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In This Issue:

Andrew Christenson's paper considers alternative interpretations for the reincorporation of sherds in pots whether functional or accidental. Hayward Franklin explores the occurrence of interior lug handles at Pottery Mound. Ongoing features include "On the Shelf", and "On View".

Finally, we provide some technical tips on submissions. An electronic publication creates formatting challenges beyond those of conventional printing or photocopying. These tips make publishing in *Pottery Southwest* easier for our contributors. We hope you will take advantage of them and send in your submissions (see Page 30 for how-to).

With this issue *Pottery Southwest* completes its fifth year of publishing on the worldwide web. We owe a big "thank you" to the Maxwell Museum at the University of New Mexico for hosting our website and to those supporters who believed in our early endeavors. Now, we look forward to the next five years of growth. To achieve this goal we need to hear from our readers. Please consider submitting a paper, inquiry, or comment so that we may keep our publication vital. Suggestions and articles are always welcome at our e-mail address: psw@unm.edu.

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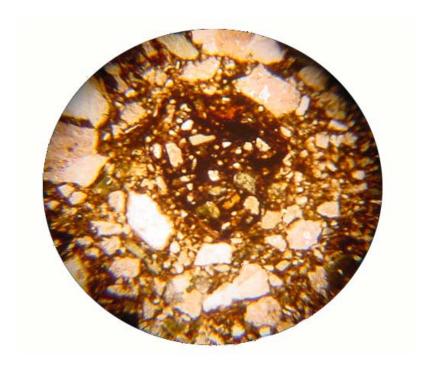
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David R. Abbott, Leslie Cohen, Patricia L. Crown, Kelly Hays-Gilpin, Donna Glowacki, Hayward Franklin, M. Patricia Lee, Peter J. McKenna, David Phillips and Christine S. VanPool. Pottery Southwest is a non-profit journal of the Albuquerque Archaeological Society

On the Reincorporation of Sherds into Pots

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Sherds as a major inclusion in pottery paste have been considered to be temper, intentionally put there because they allow thinner, stronger vessels (Rye 1976: 115-116; Shepard 1968: 131, 132). In the Southwest, Tsegi Orange Ware and Little Colorado White Ware are two clear examples of sherd-tempered wares. At the other end of the spectrum, it is common to interpret occasional small sherds encountered in analyzing ceramic thin sections as accidental inclusions, the expectable result of working clay in an environment where pot fragments are ubiquitous (Figure 1). It is the interpretation of cases between these two frequency extremes with which this article is concerned.



<u>Figure 1</u>. Presumed stray sherd inclusion in thin section of Prescott Gray vessel. Plain polarized light. Inclusion is 0.75 mm in diameter.

Reincorporation

Encounter of some large sherd inclusions in a few vessels from two sites in the Prescott Culture area of central Arizona has led me to consider interpretations other than the functional and accidental ones mentioned above (Christenson 2009a, b).

Woodward (2002:109) suggests that grog (i.e., sherd temper) may be imbued with symbolic and social value and indicates that several archaeologists have argued that inclusion in new pots of fragments of known individual vessels "may reflect and reinforce familial and ancestral links in various ways." She provides some examples from Bronze Age Britain that could plausibly be

interpreted this way (p. 109-110). The term "reincorporation" is used for such situations and is also applied to rock inclusions thought to be from ground up axes.

Two fragments from Prescott Gray Ware vessels at YAV 82, on the Yavapai-Prescott Indian Reservation, had whiteware sherds, probably Tusayan White Ware because of the quartz sand temper, much larger than the more numerous rock inclusions present. Several pieces from a polished Prescott Red jar have a total of eight whiteware sherd inclusions visible on their edges which average 2.6 mm in maximum length, the largest of which is 4.4 mm maximum length (Figure 2). In contrast, the largest rock inclusion visible is 3.5 mm and three of the four largest inclusions seen on the sherd edges are whiteware sherd.

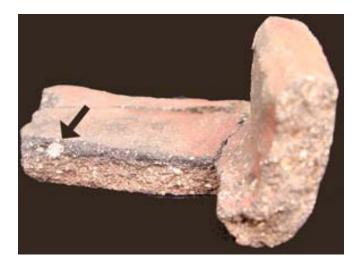


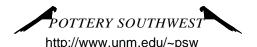
Figure 2. Prescott Red jar with whiteware sherd inclusion. Inclusion is 1.7 mm long.

Another grayware sherd from the same site may have a faint black design on the interior and contains in the paste about a half-dozen whiteware pieces, one a whopping 10.1 mm maximum length and others at 3.6, 1.2, and smaller ones at 0.4 to 0.5 mm (Figure 3). The large sherd is as thick as the vessel and would have been impossible to miss in the process of building the bowl. The largest rock visible on the sherd is only 2.1, one-fifth the size of the whiteware sherd. Neither of these sherds were in the sample from the site that were thin sectioned for petrographic analysis so more details on the inclusions present are not currently available but the sherds are not macroscopically inconsistent with the type of paste expected from local ceramic production.



Figure 3. Prescott Black-on-gray bowl with whiteware inclusion as thick as vessel wall.

At another site, YAV 77, there was a Prescott Gray sherd with a small piece of Tusayan White Ware in the paste and a mammal figurine leg with three pieces of whiteware visible. Two pieces



in the interior were 2.0 and 2.8 mm in maximum length, while another visible on the surface was 2.6 mm (Figure 4). The largest rock fragment visible was 2.0 mm.



<u>Figure 4</u>. Prescott Gray Ware figurine leg with whiteware sherd visible on surface (left center). Other inclusions visible on the surface are rock. Sherd inclusion is 2.6 mm long.

Encounter of the first of these inclusions triggered a memory of Woodward's discussion. As the inclusions are a trivial proportion of those in the vessel fragments examined, any functional value would have been negligible. But it also did not seem likely that they were just accidentally incorporated in the paste during vessel formation.

Although there is good Southwestern ethnographic evidence for a close relationship between potters and clay - very personal, almost religious, but also traditional - passed down from potter to potter (Peters 1995), I have not found any evidence for such a potter-temper relationship. This may simply be an issue of not asking the right kinds of questions as sherd temper is widespread in the region and it seems likely that its use has an ideological component.

Of course, the use by Navajo potters of prehistoric sherds as temper certainly has an ideological component, although not what we are examining here. Regardless of the strong aversion to association with the dead, Tschopik's Ramah informants had functional explanations for using sherds for temper - it "makes the clay stouter and ...stick together better" and prevents the paste from sticking to her hands, according to one potter (1941:18). In general, going to ruins to collect sherds for temper was not viewed as dangerous¹, but one potter was told that she was ill because of such behavior and so put no temper in the pots she made for the anthropologist. The pots cracked in drying, an event that the potter certainly anticipated.

My interpretation of the YAV 82 and 77 artifacts is that a whiteware sherd of uncertain size was broken up and the pieces included in a paste that consisted mostly of arkosic sand-size rock typical of Prescott Gray Ware. Except for the one inclusion in the figurine leg at YAV 77, these



whiteware inclusions are not visible on the surface of the vessel and their presence would have been known only to the maker or perhaps to workmates if potting was done in a group situation.

Let's examine some possible scenarios as to why a potter would incorporate, or, to use Woodward's term, reincorporate a piece of a previous vessel into a new one that has mostly rock temper. Clearly one is connecting the new pot with the old in some way. This could be very personal - a piece of your mentor's pot in one of yours is a material remembrance or connection. In the Southwest, where the probability that most potters were female is quite high, this reincorporation might be from a mother's or an aunt's pot. The connection, however, might not be as direct. A piece of pottery eroded out of a midden or burial would be a more generalized ancestral connection with an unknown potter of the past and her group.

The situation with Tusayan White Ware sherds being reincorporated into Prescott Gray Ware, if in fact that is what is represented, is a rather different matter. Connections between the Prescott Culture and the Anasazi were present from the very beginning, represented by Kana-a Black-on-white and Deadmans Black-on-red, both of which could have been traded as early as in A.D. 800 or thereabouts. Designs on Prescott Black-on-gray, that may date as early as A. D. 900, more strongly reflect northern than southern influence (Harper 1998; Higgins 2000), although the nature of that influence has not been explicated. Also, sometimes fairly large amounts of Prescott Gray Ware, mostly jars, show up in sites of the Sinagua (King 1949:115), who were probably intermediaries in the Kayenta Anasazi/Prescott Culture trade. The presumption is that this is pottery brought in as tradeware for the vessel itself or, more likely, for its contents (Lambert 1998:148).

J. W. Simmons, the first archaeologist to take on what he called the Prescott Black-on-gray Culture as a focus of intense research, felt that the polychrome and black-on-white pottery in burials at Fitzmaurice Ruin and elsewhere in the Prescott region were not trade pieces but indicative of "northern people" who lived there and were buried by fellow tribesmen (letter to Harold S. Gladwin, March 7, 1931, Arizona State Museum Archives A-20). Simmons' idea of outsiders living in the Prescott Culture has not been examined by following archaeologists and Anasazi ceramics in the Prescott area has universally been seen as indicative of trade.

What are other possibilities? Certainly, societies that are exchanging goods may also be exchanging people, specifically women. An Anasazi potter in Prescott country, voluntarily or not, would have some difficulty carrying on her pottery making traditions. There have been claims of locally made Tsegi Orange Ware at Prescott sites, but I have my doubts about that (Christenson 2008). At YAV 82 there is a slipped and polished sherd with Prescott paste that may be an attempt to imitate Tusayan White Ware, but such work could have been done by a local potter.

As indicated above, the designs on Prescott Black-on-gray bowls have clear relationships to the Anasazi, but no self-respecting Anasazi potter would paint this way. My own take on Prescott design is that a good proportion of it could plausibly be viewed as a form of satire of the usually strongly symmetrical, even-lined, high-contrast black-on-white that came into their area from the north. I would say that although Prescott potters were certainly <u>capable</u> of painting designs like Anasazi potters, they often chose <u>not</u> to do so as part of their ceramic tradition.



If we imagine a Pueblo potter living in Prescott country, she certainly would be stuck with a brownware paste. Using coil and scrape forming process (a sherd scraper was found at one of the sites being considered), slips (but probably not good white ones), polishing, and nicely painted designs would have been possibilities, but there might have been strong social pressures to conform to the local tradition which generally did without those methods. Also, shunning the pottery practices she was trained in might have been a way of gaining status (Cameron 2008:14). Perhaps one way of maintaining a link, materially, with her tradition would be to incorporate a piece of her native pottery into her pots made in the local tradition. This would be a nonvisible act of remembering but, perhaps, also of resistance.

Resistance has been a topic of interest in situations where there is domination of one social group or category by another and where such dominance has led to behaviors that can be viewed as a reaction to the dominant group's ideology (Scott 1990:198). Certainly inclusion of a fragment of a "foreign" pot into one that was otherwise "normal" might be an act of resistance but, at least with the Prescott Red pot, the entire pot, except the paste, is outside the range of Prescott pottery. First, the rim is bizarre. It is at right angles to the vessel wall and appears to be a jar with a nearly horizontal shoulder. The pot was smudge when fired, then red-slipped and polished after firing, an extremely rare trait. Clearly, the potter was not following a Prescott ceramic tradition or any other prehistoric one that I am familiar with, so, if this pot was an act of resistance, it was the whole pot not just the invisible Anasazi sherd.

Admittedly, we have come quite a way from a few sherds incorporated into a few vessels to hypothesizing an Anasazi potter working somewhere in the Prescott area, but we need to explain what's in the archaeological record. These few artifacts become a valid focus of our attention and seem to have potential for examining behaviors that have not been previously considered. They become the source of hypotheses that may be testable in other ways.

I am not aware of previous recognition of possible reincorporation in the Southwest literature. At Awatovi, Smith (1971:584-585) found black-on-orange and black-on-red sherds with unusually large sherd fragments in a finer-tempered paste. Because the types where this occurred are often sherd-tempered, it was the distinctive color of the larger sherds that was notable. Two fragments tempered with straw or orange colored sherd had whiteware sherds of 3 and 8 mm in length. A generally fine sand-tempered black-on-yellow fragment had large black-on-orange sherds up to 8 mm in length. Smith does not attempt to explain these occurrences, but simply presents them as unusual. We could hypothesize that these examples might represent reincorporation.

That the possible examples of reincorporation in Prescott Gray Ware vessels involve whiteware sherds could also be significant. The color white has significant symbolism in some cultures - "Light, bright and white things are good to think with. They are reflective substances, literally and figuratively" (Hamell 1983:14). White is the symbol for east among several Pueblo groups, although additional meanings vary between groups (Smith 1952:171). One wonders what claims traders made about the bright white Tusayan White Ware or Little Colorado White Ware when they came into Prescott country or when Prescott people went northeast to trade? Although focused primarily upon local trade, Prescott potters had their own micaceous vessels that were reflective as well. Maybe mica was an alternate way to dazzle the consumer for potters who did not have access to white slips?



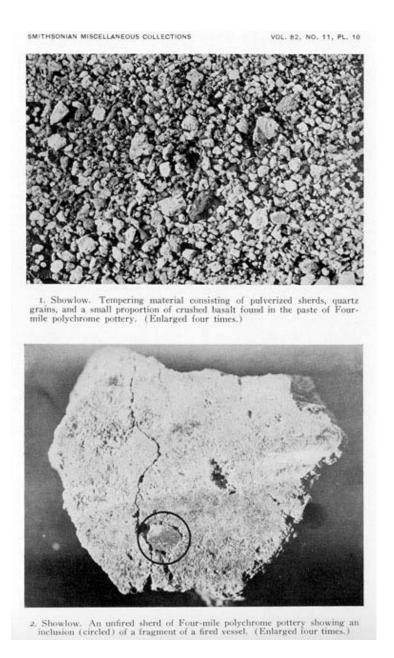
Interpreting Sherd Inclusions

Table 1 provides some initial criteria that might be useful for evaluating the different explanations for sherd inclusions in pots. Accidentally incorporated sherds should generally be scarce and diverse in size and type, although we would expect the sherds larger than the acceptable size (however defined) to be removed in the process of working the clay or during coil formation. If clay is obtained from locations with trash deposits, then a fair amount of sherd could be incorporated accidentally (Hložek et al. 2006:9). In the past I have considered rare brownware sherds in Prescott paste to be accidental (Figure 1) but reincorporation certainly cannot be discounted. However, the presence of inclusions of a "rare" ware pretty much eliminates the accidental explanation and opens up reincorporation as a possibility. At YAV 77 there were five whiteware sherds in 1950 collected and YAV 82 had no whiteware sherds in 880 collected. This whiteware frequency is typical for Prescott sites. Thus, the probability of accidentally incorporating whiteware sherds into Prescott Gray Ware pots is very low.

Table 1. Identification Criteria for Sherds in Ceramic Paste of Individual Pot

Explanation	Diversity	Size Variation	Abundance	Visibility	Examples
Accidental	High	High	Low	Low	occasional in all rock-tempered wares
Technological	Variable	Low	High	Variable	Tsegi Orange Ware; Little Colorado White Ware; Navajo Ware; some Cibola White Ware
Ideological (open)	Low	?	Variable	Variable	
Ideological (surreptitious)	Low	?	Low?	Very Low	
Uncertain	Variable	Low	Moderate	Low	Tuzigoot Plain; some Cibola White Ware

Sherds included for technological reasons should be abundant and fairly uniform in size, as uniformity enhances shock resistance (Swink 2004:23). At Show Low Ruin, an unfired Fourmile Polychrome vessel was disaggregated and the size range of the temper inclusions, sherd and fine sand, range from smaller than 1 mm maximum length to one basalt chunk at 5 mm (Figure 5 upper). To what extent this example can be defined as "uniform" is unclear, but the largest inclusions would seem to have a chance of breaking through the surface, as happened with one sherd about 5 mm maximum length in the same (?) vessel (Figure 5 lower; note crack in vessel wall running next to exposed sherd temper).



<u>Figure 5</u>. Sherd temper in unfired Fourmile Polychrome vessels. From Haury (1931)

How abundant is abundant also remains to be determined. For Fourmile Polychrome, Haury (1931: 32) described the temper as "about equal proportions" of potsherds and fine sand and interprets the presence of the sand and particles of basalt as coming from the sherds that were crushed. Thus, all of the inclusions in this type come from crushing sherds as temper. This seems to be equivalent to what Rogers (1936:30) observed for the Yuma (Quechan) - "a scant handful of ground potsherds to one heaping handful of pulverized clay" - and Tschopik (1941:19) for the Navajo.

Estimating the proportion of inclusions in paste that are sherd is not necessarily straight forward. The recognition of sherd temper is hampered by the potential similarity in paste of the temper

and that of the vessel it is incorporated into. In petrographic point counting, frequency of sherd inclusions should be considered a minimum. Also, as the fineness of pulverization increases, the ratio of recognizable sherds to rock or mineral increases.

We have petrographic point count information from several projects involving sherd-tempered wares. Lombard (1988: Table 4.1) analyzed 39 Cibola White Ware pieces from east-central Arizona and found several examples that were all sand but only one example that had a few sherd inclusions, probably accidental, in the otherwise inclusion free paste. The other samples ranged from 1 in 10 with 80% or more sherd, to 3 in 10 with 80% or more sand and the remainder tending towards the sherd side of the 50% line. Thus, there was quite a range of variation in the abundance of sherd inclusions. Similar variation was seen in the whiteware and corrugated vessels in the Dead Valley area near Springerville (Rugge and Doyel 1980).

In contrast, analysis of 269 Little Colorado White Ware sherds indicated that quartz averaged 5.7% of the inclusions, while sherd averaged 4.8% and the remainder of the rock inclusions averaged 1.9% (Schaller 1989:Table 2). Most of the quartz grains, and presumably the other mineral grains as well, are probably derived from the sherds that were crushed, but deliberate addition of some sand is also probable (Schaller 1989:37).

White Mountain Red Ware, Little Colorado White Ware, Tsegi Orange Ware, Navajo Ware, and a portion of Cibola White Ware clearly fall into the technological interpretation category. But some of the Cibola White Ware and the Tuzigoot types in the Verde Valley that often have ratios in the 3 or more rock to 1 sherd (Christenson 2002: Table 3.1) are another story. This sherd frequency is lower than the two to one ratio used by Swink (2004:23-24) and raises the question of what functional value such a low portion of sherd would have. He argues that clay variation leads to variation in tempering as potters get the clay body that feels right (pers. comm., 8/6/09). Presumably what "feels right" will vary between potters and perhaps for the same potter depending upon the type of vessel being made. He also indicates that sherds are porous and soak up water, thus speeding drying time, an issue if a large pot is being worked. This is an area of ceramic technology where experimentation is needed.

Sherds included for ideological reasons might also be of a single type or even from a single vessel, but there are a lot of unknowns with this category because of rarity of ethnographic examples and the rarity with which such behavior has been recognized archaeologically. With the Bulahay of Cameroon, a rim piece of a damaged ancestor pot is ground and incorporated into a new pot (Sterner 1989:458). Presumably the amount of the old pot to be reincorporated does not have to be large and could approach in frequency what we are interpreting as accidental. Also, as noted earlier, reincorporation may be done openly or surreptitiously with the principal difference being the visibility of the incorporated materials.

Of course, multiple things may be going on with sherd temper. Tsegi Orange Ware was created in the early 11th century by Kayenta Anasazi potters to replace rock tempered San Juan Red Ware which had been traded in from Utah prior to that time. The use of sherd temper was new for this region, although it had been carried out earlier in the Little Colorado and Cibola areas to the south (Baldwin 1978). Crushed whiteware sherds were used as the main temper and on an unslipped surface or a slipped surface that is worn or the slip is thin; they are visible on the



surface (Figure 6). Although my interpretation is that sherd temper was primarily there for technological reasons, the temper may also have been a constant visual reminder of the work of past potters - "...the individual pot became a sort of family tree, reworked by each new generation. A ceramic tape of social memories and a reminder of ancestral obligations" (Gamble 2001:120).



<u>Figure 6</u>. Tsegi Orange Ware showing visibility of whiteware sherd temper on unslipped and slipped surfaces.

Conclusions

There are a number of reasons why sherds from previous pots are put into new pots. My personal assumption has been, and still is, to consider most examples as evidence of intentional incorporation for functional reasons. We have, however, scant evidence as to how sherd inclusions actual perform functionally and are particularly ignorant of how varying mixtures of sherd and rock work.

The question of reincorporation, placement of sherds into pots for ideological reasons, is in an entirely different realm. There is little ethnographic analogy available here. One would think that if it were something that potters did very much we would have some record of it. My one query to an Anglo potter was that he did not do such a thing and neither did any of the potters that he knew. We may be dealing here with cultural context but also personal sensitivity, maybe even resistance. Perhaps reincorporating a piece of a previous pot is not something to be discussed.

The hypothesis of reincorporation is suggested when a pot meets the criteria indicated in Table 1. Unfortunately, this will usually be an untestable hypothesis because we do not have access to the intent of the potter, although some support can be gained by reduction in the probability of the other interpretations. Nevertheless, in the case of Prescott Gray Ware, the hypothesis does raise potentially addressable questions about the cultural origin of Prescott potters, the relationship of Prescott potters to potters in other cultures, and the ways in which cultural members materially

recognized connections to the past. Because of this, it is an archaeologically useful idea to ponder.

Note:

¹A male Navajo from Marsh Pass, whose grandmother made pottery, told me that sherds gathered for temper are presumed to be from vessels that broke in use and so are not associated with death as would be whole vessels that are presumed to come from burials.

Acknowledgement

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Ceramic Vessels with Interior Lug Handles from Pottery Mound, New Mexico By Hayward H. Franklin February 25, 2010

Introduction:

An interesting type of vessel occurs at Pottery Mound; it is a small conical shaped container which has interior lug handles. Typologically, these are Rio Grande Glazeware, and belong to the PIV occupation of the site between AD 1350 and 1500 (see Eckert 2008, Franklin 2007, Polly Schaafsma, editor, 2007) They are rounded-bottomed or conical or globular in form, not cylindrical, and the lug handles are placed on the inside upper surface. They are pierced for suspension by a cord or strap. Pierced lug handles are not uncommon in the Southwest, and appear in many black-on-white pottery types during PII and PIII times. However, they are typically on the exterior of the vessel, not the inside. Vessels of this conical shape are also rare, and are reminiscent of cylindrical vessels from Chaco Canyon, except that the Chaco ones have a flat bottom and exterior lugs. This paper gives a preliminary description of these unique objects.

Numerous fragments of these vessels came to light as the entire Pottery Mound artifact collection was being cataloged and reboxed during the past year. This monumental project collected, organized, reboxed, and computer-cataloged the extensive array of boxes left from the excavations between the mid-1950s to the 1980s (see Ballagh and Phillips 2006, 2008). Credit for the undertaking goes to David Phillips, curator at the Maxwell Museum, and the staff of the Friends of Tijeras Pueblo volunteer group who worked so diligently on the project. Headed by Karen Armstrong, over the past several years this group succeeded in reorganizing collections at the museum, and are to be commended for their fine work. The group utilized 738 new lidded boxes to contain 15,883 ziptop bags of artifacts. At the same time, new catalog numbers were assigned and Lou Schuyler entered all data into a computerized spreadsheet.

As the work proceeded, Karen noted and photographed various interesting items as they went from box to box. Among these were sherds of these conical vessels with their distinctive handles. Her photos form part of the record we now have of them; I have photographed other pieces. Such vessels were already known to exist, as at least two were seen in the shelved collections. Only one of these is whole; all others known at this time are fragmentary.

Description:

A total of 13 sherds and one whole vessel have been identified, thus far, in the museum collections. These consist of fragments displaying the unique handles. The 14 specimens apparently represent as many different vessels, although three of the sherds may possibly come from only two vessels. At this point, the vessel count is basically the same as the sherd count. Many more sherds from such vessels probably exist, but would have been derived from non-diagnostic portions of these vessels. Although these specimens derive from vessels that are not exactly the same shape or size, and differ in painted decoration, they all share some aspects:

1) All are relatively small, apparently ranging from about 9 to 15 cm. deep and about 6 to 12 cm. wide at the mouth. The exterior dimensions of the one whole vessel measure 9.5 cm. deep by 8.0 cm. mouth diameter.



- 2) All apparently have their widest point at the lip, and the narrowest part at the bottom; that is roughly conical-globular in form.
- 3) All have opposed pierced lug handles on the interior surface about 1-2 cm. below the lip.
- 4) Painted decoration is always confined to the exterior, and is "generic" design painted in glazed paint. There is considerable variation, but none conform to a specific "design style" within the Rio Grande Glazeware typology. They cannot be classed as Glazes A, B, C, etc. in the usual glazeware classification (Eighth Southwestern Ceramic Seminar 1966; Snow 1982). Painted decoration is somewhat different on every specimen.
- 5) Although pastes and tempers have not been examined in detail, broken edges reveal the typical brick-red paste and basaltic tempers widely used by Pottery Mound potters. Tentatively, it appears that almost all could have been produced from potters' materials available close to Pottery Mound. The one known exception is the fragment which is clearly from the Hopi area (Jeddito or Sikyatki in type) (Figures 4, 5).

Figures 1 through 9 show examples. The only whole vessel is in Figures 1, 2.



<u>Figure 1</u> Conical vessel, whole, from Pottery Mound, exterior



Figure 2 Conical vessel, whole, from Pottery Mound, einterior



<u>Figure 3</u> Conical vessel, rim fragment from Pottery Mound, exterior





<u>Figure 4</u> Conical or cylindrical vessel fragment, Sikyatki or Jeddito in type, exterior



<u>Figure 5</u> Conical or cylindrical vessel fragment, Sikyatki or Jeddito in type, interior



<u>Figure 6</u> Conical or globular vessel fragment from Pottery Mound, exterior



<u>Figure 7</u> Conical or globular vessel fragment from Pottery Mound, interior



Figure 8 Rim sherd from typical conical vessel from Pottery Mound, exterior



Figure 9 Rim sherd from typical conical vessel from Pottery Mound, interior

Interpretation:

At this time, the uses of such unique pots, as determined from their distribution throughout the stratigraphy and the rooms across the site, are unknown. Nor do we know exactly what was contained in these vessels and in what contexts they were utilized. It is clear that they appeared

in various contexts across the site, given their appearance in numerous bags from varied locations. These lines of evidence will be pursued in further research.

There is some interesting iconographic evidence from Pottery Mound kiva murals, judging by discussions in Crotty 2007, Hibben 1975, and Schaafsma 2007. Frank Hibben's book on the *Kiva Art of the Anasazi* (1975) contains two illustrations of human figures carrying small pots by a cord or thong (pp. 104 and 105). In Figure 74 on p. 104, a female carries a small pot by a cord in one hand, and a feather wand in the other. Figure 75 (p. 105) is similar, only the figure is of a male. These are reproduced here as Figures 10 and 11. Hibben's explanation in the caption to Figure 74 is: "Anasazi maiden [hairdo] with feather headdress carries a pot in one hand and an aspergill in the other. In rainmaking ceremonies the aspergill was dipped into the water pot and then sprinkled to simulate rain." An "aspergill" is defined as a brush, wand, or device for dispensing holy water and is utilized in rituals by several religions. Hibben's figure 75 shows the same activity with a liquid splashing from a small pot held by a cord in one hand, with a feather wand or "aspergill" in the other. Referring to the same mural figures at Pottery Mound, Crotty (1995:189) notes the presence of "small ceramic water jars, or canteens...they are usually fitted with lugs at their sides to hold a carrying strap". She also notes that Hibben's Figures 74 and 75 appear to be ceramic vessels, although the lugs are not depicted in detail.



Figure 10 Mural figure from Pottery Mound (Hibben 1975 p. 104)



Figure 11 Mural figure from Pottery Mound (Hibben 1975 p. 105)

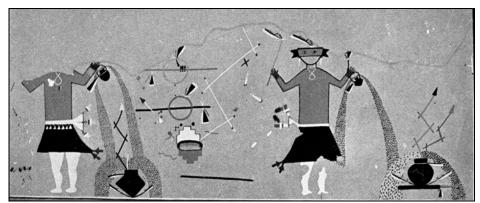


Figure 12 Kuaua kiva mural with little conical pots (Dutton 1963, Plate XVI)

Unfortunately, the pots depicted do not show any painted decoration nor do they specifically reveal whether the suspension lugs were on the interior of the vessels. They are, however, small in size and rounded or pointed on the bottom, and suspended by a cord as they are held by the human figure. Thus, Murals at Pottery Mound are at least suggestive of a possible use for these vessels.

Other depictions of murals at other contemporaneous locations may also give clues. One kiva mural at the site of Kuaua (shown here as Figure 12) also seems to suggest the use of small vessels by possibly dancing figures. This illustration is from Dutton (1963) plate XVI and again shows sprays of moisture issuing from the mouths of vessels.

Since one of the fragments is clearly Hopi in origin, it may be that other illustrations of this type of vessel appear on Hopi kiva art or in Hopi prehistoric ceramic collections. Crotty (personal communication) thinks that some analogous depictions occur in the Hopi area at Awatovi (Watson Smith 1952). However, those may be netted gourds rather than ceramic vessels.

Analagous images of pottery vessels spewing moisture also appear in Rio Grande rock art (Schaafsma 2007:140).

In sum, the depictions in the murals are suggestive of utilization, but it is hard to tell whether the containers are pots, gourds, or other material. Similarly, it is typically not indicated whether the handles are inside or outside the vessels nor is painted decoration very often shown.

Regarding the contents of such vessels, the use of cacao or chocolate in some form in Chaco Canyon during the Bonito Phase has been investigated by Crown and Hurst (e.g. Crown and Hurst 2009). If cacao was in use in Chaco in the period of AD 1000-1125, then it surely might have been available to Pottery Mound residents in the fourteenth century. The inhabitants had connections to the south in other respects including copper bells, minor amounts of pottery from the Casas Grandes area, macaws, macaw iconography, etc. Nevertheless, it seems doubtful that the analogies with cacao use at Chaco would be meaningful. These vessels are conical, those at Chaco cylindrical. Also, the depictions on kiva murals which evidently show these conical vessels in use seem to show dispensing of water, not the consumption of beverages. Furthermore, if beverages were consumed from them, there are other possibilities besides chocolate. These might include maize drinks, possibly including fermented maize such as tiswin or cactus preparations such as pulque. Therefore, the precise utilization of the vessels is unknown presently.

Additional Research:

At this time, the subject has not been thoroughly researched. Firstly, I intend to check proveniences on the known examples and determine if there are any associations with room types or areas of the site. Secondly, a concerted search for these small vessels appearing in kiva art or rock art should be undertaken. Thirdly, a review of literature would determine if such vessels appear in other archaeological settings. Presently, they seem to be almost unique to Pottery Mound, as well as possibly to the Hopi area. Finally, technical analysis of the vessels' possible contents will be conducted in conjunction with Steven Rospopo of Sandia Laboratories.



Although they likely contained only water, analysis of vessel interiors will reveal whether they might have held corn, fermented corn liquor, or even chocolate preparation or cocoa.

It does appear that these vessels are a specialized and limited-use item and not designed for daily utilitarian use. They were manufactured at Pottery Mound in limited quantities and have appeared in bags from various archaeological contexts in the site. These seem to be a specialty of potters at Pottery Mound, although the exact geographic distribution of them is not known. At least one was made in the Hopi area. Clearly, more remains to be learned. If readers have additional knowledge or suggestions, I would appreciate hearing from them. My email address is hfranklin12@comcast.net.

Acknowledgements

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Harriet S. Cosgrove and C. Burton Cosgrove

Introduction by A. V. Kidder

Supplement by William White Howells

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The Social Life of Pots: *Glaze Wares and Cultural Dynamics in the Southwest, AD 1250-1680* Edited by Judith A. Habicht-Mauche; Suzanne L. Eckert; Deborah L. Huntley 376 pp. / 6.0 x 9.0 / 2006 Cloth (978-0-8165-2457-0)

The demographic upheavals that altered the social landscape of the Southwest from the thirteenth through the seventeenth centuries forced peoples from diverse backgrounds to literally remake their worlds—transformations in community, identity, and power that are only beginning to be understood through innovations in decorated ceramics. In addition to aesthetic changes that included new color schemes, new painting techniques, alterations in design, and a greater emphasis on iconographic imagery, some of the wares reflect a new production efficiency resulting from more specialized household and community-based industries. Also, they were traded over longer distances and were used more often in public ceremonies than earlier ceramic types. Through the study of glaze-painted pottery, archaeologists are beginning to understand that pots had "social lives" in this changing world and that careful reconstruction of the social lives of pots can help us understand the social lives of Puebloan peoples. In this book, fifteen contributors apply a wide range of technological and stylistic analysis techniques to pottery of the Rio Grande and Western Pueblo areas to show what it reveals about inter- and intracommunity dynamics, work groups, migration, trade, and ideology in the precontact and early postcontact Puebloan world. Through material evidence, the contributors reveal that technological and aesthetic innovations were deliberately manipulated and disseminated to actively construct "communities of practice" that cut across language and settlement groups. The Social Life of Pots offers a wealth of new data from this crucial period of prehistory and is an important baseline for future work in this area.

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Viewing Pueblo IV Regional Organization through Ceramic Production and Exchange Deborah L. Huntley

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Publications available from the Albuquerque Archaeological Society

Bice, Richard A., Phyllis S. Davis, and William M. Sundt
 2003 AS-5 Indian of Mining of Lead for use in Rio Grande Glaze Paint. Albuquerque Archaeological Society. Albuquerque

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1998 The AS-8 Pueblo and The Canada de las Milpas: A Pueblo III Complex in North-Central New Mexico. Albuquerque Archaeological Society. Albuquerque

From the Foreword

"This volume is the latest in a long series of important contributions made by the Albuquerque Archaeological Society over the past 30 years. The project which is reported here involved excavations at a 13th century Anasazi pueblo and investigation of the larger community of which it was a part. Excavations focused on AS-8, a 46 room pueblo located near San Ysidro, New Mexico. As-8 is the largest site in a cluster of mostly contemporaneous farmsteads which includes at least 48 other architectural sites located along a two mile long portion of Cañada de las Milpas. This cluster appears to represent a distinct community, and AS-8 is the preeminent site within the cluster. Several lines of evidence suggest that initial settlement in this area occurred around AD 1160, and that occupation continued until around 1305, with the period of most intensive occupation about AD 1245.

"The cornerstone of the analytical and interpretive sections of the report is an innovative ceramic seriation. The ceramic seriation is combined with other lines of evidence to infer the construction sequence at AS-8 and the settlement history of the community as a whole." John R. Roney, Albuquerque.

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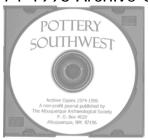
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