Classic Period Projectile Point Traditions in Southeastern Arizona

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Introduction

Similar projectile point types were manufactured across cultural and geographic boundaries in southern Arizona during the Classic period (AD 1150-1450) (Sliva 2006). This pattern coincides with the arrival of northern migrant groups, changing settlement patterns and resource availability, and an increase in obsidian use (Clark and Lyons 2012).

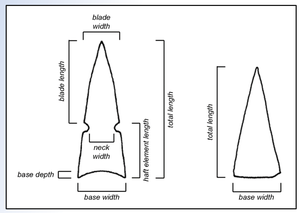
These social, technological, and environmental factors may have influenced projectile point designs in the Tucson Basin and San Pedro Valley. This analysis was conducted to identify variation in projectile point attributes among sites with different cultural influences and access to resources.

Research Questions

- Did the arrival of migrant groups influence projectile point design traditions?
- Is projectile point variation associated with different levels of large-game hunting or potential for conflict?
- Are projectile points different among sites with different obsidian procurement patterns?

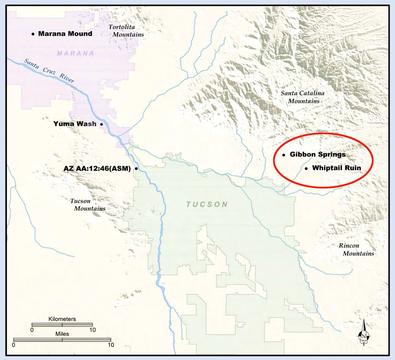
Methods

- Compared metrical and morphological attributes of 505 projectile points from five early Classic period sites in the Tucson Basin
- Compared metrical and morphological attributes of 122 projectile points from 21 late Classic period sites in the San Pedro Valley
- Used new and existing obsidian source data (Mills et al. 2012; Shackley 2017) to identify raw material procurement patterns



Projectile point attribute measurements. Image: R. J. Sliva

Tucson Basin , Early Classic Period, AD 1150-1300



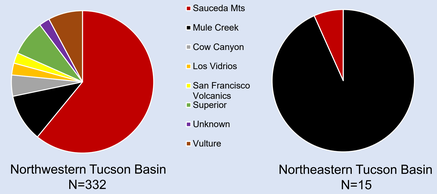
Tucson Basin sites in study. Circled sites were home to local and migrant groups. Map: Catherine Gilman.

Migrant communities: Groups from the Mogollon Highlands moved into the northeastern Tucson Basin (Gregonis 2011). Outside groups were not identified at sites in the northwestern Basin (Elson and Swartz 2016; Fish et al. 1992).

Hunting or conflict: Upland sites in the northeastern Basin contained abundant large mammal bone and evidence for hunting rituals (Gregonis 2011). Artiodactyl bone is generally scarce in the northwestern Basin (Waters 2016). No direct evidence for conflict.

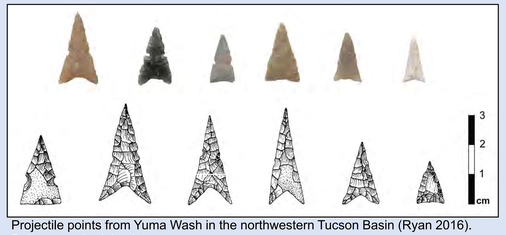
Projectile points from Whiptail Ruin in the northeastern Tucson Basin.

Obsidian Distribution



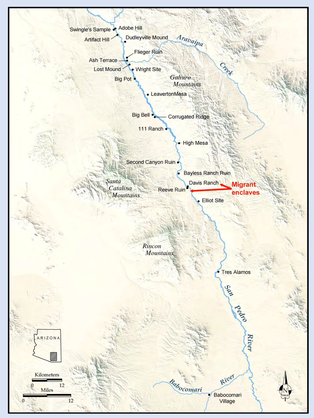
Northwestern Tucson Basin
N=332

Northeastern Tucson Basin
N=15



Projectile points from Yuma Wash in the northwestern Tucson Basin (Ryan 2016). Bottom row: burial points.

San Pedro Valley, Late Classic Period, AD 1300-1450

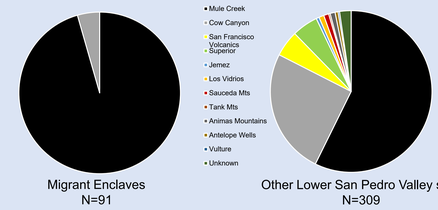


San Pedro Valley sites in sample. Map: Catherine Gilman

Migrant communities: Ancestral Pueblo groups arrived in the area around AD 1275 and settled at two known migrant enclaves (Clark and Lyons 2012). To the south, Babocomari Village lacks evidence of cultural influence from northern migrants (Di Peso 1951).

Hunting or conflict: Large game resources are abundant at sites in this area, and hunting was an important activity. No direct evidence for conflict; migrant influx may have heightened tensions (Clark et al. 2012; Di Peso 1951).

Obsidian Distribution



Migrant Enclaves
N=91

Other Lower San Pedro Valley sites
N=309

Projectile points from Reeve Ruin and Davis Ranch, migrant enclaves in the Lower San Pedro Valley.

Projectile points from Second Canyon Ruin in the Lower San Pedro Valley.

Serrated points from the Tres Alamos site (top), and Babocomari Village (bottom). Serrations are not common in the Lower San Pedro Valley, and occur more frequently in the Upper San Pedro Valley sample.

Analysis Results

Region	Result
Both	No significant differences in point attributes at sites with migrant groups.
Both	No clear point design preferences at sites with greater access to large game or defensive positioning
Tucson Basin	Unnotched base widths significantly more narrow than side-notched points; two different point technologies represented
Tucson Basin	Side-notched points in burials have significantly wider bases than non-burial points
Tucson Basin	Different obsidian procurement patterns at sites with migrant groups
San Pedro Valley	Unnotched points at Babocomari Village in the Upper San Pedro Valley are significantly longer than those in the Lower San Pedro Valley
Both	Obsidian unnotched points are significantly shorter than those made of other materials

Conclusions

- Ancestral Pueblo migrant groups did not introduce new projectile point traditions or design preferences into the region.
- Variation in base attributes on similar point types in the Tucson Basin suggests different learning traditions expressed on small points that otherwise follow socially acceptable forms.
- Points with wide concave bases may have been preferred for mortuary rituals.
- The frequency of Classic period side-notched and unnotched points at these sites is not associated with large-game hunting or potential for conflict.
- Obsidian source data continue to show differences in social ties at blended or migrant sites. However, point designs are not clearly associated with a specific source.
- “Microvariables” (Wendrich 2012) such as base attributes, serrations, notch depth, etc., may provide the best information to identify variation and different learning traditions during the Classic period in southeastern Arizona.

Acknowledgements

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