



POTTERY SOUTHWEST

Volume 35, No. 3-4
FALL-WINTER 2019

DECEMBER 2019
ISSN 0738-8020

MISSION STATEMENT

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RARE ARTIFACTS RECENTLY DISCOVERED ON WHITE SANDS MISSILE RANGE, NEW MEXICO

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Office of Contract Archeology, University of New Mexico
and
William Godby, White Sands Missile Range

The Office of Contract Archeology, University of New Mexico (OCA/UNM) field crew is currently documenting a number of archaeological sites clustering along Davies Tank, a playa on White Sands Missile Range (WSMR) in south-central New Mexico. The purpose of this work is to assess the location of significant cultural resources at each of the sites known to be in proximity to tank trails and WSMR maintenance roads, as the traffic on these roads could pose serious impacts to the cultural material. The project methods involve conducting surface survey and excavating test units within the limits of the evaluated sites. Most of the investigated sites appear to have been occupied during the El Paso phase of the Jornada Mogollon cultural sequence (A.D. 1200-1450).

With only the first field session completed, we excitedly report the discovery of four unusual ceramic artifacts at two sites. They include a torso fragment of an animal effigy handle, a very small miniature bowl (which may be a thimble), and a fragment of an owl effigy vessel. We also briefly discuss a second effigy fragment recorded previously at the same site. In this brief announcement, we share additional information on these artifacts with *Pottery Southwest* readers. This information is also being concurrently presented in the Jornada Research Institute newsletter.

The first unusual artifact, the animal effigy handle fragment, probably came from an El Paso Polychrome jar. The object, unfortunately, is missing its head, tail, and all four legs with only the torso remaining. The fragmentary piece makes it difficult to ascertain the animal that the effigy fragment depicted, although it is possible that it was a deer, or more likely a dog (Figure 1a). Similar dog effigies have been found attached on the sides of jars or on top of jar handles. The effigy fragment is about 3.5 cm long and was recovered from the fill of a trash layer that was deposited inside an abandoned El Paso phase surface structure at LA 104867.

The second unusual ceramic object is a very small El Paso Brown cylinder (Figure 1b) that was found in one of several surface artifact concentrations at Shaman Village (LA 117502), the largest El Paso phase roomblock complex currently identified on WSMR (Kurota and Sternberg 2018). The miniature bowl was made from typical El Paso Brownware series clay and temper materials, so it likely was manufactured locally at the site. It is about 2 cm tall and has a 1.7 cm rim diameter. A closer look at its outer surfaces revealed the presence of finger impressions visible along the entire perimeter.

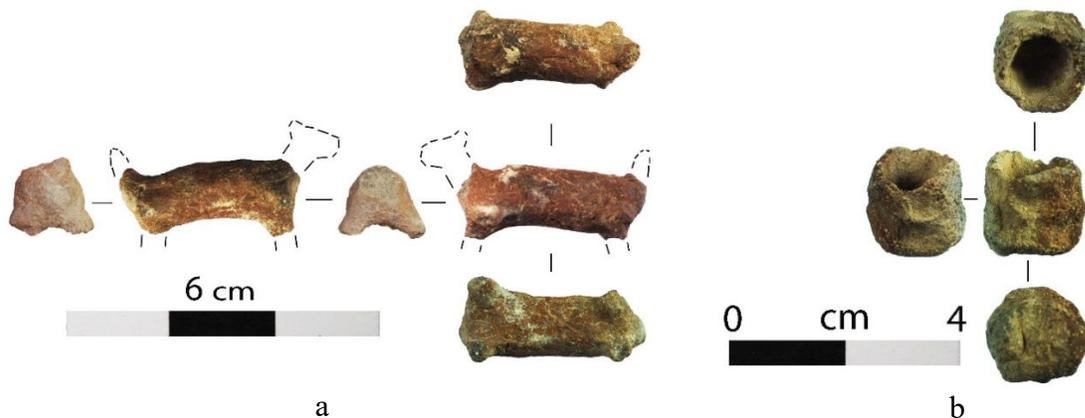


Figure 1. Unusual artifacts: (a) ceramic effigy handle from an indeterminate El Paso Polychrome vessel and (b) El Paso Brown miniature vessel.

Traditionally, the presence of miniature bowls and jars at archaeological sites has been interpreted as good evidence for *in situ* ceramic vessel manufacture, as a potter may have created such small objects out of remaining clay or children may have experimented by making miniature vessels. This may be the case for the Shaman Village miniature, yet its unusually small size could also suggest another function. William Godby, WSMR archaeologist and government project lead, suggested that the miniature "bowl" is not in fact a bowl at all but may have functioned as a thimble and may in fact be an artifact type that has been misidentified in the archaeological record. It may have been used for sewing, utilized with a bone needle. Additionally, Godby noted that the size of the indentation is very similar to an adult little finger and it could have easily been shaped around the finger. Similar crude thimbles have been identified at archaeological sites in Eastern Europe, some with a fingernail impression visible from manufacture.

The third unusual ceramic object is a small fragment from a Babícora Polychrome owl effigy vessel. This object was also found at Shaman Village. The Shaman Village owl fragment comes from the left side of the facial disc of an owl depiction (Figure 2a). Complete vessels from Casas Grandes sites indicate that the potter making such an effigy vessel would have formed a pronounced ridge along the perimeter of the face to mimic the broad and flat face of an owl (Figure 2b). The fact that the Shaman Village owl effigy face was painted with dark brown paint suggests the potter intended to depict a particular species of an owl. It has been demonstrated in the past that the potters from the Casas Grandes culture were masters in faithfully depicting various animal and bird species by incorporating particular color motifs or decorative techniques (VanPool and VanPool 2007). Our review of different species of owls in the southern parts of the American Southwest indicates the potter may have intended to depict a great horned owl, a commonly depicted bird on Casas Grandes effigy vessels (Figure 2c).



Figure 2. Three owl depictions: (a) Babícora Polychrome fragment of a left side of the face of an owl effigy (possibly great horned owl) from Shaman Village; (b) illustration of a complete Ramos Polychrome owl effigy; and (c) taxidermy-prepared great horned owl at the Environmental Division, White Sands Missile Range, image courtesy of White Sands Missile Range (photos and illustration by Alexander Kurota).

The Babícora Polychrome owl effigy fragment was found at the edge of the so-called Village Center—the densest and the most intensively occupied portion of Shaman Village. It is noteworthy that this sherd represents a second Casas Grandes effigy vessel from this site. Two years ago, OCA briefly visited Shaman Village and documented the locations of several inferred melted adobe rooms and roomblocks. It was during this time that we found a groin area fragment of a Casas Grandes human effigy vessel (Figure 3a). Such Casas Grandes male ceramic effigy vessels were typically made in a sitting or partially kneeling position, with the individual often depicted as smoking a cigar (Figure 3b). These effigy vessels are commonly referred to as “smoking shaman effigies” (VanPool and VanPool 2007). It is therefore intriguing to point out that we now have two Casas Grandes effigy vessel fragments from Shaman Village. Effigy vessels are believed to have served special ritual purposes and represented ceremonial events such as the ability to communicate and control natural and supernatural powers by a group of shaman-priests (VanPool and VanPool 2007).

Acknowledgments. We are grateful to White Sands Missile Range for their support and funding of this project, as well as for allowing us to present WSMR data in this article.

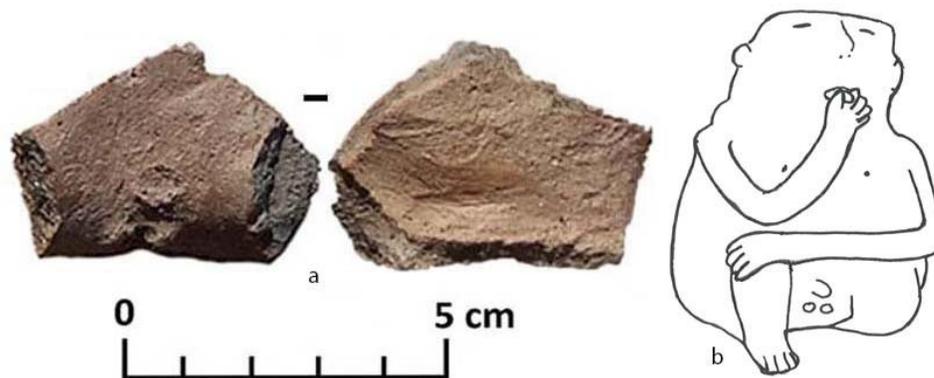


Figure 3. Casas Grandes ceramics effigy shaman: (a) frontal and rear view of a groin area fragment of an indeterminate Casas Grande shaman from Shaman Village; and (b) stylized illustration of a smoking Casas Grande ceramic effigy shaman.

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ON CASITAS RED-ON-BROWN AND SOME HISTORIC PUEBLO POTTERY TYPES IN THE MIDDLE RIO GRANDE VALLEY, NEW MEXICO

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Introduction

In this paper, we present our observations and thoughts on the Casitas pottery series and several other Historic period pottery types produced in the Northern and Middle Rio Grande Valley, New Mexico. The origins of Casitas ceramics have been sporadically documented over the past 50 years, yet in-depth discussion regarding this ceramic tradition is poorly represented in the archaeological literature.

Originally described by Hurt and Dick in 1946 and later named by Dick in 1968, Casitas Red-on-brown is a red-banded Colonial period pottery type prevalent in central and northern New Mexico along the Rio Grande Valley. Virtually all Casitas Red-on-brown vessels are bowls. Common forms include direct-rimmed bowls and flared-rimmed bowls which sometimes take on an extreme flared (“soup plate”) morphology. Most bowls are decorated with a red-painted rim band on the exterior or interior surface, depending on form. Paste is typically brick orange with sand temper.

In the original type description, Dick (1968) provided a manufacturing date range spanning A.D. 1672-1890, although most sites with Casitas Red-on-brown or several regional variants present demonstrate that production primarily occurred in the 1700s through early to middle 1800s. For example, Franklin (1997) proposes from excavations at Valencia Pueblo (LA 921) that the recovery of Isleta Red-on-tan, a regional Casitas Red-on-brown variant, in contexts directly in association with Glaze F period ceramics demonstrates that Isleta Red-on-tan dates to around 1700.

In this paper, we present attributes recorded from Casitas Red-on-brown sherds during a 2003 University of New Mexico Office of Contract Archeology (OCA) excavation project at Area D of the Alameda Village Site (LA 50240) located at the intersection of Alameda Boulevard and North Rio Grande Boulevard in Albuquerque’s North Valley (Chapman n. d.). The Alameda Village Site (also called the Old Alameda Plaza) started as a small community in the first half of the eighteenth century and consisted of a cluster of few houses. While a portion of the site also included a historic *campo santo* of the old Alameda Church (later destroyed in a flood), most of the recovered ceramic material came from the eighteenth and nineteenth century trash pile deposits adjacent to the church. A report detailing this excavation project is currently in preparation (Chapman n. d.). We introduce new variants of Casitas Red-on-brown called Casitas Red-on-brown Smudged, Casitas White-on-brown, Casitas Red-on-white, and Casitas Polychrome. Lastly, we provide information on unpainted utility ware types, including gray utility ware and polished blackware to better convey similarities and differences among Colonial period (A.D. 1598-1912) ceramics.

We note that past researchers describe several similar types to Casitas Red-on-brown from contexts both nearby and in more distant regions. For example, for the north-central New Mexico region, Batkin (1987) described San Juan Red-on-tan, a red-banded variant made at Ohkay Owingeh (previously San Juan Pueblo). In addition to Area D within the Alameda Village Site, several other sites with Casitas pottery are known in the greater Albuquerque and north-central New Mexico area, including the Chamisal Site, Alameda School Site, San Antonio de las Huertas (LA 25674), and Las Casitas (LA 917). There are several more sites located along the Rio Grande in Albuquerque's North and South valleys and in the Corrales and Santa Ana Pueblo vicinity, although we did not review the NMCRIS database for all such localities. At Isleta Pueblo, south of Albuquerque, is the locally made Isleta Red-on-tan (Marshall 1997). The Valle Bajo Brownware type was produced further southward and extending towards El Paso, Texas (Marshall 1999). Valle Bajo Brownware is directly associated with Old Socorro Mission contexts in present day El Paso. In addition to the various red-painted scalloped forms, pendant triangles and broad zig-zag lines, this pottery also shows red rim bands similar to those found on Casitas series ceramics. Common manufactured vessel forms included hemispherical bowls with direct rims, flare-rimmed bowls and soup plates, as well as globular jars with slightly flared rims (Marshall 1999:88). The El Paso area has a cluster of Spanish missions, all of which contained quantities of Valle Bajo Brownware (Figure 1; Tomka et al. 2013). In the Las Cruces area, 1980s excavations at the Taylor Romero House in the Old Town Plaza of Mesilla recovered a handful of red-banded colonial period ceramics (Erin Hegberg, personal communication, December 2019). Consequently, the presence of red-banded brownware at eighteenth- and nineteenth-century Hispanic and Indigenous settlements is widespread, yet poorly understood. This situation is directly related to how the New Mexican historic pottery typology developed.

Early descriptions of Casitas Red-on-brown provide ample information on its physical characteristics including the temper, paste color, the type of paint and the location of its application (Dick 1968). Most early descriptions reference sherds from Tijeras Canyon located east of Albuquerque (Mensel and Wilson 2004). However, there are several problems with the current designation of Casitas Red-on-brown. One issue is the presence of several tempering materials within Casitas Red-on-brown as described from excavations at different locations along the Rio Grande Valley in New Mexico. This is problematic because a single ceramic type should be defined by one major tempering material group. For example, Warren (1980) argued that Casitas series ceramics from the Cochiti Reservoir area were tempered with crushed crystal pumice or sandstone. By contrast, specimens found in the greater Albuquerque area typically incorporate sand temper (Franklin 2007). We present many of the aforementioned sites in the greater Albuquerque area in Figure 2.

The probable original source and use location of Casitas series pottery has been difficult to identify. The past inability to associate Casitas sherds from Area D within the Alameda Village Site and other nearby sites such as Los Ranchos Plaza (Sargeant 1985) or the Chamisal Site (LA 22765) to their original cultural origin context has resulted in differing interpretations regarding the cultural affiliation of Casitas series pottery. Some researchers suggest that Native American potters produced Casitas or similar ceramic types (Levine 1990, 2004; Marshall 2008, 2015), while others argue the pottery tradition stemmed from early Hispanic New Mexicans who borrowed certain pottery-making skills and practices to produce this pottery for their daily needs



Figure 1. Location of archaeological sites referenced or discussed in this paper. Base map image source: freeworldmaps.net.



Figure 2. Map of the Albuquerque area showing the locations of selected sites with Casitas series and similar red-banded historic pottery.

(Carrillo 1985, 1997; Franklin 2007). The lack of consensus regarding cultural affiliation for the producers of Casitas series pottery indicates that a succinct answer is difficult or unlikely to be identified. We propose three factors for this—a history of neglect in the archaeological exploration of early historic Hispanic and Native American settlements, the limited technical analysis of ceramic artifacts in comparison to how archaeologists investigate assemblages from prehispanic sites, and the complexity of identity construction and manipulation beyond the simple categories of Hispanic or Native American during Spanish colonization of New Mexico (Sunseri 2017).

While in this paper we do not attempt to resolve the problematic issue of Casitas ceramic series origins, we provide a robust dataset on the various attributes of Casitas and similar ceramic wares and also offer new type variant descriptions as indicated by recorded attributes. We argue that with this additional published information about the Casitas ceramic series, we foster greater transparency about common attributes, context of origin, and proposed classification of many possible variants of this historical ceramic tradition in New Mexico. This should, in turn, enable

more robust future analysis of these ceramic types or provide the necessary framework to investigate questions regarding the development, expansion, and significance of Casitas and similar red-banded ceramic wares.

Our descriptions of the selected pottery types come from the aggregation of both early analyses and classical definitions by Dick (1968), later excavations by Ferg (1984), and recent investigations by OCA, Marshall (2015), Marshall and Marshall (2008), and Condie (2007). In the first part of our analysis results, we present images and brief descriptions of several historic matte-paint polychrome pottery types recovered within Area D of the Alameda Village Site. We believe these representative samples of the better known historic Native American matte paint polychromes provide useful comparative information to Casitas Red-on-brown.

Analysis Results

The analysis of ceramics from Area D within the Alameda Village Site resulted in the documentation of 2,229 ceramics. The assemblage consists of both Native American matte-paint polychromes, as well as the Casitas series group, gray utility wares, and polished blackware. Additionally, three polished redware sherds were also noted and although they do seem to constitute a separate typological category, the three specimens did not provide sufficient data to offer a detailed description in this paper. Polished redware bowls have been noted at other Spanish Colonial period sites such as from Sandia Pueblo (Marshall 2008), from the Isleta Pueblo Mission Complex (LA 724; Marshall 2015), and from Los Ranchos Plaza (Franklin 2007).

Puname Polychrome Ware

Puname Polychrome Ware received its name from the Puname District, more commonly referred to as the Zia Pueblo-Santa Ana Pueblo area. This ceramic ware is a group of Eastern Keres Pueblo ceramic types that developed after the Pueblo Revolt (A.D. 1680-1692) and is characterized by mineral matte painted polychrome vessels. Five partially successive types of Puname Polychrome Ware were produced: Puname Polychrome (A.D. 1700-1750), Ranchitos Polychrome (A.D. 1760-1825), San Pablo or Trios Polychrome (A.D. 1750-1850), Santa Ana Polychrome (A.D. 1830-1930), and Zia Polychrome (A.D. 1850-present). A general successive chronology in terms of decorative and morphological attributes is from Puname Polychrome to San Pablo/Trios Polychrome and finally Zia Polychrome (the “Zia Branch”), while Ranchitos Polychrome developed as an offshoot of Puname Polychrome and became Santa Ana Polychrome (the “Santa Ana Branch”; Harlow et al. 2005:78). As defined by Frank and Harlow (1990), the Pueblos of Zia and Santa Ana developed and produced Puname Polychrome Ware. We describe and incorporate into our analysis the original Puname Polychrome and ceramic types associated with the Santa Ana Branch, namely Ranchitos Polychrome and Santa Ana Polychrome.

Puname Polychrome. Mera (1939) identified and defined Puname Polychrome. The presence of five attributes characterizes Puname Polychrome: a red slipped or painted rim that extends from the exterior over into the interior rim, a decorative layout with relatively equally sized panels, jar vessel forms that have a mid-body bulge and lack a neck, bowls that are similar to Tewa

Polychrome, the use of a red slip band as a division between the white slipped upper body and the unslipped plain basal portion, and highly recognizable feather motifs (Frank and Harlow 1990:98). Feather motifs are notably depicted as split sets of feathers. Crushed black basalt temper, also called Zia diabase, differentiates Puname Polychrome from later types made at Santa Ana Pueblo (Ferg 1984; Mera 1939).

Area D within the Alameda Village Site revealed four large Puname Polychrome sherds that probably originated from two separate jars. Each vessel is represented by a large rim sherd and a large body sherd giving us an opportunity to partially reconstruct the original vessels. Both jars exhibited restricted orifices in their upper body with rounded and slightly bulging shoulders along the lower body (Figures 3 and 4).

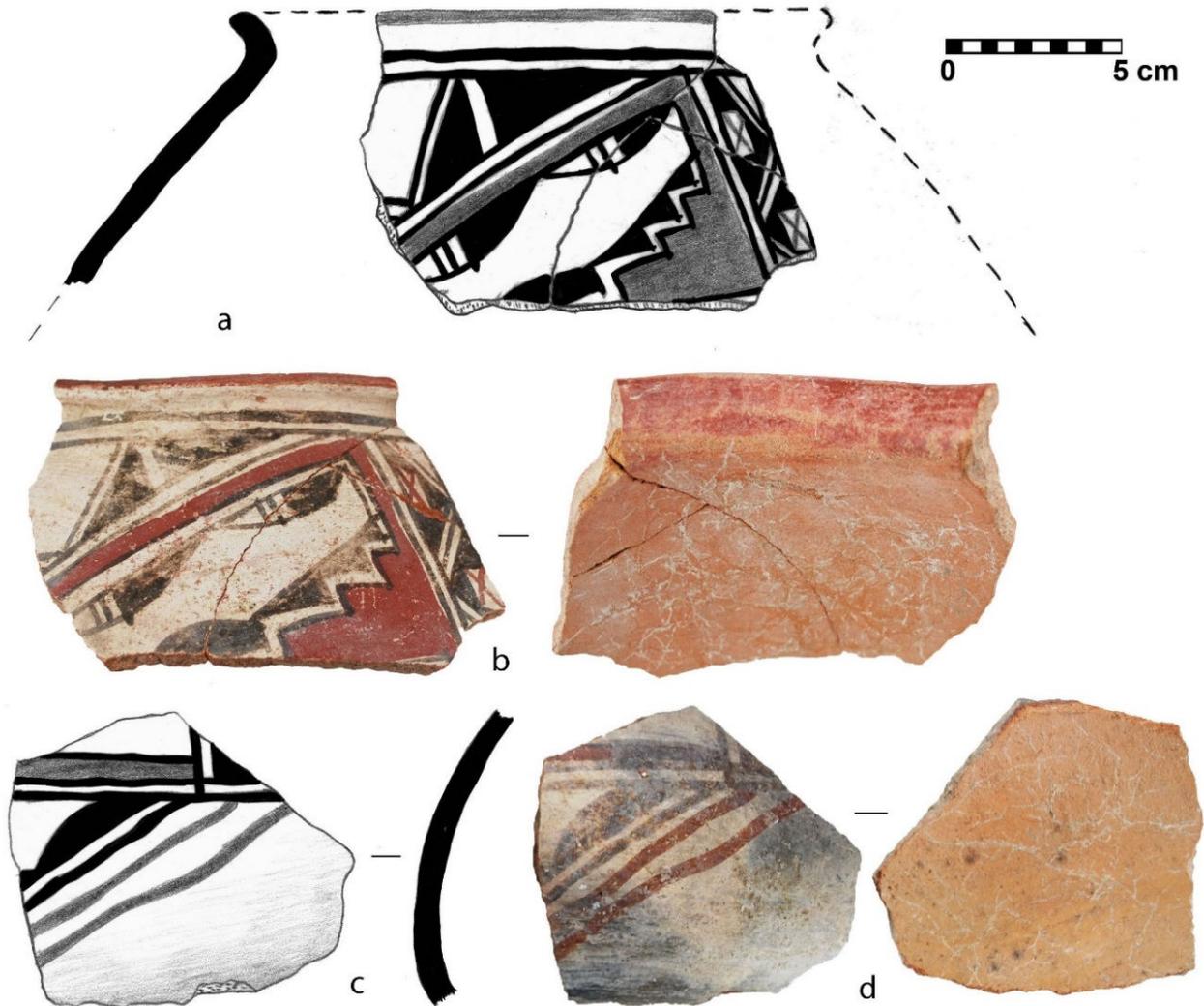


Figure 3. Puname Polychrome jar rim sherd and body sherd from Area D: (a) sketched reconstruction of the jar upper body; (b) photograph of the original rim sherd (note the red paint below the interior rim); (c) sketch and cross section of the body sherd; and (d) photographs of the exterior and interior of the body sherd.

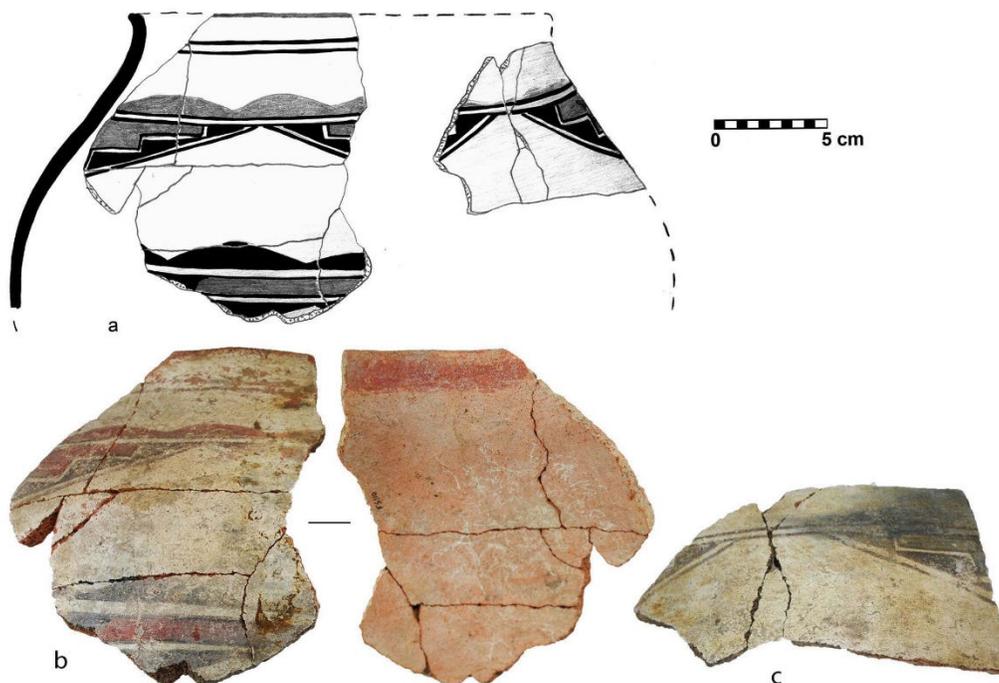


Figure 4. Puname Polychrome jar sherds from Area D within the Alameda Village Site: (a) sketched reconstruction; (b) photograph of the rim sherd (note the red paint below the interior rim); and (c) photograph of the body sherd.

Ranchitos Polychrome. Harlow (1967) defined Ranchitos Polychrome, which represents the earliest pottery produced at the Pueblo of Santa Ana. The use of quartzitic sand temper is one distinguishing characteristic between Ranchitos Polychrome and Puname Polychrome and between Ranchitos Polychrome and San Pablo/Trios Polychrome (Puname and San Pablo were tempered with basalt). The development of Ranchitos Polychrome coincides with the production of a new globular jar form (Harlow et al. 2005). The adoption of a new tempering material, a highly unusual practice for conservative Puebloan potters, appears to coincide with the movement of Santa Ana people to Ranchitos on the eastern bank of the Rio Grande. Harlow and colleagues (2005) note that early Ranchitos Polychrome is predominately painted with red mineral pigment, while post-1800 Ranchitos Polychrome vessels include extensive use of black matte paint. Furthermore, early Ranchitos Polychrome vessels have red slipped rims. This practice continued until the initial production of Santa Ana Polychrome with black painted rims, with only Ranchitos Polychrome bowls continuing to have red slipped rims.

Area D within the Alameda Village Site revealed a variety of Ranchitos Polychrome jar and bowl rim sherds. The bowls had mostly direct rims and revealed mostly brick orange paste although some had gray paste. The slips ranged from chalky white to cream-colored. The mineral black paint also ranged from black on some specimens to brown or very light brown on others (Figures 5 and 6).

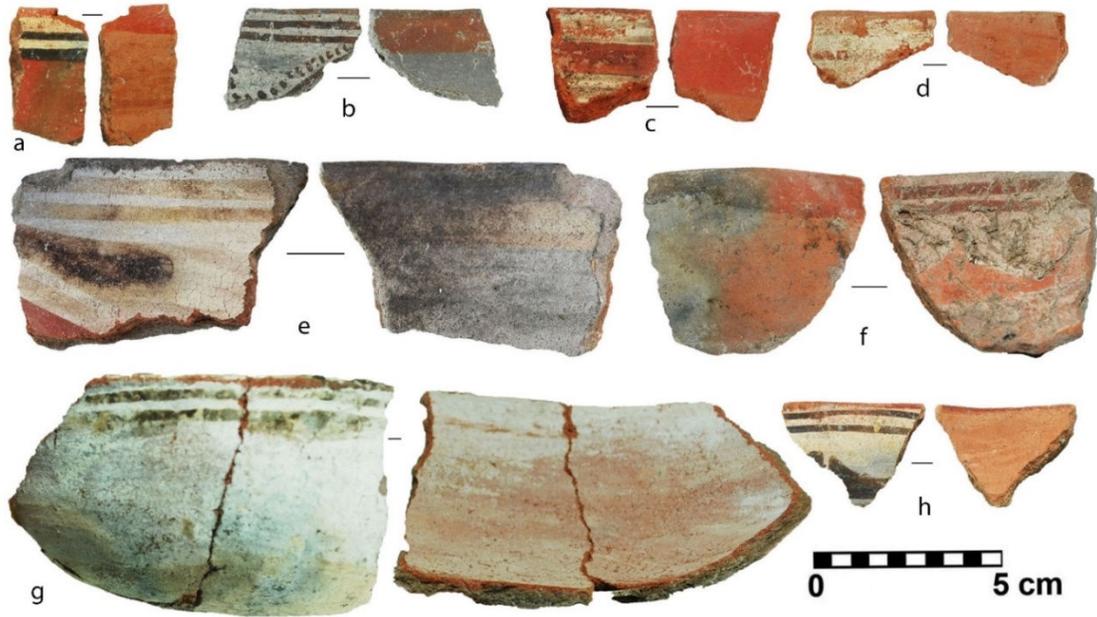


Figure 5. Ranchitos Polychrome bowl rim sherds from Area D within the Alameda Village Site. Note the red band below interior rim on (a)-(d) and exterior rim on (d).



Figure 6. Ranchitos Polychrome jar rim sherds from Area D within the Alameda Village Site. Note the red band below the interior rim on (b) and (c).

Santa Ana Polychrome. Chapman (1938) defined Santa Ana Polychrome as an extension of attributes in Ranchitos Polychrome. Harlow and colleagues (2005) concur and differentiate between “Group A” Santa Ana Polychrome produced 1830-1930 and the later addition of “Group B” produced 1885-1900. Overall Santa Ana Polychrome contains the same sand temper found in Ranchitos Polychrome, a thick and fine red slip, a white to cream slip, and a matte to black mineral paint. Exterior polish typically is minimal and poor in execution. Group A is commonly identified in nineteenth century Hispanic settings, demonstrating that Santa Ana Polychrome was commonly traded. Prominent motifs in red with adjacent negative space that cover a major extent of the vessel body characterize Group A jars.

Group B Santa Ana Polychrome jars incorporate a different decorative style with cross-hachure, checkerboarding, dashes and crescents, capped spirals, and lobe-ended triangles (Harlow et al. 2005). Harlow and colleagues (2005) suggest Group B may be crafts produced by a single family or a shared community of potters. Notably, Group B decorated bowls are nonexistent likely due to the increased demand by Euroamerican museums and collectors for classic jars.

Area D within the Alameda Village Site revealed several Santa Ana Polychrome ceramics, most of which came from jars. The paint on these sherds varied from dark black to brown or light brown. The red painted designs were mostly executed with thin or even watery paint (Figure 7).

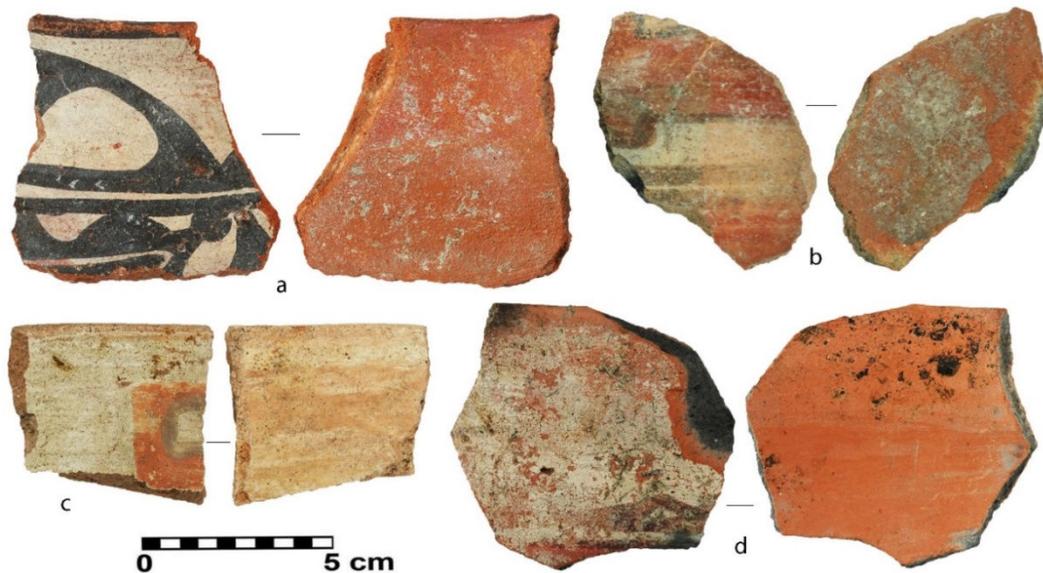


Figure 7. Photographs of Santa Ana Polychrome jar and bowl rim and body sherds from Area D within the Alameda Village Site: (a) jar rim sherd; (b) jar body sherd; (c) and (d) large bowl rim sherds.

Two partially reconstructable Santa Ana Polychrome jars were also recovered at the site. One of them consists of over two dozen sherds both small and large. The rim sherds and those from the shoulder area revealed the original vessel had a neck with a restricted orifice and a recurved rim

(Figure 8). This jar has its painted design placed on the upper body and it is subdivided into two design bands typical on Santa Ana Polychrome jars. The upper band design consists of upside-down double arcs while the lower, main design band consists of six panels, each containing various arrangements of black and red solid triangles. The white slip on top of which the entire design was applied continues about 5 cm below the painted design until it terminates with a 3.5 cm wide red painted border. Below this border is the plain unslipped light brown surface of the original vessel. Because no basal sherds from this jar were recovered, the shape of its base remains unknown.

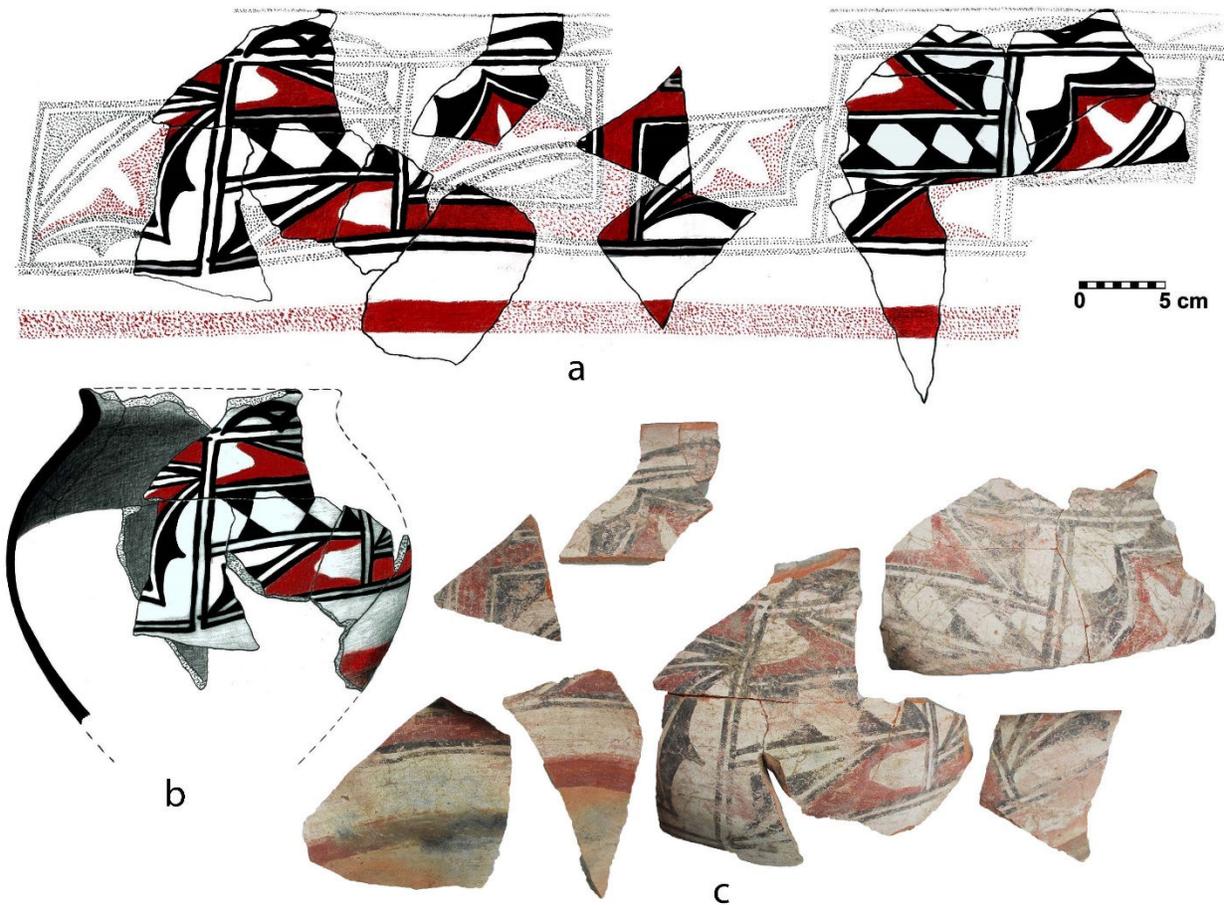


Figure 8. Partially reconstructable Santa Ana Polychrome jar from Area D within the Alameda Village Site: (a) roll-out design sketch; (b) 3-D sketch of the partially reconstructed vessel; and (c) photographs of selected sherds from the jar.

The second partially preserved jar lacks the upper body; hence its neck and rim shape as well as most of the painted design are unknown. This jar is markedly different from the other as its design is much simpler. From what is left of the vessel, we can conclude the jar had a concave base which would have allowed for its transport on one's head (Figure 9). The painted design starts with a 3.5 cm wide red painted band about one third upward from the bottom of the jar. All upper body

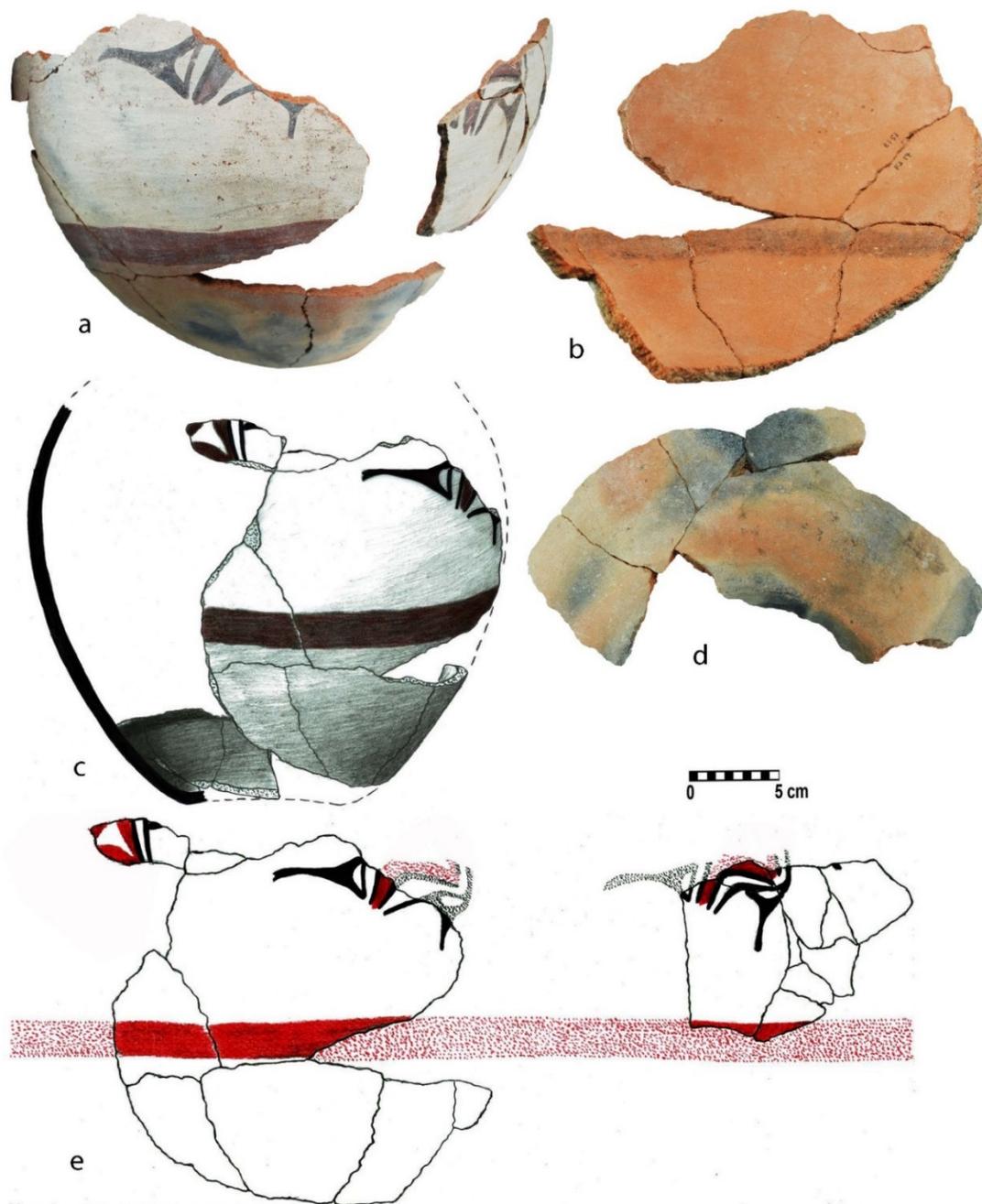


Figure 9. Partially reconstructable Santa Ana Polychrome jar from Area D: (a) photograph of the jar exterior; (b) photograph of the jar interior (note the black water mark line); (c) partial sketch reconstruction of the original vessel form; (d) photograph of the exterior jar base; and (e) roll-out sketch of partially reconstructed design.

area above the red band is covered with chalky white slip while the surface area below the red band is unslipped. Although poorly preserved, the painted design appears to have consisted of several isolated figures, perhaps five or six circling around the perimeter of the vessel. None of

the painted figures is fully preserved; hence it is unclear what the overall design was supposed to depict. There is a 3 cm wide water mark on the lower part of the jar's interior possibly indicating that water was stored inside the vessel for an extended period of time (Figure 9b). Although this vessel is incomplete, the design layout stands out with its loosely spaced figure motifs. Our literature review did not result in finding any similar design layouts on Santa Ana Polychrome vessels, which makes this jar potentially a rare specimen of the period.

Casitas Series Pottery

In this section, we present comprehensive data material collected on Casitas series pottery from Area D within the Alameda Village Site in the North Valley of Albuquerque. We provide updated information on the vessel morphology as well as on the type of temper, surface finish, and decoration. We also present new type variants such as Casitas Red-on-brown Smudged, Casitas White-on-brown, Casitas Red-on-white, and Casitas Polychrome. The establishment of multiple variants of Casitas Red-on-brown offers here the opportunity to also introduce the term Casitas series pottery, to which all these variants belong. The use of this terminology allows for easier means of expression when referencing multiple types of the group. We point out that while some of the new type variants have not been mentioned in previous publications, references to similar type names, such as smudged, red-on-white, and white-on-brown, have been made on historic pottery made at Ysleta del Sur Pueblo near El Paso, Texas (Leach et al. 1996).

Casitas Red-on-Brown. The type has been also referred to under different names such as Casitas Red-on-tan for sherds found at Old Los Ranchos Plaza (Franklin 2007) or Isleta Red-banded (Marshall 2015:72). Production occurred between approximately A.D. 1670 to 1890 (Dick 1968).

Common vessel forms include direct-rimmed bowls and flare-rimmed bowls (Table 1) which sometimes take on an extreme flared ("soup plate") morphology (Franklin 2007). Franklin (1997:10.29) references Batkin (1987) about the presence of "shouldered bowls and jars being fired at Isleta in 1890." A rim sherd from a possible Casitas Red-on-brown scoop was also noted at Area D within the Alameda Village Site. The largest bowl has been measured to be 28 cm and the smallest 15 cm with a calculated mean of 22 cm (Table 2). One bowl that OCA recently recorded at Valles Caldera National Preserve was estimated to have a 12 cm rim diameter, however. The direct rim bowls tended to be deeper with common depths ranging from 7 to 12 cm. The flare-rimmed bowls were rather shallow and with depths ranging from 3 to 7 cm. In the Albuquerque and central New Mexico area, common temper for the Casitas series pottery is sand. This has been observed at sites such as the Chamisal Site (LA 22765), Los Ranchos Plaza (LA 46638; Franklin 2007), the Alameda School Site, and Area D within the Alameda Village Site. There is also a cluster of sites with Casitas series pottery located in the Cochiti Pueblo to southern Valles Caldera region, thus offering an approximate extension of the area of occurrence of sites with high frequencies of Casitas series pottery (see Figure 1).

Table 1. Diversity of rim profiles observed on Casitas series and blackware pottery of the Spanish Colonial period from Area D within the Alameda Village Site.

Vessel Form	Ceramic Type	Rim Form							Total
		direct, indeterminate	direct, restricted	direct, unrestricted	everted	flared	flared, restricted	flared, unrestricted	
jar	Gray utility ware	4	-	-	1	10	-	-	15
jar	Polished blackware	-	-	-	-	1	-	-	1
seed jar	Polished blackware	-	2	-	-	-	-	-	2
bowl	Gray utility ware	1	-	1	2	1	8	-	13
bowl	Polished redware	3	-	-	-	-	-	-	3
bowl	Polished blackware	9	3	16	-	-	2	1	31
bowl	Casitas Polychrome	-	-	-	-	-	-	3	3
bowl	Casitas Red-on-white	-	-	5	-	1	-	2	8
bowl	Casitas Red-on-brown	3	2	4	-	3	-	11	23
scoop	Casitas Red-on-brown	1	-	-	-	-	-	-	1
Total		21	7	26	3	16	10	17	100

Table 2. Range of estimated maximum vessel diameters.

Ceramic Type	Vessel Form	Count	Min	Max	Mean	Standard Deviation
Gray utility ware	jar	5	20	30	21.6	11.3
Gray utility ware	bowl	10	13	44	22.4	9.5
Polished blackware	seed jar	1	24	24	24.0	--
Polished blackware	bowl	21	12	39	18.9	6.4
Casitas Red-on-brown	bowl	18	15	28	20.2	3.4
Casitas Polychrome	bowl	3	19	21	19.8	1.2
Casitas Red-on-white	bowl	7	17	33	22.1	6.0

A possible exception to the sole bowl form production of Casitas Red-on-brown has been noted at San Antonio de Padua Pueblo, LA 24, where Mensel and Wilson 2004:77 report three bowl or jar sherds. Even more compelling data came from Warren (1980) who reported several wide mouthed jars with red-painted bands along their rims. Warren argued that if it had not been for the red-painted rim bands, the jars would fit the Carnué Plain description.

Casitas Red-on-brown was the most common ceramic type observed at Area D of the Alameda Village Site. Most of the sherds were decorated with a red-painted rim band on the exterior and/or interior surfaces (Figure 10a, b, d, f). Rims painted only on the interior were among a few exceptions (Figure 10c, e). As is often common on Casitas series pottery, the exterior rim band may or may not be the same width when compared to the interior band. Some rims have the exterior band barely visible, perhaps not more than 2 to 5 mm wide, others—the more common ones—have the bands about 3 cm wide. The widest band has been measured on a single rim sherd and was 6.5 cm wide on the interior surface (Figure 10d).

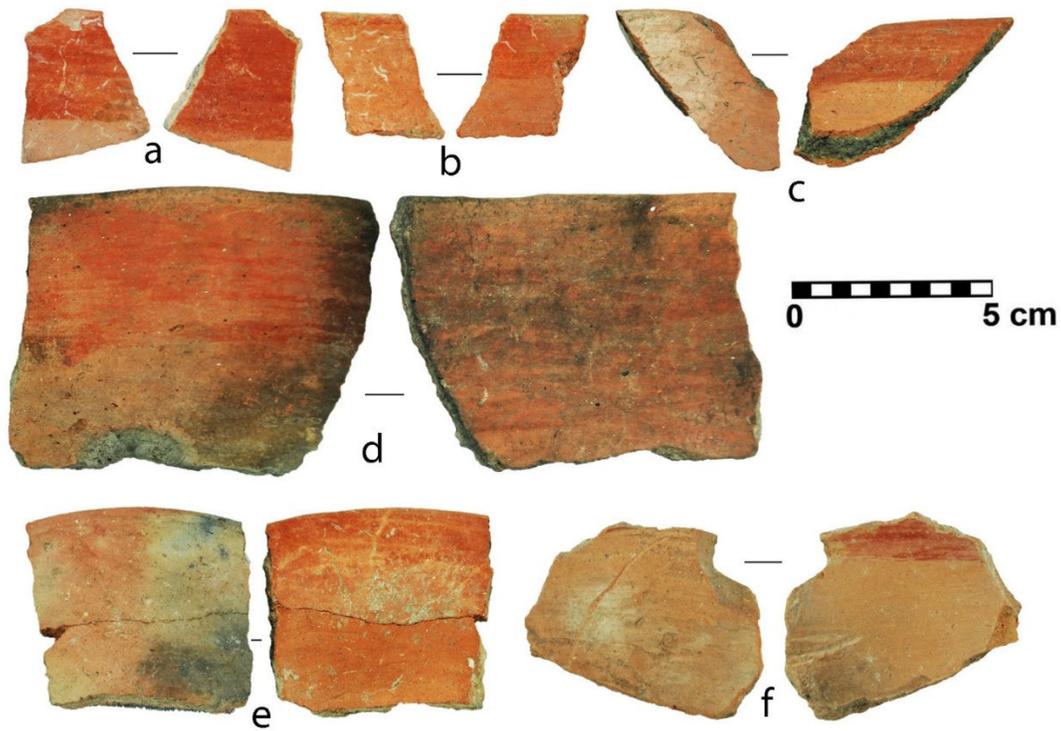


Figure 10. Photographs of selected Casitas Red-on-brown bowl rim and body sherds from Area D within the Alameda Village Site. Note the interior red slip on all sherds.

Surface finish on Casitas Red-on-brown from Area D within the Alameda Village Site ranges from well smoothed to well polished. Polishing was usually applied after the application of the paint, which often resulted in partial smearing of the paint over the unpainted surfaces.

Vessel walls are usually uniformly thick and range from 4 to 6.1 mm in thickness, with the most common thickness being about 5.5 mm. The walls culminate in a rim with a rounded, slightly flattened, or tapered lip. Two direct-rimmed bowls from LA 50420 were large enough to estimate their rim diameters and a total height on one of them (Figure 11a and b). The first bowl was estimated to measure 22 cm in diameter and the other 14 cm. The second bowl was probably 10 cm deep.

An additional three rim sherds provided information on flare-rimmed bowls. The original bowls from these rims were estimated to measure 19, 18, and 19 cm in diameter and their heights were between 4 and 4.5 cm (Figure 11c-e). The rim curvatures also revealed that rims “c” and “e” had moderately flared curvatures while rim “d” had a more acute curvature with a pronounced inflection point (Figure 11d).

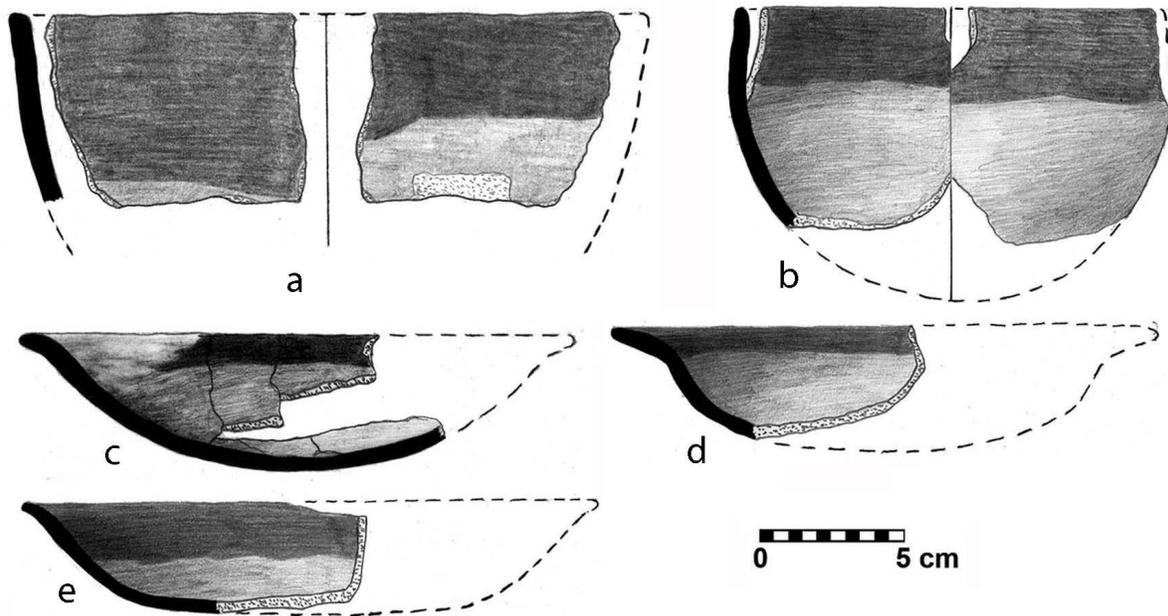


Figure 11. Sketch reconstructions of selected Casitas Red-on-brown bowls from Area D within the Alameda Village Site: (a) and (b) direct-rimmed bowls; and (c), (d), and (e) flare-rimmed bowls (“soup plates”).

Casitas Red-on-Brown Smudged. Five Casitas Red-on-brown sherds with smudged surfaces were also identified in the assemblage, two of them probably from the same vessel (Figure 12d). The remaining three sherds were relatively small. Mensel and Wilson (2004:77) have noted the presence of some smudged variants from San Antonio de Padua; smudged variants have also been reported at Sandia Pueblo (Mike Marshall, personal communication, December 2019). However, these specimens have not been previously defined as a formal type. We refer to it as a variant called Casitas Red-on-brown Smudged. The data collected from these sherds indicate that Casitas Red-on-brown Smudged was made both into flare-rimmed (Figure 12a, b, and d) or direct-rimmed bowls (Figure 12c). The flare-rimmed bowls had their red rim band applied on the interior while the direct-rimmed bowl had a similar band applied on the exterior. This is logical because those decoration surfaces are best visible on their respective vessel forms.

While there are a few differences among the individual sherds in this type variant, they all share the attribute of polished surfaces. A close observation of some of the sherds also revealed evidence for soot (Figure 12c, d) that could indicate possible use of these vessels for heating food. This is further supported by the relatively small size of Casitas Red-on-brown Smudged bowls which suggests that these containers commonly were employed as personal serving bowls.

Casitas Red-on-White. Casitas Red-on-white is a new ceramic type we introduce in this article. This pottery was well represented in the Area D assemblage, although it has been only sporadically reported in the greater Albuquerque area and from Sandia Pueblo (Mike Marshall, personal communication, December 2019). Interestingly, Casitas Red-on-white is nearly absent from many major historical Pueblo sites, such as the Convento at Isleta Pueblo (Marshall 2015).

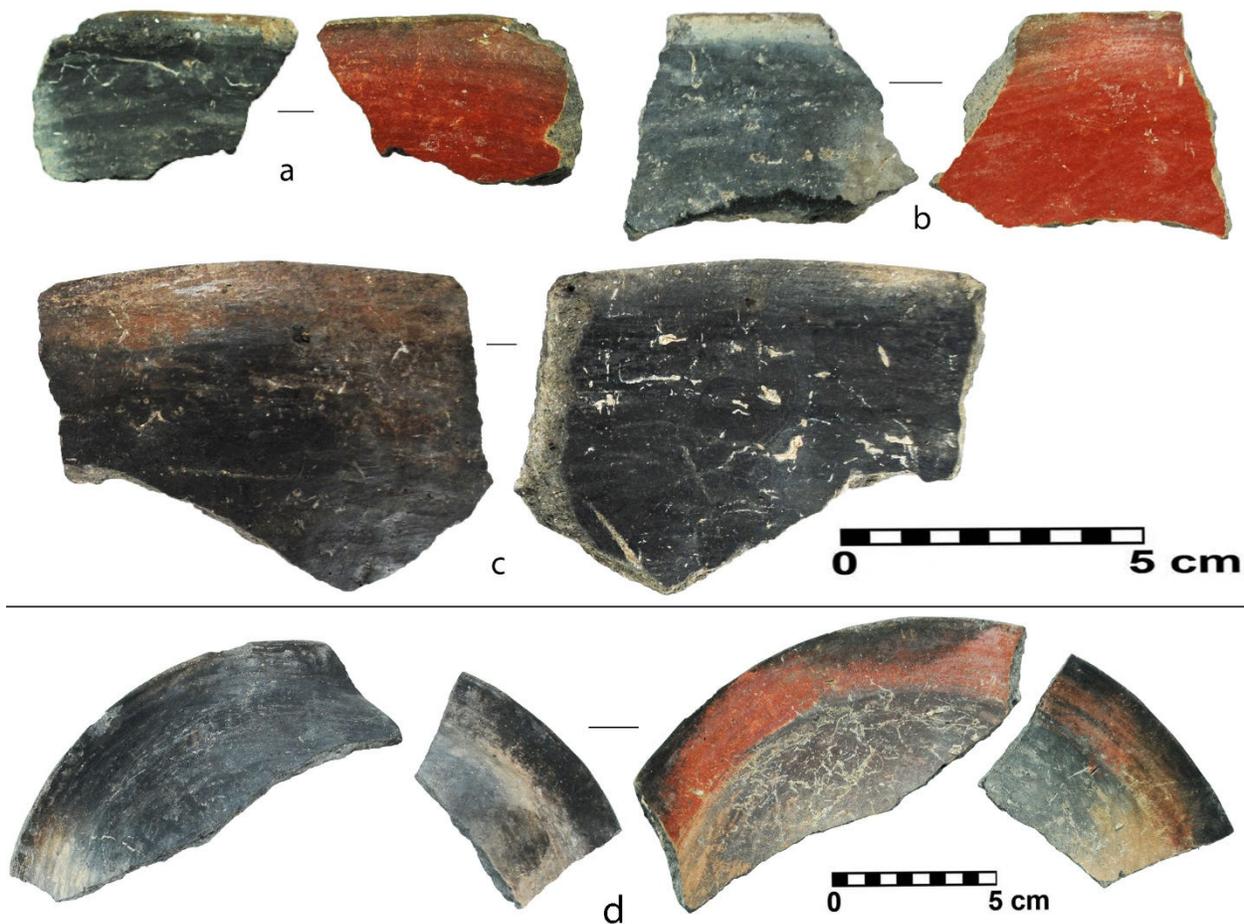


Figure 12. Photographs of selected Casitas Red-on-brown Smudged bowl rim sherds from Area D within the Alameda Village Site.

Casitas Red-on-white is a slipped variant of Casitas Red-on-brown with similar red bands (Figure 13). While some bowls had the rim bands on both the interior and exterior (Figure 13a-e), others had the band only on one surface (Figure 13g). The widths of the bands varied like those on the red-on-brown countertype. Most Casitas Red-on-white bowls were polished on both surfaces and occasional smearing of the red paint is noticeable on sherds with heavy polish (Figure 13b, c, e). The smearing of the red paint over the chalky or creamy-white slip sometimes gives the appearance of a pinkish buff color (Figure 13c). Common vessel forms include direct-rimmed and flare-rimmed bowls. These containers were likely used as personal serving bowls as evidenced by the presence of soot suggesting use for warming food.

The overall vessel sizes correspond well with the data collected on Casitas Red-on-brown specimens. Two direct-rimmed bowls shown in Figures 14a and 14b indicated rim diameters of 16 and 19 cm respectively. The first one also offered an estimated vessel height of 7 cm. Two flare-rimmed bowls revealed estimated 20 and 17 cm rim diameters and estimated vessel heights of 4 cm each (Figures 14c and 14d).

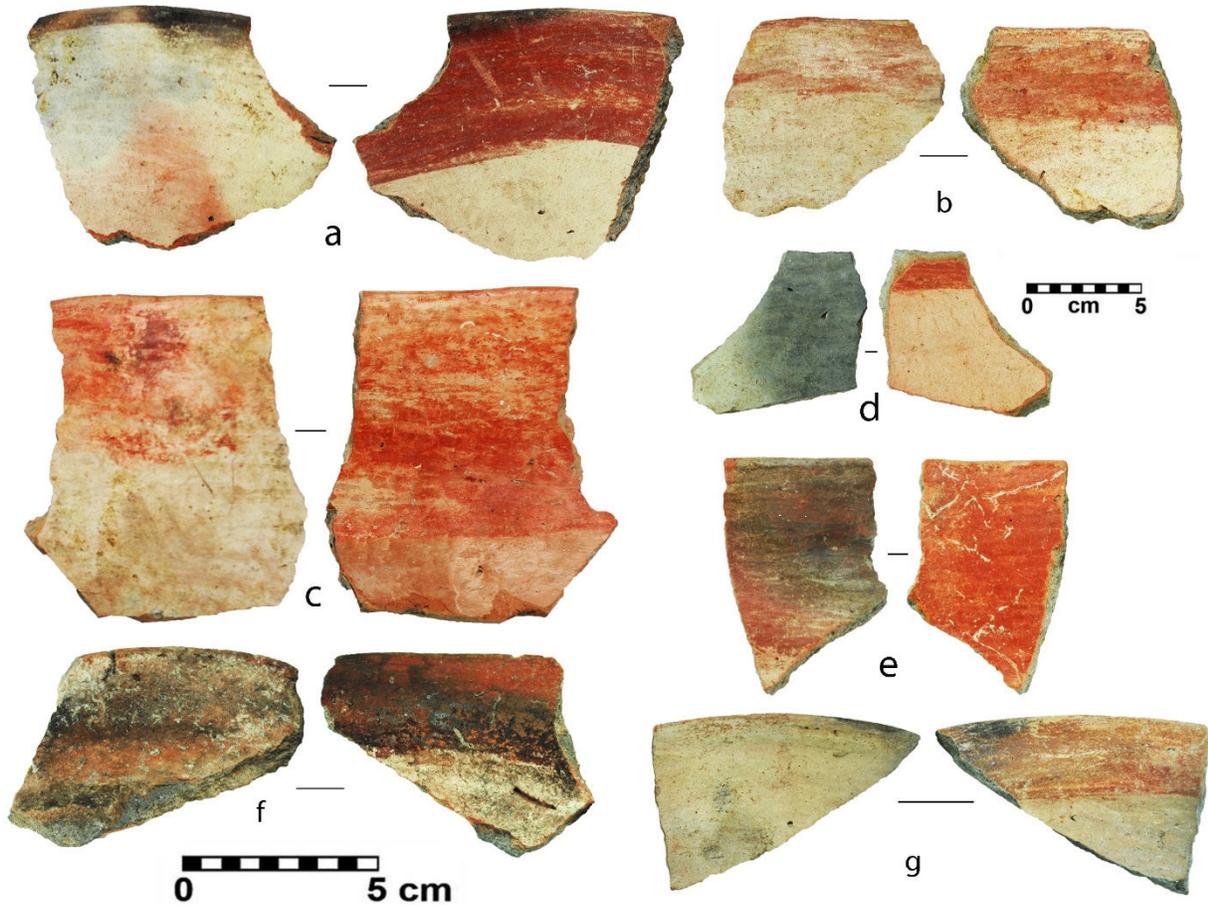


Figure 13. Casitas Red-on-white bowl rim sherds. Note soot on (a), (e), (f), and (g).

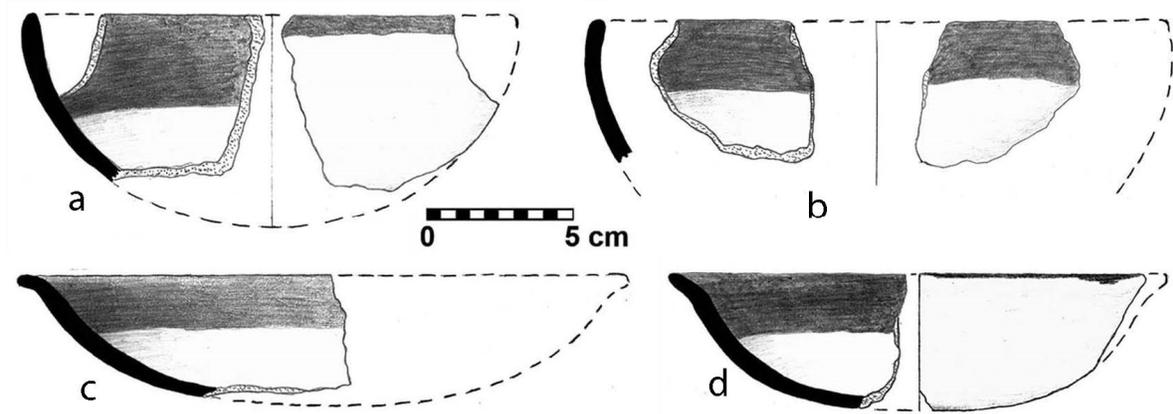


Figure 14. Sketch reconstructions of selected Casitas Red-on-white bowls from Area D within the Alameda Village Site.

Casitas Polychrome. Several Casitas series ceramics were either badly eroded or were covered with soot to the point where it was no longer possible to place them into their respective type variants. Despite this handicap, at least three sherds were classified into a rare type, Casitas Polychrome.

Ferg (1982:40) mentions recovering several sherds at San Antonio de las Huertas (Placitas) which strongly resembled Casitas Red-on-brown but which had the interior decorated with scalloped red and brown lines. Ferg gave the type a provisional name “Casitas Polychrome.” In 2013, Kurota examined the Casitas Red-on-brown and “Casitas Polychrome” sherds from the San Antonio de las Huertas Site at the Maxwell Museum of Anthropology. As described by Ferg (1982:40), these sherds have a white paste, which is significantly different from the material from Area D within the Alameda Village Site.

The first Casitas Polychrome specimen from Area D came from a direct-rimmed bowl. It has a chalky white slip with a red rim band on the exterior (Figure 15). The interior is decorated with a white slip band (probably the same that was used to slip the exterior) extending from the rim about 3.5 cm down. A portion of the red exterior slip band is also noticeable on top of the white interior band (Figure 15a, right), possibly as a result of smearing the red exterior slip during the process of polishing the vessel. Indeed, the interior of the bowl is well polished while the exterior is smoothed. The rim’s curvature provided an estimated bowl rim diameter of 18 cm.

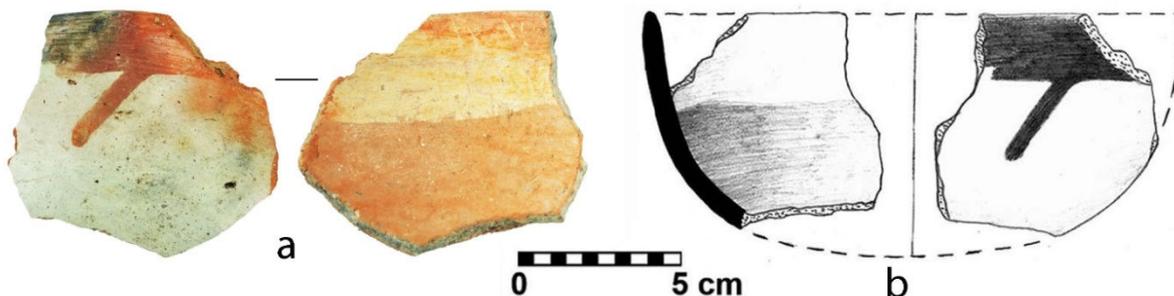


Figure 15. Casitas Polychrome bowl rim sherd from Area D within the Alameda Village Site: (a) photographs of the bowl rim sherd; and (b) bowl rim sherd reconstructed vessel form.

That first Casitas Polychrome sherd also revealed streak of red paint about 3 cm-long leaking from the rim band down the exterior vessel at a diagonal angle. This angle indicates that, while the paint was drying during initial vessel manufacture, the bowl was tilted to such an angle that the leaking streak would occur as a result of gravity. This tradition of drying painted ceramic bowls at an angle is observable on many late Rio Grande Glazewares (mainly Glaze E and Glaze F periods) in the region.

The second Casitas Polychrome sherd was a large specimen representing about 40 percent of the original vessel (Figure 16). The sherd had a white slip on the exterior and a red, 3 cm-wide rim band on the interior. A faintly visible cross design motif was engraved onto the interior bottom

of the vessel after it had been fired. It is not clear if the engraving was done by the original potter or later by someone who used the bowl. If the engraving was made by the potter, the vessel would qualify for a type name modification into *Casitas Polychrome Post-Fire Engraved*. A similar such type reference is known for the pottery from the Hopi Mesas (Jeddito Engraved) in northeastern Arizona (Colton 1956). A faint red painted line was also noted next to the cross image although, due to vessel breakage, it is unclear what the rest of the design was. A red smear is also present on the exterior of the bowl that probably resulted from polishing the vessel.

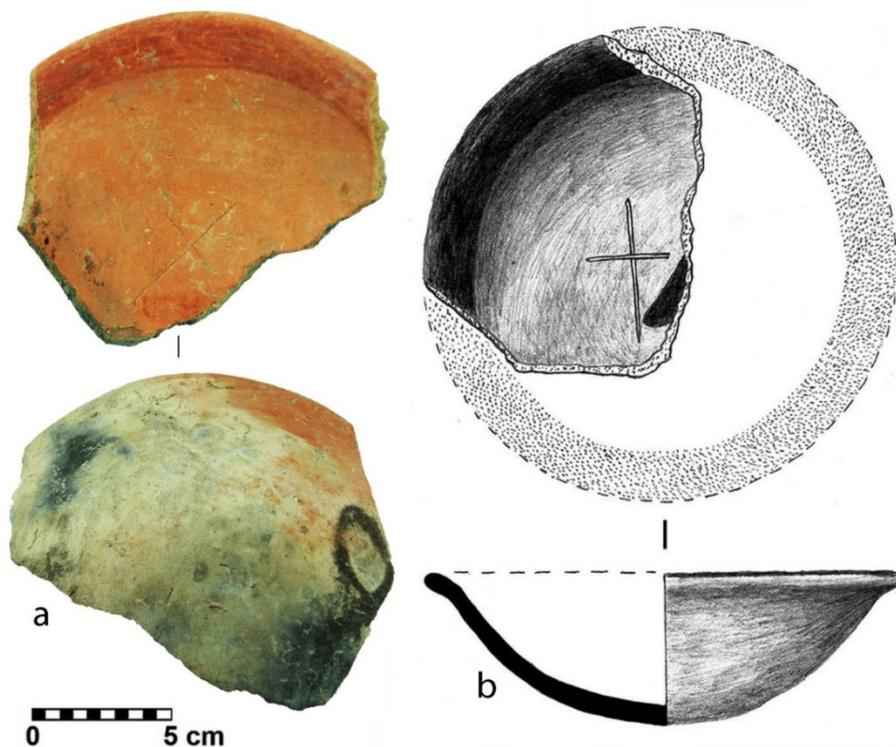


Figure 16. Casitas Polychrome flare-rimmed bowl from Area D within the Alameda Village Site. Note presence of soot on exterior of (a).

The rim sherd revealed that the original vessel was a flare-rimmed bowl with an estimated rim diameter of 17 cm. Its depth was estimated at 6 cm. This vessel size supports the inference of its function being a personal serving bowl. Traces of soot were noted primarily on the exterior and some on the interior of the bowl. The relatively large amounts of exterior soot suggest the bowl was placed over the fire, perhaps to heat food.

The third Casitas Polychrome specimen from Area D within the Alameda Village Site was a large fragment of a soup plate, representing about 40 percent of the original vessel (Figure 17). The soup plate was decorated in a Casitas series-style design layout with the exterior being slipped with chalky white slip and an interior rim band. The interior band, however, was made in a more elaborate style compared to the second Casitas Polychrome bowl. The design band

was made by first applying a 3.5 cm-wide white slip band after which a band consisting of connected red triangles was applied on top. We estimate there were nine such connected triangles within the interior design band (Figure 17b). Such a design resembles that found in Ferg (1984).

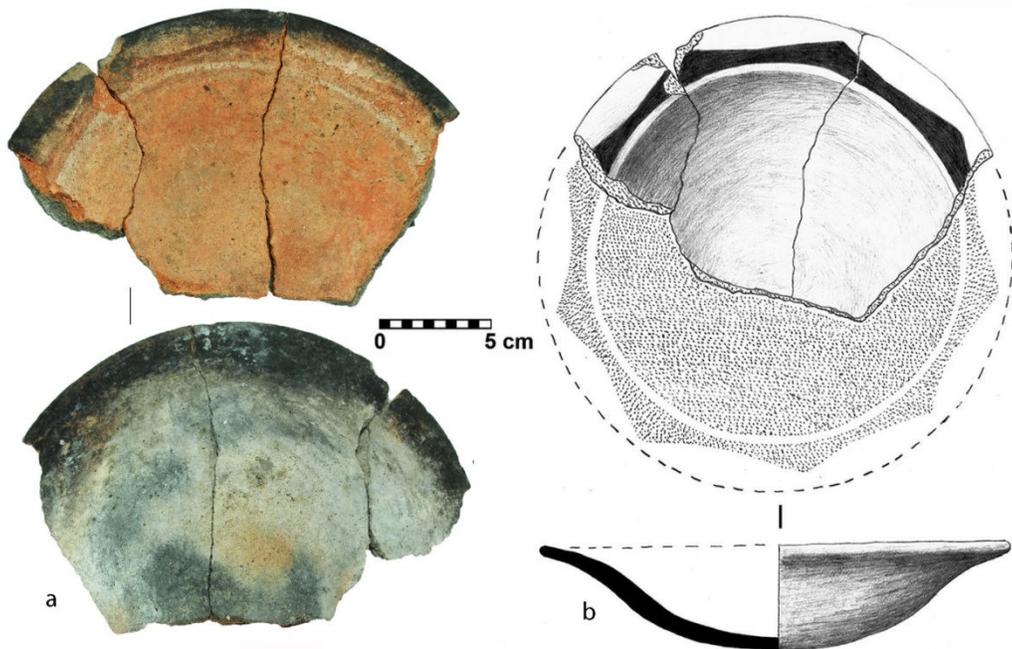


Figure 17. Casitas Polychrome soup plate from Area D within the Alameda Village Site.

The projected interior design can be considered unique for the Casitas series pottery, yet it resembles similar motifs found on Santa Ana Pueblo bowls including Ranchitos Polychrome and Santa Ana Polychrome. There is evidence of heavy soot marks along the exterior and interior rim which renders an interpretation that food was heated inside this container. The rim's curvature offered an estimated rim diameter of 19 cm.

Casitas White-on-Brown. Area D within the Alameda Village Site also revealed one bowl rim sherd with a white slip band applied on the interior just below the rim (Figure 18). We unfortunately do not have a photograph of the sherd available. The profile of the rim and its horizontal curvature indicated the original bowl had a flared rim giving it a soup plate appearance. The bowl was probably 14 cm in maximum diameter and was about 6 cm deep. A microscopic observation of the sherd's wall revealed its paste was light brown and was mixed with sand temper. While the paste color was slightly lighter than the typical brick-orange paste on Casitas Red-on-brown, the sand temper and the sherd's morphological features are comparable to the other Casitas series types. Therefore, we tentatively named this specimen as Casitas White-on-brown. Similar such white-banded bowls have been reported at other contemporaneous sites. Marshall (2015) noted a few such specimens at the Isleta Pueblo Mission Complex, and Carrillo (1997) mentioned variants including white slip rim band and white slip all-over-body.

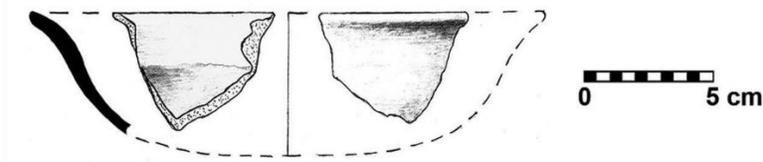


Figure 18. Sketched reconstruction of a Casitas White-on-brown bowl from Area D within the Alameda Village Site. Note white slip band on the interior of the sherd.

Historic Utility Ware

Historic utility ware pottery is the most common ceramic ware found at Historic period Native American sites, as well as sites of Hispanic New Mexican origin. This has made the origin of this ceramic tradition confusing.

Historic Plain Utility. At Area D within the Alameda Village Site, the most common pottery was Historic plain utility. In the Albuquerque area, this informally defined pottery is also referred to as Carnué Plain, particularly when found in the Sandia Mountains and the Tijeras Canyon areas (Dick 1968; Franklin 1997). Sherds belonging to this ceramic category from Area D within the Alameda Village Site were made with poorly finished interior and exterior surfaces often exhibiting light gray to dark gray, even black color (Figure 19), although occasional light brown, beige or orange colored specimens were also present. Such variety of paste color is common on this pottery throughout the greater Albuquerque area as observed on specimens at the Chamisal Site, Alameda School Site, and Isleta Pueblo Mission Complex (Marshall 2015).



Figure 19. Historic plain utility ware bowl rim and jar body sherds.

A few partially reconstructable vessels were recovered during the excavations at Area D (Figure 20). Data collected on the morphology of these partial vessels revealed that most historic plain utility wares were made into flare-rimmed jars. However, one direct-rimmed jar was recovered. Bowls were also common and all were restricted flared rims (Figure 20d, f, g, i). That they were made into large and small sizes suggests possible family-size and personal serving bowl functions. The jars were often made into large hemispherical forms with wide open orifices and flared or recurved rims (Figure 20a, b, h). This globular shape would have made the jars excellent cooking containers. The frequent presence of exterior soot supports this inference. One exceptionally large historic plain utility jar rim sherd was also noted. Its estimated rim diameter was 32 cm and we suggest the vessel may have served a long-term storage function (Figure 20e).

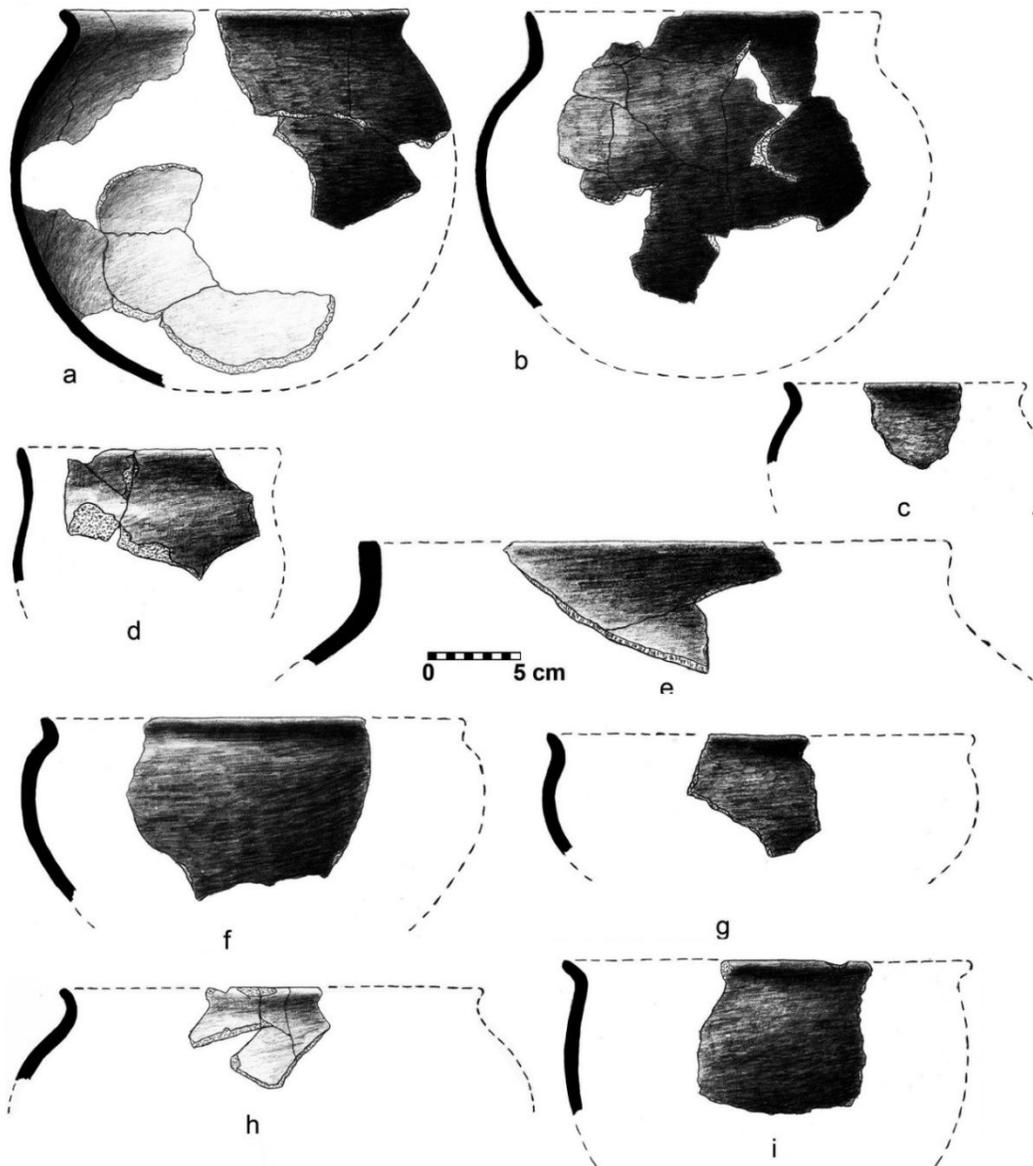


Figure 20. Historic plain utility ware vessel forms: (a), (b), (c), (d), and (h) restricted flared-rimmed jars; (d), (f), (g), and (i) restricted flared-rimmed bowls; and (e) restricted direct-rimmed jar.

Polished Blackware

This section discusses polished blackware and what has occasionally been termed polished grayware, two types distinguished by the degree of gray color on their exterior (Figure 21). This distinction is solely the result of differences in the completeness of smudging during the vessel's firing. Consequently, we argue polished blackware and polished grayware should not be differentiated as different ceramic types. Polished blackware was the second most common ceramic ware at Area D within the Alameda Village Site. Depending on the location of the project area or the ceramic analyst, such pottery has been referred to as Kapo Black or Kapo Gray for the northern New Mexico region (Marshall and Marshall 2008), Manzano Black for the Sandia-Manzano Mountains of the eastern Albuquerque area (Dick 1968), and polished blackware in the central Albuquerque Basin area (Franklin 2007).

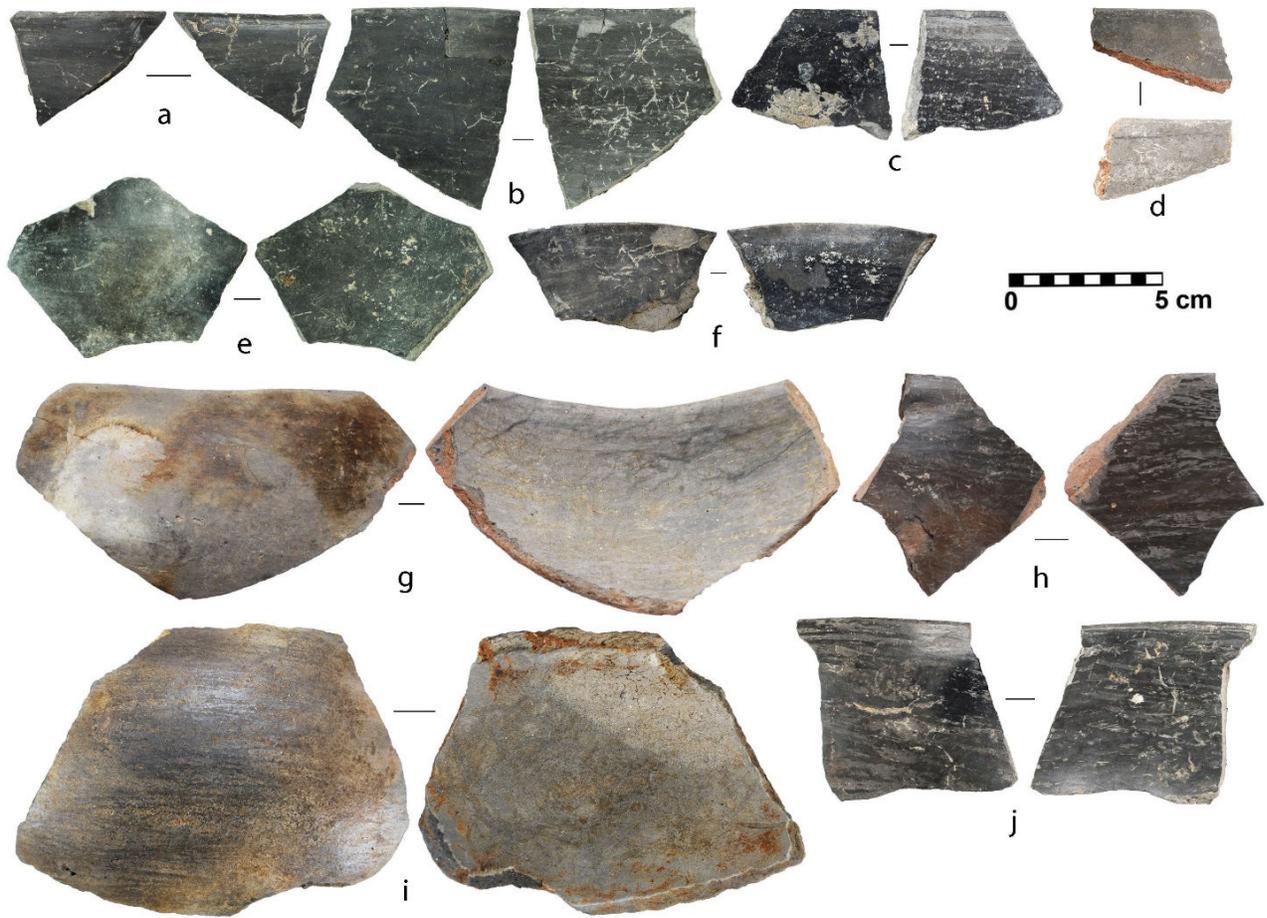


Figure 21. Polished blackware bowl rim sherds from Area D within the Alameda Village Site.

In the Albuquerque area, Herbert Dick (1968) was the first to offer a formal reference to this pottery type as Manzano Black for specimens found in the Manzano Mountains. Franklin (2007) uses this term for the polished utility ware ceramics recovered at Los Ranchos Plaza in Albuquerque, while Marshall calls the specimens found at Sandia Pueblo Kapo Black, although they have granitic sand temper instead of the typical pumice (Marshall 2008).

The sherds from the Area D assemblage can be light gray, gray, dark gray to very dark gray in color, but are almost never the pure black typical for Kapo Black. The ceramic assemblage from Area D revealed that the polished blackware pottery was made with non-local temper inclusions that included fine volcanic ash or volcanic glass that is not part of the local geologic signature. Quite common in the area, this pottery is defined by well-polished interior and exterior surfaces.

Polishing of both surfaces is a signature attribute on polished blackware in general. Bowls with wide-open orifices tend to be more polished on their interior surfaces. Soot is also occasionally present primarily on the exterior surfaces, suggesting possible heating of food prior to consumption (Figure 21e, g).

Bowls seem to be overwhelmingly represented among the polished blackware assemblages. Direct-rimmed bowls are the most common shapes (Figure 22a-e g-h, j-l), although occasional flare-rimmed bowls are also found (Figure 22i). Two sherds came from seed jars (Figure 22f, o). One bowl with a restricted rim was modified during its production into a larger form with a slightly recurved rim and an acute shoulder (Figure 22n). Such forms are sometimes referred to as dough bowls (Baktin 1987). While not very common, polished blackware jars were also made, although in rather small size and with flared necks (Figure 22m).

Isleta Series Pottery

In this section we briefly discuss our observations of Isleta Red-on-tan and other historic Isleta Pueblo pottery. These observations come from Alexander Kurota's brief analysis of the ceramic assemblage recovered by Mike Marshall during his excavations at the Isleta Pueblo Mission Complex (LA 724; Marshall 2015). A December 2019 visit to the Maxwell Museum of Anthropology revealed several interesting facts that merit further discussion in this paper.

Isleta Red-on-Tan. The analysis of pottery from the Isleta Pueblo Mission Complex revealed that Isleta Red-on-tan pottery is strikingly similar to Casitas Red-on-brown. In fact, the sherds belonging to these two types are almost indistinguishable from each other. For example, the sherds share similar exterior light brown to tan paste color as well as a brick red-colored band along the rim (Figure 23).

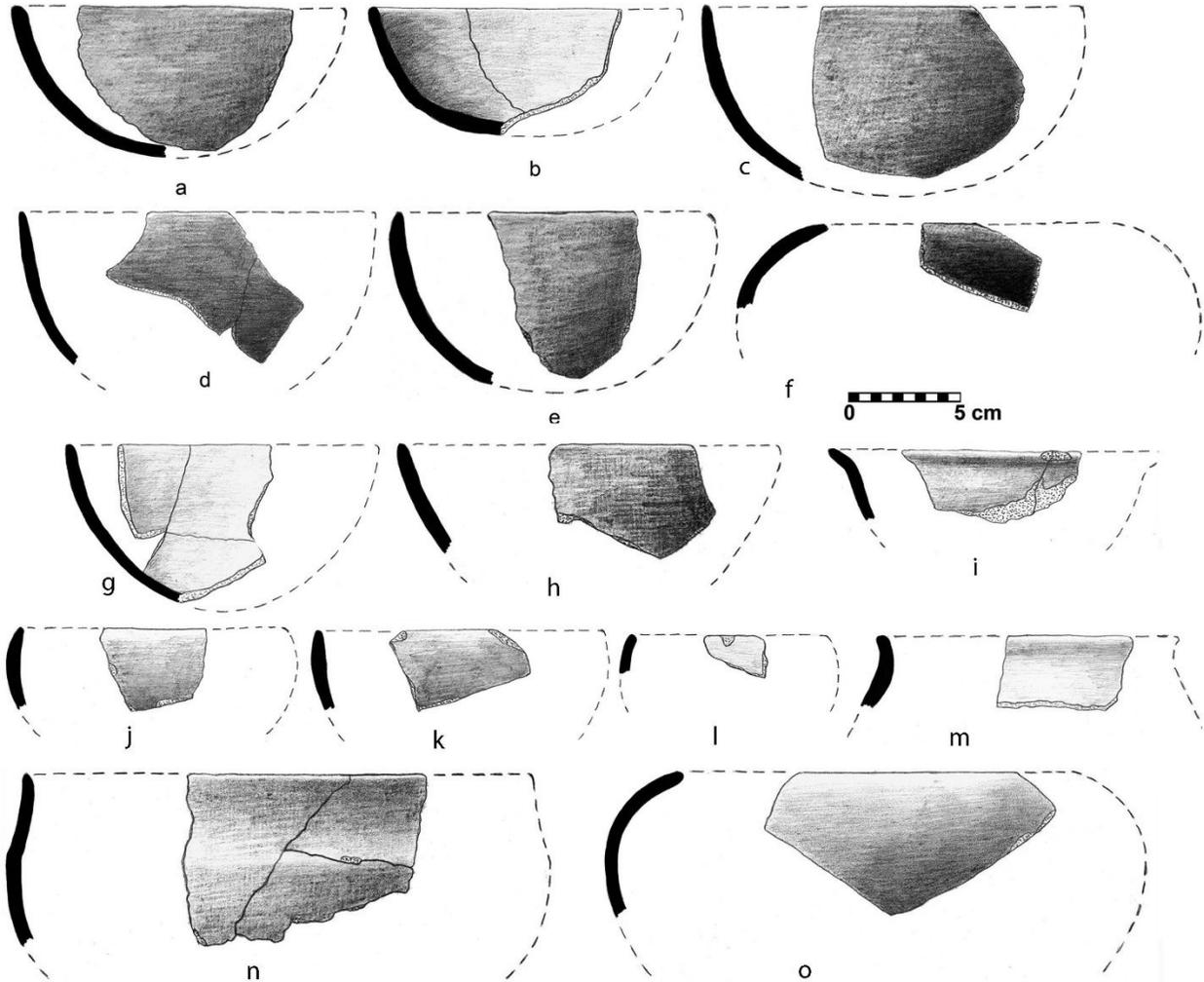


Figure 22. Sketched vessel reconstructions of polished blackware bowls from Area D within the Alameda Village Site.

In general, the Casitas Red-on-brown and Isleta Red-on-tan vessel forms are equally similar, with the majority being direct-rimmed, hemispherical bowls with the occasional flared rim. Of the 250 Isleta Red-on-tan sherds recorded by Franklin (1997:158, Table 10.9) at Valencia Pueblo (LA 953), 169 were bowls, 78 were soup plates, and 3 were jars. Franklin (1997:10, 29) also references Batkin (1987) about the presence of “shouldered bowls and jars being fired at Isleta in 1890.” The main distinguishing factor between Isleta and Casitas red-banded pottery is the somewhat finer paste and finer sand temper observed in Isleta sherds. Isleta temper is very fine sand that appears to have come from Rio Grande alluvial sediments. Some Isleta sherds also revealed the presence of occasional fine mica specks. Occasional fire clouds and traces of soot were also noted on the exteriors of some sherds (see also McKenna 2007:9). Batkin (1987) presents a historic photograph of an Isleta Pueblo potter firing large red-banded bowls that are probably Isleta Red-on-tan. Two of the rim sherds from the Isleta Pueblo Mission Complex revealed 20 and 27 cm diameter rims, also supporting an inference of relatively large vessel size (Table 3).

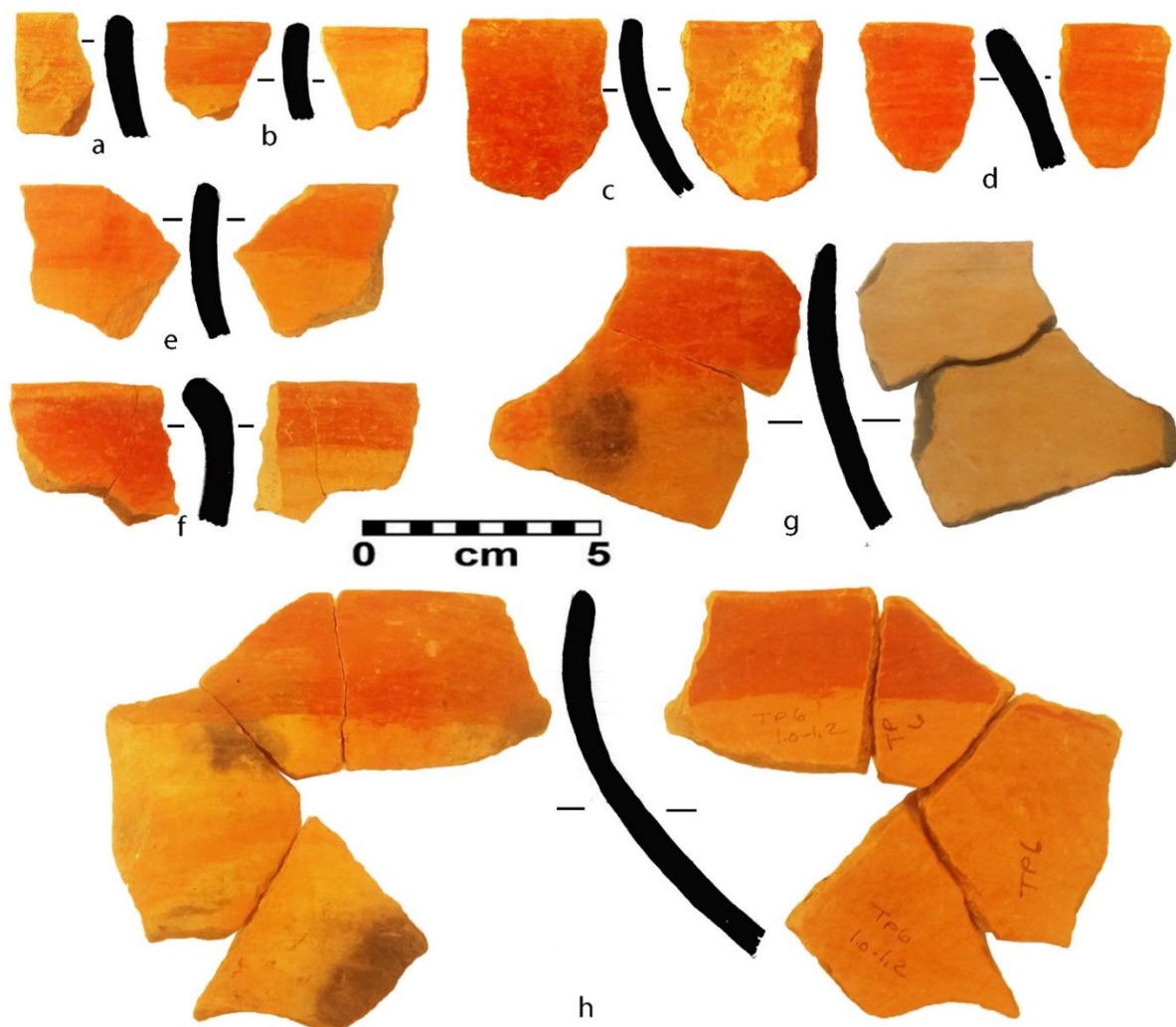


Figure 23. Isleta Red-on-tan bowl rim sherds: (a) Maxwell Cat. No. 2017.28.350, (b) 2017.28.341, (c) 2017.28.349, (d) 2017.28.349, (e) 2017.28.60, (f) 2017.28.65, (g) 2017.28.40, and (h) 2017.28.34. All images are courtesy of the Maxwell Museum of Anthropology. Note: The colors of the sherds are distorted by artificial lighting.

McKenna (2007) provides a detailed description of Isleta Red-on-tan from the Old Chical Site (LA 112497) assemblage. Located about 2.5 miles southeast of the Isleta Mission Complex, the site revealed that the nature of production had simplified over the span of the type's production. McKenna (2007:9) notes that later-built vessels were made with thicker walls and coarser texture. All were dough-bowls, while the jars, soup plates, and other forms were discontinued (see also Franklin 1997:146). Based on the observed high-iron clays mixed with arkosic sands, McKenna argues the pottery is of Isleta Pueblo origin, although he also argues that the rim paint technology suggests Laguna Pueblo influence. McKenna estimates Isleta Red-on-tan was produced between A.D. 1730 and A.D. 1950.

Table 3. Data collected on selected Colonial period rim sherds from Isleta Pueblo Mission Complex (LA 724) (Courtesy of Maxwell Museum of Anthropology).

Ceramic Type	Vessel Form	Rim Form	Est. Rim Diameter (cm)	Paste Color	Temper	Maxwell CAT No. 2017.28.-
Isleta Red-on-tan	bowl	direct	-	gray	very fine sand	350
Isleta Red-on-tan Smudged	bowl	flare	-	buff	fine sand	350
Isleta Red-on-tan	bowl	direct	-	gray	fine sand	349
Isleta Red-on-tan	bowl	direct	-	dark gray	very fine sand	349
Isleta Red-on-tan	bowl	flare	-	orange	fine sand	349
Isleta Red-on-tan	bowl	direct	27	beige	very fine sand with mica	39
Isleta Red-on-tan	bowl	direct	20	gray	fine sand	41
Isleta Red-on-tan	bowl	NA	-	beige	fine sand	40
Polished blackware	bowl	flare	-	gray	fine sand	40
Isleta Red-on-tan	bowl	direct	-	gray	fine sand	34
Isleta Red-on-white	bowl	flare	20	gray	fine sand	34
Isleta Red-on-white	bowl	direct	15	beige	fine sand	34
Isleta Red-on-white	bowl	direct	13	orange	fine sand	37
Isleta Red-on-tan Smudged	bowl	direct	16	gray	fine sand	65
Isleta Red-on-tan	bowl	direct	-	orange	fine sand	60
Isleta Red-on-white	bowl	flare	-	gray	fine sand	67
Isleta Red-on-tan	bowl	flare	-	gray	fine sand	65

Franklin's (1997) analysis of Isleta Red-on-tan sherds from Valencia Pueblo revealed similar results, with most sherds having fine sand although occasional basalt, crushed sherd, and indeterminate igneous rock tempers were also noted (1997:176, Table 10.19). The silty paste is fine-grained and never gritty. Fire clouds and blackening are very common suggesting placement near fuelwood during firing (Franklin 1997:145-146). Franklin (1997:145) argues the type was made at Isleta Pueblo but also considers a possibility of its manufacture at other nearby pueblos. In addition to the Isleta Red-on-tan, seven Valencia Pueblo sherds were classified as Isleta Polychrome, which we do not describe in this article (Franklin 1997:177).

Isleta Red-on-White. Just like Casitas Red-on-white, the Isleta series pottery also has a red-on-white type. Found at the Isleta Mission Complex, Isleta Red-on-white is merely a slipped variant of Isleta Red-on-tan. The slip ranges from chalky white to cream or buff color. It is a medium thick to thin slip which sometimes allows the tan colored paste to be visible under the slip (Figure 24). The red-slipped rim band can vary in width from 1.5 to 6 cm and the color ranges from brick red to maroon-brown. Occasional fire-clouds and traces of soot were also noted. Direct-rimmed bowls are the most common vessel form. Two rim sherds in the sample analysis revealed 13 and 15 cm diameters (Table 3). Occasional flare-rimmed bowls were also present. The temper is the same as that in Isleta Red-on-tan.

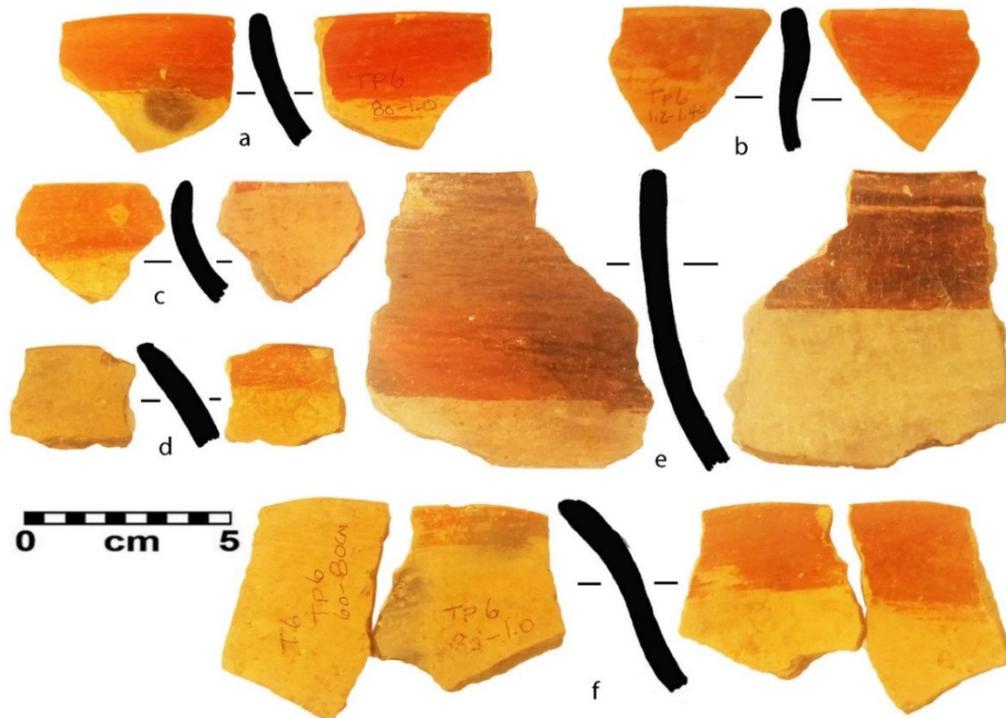


Figure 24. Isleta Red-on-white bowl rim sherds: (a) Maxwell Cat. No. 2017.28.34, (b) 2017.28.37, (c) 2017.28.34, (d) 2017.28.67, (e) 2017.28.39, (f) 2017.28.34. All images are courtesy of the Maxwell Museum of Anthropology. Note: The colors of the sherds are distorted by artificial lighting.

Isleta Red-on-Tan Smudged. As Marshall (2015) noted, there are also a few smudged specimens in the Isleta Pueblo Mission Complex ceramic assemblage. We accordingly refer to these sherds as Isleta Red-on-tan Smudged. Two of the rim sherds from this assemblage came from two separate bowls. One had a direct rim (Figure 25a) and the other a flared rim (Figure 25b). Both of these rim sherds were lightly smudged on their interior and tempered with a fine sand. The direct rim specimen was estimated to be 16 cm diameter for the original bowl.



Figure 25. Isleta Red-on-tan Smudged bowl rim and body sherds: (a) Maxwell Cat. No. 2017.28.65 and (b) 2017.28.350. All images are courtesy of the Maxwell Museum of Anthropology. Note: The colors of the sherds are distorted by artificial lighting.

Summary of Re-Analysis of Isleta Mission Complex Sherds. We identified many traits similar to those in Casitas pottery types during our analysis of the Isleta Pueblo Mission Complex sherds. We argue that Isleta series pottery is very similar and perhaps almost indistinguishable from the Casitas series sherds. It appears both series are Native American pottery traditions, one likely originating from Santa Ana Pueblo and the other from Isleta Pueblo. The one distinguishing factor between the two traditions is suggested to be the fine paste with finer sand temper observed on Isleta series pottery, while Casitas series sherds tend to have slightly coarser paste and sand temper. Future detailed analyses of Casitas (and Isleta) series sherds from many different contexts will be required to explore these differences and their contextual implications.

The Isleta Pueblo Mission Complex also produced large quantities of historic utility ware pottery. These sherds seem to be equally indistinguishable from the above described *historic plain utility ware* and the *polished blackware*. These sherds were also tempered with fine to very fine sand. One larger rim sherd of polished blackware came from a deep flare-rimmed bowl (Figure 26).



Figure 26. Polished blackware bowl rim sherd: Maxwell Cat. No. 2017.28.40. Image is courtesy of the Maxwell Museum of Anthropology.

Summary

This paper has provided an overview of what is generally known today about Casitas Red-on-brown and similar historic red-banded pottery in New Mexico. A review of the map (Figure 1) shows that most of the sites with these red-banded ceramic types occur in the central and northern New Mexico region, clustering along the Rio Grande Valley. Additionally, a cluster of sites associated with several Spanish Colonial period missions near El Paso, Texas has produced similar ceramics termed Valle Bajo Brownware. There appears to be a void between El Paso, Texas and Socorro, New Mexico with no sites having such pottery, although this could be a result of limited data. It is possible that some of the *parajes* along the *Camino Real* may have some red-banded pottery sherds, although Mike Marshall, who recently surveyed the *Camino*

Real, did not recall seeing any red-banded ceramics along these trail stops (personal communication, December 2019).

Our analysis of the red-banded bowls from Area D within the Alameda Village Site as well as observations of similar specimens throughout central and northern New Mexico indicate that these sherds almost always resemble the polychromatic vessels made in nearby pueblos. For example, the Casitas Red-on-brown, White-on-brown, and Polychrome sherds from Area D within the Alameda Village Site have very similar paste to that of the Puname Polychrome specimens found at the site. The only difference is that Puname Polychrome has basalt temper while the Casitas sherds are sand tempered. If the Casitas Red-on-brown sherds were made by Santa Ana or Zia Pueblo potters, then the difference in temper could be explained by the fact that both Santa Ana and Zia potters made their early historic (matte-paint and utility wares) pottery with basalt temper (Harlow et al. 2005). This was the case for Puname Polychrome which was made at both Zia and Santa Ana Pueblos with basalt temper and thus it seems hard to distinguish from which pueblo it came.

After Santa Ana Pueblo potters started using coarse sand temper sometime around A.D. 1750, pottery from that point can be easily assigned to either of the two pueblos. Importantly, when we compared the sand-tempered Santa Ana Pueblo ceramic types (Ranchitos Polychrome and Santa Ana Polychrome) to the Casitas series specimens at Area D within the Alameda Village Site, their paste and temper are almost indistinguishable from each other. Similarly, the red-painted bands that are common on the interiors of Ranchitos and Santa Ana Polychrome bowls and jars are also indistinguishable from those on Casitas Red-on-brown bowls. This goes for the red color slip as well as the width of the bands that can vary both on Casitas series and on Santa Ana series pottery. Indeed, one needs to see whether the exterior of a sherd is painted with polychromatic design to conclude whether a sherd should be classified Casitas Red-on-brown or Ranchitos/Santa Ana Polychrome. These observations suggest that Casitas series ceramics were made by Puebloan potters rather than those belonging to the Hispanic New Mexican community.

If this assertion is correct and the historic Puebloan potters indeed manufactured Casitas series pottery, then specimens made in different pueblos should indicate tempering agents consistent with those pueblos and, thus, should receive their own type variant names. This has already been the case for recently introduced type names such as San Juan Red-on-tan (Batkin 1987; Mensel and Wilson 2004) for the northern Rio Grande region and Isleta Red-on-tan (Franklin 1997) or Isleta Red-banded (Marshall 2015) for the Isleta Pueblo contexts. San Juan Red-on-tan is a variety of Tewa polished ware that was produced primarily at San Juan and other Tewa Pueblos during the late nineteenth to early twentieth century (Batkin 1987; Moore 2001; Mensel and Wilson 2004). Isleta Red-on-tan is also historic type that fires to a beige or tan color and has portions partially covered with a red slip. Hayward Franklin (1997:10.31) asserts that Isleta Red-on-tan is “unquestionably” a product of the Puebloan potters (presumably at or near Isleta Pueblo). Franklin also admits that while there are great similarities between Isleta Red-on-tan and Casitas Red-on-brown (or tan), there is a possibility that the Casitas vessels may have been manufactured by Hispanic potters (Carrillo 1997; Dick 1968; Hurt and Dick 1946).

Similarly, during their survey of the Rio Abajo region of central Rio Grande Valley, Marshall and Walt (1984) identified a cluster of pueblos with “late nineteenth to early twentieth century” pottery types. The authors grouped most of these ceramics into a “Carnué” group, although they did make distinctions between painted and unpainted sherds by referring to them as “red rim” or “red slipped.” These specimens might well indeed belong to some of the currently defined variants of Casitas series pottery. Unfortunately, many of the reports referring to these poorly known ceramic types have few or no photographs or illustrations.

A number of earlier scholars also suggest that Casitas series pottery was manufactured by Hispanic settlers (Carrillo 1997; Dick 1968; Hurt and Dick 1946) whose villages overlay the very locations of previously occupied indigenous pueblos. Such is the case of San Antonio de Padua (LA 24) where Casitas pottery appears to be associated with a Hispanic occupation separate from the Late Classic period component below (Warren 1980; Mensel and Wilson 2004).

Southward into El Paso, Texas, Marshall postulated a Valle Bajo Brownware ceramic tradition associated with Old Socorro Mission contexts in the present day El Paso area. In addition to various red-painted scalloped forms, pendant triangles, and broad zig-zag lines, this pottery also shows red rim bands similar to those found on Casitas series ceramics. Common manufactured vessel forms included hemispherical bowls with direct rims, flared-rimmed bowls, and soup plates, as well as globular jars with slightly flared rims (Marshall 1999:88).

It is unclear where gray utility ware pottery was manufactured and how it arrived at Area D within the Alameda Village Site. It is possible that some of it may have been made by the potters at Sandia Pueblo or Santa Ana Pueblo, both of which used sand or granitic sand temper. There is also a possibility that the polished blackware, together with the plain utility wares and polished redwares, was the only pottery made at Sandia Pueblo. Alternatively, the gray utility wares and polished blackwares may have also been produced by Hispanic-origin potters in the Tijeras Canyon and the greater Manzano Mountains area.

More research is needed to better understand the origin and the use of red-banded Colonial period pottery in the Middle Rio Grande region and its neighboring areas. Our review of the published literature and our analysis of ceramics from the Alameda Village Site Area D and a sample from the Isleta Pueblo Mission Complex point to a Puebloan origin for this pottery. Small to medium sizes of these bowls indicate possible personal serving and family serving or cooking function respectively. The fact that much of the Casitas series pottery is known primarily from Hispanic-origin sites indicates strong trading relationships between the Native groups and the Hispaños. Research on ceramics from the historic-era trash mounds at Santa Ana and Zia pueblos could shed more light on the origin, the use, and the trading of this pottery in New Mexico during the Colonial period.

Acknowledgments. We are grateful to numerous individuals who have helped us to prepare this article. Maxwell Museum of Anthropology’s Karen Price allowed Alexander Kurota to analyze the Isleta Pueblo Mission Complex ceramics and Diane Tyink gave us permission to publish photographs from this ceramic assemblage. Mike Marshall provided copies of several his reports with Colonial period ceramics and also came to visit with Alex Kurota at OCA to discuss the Casitas pottery. Erin Hegberg provided us with many reports containing data on Casitas and similar

pottery types. Additional useful information was provided to us by Dr. Kelly Jenks, Dr. Hayward Franklin, Dr. Eric Blinman, Toni Laumbach, and Esperanza Juarez. Finally we are eternally grateful to Gretchen Obenauf for her technical editing of this article.

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EXPERIMENTAL ARCHAEOLOGY FOR CERAMICS IN THE AMERICAN SOUTHWEST

Andy Ward, Independent Scholar

Experimental archaeology has a long history in the American Southwest, going back at least as far as Anna O. Shepard's seminal work *Ceramics for the Archaeologist* (Shepard 1956). Although she may not have been creating pottery replicas and the field of experimental archaeology had not yet been defined, her work testing different firing methods and clays in an effort to better understand how prehistoric pottery was made is very similar to what is called experimental archaeology today. Some other highlights of experimental archaeology from the Southwest include:

- 1991 Crow Canyon Archaeological Center begins to host an annual Kiln Conference to explore Anasazi trench kiln technology and to perform firing experiments (Ermigiotti 1997).
- 1993 Clint Swink publishes "Limited Oxidation Firing of Organic Painted Pottery in Anasazi-Style Trench Kilns," the result of 200 test firings (Figure 1; Swink 1993).
- 1999 Christopher Pierce completes his dissertation "Explaining Corrugated Pottery in the American Southwest: an Evolutionary Approach," in which he determines the practical benefits of corrugated cooking pots by making and using 24 replica pots and measuring the results (Pierce 1999).
- 2003 the first Leupp Kiln Conference was held in Old Leupp, Arizona to continue the experimentation and group thinking that was lost when the original Kiln Conference stopped being held after 1998. This event has been held every year since with the exception of 2010 and 2013, and has been called the Southwest Kiln Conference since 2014 (William Lucius, personal communication, August 2019).

Although I am not an archaeologist, or more correctly not a professional archaeologist, I have been involved in experimental archaeology since I was a teenager. I got involved with trying to replicate prehistoric pottery while still in high school and as I learned more and became more fluent in archaeology I tried all the harder to get it right, accurate in every way to the ancient sherds. Never one to start small I jumped right into the deep end of the pool as it were and tried to make complex polychromes from the start. Specifically I wanted to re-create Gila Polychrome and Babocomari Polychrome. This turned out to be a much harder task than I had anticipated and now 30 years later I am still working on accurately making those pottery types.



Figure 1. Clint Swink with one of his early experimental kilns (1989). Photo by Rickie Swink.

Upper Gila Preservation Archaeology Field School

In 2015 I was invited to teach pottery to the students at the Upper Gila Preservation Archaeology (UGPA) Field School in New Mexico. This field school has an experimental archaeology program headed up by Allen Denoyer, an archaeologist who is fluent in a wide range of skills from flint-knapping and atlatl making to adobe pueblo and pit house construction. He always provides the students with a variety of fun experiences in experimental and experiential archaeology and for the last five years my pottery class has been a part of that experience.

Every summer I collect and process the necessary clay a week or two before the class, then pack up all my pottery equipment and drive to New Mexico on the first weekend in June. There I teach the students how to form pottery using the coil and scrape method, the same method used by the fourteenth century potters who lived in the ruins the students will be excavating (Figure 2). Each student uses a gourd scraper and a ceramic puki to form their vessels; other tools include deer rib scrapers, smooth polishing stones, and yucca leaf paint brushes. I usually spend a few hours in the afternoon guiding the students through making a pot, then I head back to Arizona. Over the course of the next month the students may work on finishing up their pots and decorating them as they have time in between excavating ruins, field surveys, making and practicing with atlatls, and whatever other activities make up the UGPA Field School curriculum.



Figure 2. 2018 Upper Gila Preservation Archaeology Field School students and teachers try their hands at coil and scrape pottery.

I return when the field school is wrapping up, usually on the Fourth of July, to fire the finished pots. So, early on a warm July morning I can be found arranging 20 or so pots over a bed of hot coals to get the student's pottery fired before the afternoon brings hotter weather and breezy conditions. As usual for a large firing of students' work, there are varying degrees of success, some pots may break or come out of the fire marred by fire clouds while others may be exactly what the potter envisioned, a vital lesson for young archaeologists to not count chickens before they hatch. The students come away with a new appreciation for ancient ceramics and the tools, materials, and labor that was involved in producing it. Hopefully one or two students develop an interest in pursuing pottery replication further.

The Southwest Kiln Conference

The original kiln conferences, held at Crow Canyon every year from 1991 until 1996 and then at Pojoaque, New Mexico in 1997 and Pecos National Historical Park, New Mexico in 1998, answered many questions about how pottery was fired in the Four Corners region prehistorically. After the two New Mexico conferences, there was a five-year hiatus (Clint Swink, personal communication, November, 2019).

In 2003, Tim Wilcox and Bill Lucius organized the Leupp Kiln Conference and from that time on it has been an annual event (except for 2010 and 2013). Held in a different location in the

Southwest every year, the Southwest Kiln Conference has examined the technology of pottery for a variety of Southwest pottery traditions from Mesa Verde Black-on-white to Rio Grande Glazewares and Salado Polychromes. In recent years the focus of the conference has slowly drifted away from the science and data of the original Crow Canyon conferences; now the focus is more on education, sharing information between potters, and showing contemporary potters how pottery was made long ago. Some of the participants are modern potters with little more than a passing interest in replicating prehistoric pottery. Still, some of the participants are doing real experimental archaeology and the exchange of ideas and materials that takes place at the Kiln Conference is invaluable to such research. For example, I have driven hundreds of miles and tested dozens of clays in the past year in my search for the white slip used to create Salado Polychrome pottery, and Cherylene Caver is working on replicating San Juan Redwares and Plains Woodland pottery (which she forms upside down on the Plains (<https://youtu.be/jzIGgodgvGg>)). Both of us have presented the results of our research at conferences in recent years and shared knowledge gained in our research with other conference participants.

The 2019 conference took place in the first week in October. Here are some highlights.

The conference started on Friday morning October 4 with presentations at the Gila Pueblo campus of Gila Community College in Globe, Arizona. The speakers were:

- Charmion McKusick - A View from Gila Pueblo of the Southwest Regional Cult
- Caitlin Wichlacz - Reframing Skills and Mastery in Pottery Making: Considerations from the American Southwest
- Joseph Crary - Finding the Right Time
- Andy Ward - Where is Salado?

After lunch we reconvened up the road a mile or so at Besh Ba Gowah Archaeological Park where the afternoon was dedicated to pottery demonstrations. The demonstrations were held al fresco among the ruins of Besh Ba Gowah, a fourteenth century pueblo ruin that is owned by the city of Globe. They included:

- Wayne Keene - Hopi tile painting workshop
- Steve Rospopo - micaceous pottery demonstration
- Cherylene Caver - corrugated pottery demonstration (Figure 3)
- Matts Myhrman - magnetic pottery, yucca brush making, slipping, and miscellaneous demonstrations



Figure 3. Cherylene Caver demonstrates corrugated pottery at Besh Ba Gowah as part of the 2019 Southwest Kiln Conference. Photo by Andy Ward.

On Saturday the center of activity shifted 30 miles north of Globe to the Timber Camp Campground on the Tonto National Forest. The pottery firings got started around 8:00 in the morning and went on until about 2:00 in the afternoon. There were six different firings by five different potters:

- Micaceous pottery firing with pine bark by Steve Rospopo
- Hopi tile firing with sheep manure by Wayne Keene
- Anasazi trench kiln firing with juniper and cypress wood by Cherylene Caver
- Oxidized organic paint firing (Salado) with juniper and cypress wood by Andy Ward
- Oxidized pottery firing with juniper and cypress wood by Andy Ward
- “Kitchen Sink” firing with cow manure, pine bark and pine cones by Matts Myhrman

Saturday night a large group of participants gathered around the campfire to talk about pottery and eat Wetherill Stew (Urban 2015). All of the pots, except those in the trench kiln, were done firing on Saturday. The trench kiln was not opened until early Sunday morning when it had completely cooled off. After the pots were taken out of the kiln and examined, we talked a little about our successes and failures, took a group picture (Figure 4) and then some participants started heading home. One last group event on Sunday afternoon was a field trip to Kinishba Ruin on the White Mountain Apache Reservation. These pueblo ruins were partially reconstructed in the mid-twentieth century then abandoned and are now crumbling for the second time.



Figure 4. 2019 Southwest Kiln Conference participants. Photo by Larry Galbiati.

The Future of Experimental Archaeology in the Southwest

What is the state of experimental archaeology for ceramics in the American Southwest today? Those who were taking the lead in this field back in the 1990s are now approaching or past the age of retirement. Who will take their place? Take, for example, Eric Blinman, a professional archaeologist, pottery replicator, and one of the early kiln conference organizers. He has been a leader in researching how Rio Grande Glazeware was made, a task that requires an intimate understanding of clay and firing (Blinman, et al. 2012). Since the Southwest Kiln Conference has drifted away its original focus on science, people like Swink and Blinman rarely make an appearance at the conference. Southwest archaeology needs people who possess a detailed understanding of the technology of pottery production to address questions that can only be answered through experimental archaeology. Where is the next generation of ceramic

experimental archaeologists? There are still many questions that need answering. A few of those are:

- How did Mimbres potters achieve reduced iron black paint?
- How was glaze paint accomplished in the prehistoric Southwest?
- Is there any practical benefit to smudging the insides of vessels?
- How much wood and labor went into pottery firing?
- How do different pottery types compare by labor and wood consumption?

There are not many people working on the answers to these types of questions today. Those that do experiment with ceramic materials seem to prefer to answer questions with an electric kiln. You can produce the needed temperature using an electric kiln but you will never reproduce the correct atmosphere of a wood fire, and atmosphere is at least as important as the temperature in a firing. I hope that this article or the Southwest Kiln Conference may inspire some young archaeologist to take up the mantle and become the next Blinman. There is definitely a need for archaeology of this sort in the Southwest. However, there is hope! I have taught pottery to many young archaeologists in my five years teaching at the Upper Gila Preservation Archaeology Field School and I know that some of them have continued to make pottery. Also I am currently working with a graduate student at Arizona State University who happens to be both a potter and an archaeologist (a rare combination) on an experimental archaeology project. So step up young archaeologists in the Southwest, there is a great deal of work to be done in the realm of experimental archaeology in ceramics. It is fun, challenging, and rewarding work. If you want some help with ceramics technology or want to know where to start, feel free to contact me directly; I am always interested in sharing knowledge and helping out archaeologists. Also plan on coming out to the Southwest Kiln Conference next year to get inspired, learn from potters, and hear about the work others are doing in this area.

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REVIEW

Kantner, John, David McKinney, Michele Pierson, and Shaza Wester

2019 Reconstructing sexual divisions of labor from fingerprints on Ancestral Puebloan pottery.
Proceedings of the National Academy of Sciences 116(25):12220-12225.

Reviewed by Peter J. McKenna

Ostensibly this paper presents strong evidence that both men and women were significantly involved in pottery production during the Chaco era (<A.D. 1200) and that those contributions by sex varied over time and even among different social groups in the same community. Perhaps more importantly this paper is a warning against the pitfalls of projecting the ethnographic present onto the past and the attendant facile acceptance of “sacred cow” assumptions such as projections engender (so to speak). Contrary to the foregrounding Chaco Canyon gets in referring to this study, Kantner and company employ fingerprint data from the Blue J Community, a more controlled cultural environment than the complex palimpsest of occupation in Chaco Canyon. Basic to the study is the fact that fingerprints exhibit sexual dimorphic characteristics, particularly using the friction ridge breadth. This is an important contribution to the study of the sexual division of labor from evidence in archaeological contexts that does not rely on assumption. The paper is short, engaging, and elegant and presents a useful tool in developing labor profiles in communities wherever fingerprints are evident on pottery. “Reconstructing sexual divisions of labor from fingerprints on Ancestral Puebloan pottery” can be read or downloaded at www.pnas.org/cgi/doi/10.1073/pnas.1901367116.



Indented corrugated sherd with fingerprints. Photo courtesy of Michelle Turner.

EXHIBITS AND EVENTS

Poeh Cultural Center at Pueblo of Pojoaque presents *Di Wae Powa: They Came Back*. One hundred ancestral Tewa pots, returned from the Smithsonian, are in this ongoing exhibit which opened on October 12, 2019. For more information see <https://poehcenter.org/museum/exhibits>. Also of interest to Pottery Southwest readers is a short video about the deep meaning of the pots that have “come home.” Video: https://www.youtube.com/watch?v=0J2kaNbrk_0&feature=youtu.be&fbclid=IwAR1NMkwGqn_gpiaYvFEqVOKCyI1wc82f8pJasb_I0bl3BTAIXlj1ju3f1bc

Ann Ramenofsky and Kari Schleher will give a **Southwest Seminars** lecture in Santa Fe on March 2nd at 6:00 on “San Marcos Pueblo: Native Stability and Change During the Spanish Contact Period” at Hotel Santa Fe. Admission by subscription or \$15 at the door. See <https://southwestseminars.org>.

The **Society for American Archaeology** 85th Annual Meeting will be held in Austin from April 22nd to April 26th, 2020. Details at <https://www.saa.org/annual-meeting>.

The **Archaeological Society of New Mexico** Annual Meeting will be held at the Sagebrush Inn and Conference Center in Taos from May 8th to May 10th, 2020. The theme of the conference is “Taos at the Crossroads of Trade.” Further information can be found at www.taosarch.org.

Bruce Bernstein will give a **Southwest Seminars** lecture in Santa Fe on May 18 at 6:00 on “San Ildefonso Pottery: Voice of the Clay, 1600-1930” at Hotel Santa Fe. Admission by subscription or \$15 at the door. See <https://southwestseminars.org>.

Pecos Conference 2020 will take place from August 6th to August 9th in Mancos, CO. Registration opens in April. See <https://www.pecosconference.org>.

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