petrographic temper groups and other temper attributes

Figure 2:
1960s map of Goat Spring Pueblo with looting and excavation units identified.

300+ years of Pottery Production and Exchange

Objectives

Production
+ Local potters produced both glaze painted and plain wares based on paste color and criteria of abundance (Figure 3)
+ Locally produced pottery was tempered with locally available intermediate volcanic rocks including tuff/rhyolite (Figure 4)
+ Relatively large grain size, void frequency, and poor clay mixing in some sherds suggests expedient production (Capone 2006 in The Social Life of Pots) by at least some village potters.

Identity
+ Goat Spring Pueblo was located on the border of traditional Zuni and Piro territories leading to questions of village affiliation through time
+ All locally produced pottery was rock-tempered (a Rio Abajo Pueblo tradition) rather than sherd-tempered (a Zuni tradition)
+ Based on this diachronically consistent rock temper tradition, we infer at no time in its occupation was Goat Spring Pueblo a Zuni village

Regional Networks
+ 9% of pottery recovered appear to be nonlocal and appear to come from multiple provenances (Table 1)

Figure 3:
Glaze painted pottery produced at Goat Spring Pueblo

Figure 4:
Rhyolite temper typical of locally produced pottery

Figure 5:
Examples of nonlocal tempers.

Table 1: Temper Count Region
- Basalt (Figure 5a) 8 Central Rio Grande or Upper Rio Abajo
- Basalt & diabase 7 Rio Puerco
- Diabase 3 Central Rio Grande or Upper Rio Abajo
- Intermediate volcanics with rounded quartz (Figure 5b) 6 Lower Rio Abajo
- Gabbro? (Figure 5c) 1 Salinas
- Schist? 1 Albuquerque
- Quartz-plagioclase sands 2 Central Rio Grande
- Grog (Figure 5d) 1 Western Pueblo

Future Directions
+ Examine possibility of expedient technology more closely through further quantitative analysis on a larger sample size and determine frequency through time
+ Compare nonlocal samples with comparative slides from other regions to help tighten provenance
+ Explore whether regional networks change over time
+ Lead isotope analysis on glaze paint to understand resource procurement through time

Acknowledgments
David Killick played a vital role in producing images; Evan Gloni and Suzanne Vukobratovich helped with initial sherd sort; Dick Franta provided valuable research support; samples prepared by Quality Thin Section

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