Salado Polychrome and (In)organic Paint Variability

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Does paint variation reflect cultural diversity on Salado polychromes?

- Salado polychrome pottery (aka Roosevelt Redware) is the most visible manifestation of a vibrant socio-religious movement known as the Salado Phenomenon
- Spread quickly across much of the U.S. southern Southwest beginning in the late 13th century
- Involved a large and diverse range of communities with varied social and historical backgrounds

Map showing general Salado area (Map by Catherine Gilman)

Paint composition is a low-visibility technology that can provide information on shared social backgrounds

Carbon paint: Organic based , looks blurry/ fuzzy

Mineral Paint: uses mineral pigment, lines look sharp

- Nearly all vessels were decorated with black organic paint, a technology unused by many local antecedents
- Such technological homogeneity suggests that the corpus of Salado *potters* was considerably less diverse than the larger corpus of Salado *participants*.
- We suspect, in fact, that most of the people making the vessels shared a common cultural-historical heritage that was not necessarily shared by everyone who used the vessels.
- Infrequently, Salado polychrome vessels were decorated with black mineral (rather than organic) paint.
- Such anomalies may represent potters with different cultural-historical backgrounds who made Salado pottery.

Map showing Dinwiddie site (Map by Catherine Gilman)

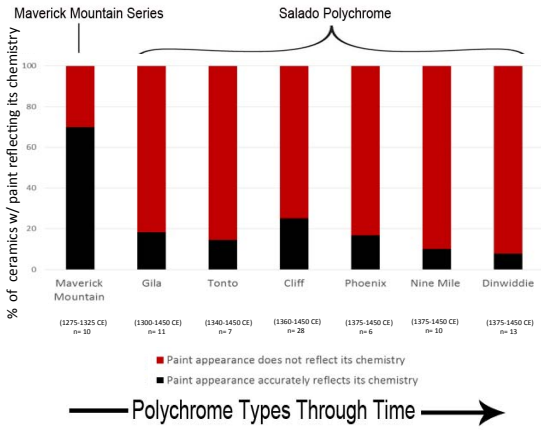
Using both macroscopic and chemical analyses we examined paint diversity on polychromes from Dinwiddie-a Salado site located in the Cliff Valley of Southwestern New Mexico

- Since 2013, Archaeology Southwest has excavated threatened sections of the Dinwiddie site's Cliff phase (1300-1450 CE), Salado pueblo as part of the Upper Gila Preservation Archaeology Project and field school, in conjunction with the University of Arizona
- A high frequency of Salado polychromes with what *appeared* to be black mineral paint were recovered, as well as Maverick Mountain Polychromes- as possible precursor to Salado.
- The occurrence was so striking that a representative sample of 100 sherds was subjected to XRF (X-Ray fluorescence) and LA-ICP-MS (Laser-ablation inductively coupled plasma-mass spectrometry) by the Archaeometry Laboratory at MURR

Carbon paint on Salado polychrome vessels at the Dinwiddie site *looked* ***mineral***

Cliff Polychrome from Arizona State Museum

Many Salado polychromes overlap temporally , but if we arrange them according to their respective production range medians, results suggest that the **use of carbon paint that *looked mineral* may have *increased through time***, especially after 1375 C.E.



Ceramic paint composition was misidentified using macroscopic analysis for over 80% of polychromes

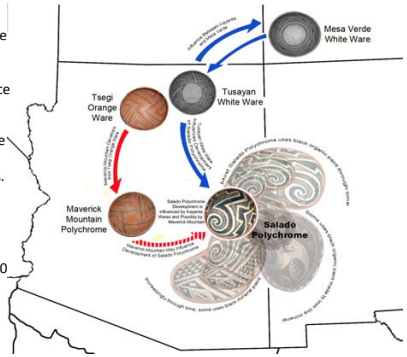
- Maverick Mountain Series ceramics reflected their chemical composition at a higher frequency then Salado polychromes, probably because they were often mineral-painted
- This realization has impacts on the interpretive value of distinguishing carbon paint from mineral paint macroscopically and emphasizes the importance of chemical analyses

Paint variation on Salado vessels may indicate a greater diversity in intra-Salado variability

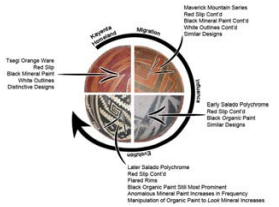
- Within our small sample (n = 100) ceramics with paint that *looked* mineral may have increased over time
- As the Salado Phenomenon grew in breadth and diversity, the corpus of potters making its distinctive polychrome pottery may have become more diverse as well
- Subtle, visual differences produced by different manufacturing methods may have been recognized as culturally significant, perhaps even implemented for that reason
- However, it could also be that these variations were unintentional and not culturally significant
- At the least, this adds to the growing body of evidence that suggests intra-Salado variability
- A more detailed paper concerning this analysis is in preparation, focusing on the technological aspects of paint manufacture.
- We also hope to increase the size and scope of our sample to test our pattern beyond the Upper Gila region. We are integrating our work with analyses by Deborah Huntley and Jeffrey Ferguson. With a sample of 400 sherds their analyses also showed that Salado polychromes were predominantly carbon painted- despite their mineral appearance. Additionally, the Maverick Mountain tested appeared mineral and were in fact mineral in composition.

Future studies in paint variability can help us explore models of Salado influence and diversity

- Previous studies done by Archaeology Southwest indicate that Kayenta migrants moving south may have played an important role in the emergence of the Salado Phenomenon.
- In their northern homeland the Kayenta produced ceramics with mineral and carbon paints.
- Tsegi Orange Ware (1000-1300 CE) – used mineral paint
- Tusayan White Ware (800-1300 CE)- used carbon paint
- Did traditions converge- perhaps in the context of migrant descendants- in early Salado polychrome (~1275 CE)?



Through the continued examination of subtle details, big questions may one day be answered.



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