Buried City Ceramics, Ochiltree County, Texas

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¹The Buried City of the Panhandle has been studied sporadically since the first decade of the 20th century. These sites along Wolf Creek in the Texas Panhandle produce a unique complex of associated traits that include large single-room houses enclosing almost 64 square meters, a series of bone tools such as bison tibia digging stick tips, deer-antler handles, deer-mandible sickles, awls and phids made from the distal ends of deer tibiae, and a ceramic tradition that includes significant modification or decoration of the rims and lips of vessels. This pottery has at times been referred to as a variant of Borger Cordmarked for the Antelope Creek Focus as defined by Alex Krieger in 1946. To illustrate the similarities and differences between Borger Cordmarked



Overview of site 41OC43, Buried City. Approximately AD 1350.

and Buried City ceramics, I spent a week examining the ceramic collection from Alibates #28, one of the type localities for Borger Cordmarked pottery.

Borger Cordmarked pottery, as shown at Alibates 28 has uniformly cord-impressed exterior surfaces. The cord markings are usually cross-hatched on the body and shoulder of the vessel and parallel and vertical on the lower two-thirds of the vessel rims. The upper third of the rim may be cord marked or smoothed-over cord marked. The paste² of Alibates 28

pottery, based on a sample of 192 rim sherds, was predominantly of medium-sand sized particles of highly angular quartz and feldspar, consistent with what Jack Hughes commonly referred to as crushed-rock or crushed-boiling pebble temper. Only 3 of the 192 sherds examined had temper of sub-rounded, polished, medium to fine quartz sand grains.

Buried City pottery includes cord marked, smooth-surfaced, and smoothed-over cord marked finishes (Appendix 1, Figure 6). Vessel forms are globular jars with rounded bottoms and no definable base sherds, other than apparent abrasion of the cord impressions on vessel bases. Earlier ceramics include sub-conical vessel forms with direct rims and a temper of crushed scoria. Paste on the later ceramics is almost universally tempered with fine aeolian quartz sand. In about one-third of the sherds there are other inclusions in the paste such as grog, burned and unburned bone, occasional shell, and other unidentifiable inclusions. Locally occurring bentonitic clays are found as clay nodules or lumps in a deposit of fine aeolian sand like that used for the temper.

Pottery from both sites seems statistically similar when comparing metric attributes (Table1). The average height of rims, thickness, mouth and throat diameters, and angle between rim and body are similar. Cord spacing measurements, an indicator of the diameter of the cords used to manufacture the pottery, have not been completed for the Buried City sample at this time. Minimum thickness for Buried City rims was not recorded because it was relatively uniform on rims where the comparison measurements might have had some meaning. The two greatest differences are in rim heights measured from the center of the curve onto the shoulder to the top of the lip and of the relationship between throat and mouth diameter. Statistical averages alone are not a fair representation of the variability in these samples.

Frequency distributions of selected traits illustrate some important differences. Both Buried City and Alibates 28 pottery are of similar thickness (Appendix 1, Figure 1). Rim heights are similar with 35mm rim

¹ I would like to thank Harold Courson, Kirk Courson and the rest of the Courson family for their support in making this research possible.

² Paste analysis was made using a 10X hand-lens on existing broken surfaces or clean pre-excavation breaks.

	Rim Height	Mouth Diam	Throat Diam	Max Thck	Min Thick	Angle	Cord Space
ALIBATES 28							
Average	43.74	20.65	19.16	6.48	4.98	139.57	2.70
Minimum	21.00	11.25	11.25	3.50	3.00	104.00	1.40
Maximum	65.50	32.50	32.50	10.00	7.00	153.00	4.80
Std. Dev	11.67	4.97	4.92	1.41	0.92	13.98	0.69
N	32	79	52	113	110	9	106
BURIED CITY							
Average	33.55	19.51	17.78	6.65		139.94	
Minimum	7.70	7.00	6.50	4.00		104.00	
Maximum	62.00	50.00	45.00	13.10		170.00	
Std. Dev	10.76	7.14	6.18	1.54		19.67	
N	65	90	90	108		31	

Table 1: Measurements of Alibates 28 and Buried City pottery

height being most common in both samples. In the Buried City ceramic sample there is a second peak at 25mm rim height, suggesting two distinct rim conformations at Buried City (Appendix 1, Figure 2). Average mouth and throat diameters at Buried City and Alibates 28 are similar to each other and between the two sites. For these two measures, the frequency distributions illustrate a substantial difference. Mouth diameter of Alibates 28 pots is predominantly at 15 and 20 cm. For Buried City pottery, the most common mouth diameters are 10 and 15cm, and there is a wider range of mouth diameters at Buried City than at Alibates (Appendix 1, Figure 3). There are no pot throats under 10cm at Alibates 28 and most of them are more than 15cm. Most Buried City throat diameters are less than 15cm (Appendix 1, Figure 5).

At Buried City, throat diameters are normally smaller than the mouth diameters, suggesting that rims are everted or flared. The final chart of frequency distribution illustrates this. For each sherd, the throat diameter was subtracted from the mouth diameter of the vessel, providing an estimate of the rim flare. Although both Buried City and Albiates 28 have a dominant peak of straight rims, Buried City has a large number of sherds with negative results from this calculation: the throat is narrower than the mouth. Alibates 28 has the opposite pattern, suggesting that rims are normally vertical or turned in a bit making throats larger than mouths.

Beyond the measurements, Buried City pottery offers a sharp contrast with Borger Cordmarked (assuming Alibates 28 is a fair representation of Borger). Six Buried City sites produced a total of 5,780 pottery sherds. Of those, 52% are cord marked, 28% are smoothed-over cord marked, 16% are plainware, and 4% are decorated (See Appendix 1, Figure 6). Most of the decorated ware comes from 41OC27 and 41OC43 and so may date during the middle of the 14th century AD. Of all sherds examined from Alibates 28, all were cord marked and none were ornamented or decorated in any way.



Overview of site 41OC26, Buried City. Approximately AD 1250.

Decorations on Buried City pottery are confined to the neck and rim and only rarely appear on the shoulders. Stylistic modes of Buried City decorated rim sherds were studied by Lee Dobratz and Michael Olson of WSU as a class project in December, 2001³. Their sorting provides the nucleus of the following discussion.

> One hundred eighty-five rimsherds were analyzed. Of these, decorated rims accounted for 38% of the sample. Vessel diameters ranged from 2 to 52cm. Mouth diameters of decorated pottery rims ranged from 7 to 20cm. The total collection included 116 undecorated rim sherds and 69 decorated rim sherds.

Review of basic modalities of ornamentation resulted in 15 unique decorative styles represented including some already identified in earlier reports.

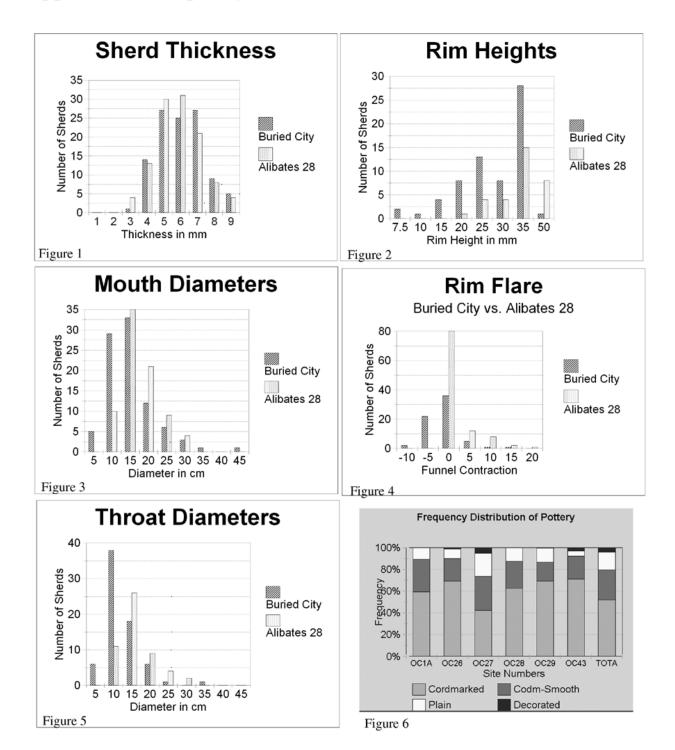
- Horizontal Pinch. Regularly spaced pinch marks form a horizontal band around the rim below the lip. N = 24 sherds (Appendix 2, Figure 1A and 1B).
- Added Coil Thickening (Braced lip). An extra coil was added to the lip to make a thickening or narrow collar on the upper part of the rim. N = 8 sherds (Appendix 2, Figure 1C).
- Horizontal pinch with collar. This is a combination of styles 1 and 2 above. N = 8 sherds (Appendix 2, Figure 1D and 1E).
- Diamond pinch with collar. A coil is added horizontally around the upper rim and horizontal and vertical pinching is combined to make diamond shapes in the collar. N = 5 sherds (Appendix 2, Figure 1F).
- Rolled rim with horizontal pinch. Rim has large added coil flared to the outside of the pot with pinching marks. This can include a crenelated or pie-crust appearance to the rim. N = 2 sherds (Appendix 2, Figure 1G).
- Thickened collar with incised lines. Rim and lip are thickened at the top 1.5cm and three horizontally lines are incised into the collar. N = 2 sherds. (Appendix 2, Figure 1H).
- Rim incising. Incision marks in a parallel notch-like pattern diagonally oriented around the topmost edge of the rim. This is done on rims that are not collared or thickened. N = 7 sherds. (Not illustrated).
- Chevron Incised. Incising on the face of the rim, possibly with triangular or chevron pattern in a horizontal bands. N = 3 sherds (Appendix 2, Figure 1I).

- Cross-hatched lip. Cross-hatch incisions on the top of the lip of the pot. May have chevron incision on the rim. N = 1 sherd (Not illustrated).
- Horizontal Pinching with incised lip. One incised central line circumscribing the top of the lip and horizontal pinching on the collar. N = 1 sherd (Appendix 2, Figure 2A and 2B).
- Shell impressed. The lip of the vessel has been impressed with a shell creating a horizontal band of indentations. N=4 sherds (Appendix 2, Figure 2C).
- Shell impressed on top of rim immediately below lip. The shell markings are impressed along the exterior margin of the lip. N = 3 sherds. (Appendix 2, Figure 2D).
- Vertical fingernail impressed. Similar to 11 and 12, but impressions obviously made by fingernail rather than shell. N = 1 sherd (Appendix 2, Figure 2E).
- Undecorated cord marked rims. Variable cord marking including neat vertical parallel cord impressions and irregular and cross-hatch cord impressions on the face of the rim. Lips can be flat, rounded, or tapered. If lips are rounded a few milimeters of the rim face can have cord impressions obscured. N = 98 (Appendix 2, Figure 2F and 2G).
- Undecorated smooth rims. No cord impressions or other decorations of the rim are apparent. Workmanship can result in a very smooth surface or in an irregular surface. N = 18 sherds (Appendix 2, Frigure 2H and 2I).

Other analytical notes in the collection suggest that some of the surface finishes that are superficially categorized as cord marking may in fact be the result of corn-cob marking, impressing with a brush or a very roughly wrapped cord, and in two instances from a late 13th century AD site rolling with a corncob and corn. Rim treatments not addressed here include lip-tabs, some handles, and classic Central Plains style collars. Future analysis will address questions of chronological variation in the assemblage and consider whether or not some treatments are site-specific household or community development of particular ornamental modes.

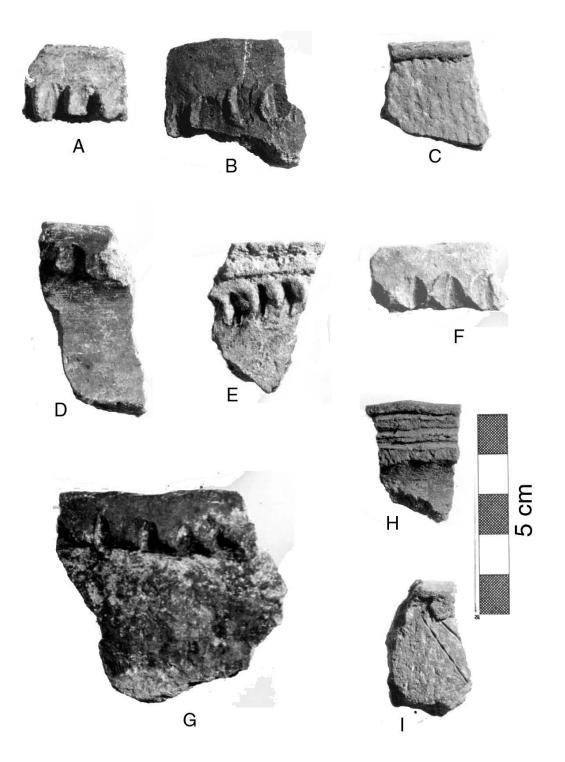
Borger Cordmarked and Buried City pottery differ in temper, rim form, decoration and surface finish. They are similar in thickness and overall size. In conclusion, I would argue that Buried City pottery and Borger Cordmarked are similar in the same way that Buried City houses are similar to Antelope Creek houses: only in the broadest outlines.

³ Both of these students were, at the time they conducted this study, majoring in art. One of them was specializing in ceramic arts. Neither had prior training in archaeological analyses and their instruction was to use their training from art to categorize the collection, ignoring as far as they could any prior descriptions within archaeology. The hoped-for result was that thus would be an evaluation not biased by prior typological reviews of ceramics.



Appendix 1: Frequency Distributions

Appendix 2: Pottery Illustrations



Appendix 1, Figure 1

