



# POTTERY SOUTHWEST

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## MISSION STATEMENT

*Pottery Southwest*, a scholarly journal devoted to the prehistoric and historic pottery of the Greater Southwest (<http://www.unm.edu/~psw/>), provides a venue for students, professional, and avocational archaeologists in which to publish scholarly articles as well as providing an opportunity to share questions and answers. Published by the Albuquerque Archaeological Society since 1974, *Pottery Southwest* is available free of charge on its website which is hosted by the Maxwell Museum of the University of New Mexico.

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## MOTIFS 1-7: AN OVERVIEW

Part of

### **A Study of Basketmaker III Black-on-white Bowl Motifs in the Four Corners Region**

Linda Honeycutt

Yellow Jacket, CO

#### **Abstract**

On-going research has identified seven motifs in approximately 1,500 black-on-white bowls and bowl sherds from 76 dated and provenienced Basketmaker III sites in the Four Corners Region. This paper presents an overview of each motif in the form of both stylized drawings and photographs or digital tracings of 12 representative artifacts. Readers interested in more information are referred to the study's associated website [www.basketmakeriiimotifs.org](http://www.basketmakeriiimotifs.org) which displays all 1,259 photographs and tracings identified for the seven motifs.

#### **Overview**

##### *Research Goals*

The goals of this study are to identify all Basketmaker III black-on-white bowl motifs, and determine their spatial and temporal distribution. The data used in this study are derived from photographs and drawings of bowls and bowl sherds from provenienced and dated Basketmaker III sites in the Four Corners Region. This is a multi-year research project which was begun in 2010 and is anticipated to be completed by 2020.

##### *Study Area*

As commonly used by tourists and archaeologists, the term "Four Corners Region" is an area of undefined size centered on the point where Arizona, Utah, Colorado and New Mexico meet. For the purposes of this study, and as shown in Figure 1, the Four Corners Region is composed of nine counties: Apache and Navajo counties in northeastern Arizona, San Juan and McKinley counties in northwestern New Mexico, Archuleta, La Plata, Montezuma and Dolores counties in southwestern Colorado, and San Juan County in southeastern Utah.

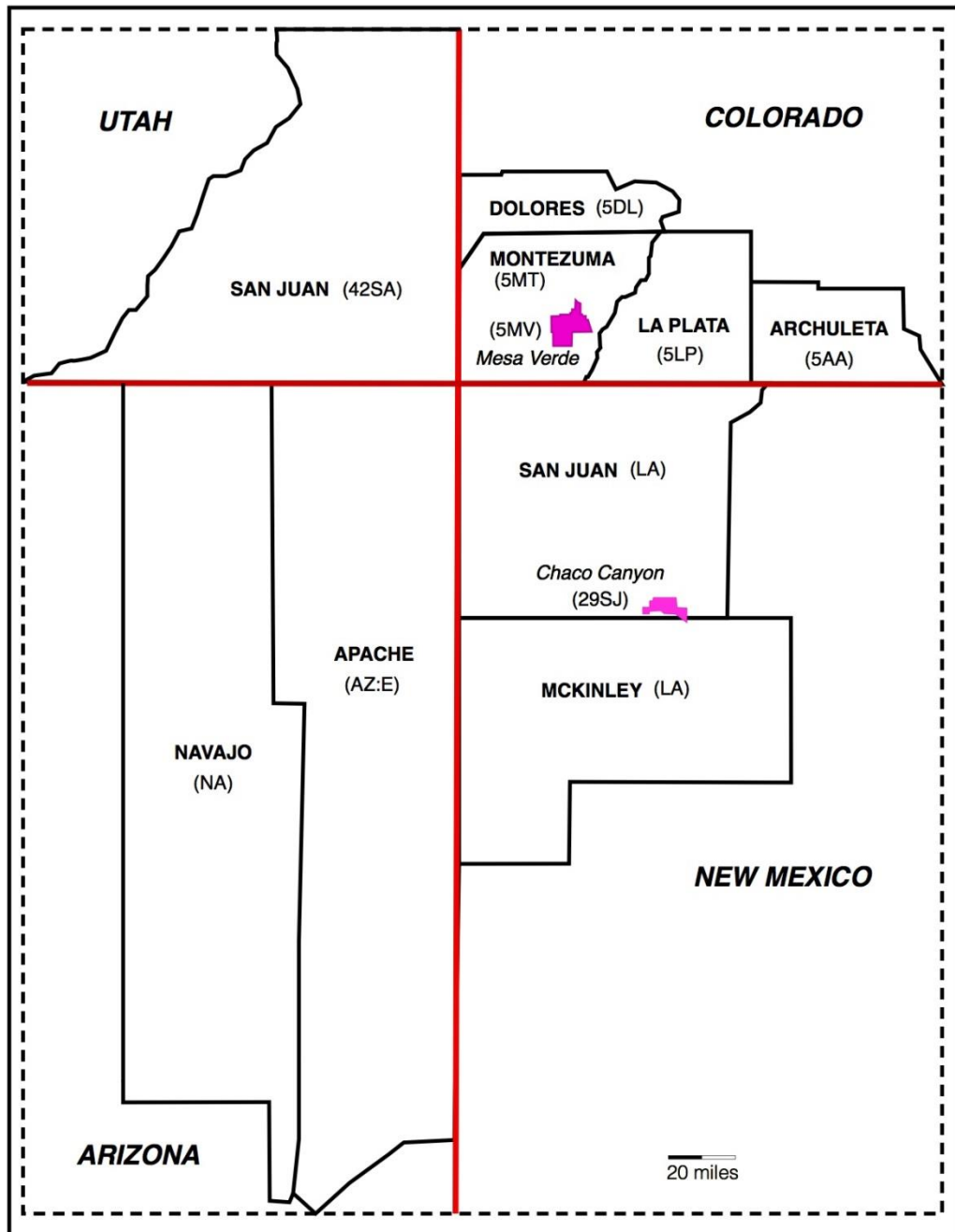


Figure 1. Map showing location of nine counties comprising the Four Corners Region for this project.

*Site Numbering Systems*

The sites located in these nine counties have been recorded using a variety of site numbering systems (see Table 1). For ease of reference in the following motif descriptions, the individual artifact illustrations have been first arranged alphabetically by state and then by site number.

Table 1. Site Number Systems Used in Study Area

State	State Code	County or National Park	County Code	Other	Notes
Arizona	AZ	Apache	-	E	quadrangle 1 degree lat. x long.
	-	Navajo	-	NA	Museum of Northern Arizona
Colorado	5	Archuleta	AA		
	5	Dolores	DL		
	5	La Plata	LP		
	5	Montezuma	MT		
	5	Mesa Verde National Park	MV		in Montezuma County
New Mexico	29	Chaco Culture National Historical Park	SJ		in San Juan County
	-	San Juan	-	LA	Laboratory of Anthropology
	-	McKinley	-	LA	Laboratory of Anthropology
Utah	42	San Juan	SA		

### *Photograph Numbering System*

Each artifact photograph has its own unique number, composed of its site number followed by, depending on circumstances, a museum catalog number, a field specimen or provenience designation, or a figure number. For sherds bagged together that lack individual identifying information, I have appended a letter (a-z) to the bag-level information which corresponds to each artifact's position in the group photograph. For tracings done from existing report photographs, the site number is followed by the figure, plate or vessel number as shown in the report.

### *Curatorial Facilities*

Most of the artifact photographs used in this study have been taken by the author at museums or other facilities in the states of Arizona, Colorado, New Mexico and Utah (see Table 2). Exceptions to this are those artifacts that either (1) are curated in Massachusetts, New York, or Washington D.C., or (2) have been reburied, returned to the landowner or misplaced. In these (approximately 100) cases, the author has obtained the relevant artifact photographs from either previously published reports or through the assistance of museum staff and research associates.

Table 2. Museums and Other Facilities Holding Artifacts Photographed in this Study

State	City	Location of Artifacts and/or Artifact Photographs
AZ	Tucson	Arizona State Museum
	Flagstaff	Museum of Northern Arizona
CO	Cortez	Crow Canyon Archaeological Center
		Woods Canyon Archaeological Consultants
	Dolores	Anasazi Heritage Center
	Boulder	University of Colorado Museum of Natural History
MA	Cambridge	Peabody Museum of Archaeology and Ethnology at Harvard University, original photographs by F. P. Orchard
NM	Albuquerque	Chaco Culture National Historical Park
	Santa Fe	Museum of Indian Arts and Culture, Laboratory of Anthropology
NY	New York	American Museum of Natural History, Division of Anthropology, original photographs by M. Patricia Lee
UT	Blanding	Edge of the Cedars State Park Museum
	Salt Lake	Utah Museum of Natural History
Washington, D.C.		Smithsonian Institution, Department of Anthropology, original photographs by Department of Anthropology

*PhotoShopping*

Adobe PhotoShop is the means by which I remove background "noise" from my photographs, and disguise some of my shortcomings as an artifact photographer. I use PhotoShop to remove background, minimize blur, lighten shadows, increase contrast and crop (see Figure 2). My photographs are not to scale, either absolutely or relatively, and they are not corrected for white balance.



Figure 2. Examples of PhotoShopped artifact photographs (top to bottom).  
 AZ.E:8:4.A-14296 (Arizona State Museum);  
 5MT8899.260.RC 2 (Anasazi Heritage Center);  
 5MT8565.RC 5 (Anasazi Heritage Center);  
 29SJ1659.C89456 (Chaco Culture National Historical Park Museum Collection);  
 42SA6396 (Edge of the Cedars State Park Museum)

## Digital Tracing

A digital tracing is made of an artifact photograph (or drawing) if the artifact was either associated with a human burial (see Figure 3) or in such poor condition that the motif is not readily apparent (see Figure 4). A tracing depicts all painted surfaces and artifact edges. The inside rim edge is indicated by a solid line, and broken edges are indicated by dashed lines. Only clearly visible lines and shapes are traced; no digital reconstruction is done. The presence of white space in a tracing indicates that either (1) no paint was prehistorically applied there or (2) burning, pitting, calcification or fracturing has removed or obscured the paint. Each artifact photograph is maintained in an “underlying” layer (which is later turned off) and each tracing is maintained in an “overlying” layer. Photographs are traced under a wide range (50-900%) of magnification.

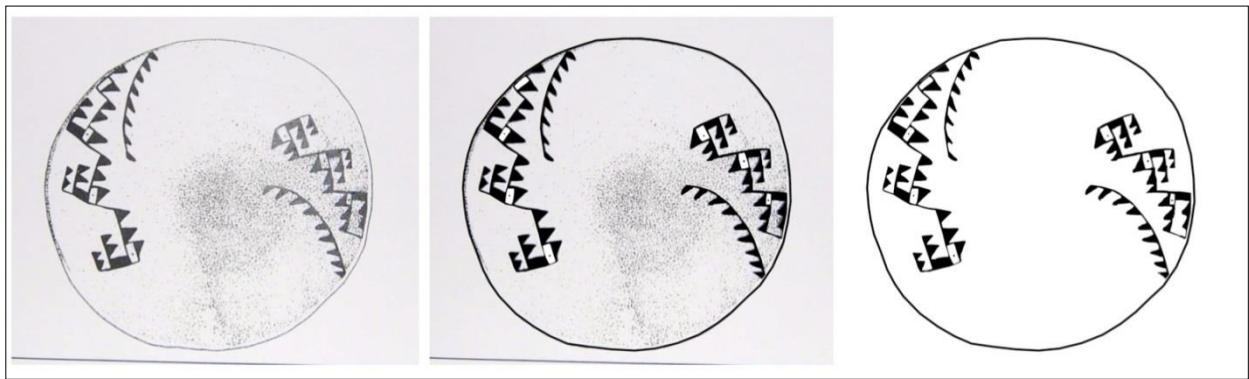


Figure 3. Example of digital tracing of existing drawing. Photograph of drawing (left); digital tracing over drawing (center); digital tracing of drawing (right). LA80422.Figure G55 (Reed et al., 1998)

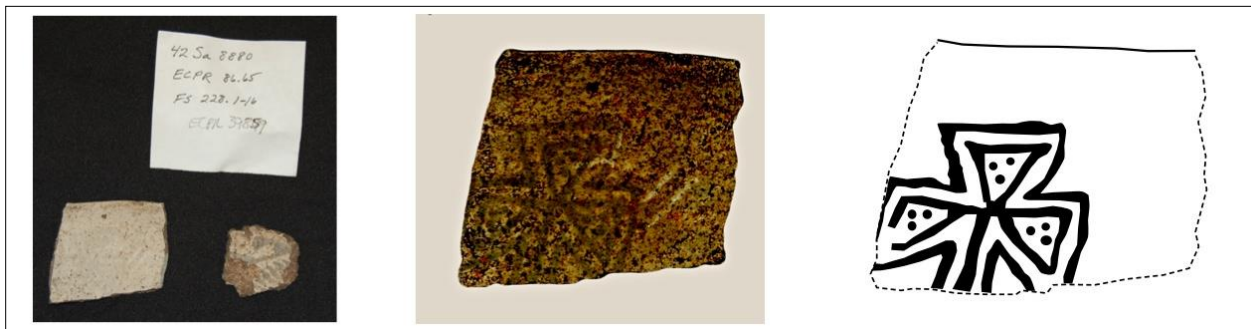


Figure 4. Example of digital tracing of sherd with indistinct paint. Photograph of sherd (left); photograph of sherd after PhotoShopping to enhance contrast (center); digital tracing of sherd (right). 42SA8880.228a (Edge of the Cedars State Park Museum)

## MOTIF 1

Motif 1 is a relatively complicated motif and the least common in the ceramic assemblage. It occurs in three forms: Basic, Reduced and Joined (see Figures 5). It can be described in either geometric (i.e., triangle) or zoomorphic (i.e., head) terms. Approximately 50 examples of Motif 1 have been identified to date.

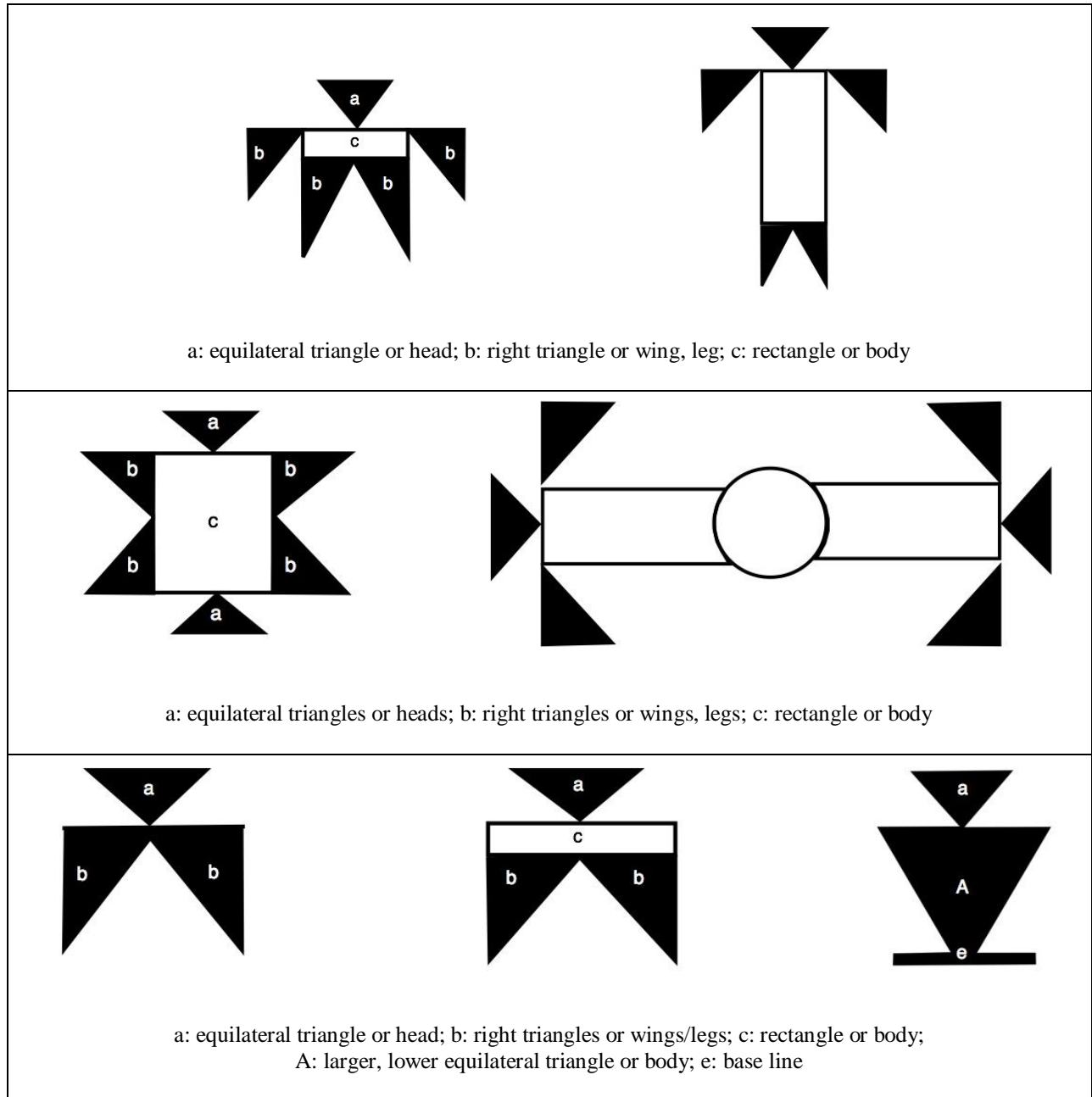


Figure 5. Stylized drawings of Motif 1 forms: Basic (top), Joined (middle), Reduced (bottom).



Motif 1 can exhibit variations on all its parts (see Figure 6). As will be seen in Motifs 2 and 4, two of these parts are free-standing motifs themselves.

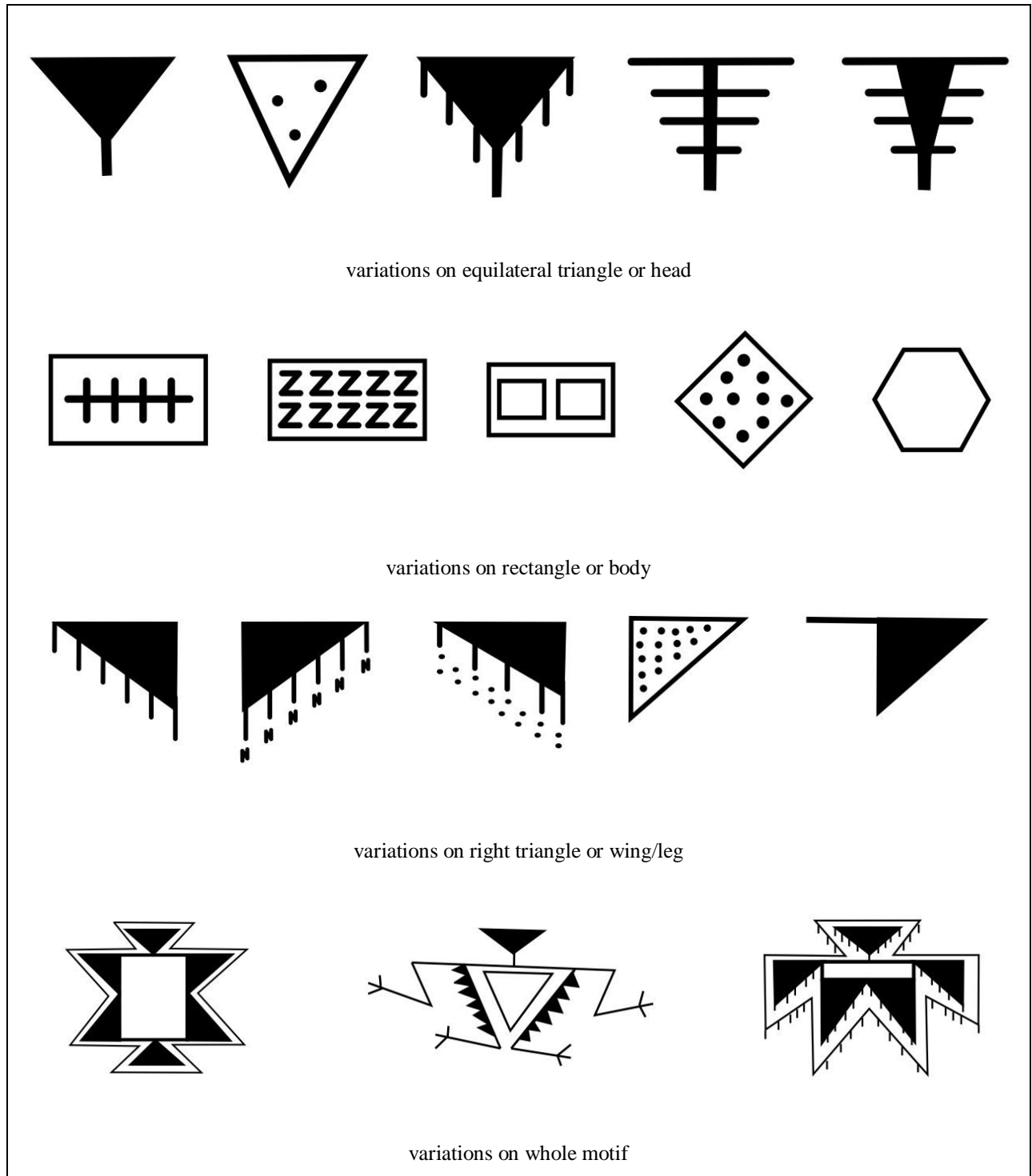


Figure 6. Stylized drawings of Motif 1 variations.

 <p>AZ Tsehatso.29.1/1694 Division of Anthropology American Museum of Natural History</p>	 <p>5LP10843.29.1/3238 Division of Anthropology American Museum of Natural History</p>	 <p>5MT9168.703 Anasazi Heritage Center Bureau of Land Management</p>
 <p>5MT9387.324 Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT20065.RC14 Woods Canyon Archaeological Consultants</p>	 <p>5MV354.Figure 171 Lancaster, James A. and Don Watson 1950</p>
 <p>5MV1644.Figure 110 b Hayes, Alden C. and James A. Lancaster 1975</p>	 <p>29SJ299.C10258 Chaco Culture National Historical Park Museum Collection</p>	 <p>LA2501.Figure G4 Reed, Lori Stephens, Joell Goff and Kathy Niles Hensler 1998</p>
 <p>42SA8543.328 Natural History Museum of Utah</p>	 <p>42SA8821.1318 Natural History Museum of Utah</p>	 <p>42SA8895.Figure 11-11 Hurst, Winston 1985</p>

Figure 7. Photographs or drawings of 12 artifacts displaying Motif 1.

## MOTIF 2

Motif 2 is clearly related to, and probably derived from, the equilateral triangle or head of Motif 1. It occurs in three forms: plain, horizontal line and vertical line (see Figure 8). Both the plain and horizontal line forms can be either attached to a base line or free-floating. The vertical line form is attached. Currently Motif 2 is represented by over 80 artifacts in the project database.

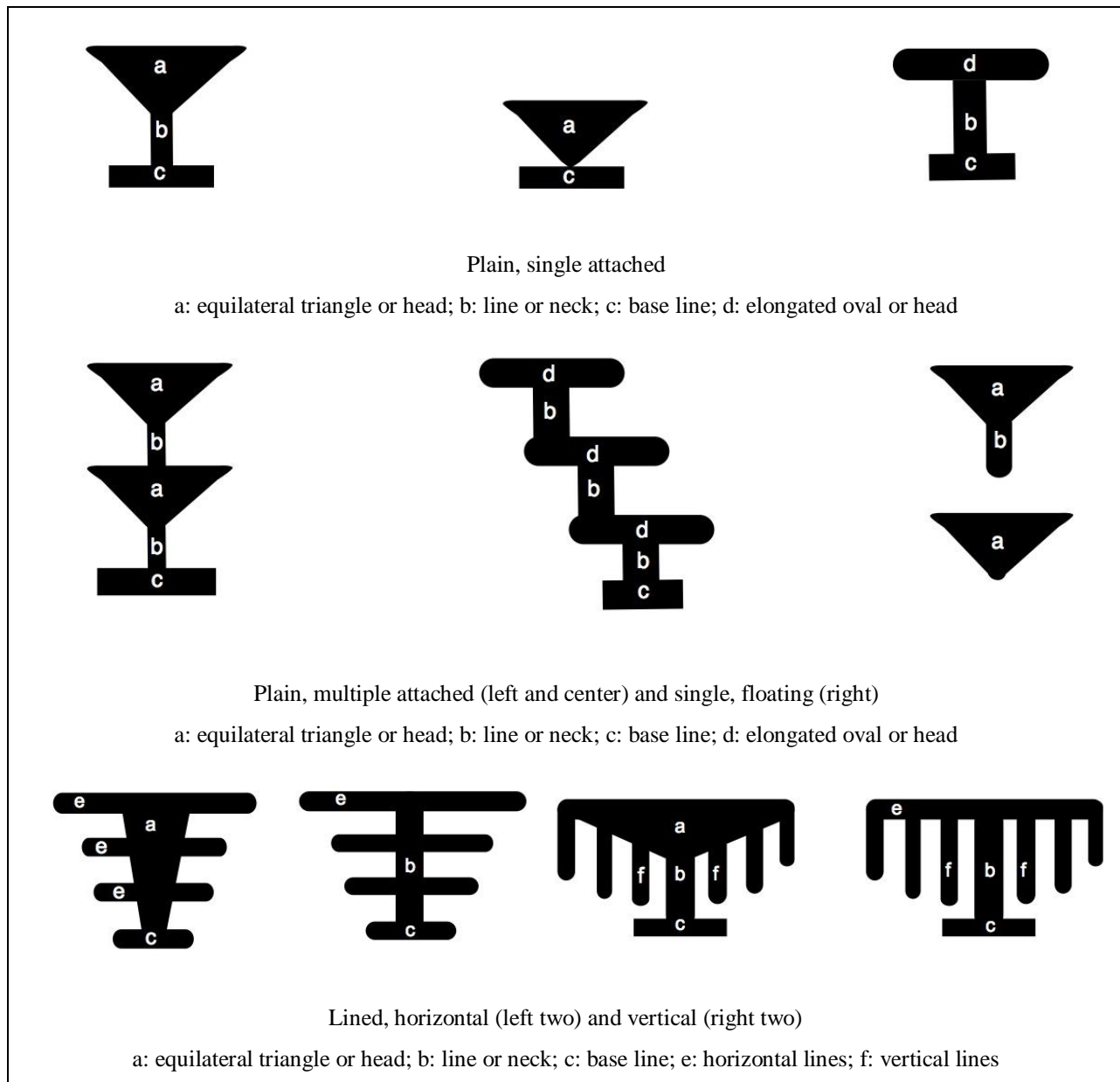


Figure 8. Stylized drawings of Motif 2 Forms: Plain (top and middle) and Lined (bottom)

 <p>AZ.E84.A-14296 Arizona State Museum</p>	 <p>5DL1138.RC10 image on file, Anasazi Heritage Center Bureau of Land Management</p>	 <p>5LP39.2201 University of Colorado Museum of Natural History</p>
 <p>5LP10843.9555 University of Colorado Museum of Natural History</p>	 <p>5MT4684.179 b Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT9072.34 b Anasazi Heritage Center Bureau of Land Management</p>
 <p>5MT9168.201 a Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT10647.141.8 Crow Canyon Archaeological Center</p>	 <p>5MV354.Figure 17 m Lancaster, James A. and Don Watson 1950</p>
 <p>29SJ423.C14309 Chaco Culture National Historical Park Museum Collection</p>	 <p>42SA6396.1922 Edge of the Cedars State Park Museum</p>	 <p>42SA8543.384 Natural History Museum of Utah</p>

Figure 9. Photographs or drawings of 12 artifacts displaying Motif 2.

### MOTIF 3

Motif 3 comes in two forms: 45 degrees and 90 degrees, based on the motif's angle relative to its base line (see Figure 10). Motif 3 appears to have developed independently of Motifs 1, 2, and 4. It is represented in the data base by roughly 150 artifacts from 50 sites.

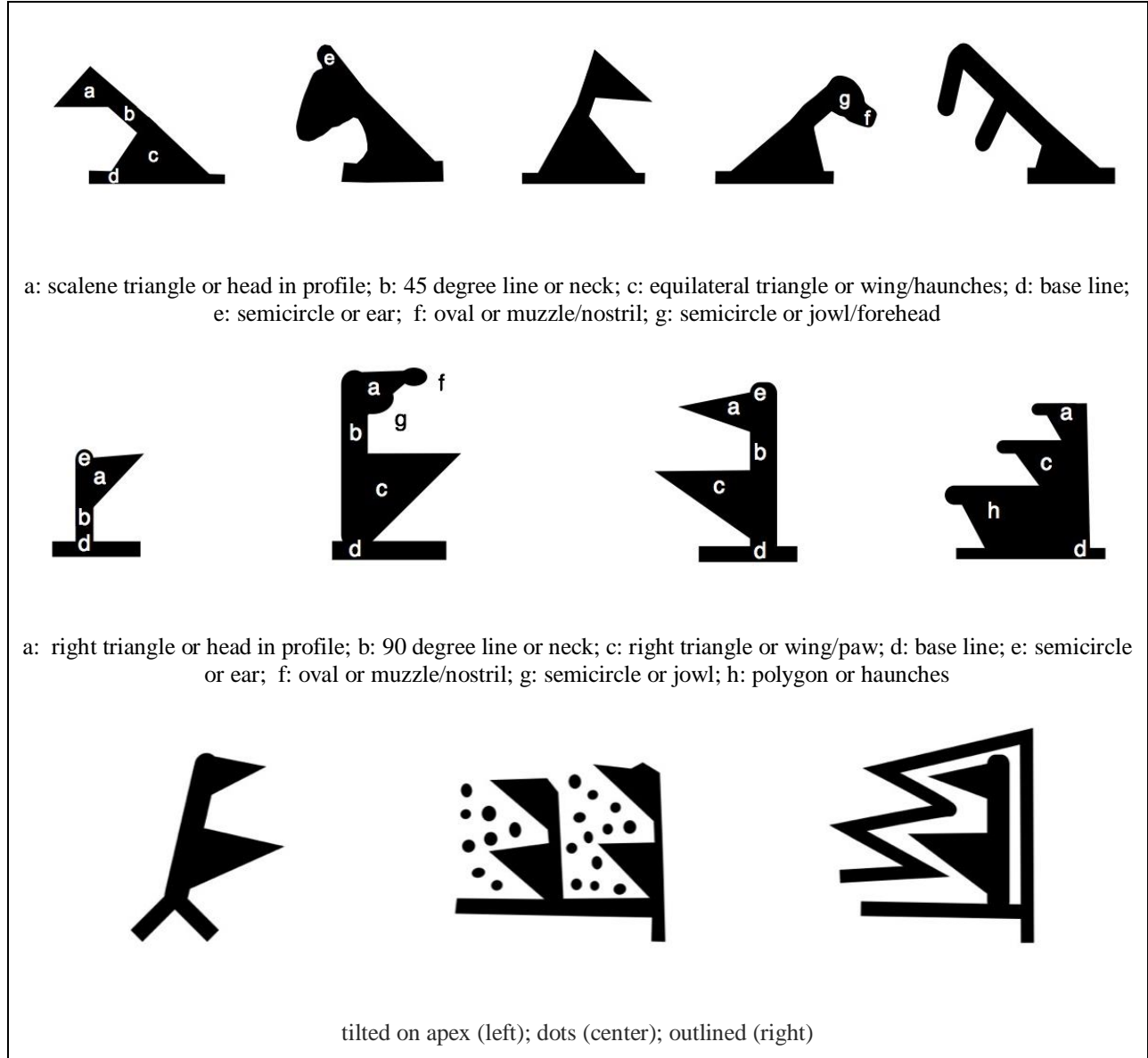


Figure 10. Stylized drawings of Motif 3: Forms 45 degrees (top) and 90 degrees (middle); Variations (bottom)



Figure 10. Photographs of 12 artifacts displaying Motif 3: 45 degrees (upper two rows), 90 degrees (lower two rows).

### MOTIF 4

Motif 4 exhibits two forms, recognized by their outlines: triangular and rectangular. The triangular form appears related to Motif 1 right triangles or wings; the rectangular form does not.

To date, approximately 160 examples of Motif 4 have been found in the ceramic collections of 33 sites.

Triangular. This form comprises a right-angle triangle, the hypotenuse of which is embellished with 3-8 graduated, parallel lines which are perpendicular to the far edge or attachment line (see Figure 11 left and center). The hypotenuse can be either straight or stepped and both types can be found on a single artifact. This form appears to derive from Motif 1's wings and/or legs. In uncommon instances, the triangle is omitted and only the graduated lines are present (Figure 11 right).

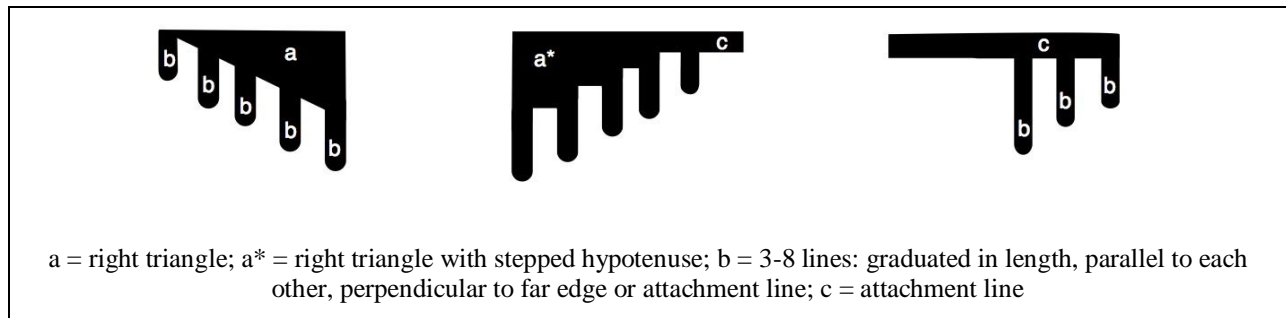


Figure 11. Stylized drawings of Motif 4 triangular form.

Rectangular. This form consists of 3-8 parallel lines, all approximately the same length, appended to a perpendicular connecting line (see Figure 12). It lacks an underlying triangle. No evidence of a relationship with Motif 1 has been noted. To date, this form is represented by only 14 examples.

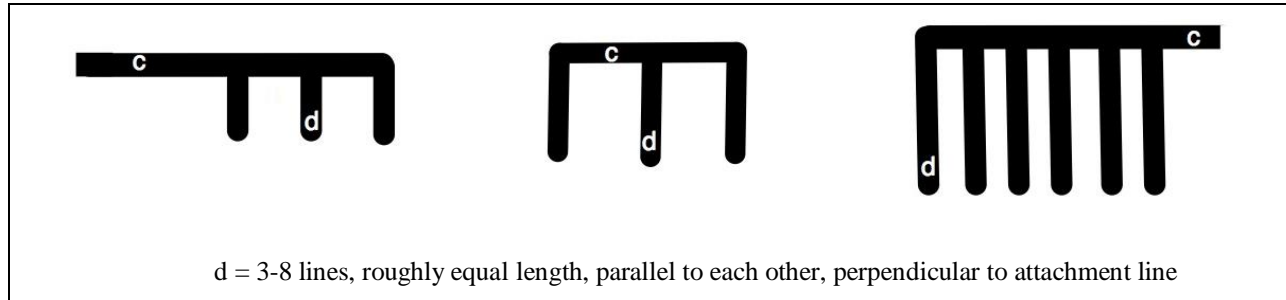


Figure 12. Stylized drawings of Motif 4 rectangular form.

Variations. The triangular form of Motif 4 is often outlined and/or “trimmed” with one or two rows of Zs (see Figure 13). The end of a Z row can be terminated by a line which incorporates a Z, resulting in the appearance of a hook. To date, no variations have been identified for the rectangular form.

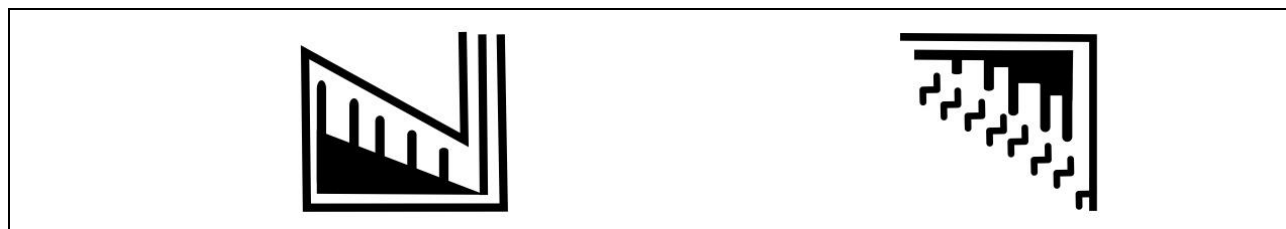


Figure 13. Stylized drawings of Motif 4 variations: outlined (left), appended with Zs (right)












 <p data-bbox="332 546 527 588">AZ.E810.A-14393 Arizona State Museum</p>	 <p data-bbox="706 525 950 588">5DL112.22.23 Anasazi Heritage Center Bureau of Land Management</p>	 <p data-bbox="1096 525 1323 588">5LP39.2196 University of Colorado Museum of Natural History</p>
 <p data-bbox="332 924 527 966">5LP10201.Figure 12 d Carlson, Roy L. 1963</p>	 <p data-bbox="706 903 933 966">5MT1.9743.4 University of Colorado Museum of Natural History</p>	 <p data-bbox="1079 903 1323 966">5MT9540.201 b Anasazi Heritage Center Bureau of Land Management</p>
 <p data-bbox="308 1291 552 1354">5MT11861.347 Anasazi Heritage Center Bureau of Land Management</p>	 <p data-bbox="657 1291 982 1354">29SJ299.C29214 Chaco Culture National Historical Park Museum Collection</p>	 <p data-bbox="1096 1291 1323 1354">LA5631.4151 University of Colorado Museum of Natural History</p>
 <p data-bbox="267 1669 592 1711">42SA4989.28 Edge of the Cedars State Park Museum</p>	 <p data-bbox="657 1669 982 1711">42SA6396.2580 Edge of the Cedars State Park Museum</p>	 <p data-bbox="1063 1669 1339 1711">42SA8540.2931 Natural History Museum of Utah</p>

Figure 14. Photographs and drawings of 12 examples of Motif 4.



## MOTIF 5

Motif 5 is characterized by dots, usually enclosed within a polygon which is itself often embellished by lines or triangles. Originally nick-named “Defended Dots”, it is now recognized that dots can occur by themselves, without any enclosing lines. More than 400 examples are present in the data base, occurring on more than half of the sites.

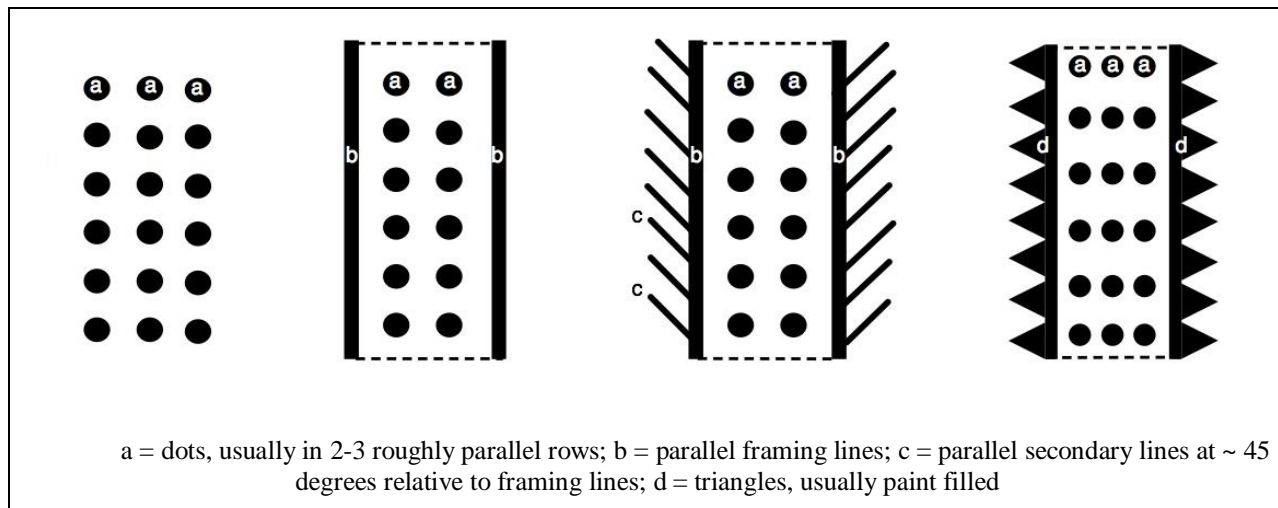


Figure 15. Stylized drawings of Motif 5 forms.

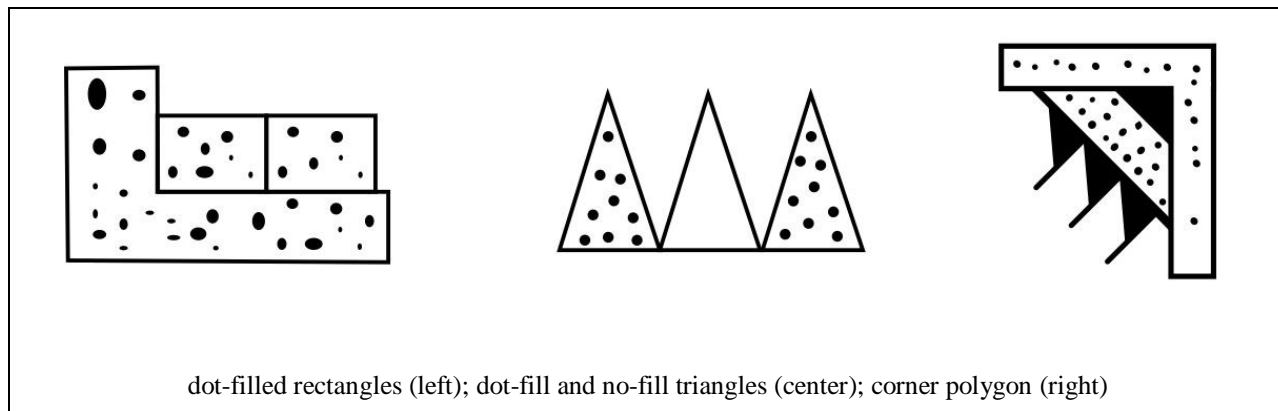


Figure 16 Stylized drawings of Motif 5 variations.

 <p>AZ.E:8:1.A-14399 Arizona State Museum</p>	 <p>NA3570.L1.3256 a Museum of Northern Arizona</p>	 <p>5DL121B.RC15 Anasazi Heritage Center Bureau of Land Management</p>
 <p>5MT8565.39 a Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT11861.930 Anasazi Heritage Center Bureau of Land Management</p>	 <p>29SJ299.C9504 Chaco Culture National Historical Park Museum Collection</p>
 <p>29SJ423.C14374 Chaco Culture National Historical Park Museum Collection</p>	 <p>29SJ1659.A340894.8 n Department of Anthropology Smithsonian Institution</p>	 <p>42SA6396.10 Edge of the Cedars State Park Museum</p>
 <p>42SA8540.2838 Utah Museum of Natural History</p>	 <p>42SA8876.610 Edge of the Cedars State Park Museum</p>	 <p>42SA8895.952 b Edge of the Cedars State Park Museum</p>

Figure 17. Photographs and drawings of 12 examples of Motif 5.

## MOTIF 6

The basis of Motif 6 is a single element which resembles the letter "Z" or its approximate mirror image, the letter "S". Elements occur in multiples comprising one or more rows. They are usually spaced at fairly regular intervals and oriented in the same direction; contiguous or opposing elements are uncommon. The rows can be open or enclosed, straight or curved. When present, enclosing lines can be straight or curved, and plain or appended with bristles or paint-filled triangles (see Figure 18). Currently, over 180 examples of Motif 6 have been identified in the ceramic assemblages of 37 sites.

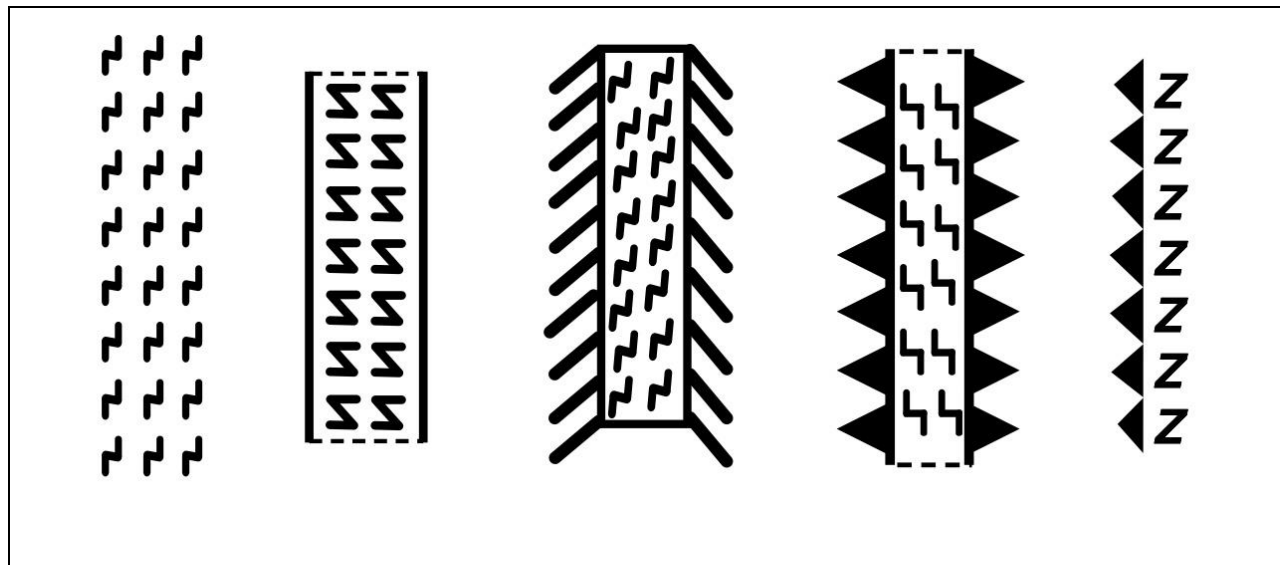


Figure 18. Stylized drawings of Motif 6 forms.

The degree to which elements resemble either Z or S letters varies widely (see Figure 19). At one end of the spectrum are classic Z letters, while at the other end are items which look like squashed worms, and in between are variously shaped objects, some of which (in my mind at least) resemble ducks swimming down a river. One widely accepted interpretation of this motif is "basket stitch".

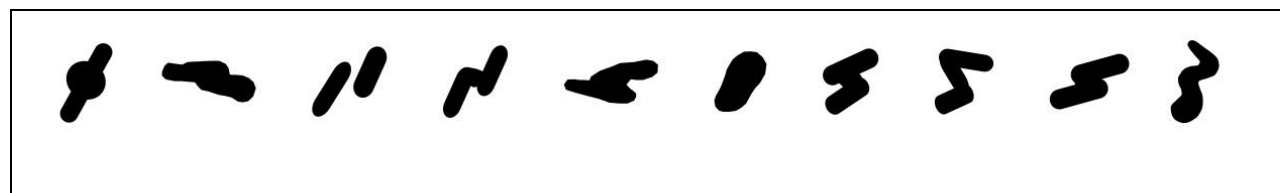


Figure 19. Stylized drawings of Motif 6 element variations.

 <p>AZ.E81.A-14415 Arizona State Museum</p>	 <p>AZ.E810.A-14384 Arizona State Museum</p>	 <p>5DL1138.RC8 image on file, Anasazi Heritage Center Bureau of Land Management</p>
 <p>5LP10843.29.1/3241 Division of Anthropology American Museum of Natural History</p>	 <p>5MT1.9670 i University of Colorado Museum of Natural History</p>	 <p>5MT2858.157 Anasazi Heritage Center Bureau of Land Management</p>
 <p>5MT9168.403 Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT11861.232 a Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MV1644.Fig 110a Hayes, Alden C. and James A. Lancaster 1975</p>
 <p>29SJ1659.A340894.8 f Department of Anthropology Smithsonian Institution</p>	 <p>42SA8540.2141 Natural History Museum of Utah</p>	 <p>42SA8895.496 Edge of the Cedars State Park Museum</p>

Figure 20. Photographs and drawings of 12 examples of Motif 6.

## MOTIF 7

Motif 7 is characterized by paint-filled triangles. These are usually arrayed along the base line of a stepped polygon, or the framing line of a rectangle (see Figure 21). The triangles range from purely geometric to subtriangular with rounded corners; they are occasionally interspersed with lines of varying thickness that resemble bristles (see Figure 22). Motif 7 is represented by approximately 160 artifacts from 37 sites.

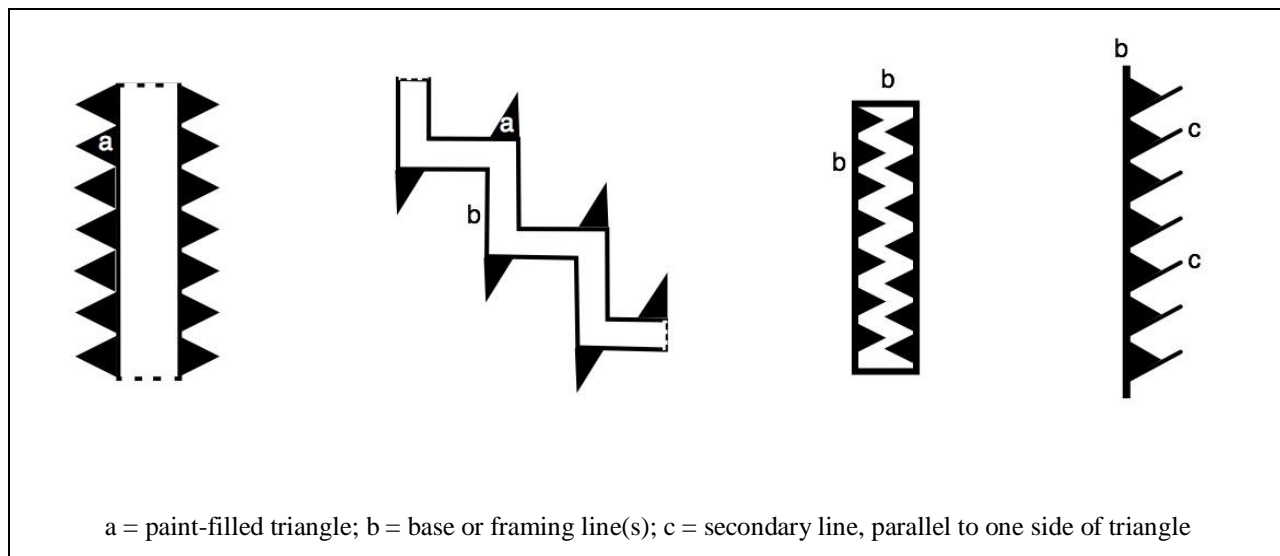


Figure 21. Stylized drawings of Motif 7 forms.

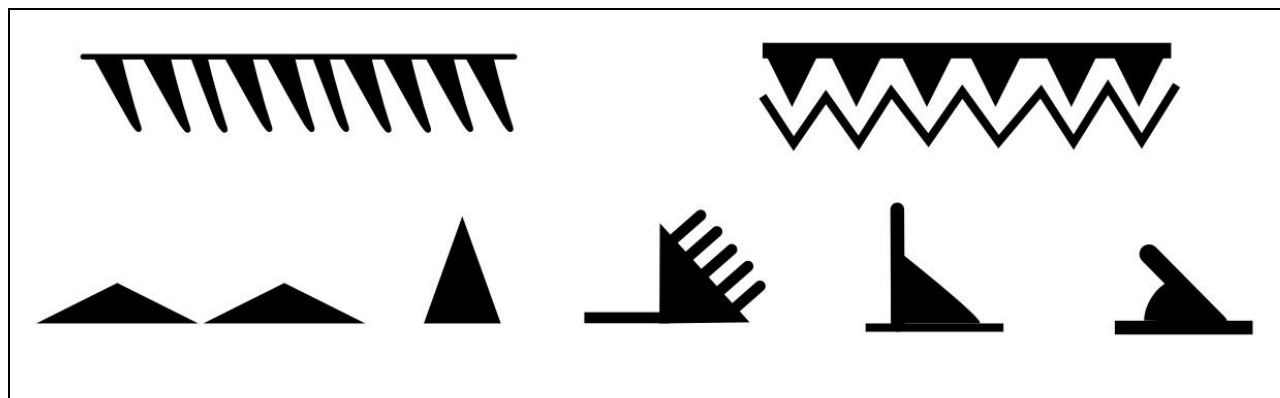


Figure 22. Stylized drawings of Motif 7 variations.









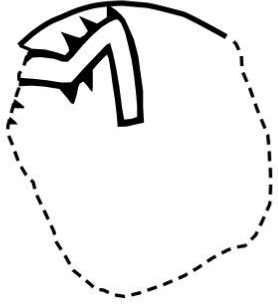
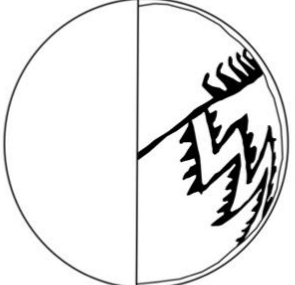


 <p>5LP39.9559 University of Colorado Museum of Natural History</p>	 <p>5DL112.22.38 Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT1.9901 University of Colorado Museum of Natural History</p>
 <p>5MT8937.91 d Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT9540.252 a Anasazi Heritage Center Bureau of Land Management</p>	 <p>5MT10647.703 Crow Canyon Archaeological Center</p>
 <p>29SJ299.C9915 Chaco Culture National Historical Park Museum Collection</p>	 <p>29SJ423.C14416 Chaco Culture National Historical Park Museum Collection</p>	 <p>LA80425.Figure 6-32 Snell, et al., 2012</p>
 <p>LA83507.Figure 173 Wellman, K.D. 1994</p>	 <p>42SA6396.1389 Edge of the Cedars State Park Museum</p>	 <p>42SA20977.127 Edge of the Cedars State Park Museum</p>

Figure 23. Photographs and drawings of 12 examples of Motif 7.

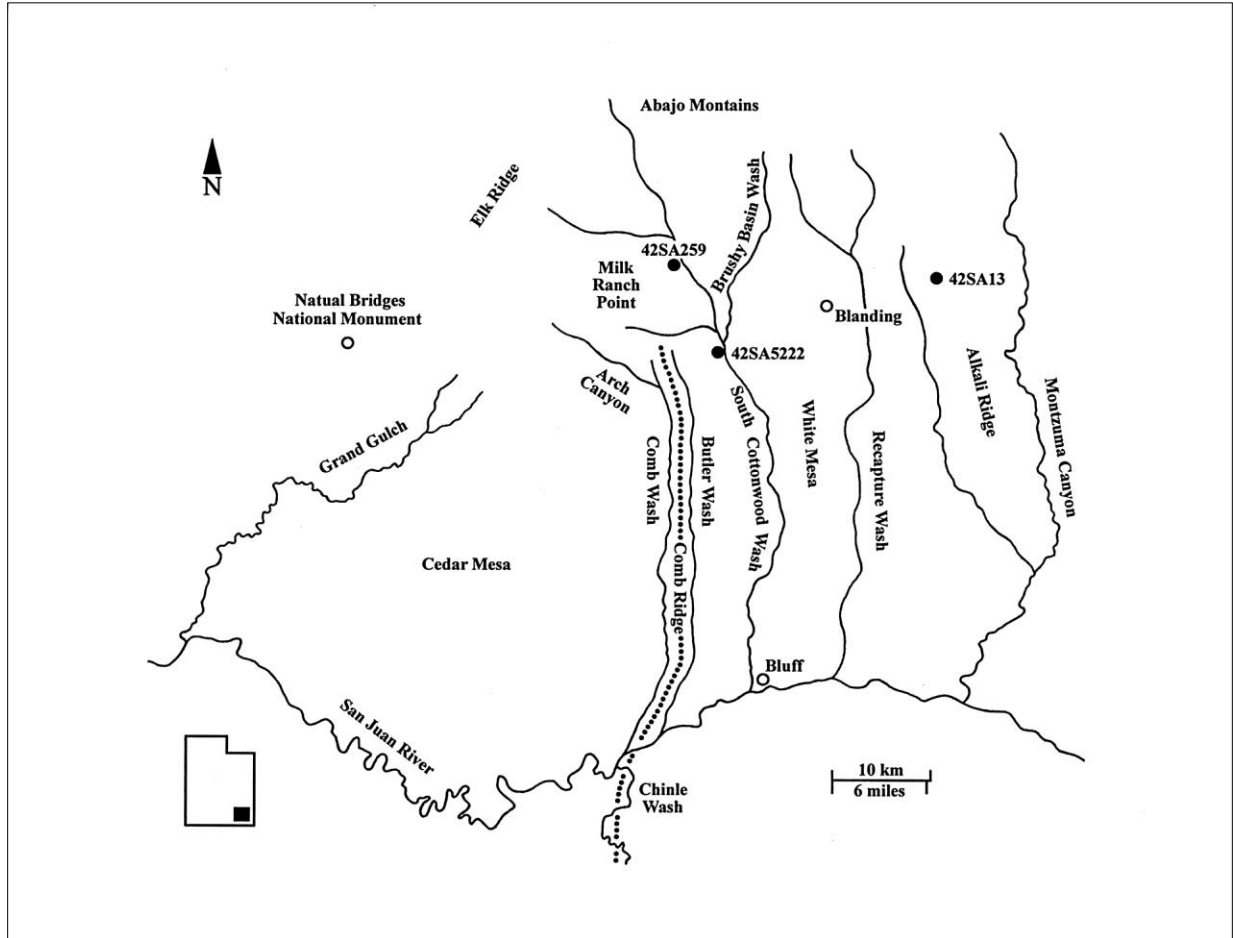
Figure	Site/ Artifact	Reference
7, 9	5MV354 (Twin Trees)	Lancaster, James A. and Don Watson 1950 Excavation of Two Late Basketmaker III Pithouses in <i>Archeological Excavations in Mesa Verde National Park, Colorado</i> . <a href="http://www.nps.gov/history/history/online_books/archeology/2/sec1.htm">www.nps.gov/history/history/online_books/archeology/2/sec1.htm</a>
7, 20	5MV1644 (Site 1644)	Hayes, Alden C. and James A. Lancaster 1975 Badger House Community, Mesa Verde National Park, <i>Colorado Publications in Archeology 7E, Wetherill Mesa Studies</i> , U.S. Department of the Interior, National Park Service, Washington
7	42SA8895	Hurst, Winston 1985 Chapter 11: Ceramics in <i>Final Recapture Wash Archaeological Project, 1981-1983, San Juan County, Utah</i> , A.S. Nielson, J.C. Janetski, and J.D. Wilde (editors). Brigham Young University Museum of Peoples and Cultures Technical Series No. 85-7, Provo
17	29SJ1659	Roberts, Frank H. H. 1929 Shabik'eshchee Village: A Late Basketmaker Site in the Chaco Canyon New Mexico. <i>Smithsonian Institution Bureau of American Ethnology Bulletin 92</i> , United States Government Printing Office, Washington
7	LA2501	Reed, Lori Stephens, Joell Goff, and Kathy Niles Hensler 1998 Inventory of Whole and Reconstructible Vessels. In Exploring Ceramic Production, Distribution, and Exchange in the Southern Chuska Valley: Analytical Results from the El Paso Natural Gas North System Expansion Project, by Lori Stephens Reed, Joell Goff, and Kathy Niles Hensler, Appendix G. <i>Pipeline Archaeology 1990-1993: the El Paso Natural Gas North System Expansion Project, New Mexico and Arizona, vol. XI</i> , Timothy M. Kearns, general editor. Report No. WCRM(F)074. Western Cultural Resource Management, Inc., Farmington, New Mexico.
14	5LP10201 (Ignacio 7:23)	Carlson, Roy L. 1963 Basket Maker III Sites Near Durango, Colorado, <i>University of Colorado Studies Series in Anthropology No. 8 The Earl Morris Papers No. 1</i> . Boulder
3	LA80422	Reed, Lori Stephens, Joell Goff, and Kathy Niles Hensler 1998 Inventory of Whole and Reconstructible Vessels. In Exploring Ceramic Production, Distribution, and Exchange in the Southern Chuska Valley: Analytical Results from the El Paso Natural Gas North System Expansion Project, by Lori Stephens Reed, Joell Goff, and Kathy Niles Hensler, Appendix G. <i>Pipeline Archaeology 1990-1993: the El Paso Natural Gas North System Expansion Project, New Mexico and Arizona, vol. XI</i> , Timothy M. Kearns, general editor. Report No. WCRM(F)074. Western Cultural Resource Management, Inc., Farmington, New Mexico.
23	LA80425	Snell, Dawn, Brenda G. Randolph and Randy Korgel 2012 Chapter 6 LA80425 In <i>Pipeline Archaeology 1990-1993: The El Paso Natural Gas North System Expansion Project, New Mexico and Arizona Volume VII - Book 2 Investigations at an Early Anasazi community in Tohatchi Flats, New Mexico</i> . Janet L. McVickar, Brenda G. Randolph and Dawn Snell, editors. Western Cultural Resource Management, Inc. Farmington, NM

Figure	Site/ Artifact	Reference
23	LA83507	Wellman, K.D. 1994. Ram Mesa community site excavations, Site 423-131. In R. B. Sullivan (ed.), Excavations at Anasazi Sites in the Upper Puerco River Valley (pp. 226-243). <i>Across the Colorado Plateau: Anthropological Studies for the Transwestern pipeline Expansion Project Vol. X</i> . Office of Contract Archaeology and Maxwell Museum of Anthropology. Albuquerque, NM



**SOUTHEASTERN UTAH – IT'S NOT SOUTHWESTERN COLORADO:  
MILK RANCH POINT'S CONTRIBUTION TO A  
REVISED CERAMIC SEQUENCE FOR SOUTHEASTERN UTAH**

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**Figure 1.** Southeastern Utah and the locations under discussion.

In the late 1960s, the need to address the archaeological resources on the Monticello Ranger District of the Manti-La Sal National Forest was recognized by the U. S. Forest Service. As a result, the Elk Ridge Archaeological Project was initiated in 1971 with an archaeological survey of that part of Elk Ridge known as Milk Ranch Point. The project was under the supervision of Forest Service archaeologist Dee Green (ca. 1971). Milk Ranch Point is the northwestern head of the South Cottonwood drainage, a northern tributary of the San Juan River (Figure 1). Because Milk Ranch Point slopes to the east and has good soil, it was a significant prehistoric farming area at elevations from about 1888 to 2376 m (6200 to 7800 ft.). A large number of field houses and farmsteads along with several more substantial sites were found in the area. The archaeological work of the first year included the collection of almost 25,000 sherds from 654 sites in an area of approximately 12.3 square miles (DeBlois 1975:63, Table 2). Sherds from the small sites were completely collected while large sites were sampled. The collections are curated at the Edge of the Cedars State Park in Blanding, Utah as ECPR94007.

The collections made on the National Forest by Brigham Young University in 1972, 1973, and 1974 from other parts of the upper South Cottonwood drainage are also curated at the Edge of the Cedars State Park. During these projects, more than 2,000 sites were located and at least partially collected (DeBloois 1975:viii); no other projects in southeastern Utah can compare in the size of the area that was intensively surveyed and in the quantity of artifacts collected. Although some information exists in the gray literature (Berge, et al. 1976; Louthan 1974), the potential exists for much more research using these collections.

“The Elk Ridge Archeological Project” (DeBloois 1975) is the only published report available on the 1971 work. Unfortunately the ceramics analysis in the report has several limitations. Residual categories were not used for plain gray or white ware sherds; all plain gray body sherds were classified as Chapin Gray and white ware sherds were forced into type classifications without enough evidence to justify a specific type. Sherds that had a light color were classified as white ware even if they were not polished, slipped, or painted. Bluff Black-on-red (Bluff B/R) was not identified as a type; these red ware sherds were classified as Abajo Red-on-orange (Abajo R/O) even though Bluff B/R was the most common of the San Juan red wares on Milk Ranch Point. Also, oxidized gray ware sherds were classified as red ware. Imported sherds were not recognized with all sherds being classified as Mesa Verdean types. Finally, one category was titled "Miscellaneous" without any description of the many sherds that it contained. In spite of these deficiencies, the report provides much useful information on the prehistoric occupation of Milk Ranch Point. The following re-analysis of a substantial portion of the collections addresses the problems described above.

## METHODOLOGY

I examined about 18,000 sherds from 195 sites. Because of the large number of sherds, the analysis was primarily used to determine pottery types rather than record a more comprehensive description of each sherd. A microscope was used to identify the temper when it could not be determined with a hand lens. Field numbers (ML numbers, standing for Manti-La Sal) were used in this analysis so that comparisons could be made with the results in the DeBloois (1975) report. Only sites where 20 or more sherds were collected were initially considered for dating sites. The collections include large numbers of sherds that were too small to analyze (smaller than approximately 1.5 x 2 cm (.6 x .8 in)). These were set aside. In some cases, this criterium brought the number of sherds for a site to fewer than 20. If the period of occupation could still be determined, the data were used. If not, the site was dropped from consideration. The average sherd was smaller than a half dollar – much smaller than expected. (The small size of the sherds was probably due to most of the area having been plowed by the Forest Service to improve the vegetation for wildlife habitat.) This small size prevented me from classifying most of the late white ware into either McElmo Black-on-white (McElmo B/W) or Mesa Verde Black-on-white (Mesa Verde B/W), so they were placed into the “late white ware” residual category. A check of the first 30 sites that were analyzed showed that almost 20 percent of the sherds were diagnostic, providing adequate data for determining the time of occupation for these sites.

## RESULTS OF THE ANALYSIS

Most of the pottery in the South Cottonwood drainage was made using either Morrison Formation clays (available in most of the area east of Comb Ridge) or Chinle Formation clays (available at the base of Comb Ridge on the west side)<sup>1</sup>. An indication that the people who started farming on Milk Ranch Point came from the south can be found in the white-firing clay used in some of the Basketmaker III and Pueblo I pottery that had the typical igneous rock temper used by the Mesa Verdeans. It is a clay that was probably imported; it does not appear to have been from either the Morrison or Chinle Formations because, when fired, it has a gray scale (G.S.) value of 8+. The lightest color for pottery made from the Morrison Formation appears to be G.S. 7 while that from Chinle clays appears to be G.S. 6. This clay may have come from the Kayenta, Arizona area.

Almost all of the imported sherds were from the Kayenta area and have been described by Colton (1955, 1956)<sup>2</sup>. Most of these sherds were from multi-component sites, therefore their time of use is not obvious. It may be significant, however, that most of these sites had a Pueblo II component. In addition, several Pueblo I sites had Kana-a Black-on-white (Kana-a B/W) sherds and several Pueblo II sites had Black Mesa/Sosi or Dogoszhi Black-on-white sherds. (It was not possible to differentiate between Black Mesa and Sosi Black-on-white types due to the small size of the sherds.) Early Tsegi red wares (Medicine Black-on-red and Tusayan Black-on-red) were present at several middle/late Pueblo II sites. Few Tsegi Polychrome sherds, which are relatively common in southeastern Utah, were found on late Pueblo II or Pueblo III sites; this may be due to a significant number of non-diagnostic sherd-tempered red ware sherds having been assigned to a residual category.

### THE OCCUPATIONAL SEQUENCE ON MILK RANCH POINT

This analysis used 168 single component sites that had enough sherds to determine their period of occupation; their site numbers are in Appendix A. The sherds that were analyzed from these sites provided the information in Table 1; the dates for each period are approximate. Because the periods vary in length, a “sherds/year” category was added. For each period it consists of the number of sherds collected divided by its estimated length. This information should give a better indication of the intensity of the occupation during each period.

**Table 1.** Number of sites, sherds, sherds/site and sherds/year  
for each of my periods at single component sites

	<b>BMIII Prior to 750</b>	<b>Early PI 750-775</b>	<b>E/M PI 775-820</b>	<b>M/L PI 820- 925</b>	<b>E/M PII 925- 1000</b>	<b>M/L PII 1000- 1075</b>	<b>L PII/ E PIII 1075-1180</b>	<b>L PIII 1180- 1300</b>
Number of sites	26	23	35	46	24	4	4	6
Number of sherds	771	1,104	1,609	3,482	1,280	529	133	1,147
Sherds/ site	29.7	48	46	75.7	53.3	132.3	33.3	191.2
Sherds/ year	7.7	44.2	35.3	33.2	17.1	7.1	1.1	9.6

*Basketmaker III (Prior to A.D. 750).*

Basketmaker III was not divided into early and late periods because Abajo R/O only occurs in small quantities on Milk Ranch Point and therefore is not a reliable indicator that can be used to divide this period. An arbitrary 100 years was used as its estimated length with A.D. 650 as the starting point. Either Abajo R/O or undifferentiated orange ware sherds were found on fifteen out of twenty-six sites from this period. Chapin Gray and plain gray body sherds were the most common on these sites along with a few Chapin Black-on-white (Chapin B/W) sherds. Most of the sites were small with only one of the sites having more than 50 analyzed sherds. This period had the fewest sherds/site at 29.7.

*Early Pueblo I (A.D. 750-775).*

There were fewer sites during this short period – 23 compared to 26 Basketmaker III sites; however, the number of sherds/site increases to 48. This is the most problematic of my periods. The only change from the Basketmaker III period is the introduction of Bluff B/R. When does Bluff B/R show up on Milk Ranch point? Oppelt (2001:457) determined that Bluff B/R was being made in the South Cottonwood drainage as well as at other locations. Brew (1946:Figures 106-109, Notes) found a few sherds of Bluff B/R at 42SA13, a large early Pueblo I site on Alkali Ridge (Figure 1), but there is no indication of when it was first made there. Tree ring dates from a late pit house at 42SA13 give dates in the late A.D. 770s, so Bluff B/R appears to have been made by early Pueblo I. Based on the amount of red ware on Milk Ranch Point that was apparently made with Chinle Formation clay, it is possible that they were producing Bluff B/R on Milk Ranch Point as early as the end of Basketmaker III.

*Early/middle Pueblo I (A.D. 775-820).*

The number of sites increases to 35 from the previous period's 23. The start of this period is determined by the introduction of White Mesa Black-on-white (White Mesa B/W) and Moccasin Gray. (White Mesa B/W designs are similar to those on Kana-a Black-on-white from the Kayenta area; however, the temper in the pottery is the igneous rock used by Mesa Verdean potters instead of Kayenta sand (Hurst et al. 1985).) At this time, a group of people, probably from south of the San Juan River, moved into the South Cottonwood drainage and appear to have started farming on Milk Ranch Point (Severance 2008:152). The number of sherds/site stays about the same. Of the 35 sites, only five had both White Mesa B/W and Moccasin Gray. Four only had White Mesa B/W and 26 only had Moccasin Gray.

*Middle/late Pueblo I (A.D. 820-925).*

Mancos Gray and Deadmans B/R are the new types that appear during this period. Deadmans B/R is only found in trace amounts on Milk Ranch Point during this and the next period; Bluff B/R is still the dominant San Juan red ware. At lower elevation sites in the South Cottonwood drainage, Deadmans B/R is much more common. The increase in the number of sites to 46, and the increase in number of sherds/site to 75.7 can probably be explained by the immigration of another group of people from south of the San Juan River who settled in the Comb Wash/Red Knobs area. These people have several traits that differ from the Mesa Verdeans living east of Blanding (Severance 2008:152-153). A prehistoric road connects sites in Comb Wash at the mouth of Arch Canyon to Red knobs (42SA259) in the South Cottonwood

drainage (Figure 1). Therefore I consider Red Knobs to be an outpost established by the people living in the Comb Wash area (Severance 1999). Allison (2004) describes the late Pueblo I occupation at Red Knobs (Figure 1). These immigrants apparently used Milk Ranch Point for farming along with the people who were already farming there. The significant increase in number of sherds/site indicates that sites were larger or were used for a longer time than those of the previous periods.

*Early/middle Pueblo II (A.D. 925-1000).*

At 24, the number of sites has decreased to about half of those of the previous period, most likely due to the abandonment of the Comb Wash/Red Knobs area by the early A.D. 900s (Allison 2004). The number of sherds/site, 53.3, is closer to the figure for periods prior to middle/late Pueblo I. This period has the greatest diversity of ceramic types. The same is true for sites from this period in the Brushy Basin drainage, an eastern tributary of the South Cottonwood drainage (Figure 1). The corrugated gray wares, Mancos, Dolores and Mesa Verde, appear at this time along with Mancos Black-on-white (Mancos B/W). Chapin B/W drops out.

*Middle/late Pueblo II (A.D. 1000-1075).*

The number of sites drops precipitously to four. However, the number of sherds/site more than doubles to 132.3, indicating the largest single component sites to date. The end date for the last period and the starting date for this period are arbitrary because it is determined only by the absence of the early ceramic types: Chapin Gray, Moccasin Gray, Mancos Gray, White Mesa B/W, and the San Juan red wares. It is interesting that they all would drop out at the same time; a hiatus at the beginning of this period may be indicated. From middle/late Pueblo II through Pueblo III, many sites were re-occupations of earlier sites and were not included in this part of the analysis. It appears that the level of farming on Milk Ranch point dropped significantly during this period and became even less in the following period. Up to this time, the intensity of farming on Milk Ranch Point appears to correlate with the movement of people into and out of the area west of Blanding. Now there is a change in that pattern that most likely was due to a change in the climate. The only study of climate that has been made in this area was by Petersen (1988) for the Dolores Project in Colorado, about 60 miles to the east of the South Cottonwood drainage. On page 115, Petersen states that the prehistoric climate from the "A.D. 1000 to 1100 period shows increases in both summer and winter precipitation." According to his reconstruction, the A.D. 1000 to 1075 period should have been a good time to grow crops on Milk Ranch Point. So growing conditions alone do not explain the significant reduction in farming at this time. Petersen continues:

Archaeological pollen spectra from the project area that date between A.D. 1000 and 1100 show higher arboreal pollen percentages than those of today, which suggests that the farming belt may also have been wider than it is at present (Petersen 1986a). . . .

With a widening dry-farming belt in the region after A.D. 900, the project area would have again occupied a more marginal position near the upper elevation limit of the potential dry-farming belt. Because the upper limit of the belt is determined by the length of the growing season, the project area may have been

subject to more frequent short growing seasons than lower elevational areas within the belt. The center of the potential dry-farming belt thus may have been relatively more attractive than either the frost-prone upper or drought-prone lower margins [Petersen 1988:115, 119].

It appears that the farmers may have moved to lower elevations because growing conditions were better there.

*Late Pueblo II/early Pueblo III (A.D. 1075-1180).*

The decline in the use of the area that started in the last period, intensified. The largest number of sherds at a single component site was 69. Seven sites that dated to this period were not included in this analysis because they had more than one occupation, with all of the previous occupations being during Pueblo I. McElmo B/W is added to the ceramic assemblage from the previous period. With just four sites, and the drop in the number of sherds/year, this period is interesting. It is when people returned to the Comb Wash/Red Knobs/Cedar Mesa area (Allison 2004; Matson et al. 1988:252-253; Severance 2008:155). Apparently conditions were not right for farming on Milk Ranch Point. If there was a time when Milk Ranch Point was not occupied continuously, this was probably it; and the lack of use may have started during the last period. It is not clear where their new farming areas were located. Petersen, again discussing the climate at that time:

The period A.D. 1100 to 1275 is characterized as having had relatively reduced winter and summer precipitation amounts (Fig. 55). However, in some ways it is unlike the preceding periods. Even though it has a spruce to pine ratio similar to the A.D. 800s, which suggests that winter precipitation was similar, it does not have as much summer rainfall, which is evinced by the pinyon pine pollen influx. Because of the relatively lower winter and summer precipitation, a narrower dry-farming belt is illustrated in Figure 59. However, farming that was strictly dependent upon summer rainfall within the dry-farming belt in the period A.D. 1100 to 1275 may have been more risky than it was during the A.D. 800s.

To compensate for the greater risk associated with less-dependable summer rains within a narrow dry-farming belt farming practices may have become more diversified after A.D. 1100 than they were during the A.D. 800s. Based on this line of reasoning, the relative attractiveness of the entire dry-farming belt in general and the project area in particular may not have been as high after A.D. 1100 as it had been during the 800s [Petersen 1988:119].

Many of the Pueblo I sites below the 2010 m (6600 ft.) elevation level that had been abandoned for about 150 years were re-occupied at this time, indicating that the people were reclaiming ancestral lands (Jim Allison, personal communication 2004). This includes sites on Little Baullie Mesa between the north side of Arch Canyon and the South Cottonwood drainage along with 42SA259. As stated above, Cedar Mesa was also re-occupied during this period. Where had these people lived in that long period between the two occupations? Their pottery gives a possible answer. If the people who re-occupied the Comb Wash/Red Knobs/Cedar Mesa area during late Pueblo II/early Pueblo III had been out of the Mesa Verde culture area

for as many as seven or eight generations, the pottery that they brought with them when they returned to their ancestral home territory should have been made with different clays and temper than those used in southeastern Utah. The designs on white ware probably would also have undergone changes. There is no visible change in the pottery of the returnees from that found in the other areas in southeastern Utah occupied by the Mesa Verdeans, indicating that they probably did not leave southeastern Utah during that period. The most likely area they could have been using during that time is located east of Blanding, from Recapture Wash to Montezuma Canyon. I have found numerous Pueblo II unit pueblos in this area.

*Late Pueblo III (A.D. 1180-1300).*

Farming rebounded somewhat during this period. Even though only six single component sites are in the study, they are the largest sites so far with an average of 191.2 sherds/site. The final change in the ceramic assemblage is the addition of Mesa Verde B/W. It is not clear when in the A.D. 1200s the area was depopulated. If a date of A.D. 1260 is used instead of A.D. 1300, the result is 14.3 sherds/year instead of 9.6. If A.D.1240 is used, the number is 19.1. With the end of the Pueblo III period, the prehistoric occupation of Milk Ranch Point was over.

### MULTI-COMPONENT SITES

Twenty-one of the analyzed sites had multiple occupations and were not used in revising the ceramic sequence. Table 2 shows the number of sites that were re-occupied during Pueblo II and Pueblo III. The table does not include ML 383 which had all three Pueblo periods present; the largest number of sherds from any site (2,956) was collected from sample areas there. Four of the Basketmaker III sites were re-occupied along with fifteen Pueblo I sites and one early/middle Pueblo II site. This re-occupation of Pueblo I sites is a subject that needs more study because it occurred over much of southeastern Utah (e.g. Allison 2004).

**Table 2. Multi-component sites**

	<b>E/M PII</b> <b>925-1000</b>	<b>M/L PII</b> <b>1000-1075</b>	<b>PII</b> <b>900-1100</b>	<b>L PII/E PIII</b> <b>1075-1180</b>	<b>L PIII</b> <b>1180-1300</b>	<b>PIII</b> <b>1100-1300</b>
BMIII Prior to 750	1	1			2	
Early PI 750-775		1	1	2	1	
E/M PI 775-820	1			3		
M/L PI 820-925		2	1	1		1
Pueblo I 750-900				1		
E/M PII 925-1000					1	

### THE REVISED CERAMIC SEQUENCE

Most of the dates that are used for Mesa Verde ceramic types in southeastern Utah have been determined in southwestern Colorado (Breternitz 1984; Oppelt 2008; Wilson and Blinman 1995). They need to be revised for southeastern Utah because many of the ceramic assemblages

at sites in this area differ from those in southwestern Colorado. Table 3 is my ceramic sequence using estimated dates from the analyzed sites on Milk Ranch Point as well as data from other sites in southeastern Utah (Severance 2008). Unfortunately, none of the pottery in southeastern Utah has been dated using tree-ring dates, so my dates are approximate. The revised ceramic sequence appears to be valid for that part of southeastern Utah between Cedar Mesa and Montezuma Canyon. Whether it is valid for any of the area east of there remains to be determined.

**Table 3:** The Revised Ceramic Sequence for Milk Ranch Point and much of southeastern Utah

Ceramic Type	BMIII Prior to 750	Early PI 750-775	E/M PI 775- 820	M/L PI 820- 925	E/M PII 925- 1000	M/L PII 1000- 1075	L PII/ E PIII 1075- 1180	L PIII 1180- 1300
Chapin Gray A.D. <u>575-980</u>	X	X	X	X	X			
Moccasin Gray A.D. <u>775-980</u>			X	X	X			
Mancos Gray A.D. <u>875-980</u>				X	X			
Mancos Corrugated A.D. <u>925-1300</u>					X	X	X	X
Dolores Corrugated A.D. <u>925-1300</u>					X	X	X	X
Mesa Verde Corrugated A.D. <u>925-1300</u>					X	X	X	X
Chapin Black-on- white A.D. 575-900	X	X	X	X				
White Mesa B/W A.D. 775-1000			X	X	X			
Mancos Black- on-white A.D. <u>980-1300</u>					X	X	X	X
McElmo Black- on-white A.D. 1075-1300							X	X
Mesa Verde B/W A.D. 1180-1300								X
Abajo Red-on- orange A.D. <u>700-980</u>	X	X	X	X	X			
Bluff Black-on- red A.D. 750-980		X	X	X	X			
Deadmans Black- on-red A.D. 875-1000				X	X			

*Note:* The dates that differ significantly from the generally accepted dates are underlined.



The reasons for the changes are:

- 1) Chapin Gray and Moccasin Gray can be found in early/middle Pueblo II sites on Milk Ranch Point and on other sites from this period in the South Cottonwood drainage. Their end dates are extended to A.D. 980 from A.D. 900.
- 2) Mancos, Dolores, and Mesa Verde Corrugated pottery can all be found on both Pueblo II and Pueblo III sites in southeastern Utah. On Alkali Ridge, Brew (1946: Figure 152) found jars with all three rim eversions at two Pueblo II sites. In the Brushy Basin drainage, I have found Mancos Corrugated and Mesa Verde Corrugated rims on early/middle Pueblo II sites; and, in Beef Basin (west of the Abajo Mountains), a Crow Canyon Archaeological Center analysis of sherds from a late Pueblo III site (42SA23072) found both Mancos Corrugated and Mesa Verde Corrugated sherds present (Jonathan Till, personal communication 2005). On Milk Ranch Point, four single component sites had sherds with all three rim eversions: ML 225, an early/middle Pueblo II site; ML 155 and ML 475, middle/late Pueblo II sites; and ML 381, a late Pueblo III site. Therefore, the beginning date for these three types is A.D. 925 and their end date is A.D. 1300. The dates for southwestern Colorado are: Mancos Corrugated A.D. 930-1100; Dolores Corrugated A.D. 1050-1250; and Mesa Verde Corrugated A.D. 1200-1300.
- 3) Mancos B/W can be found on late Pueblo III sites in southeastern Utah (Brew 1946:297; Rudy 1955; Severance 2003:196). Also, the Crow Canyon Archaeological Center found Mancos B/W, McElmo B/W, and Mesa Verde B/W at 42SA23072 in Beef Basin (Jonathan Till, personal communication 2005). This differs from the situation in southwestern Colorado where Mancos B/W is not found after A.D. 1150. Its end date has been extended to A.D. 1300 for southeastern Utah.
- 4) Abajo R/O can be found on early/middle Pueblo II sites on Milk Ranch Point, therefore its end date has been extended to A.D. 980 from A.D. 850.
- 5) There are two choices for the end date for Deadmans B/R. It can be found later than the A.D. 1000 date in Breternitz et al. (1974:62), but I did not find enough evidence to agree with the end date of A.D. 1100 proposed by Wilson and Blinman (1995:56-57). After A.D. 1000 it appears that these sherds come from heirloom pottery. I found just eight sherds at single component sites on Milk Ranch Point including one sherd that was found on a middle/late Pueblo II site and one sherd was found on a late Pueblo II/early Pueblo III site. I have also found single sherds east of Blanding at late Pueblo II and Pueblo III sites. Depending on your definition of an end date, either A.D. 1000 or A.D. 1100 could be considered to be correct. However, it appears that Deadmans B/R falls out of common use around A.D. 1000.

## CONCLUSIONS

In addition to proposing that the ceramic sequence for southeastern Utah differs from the one in southwestern Colorado, this report raises questions that require additional work before we can better understand the prehistoric cultural dynamics that took place in southeastern Utah.

Especially needed are tree-ring-dated ceramics to accurately define the beginning and end dates for all of the pottery types.

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### ENDNOTES

1. Some potters occasionally used a “butterscotch” colored clay of unknown origin. This color is not found in the *Munsell Soil Color Charts*. Unlike Morrison or Chinle clays which turn red or red-orange when oxidized or vitrified, this clay turns yellow. Occasionally a carbon streak was present. I found a few sherds made from this clay at 42SA5222 farther downstream in the South Cottonwood drainage (Figure 1)(Severance 2004). It makes poor quality pottery.
2. One Fremont jar (Emery Gray) was found at a late Pueblo III site (ML 153). Apparently all of the sherds were in one location because the jar had been completely reconstructed. Unfortunately, at some point it was apparently dropped, and now it is in several pieces. It was the only Fremont pottery in the analyzed sherds.

### REFERENCES

Allison, James R.

2004 Surface Archaeology of the Red Knobs Site, a Southeastern Utah Great House. *Kiva* 69(4):339-360.

Berge, Dale L., Ray T. Matheny, Craig B. Harmon, Asa S. Nielson, and Michael P. Benson

1976 The Elk Ridge Archaeological Project, Manti-La Sal National Forest (1973): Rincon Mesa, Horse Flat and Dry Wash. Ms. on file U.S. Forest Service, Intermountain Region, Ogden, Utah.

Breternitz, David A., Arthur H. Rohn, Jr., and Elizabeth A. Morris (editors)

1984 *Prehistoric Ceramics of the Mesa Verde Region*. 2nd. ed. INTERpark, Cortez, Colorado. Originally published 1974, Museum of Northern Arizona Ceramic Series No. 5, Northern Arizona Society of Science and Art Inc. Flagstaff.

Brew, John Otis

1946 *Archaeology of Alkali Ridge, Southeastern Utah*. Papers of the Peabody Museum of Archaeology and Ethnology, Vol. XXI. Harvard University, Cambridge, Massachusetts.

Colton, Harold S.

1955 Pottery Types of the Southwest, Wares 8A, 8B, 9A, 9B: Tusayan Gray, and White Ware, Little Colorado Gray, and White Ware. In *Pottery Types of The Southwest, Museum of*

*Northern Arizona Ceramic Series No. 3*, edited by Harold S. Colton. Northern Arizona Society of Science and Art, Flagstaff.

1956 Pottery Types of the Southwest, Wares 5A, 5B, 6A, 6B, 7A, 7B, 7C: San Juan Red Ware, Tsegi Orange Ware, Homolovi Orange Ware, Winslow Orange Ware, Awatovi Yellow Ware, Jeddito Yellow ware, Sichomovi Red Ware. In *Pottery Types of The Southwest, Museum of Northern Arizona Ceramic Series No. 3c*, edited by Harold S. Colton. Northern Arizona Society of Science and Art, Flagstaff.

DeBloois, Evan I.

1975 *The Elk Ridge Archaeological Project: A Test of Random Sampling in Archeological Surveying*. Archaeological Report No.2, United States Forest Service, Intermountain Region, Ogden, Utah.

Green, Dee F.

ca.1971 The Elk Ridge Archaeological Project, Manti-La Sal National Forest: Summary of the 1971 Field Season. Manuscript on file, United States Forest Service, Intermountain Region, Ogden, Utah.

Hurst, Winston, Mark Bond, and Sloan E. Emery Schwindt

1985 Piedra Black-on-White, White Mesa Variety: Formal Description of a Western Mesa Verde Anasazi Pueblo I White Ware Type. *Pottery Southwest* 12(3).

Louthan, Bruce D., editor

1974 The Elk Ridge Archaeological Project, Manti-La Sal National Forest: Summary of the 1972 Season. Ms. on file, Department of Anthropology and Archaeology, Brigham Young University, Provo, Utah

Munsell Color

1988 ed. *Munsell Soil Color Charts*, Macbeth Division, Kollmorgen Instruments Corporation, Baltimore.

Matson, R.G., William D. Lipe, and William R. Haase

1988 Adaptational Continuities and Occupational Discontinuities: The Cedar Mesa Anasazi. *Journal of Field archaeology* 15:245- 264.

Oppelt, Norman T.

2001 Seeking the Red Ware Potters of the Northern San Juan: Petrographic Analysis of Bluff Black-on-red. *Kiva* 66(4):447-465.

Oppelt, Norman T. (compiler)

2008 List of Southwestern Pottery Types and Wares with Dates and References to Descriptions and Illustrations, Revised and Updated Version. Oppelt Publications, Greeley, Colorado.

Petersen, Kenneth Lee

1988 *Climate and the Dolores River Anasazi*. Anthropological Papers Number 113, University of Utah Press, Salt Lake City, Utah.

Rudy, Jack R.

1955 *Archeological Excavations in Beef Basin, Utah*. Anthropological Papers Number 20, Department of Anthropology, University of Utah, Salt Lake City, Utah.

Severance, Owen

1999 Prehistoric Roads in Southeastern Utah. In *La Frontera: Papers in Honor of Patrick H. Beckett*, edited by Meliha S. Duran and David T. Kirkpatrick, pp. 185-195. Papers of the Archaeological Society of New Mexico 25, Albuquerque.

2003 Cultural Dynamics in Southeastern Utah: Basketmaker III Through Pueblo III. In *Climbing the Rocks: Papers in Honor of Helen and Jay Crotty*, edited by Regge N. Wiseman, Thomas C. O'Laughlin, and Cordelia T. Snow, pp. 189-203. Papers of the Archaeological Society of New Mexico 29, Albuquerque.

2004 Cottonwood Falls (42Sa5222) and Its Place in Southeastern Utah's Prehistoric Landscape. In *Ever Westward: Papers in Honor of Elizabeth Kelley*, edited by Regge N. Wiseman, Thomas C. O'Laughlin, and Cordelia T. Snow, pp. 139-157. Papers of the Archaeological Society of New Mexico 30, Albuquerque.

2008 Prehistoric Migrations West of Recapture Wash, Southeastern Utah. In *Chasing Chaco and the Southwest: Papers in Honor of Frances Joan Mathien*, edited by Regge N. Wiseman, Thomas C. O'Laughlin, Cordelia T. Snow, and Cathy Travis, pp. 147-162. Papers of the Archaeological Society of New Mexico 34, Albuquerque.

Wilson, C. Dean and Eric Blinman

1995 Ceramic Types of the Mesa Verde Region. In *Archaeological Pottery of Colorado: Ceramic Clues to the Prehistoric and Protohistoric Lives of the State's Native Peoples*, edited by Brunswig, R. H., Bruce Bradley, and Susan M. Chandler, pp. 33-64. CCPA Occasional Papers No. 2, Denver.

## Appendix A

### Single-component Sites Used in the Analysis:

#### Basketmaker III

ML 30, 35, 45, 67, 80, 119, 144, 193, 218, 243, 255, 257, 279, 290, 304, 324, 361, 367, 404, 420, 434, 452, 459, 463, 482, 989

#### Early Pueblo I

ML 2, 6, 15, 61, 66, 115, 118, 127, 211, 214, 240, 251, 259, 282, 283, 294, 322, 332, 335, 356, 427, 448, 486

#### Early/middle Pueblo I

ML 12, 21, 36, 51, 62, 81, 89, 105, 110, 114, 130, 131, 231, 237, 248, 275, 278, 287, 291, 313, 330, 336, 351, 353, 354, 366, 399, 410, 433, 439, 454, 460, 464, 466, 998

#### Middle/late Pueblo I

ML 1, 9, 13, 14, 17, 19, 38, 40, 47, 48, 54, 69, 70, 74, 79, 109, 123, 124, 125, 138, 229, 234, 245, 247, 254, 296, 348, 352, 370, 395, 402, 406, 409, 413, 417, 422, 430, 444, 449, 465, 518, 973, 975, 979, 987, 995

#### Early/middle Pueblo II

ML 34, 42, 44, 50, 101, 140, 141, 143, 160, 162, 177, 219, 226, 233, 246, 276, 319, 345, 376, 398, 467, 478, 977, 983

#### Middle/late Pueblo II

ML 172, 230, 475, 970

#### Late Pueblo II/early Pueblo III

ML 31, 207, 235, 310

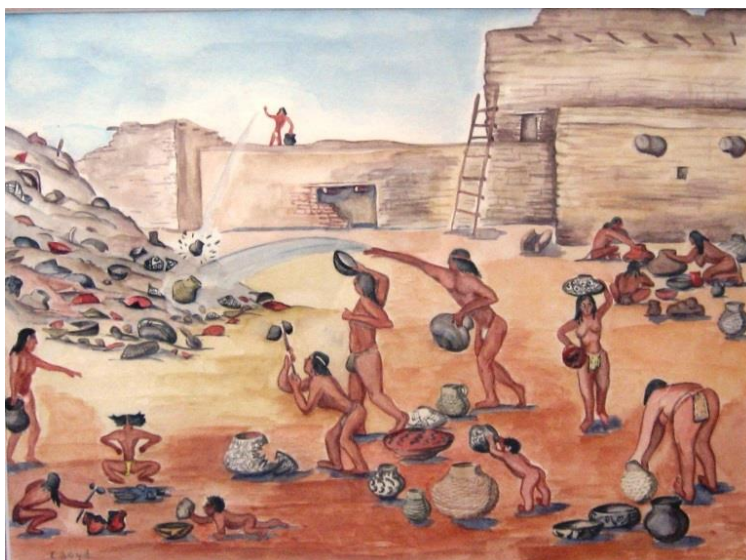
#### Late Pueblo III

ML 146, 153, 381, 388, 429, 440

**Since Mera: The Original Eleven Bulletins With Essays and Opinions Derived from Recent Research (Compiled and Edited by Emily J. Brown, Regge N. Wiseman, and Rory P. Gauthier), Archaeological Society of New Mexico Special Publication No. 5. 2014; 406 pp, with original illustrations and maps. Reviewed by David H. Snow**

It is appropriate to note at the outset that the October, 1976 issue of *Pottery Southwest* carried, under Queries & Responses, Ted Frisbie's announcement of his plan to have reprinted in a single volume the original Technical Series Bulletins from the Laboratory of Anthropology, by Dr. Harry P. Mera. After 38 years of fits, starts, stumbles, and roadblocks (Frisbie2011), Ted's dream is a reality, and the Archaeological Society of New Mexico is to be congratulated for bringing it, at long last, to a satisfying reality. The added bonus here is the inclusion of essays, commentary, and opinions by regional experts by way of up-to-date syntheses on the status and thinking about the ceramic materials treated by Mera more than half a century ago. The volume is prefaced by Hayward Franklin, and by Ted's remarkably detailed biographical 'sketch' of Dr. Mera, highlighting the career of a man of many talents, interests, and accomplishments. Each of the accompanying essays provides a clear reminder that the ceramic and social (pre-) history of the eastern pueblos and adjacent areas of Mera's interests remain juicy oranges (if I might be forgiven the allusion to Tozzer's. by now, hackneyed advice to Kidder!)

Through his insightful, ceramic-tinted spectacles, and based principally on his own fieldwork, Mera's preliminary observations and thoughts on the ceramic history of the Rio Grande and adjacent regions have only been improved upon over the intervening years. No matter how much we might wish his field methods had been more rigorous and systematic, any shortcomings in his interpretations are scarcely worthy of serious critique, and many of his insights have withstood both the 'test of time', and advances in research and analysis. The accompanying artwork was painted by the late E. Boyd Hall, ca. 1938-40, and likely reflects her visits to the Peabody Museum's Awatobi Expedition (1938-39) with her husband, Ned Hall (see Davis 2008). It is said to have been given, appropriately enough, to Dr. Mera upon his retirement in 1946 from the Laboratory of Anthropology.



**'The potsherd industry', by E. Boyd, ca. 1938, (reprinted with permission of the owner).**

**Bulletin 1, Chupadero Black on White**, is reviewed by Regge N. Wiseman who focuses on four aspects of the Chupadero ‘issue’: the possible sources of manufacture of this widely distributed type across much of eastern New Mexico and adjacent Southern Plains; the possible ‘functions’, or uses of the predominate jar forms (for liquid or dried materials, such as salt?); on its possible dating (late in the 12<sup>th</sup> century to as late, perhaps, as 1450-1500?); and on its relation to the succeeding Tabira Black-on-white. Both types are assumed to have been produced by the same potting lineages or, at least, by potters in the same communities. If this were the case, the quite limited distribution of 17<sup>th</sup> century Tabira B/w clearly reflects the withdrawal of Jornada Mogollon and adjacent populations by the ca. A. D. 1450-1500 period suggested by Wiseman. Alternatively, Chupadero B/w was made until much later than previously suspected; or there was a considerable gap between production of the two types?

**Bulletin 2, Lincoln Black-on-Red**, also is reviewed by Wiseman who discusses likely ancestral types and their variable attributes (Broadline and Three Rivers Red-on-terracotta). Mera was of the opinion that the appearance of “well developed” glaze paint on late examples of Lincoln B/r indicated successful “imitation” of Rio Grande Glaze A Red by Lincoln potters. Wiseman reviews the possibility that the occasional presence of glaze paint on Lincoln B/r might simply be no more than relatively unsuccessful efforts “to replicate” Rio Grande Glaze I Red, or Agua Fria Glaze-on-Red. Whether the paint in question is lead based, or merely an over-fired manganese based solution (as, apparently, was the case with some White Mountain Redware glazes) remains to be determined. Mera did note the occurrence of Lincoln B/r at sites with St. Johns Polychrome “and other Little Colorado polychrome types of the same class,” types that often bear a manganese (occasionally with copper) glaze paint.

**Bulletin 3, El Paso Polychrome**, again, is reviewed by Wiseman, whose comments focus on recent studies that allow discrimination between the “Early/Transitional” and “Classic” variants of the type based on a Rim Sherd Index described by Carmichael and West in the early 1980s. He notes that Speth and colleagues, using just the single measurement of “greatest thickness” of vessel rims, tends to distinguish between Early and Classic El Paso Polychrome jars. As is the case with Chupadero B/w, Wiseman notes that El Paso Polychrome tempering materials indicate manufacture over a widespread region of east-central and southeastern New Mexico. Wiseman briefly reviews recent studies of design characteristics of the type; and comments on the unusually large size of El Paso Polychrome jars with evidence of having been set over/on a fire; and, finally, he discusses how the Jornada Brown and El Paso series relate to one another. The published date ranges for El Paso series (“Early” to “Classic”) suggests an unusually long-lived potting tradition.

**Bulletin 4, Wares Ancestral to Tewa Polychrome** is reviewed by C. Dean Wilson and Candace Lewis; though, perhaps, invariably, a good part of their discussion revolves around the materials subsequently described by Frank Harlow (1970, 1973). Harlow’s contributions to the late prehistoric and early historic pottery of the upper Rio Grande region (i. e., the Pajarito Plateau and adjacent Lower Chama Basin), have become something of a ‘standard’ for many who work with the “Tewa” ceramic sequence. It is unfortunate that the many examples that Harlow discusses in presenting details of his several new ‘types’ (particularly, “Sakona Black/tan” and “Sakona Polychrome”) have never been seen by archeologists who reference his studies. These ‘types’ or varieties named by Harlow differ only by the Sakona ‘keeled’ bowl

form from Mera's original Tewa Polychrome. Wilson and Lewis note that differences between these and Mera's named types are "subtle and difficult to make, particularly for sherds." For those readers who wish to pursue further Harlow's typological distinctions from those in Mera's original work, see the former's contribution in Kenneth Chapman's, *The Pottery of San Ildefonso Pueblo* (1970), and this reviewer's review of Harlow's contribution (Snow 1972).

Mera's descriptions of Potsuwi'I Incised, Sankawi Black/cream, and the Biscuitwares, as the authors note, have been more or less augmented by additional descriptions of these types from excavations by Wendorf and Gauthier, material not then available to Mera. Additional detailed descriptive data for the Biscuitwares – especially Cuyamungue Black/tan can be found in Ken Honea's (1968) discussion of ceramics from LA 6455 (the Alfred Herrera Site) near Cochiti Pueblo. Contrary to Mera's thinking, that Potsuwi'I Incised was a "predecessor" to Sankawi Black/cream, Wilson and Lewis suggest that there were "two separate trajectories for the two types defined by Mera: one leading from Biscuit B to Cuyamungue Black-on-tan to Sankawi Black-on-cream and ultimately to Tewa Polychrome, (if, in fact Cuyamungue is considered a useful type, distinguishable only from rim form from similar 'tan'- firing Biscuit B vessels; e.g. Gauthier 1987); and the other leading from Potsuwi'I Incised to Tewa Plain Ware types."

Somewhere in the transition from Sankawi B/c to Tewa Polychrome are those, as yet, only occasionally reported examples of Sankawi jars with red-painted rim interiors (e.g. Barnett 1969:157; Snow 1963:15). Not formally described in the literature, they have been referred to as "Sankawi Polychrome." Somehow these are 'transitional' between Sankawi B/c and Tewa or Pojoaque (or "Sakona") Polychromes. Interestingly, a sherd of what can only be Biscuit B from the surface of Pottery Mound, bears red in the design, and can be seen in Mera's type collection from LA 416.

**Bulletin 5, A Proposed Revision of the Rio Grande Glaze Paint Sequence.** In her review, Cynthia Herhan rightly notes that Mera's proposed "revision" in reality was an effort to 'devise' a more comprehensive approach to changing attributes within the Rio Grande Glazeware sequence. Mera's Glazeware 'groups' (A through F), based only on rim forms, still are used all too frequently by regional archaeologists as a kind of shorthand for the tentative time frames proposed by Mera based on scanty and not well-dated tree-ring studies some 75 years ago! Orcutt's (1999:96; my emphasis) apparent surprise at finding that "Glaze A....types (lumped) occur in proveniences dating after the mid-fourteenth century and seem never to die out...." reflects the obvious need for re-thinking Glazeware spatial and temporal variability; and Herhan cites recent efforts to catch up on our thinking about the dating of the Glazeware types. Neither Mera's nor Kidder's sequence of rim forms capture the range of variability in Glazeware production, as Kidder himself realized (Kidder and Shepard 1936:xx; and see Snow and Franklin in press). It might surprise the reader to learn that I count some 50 'type' or 'variety' names that have been advanced (and generally ignored!) in the extant literature over the years to accommodate obvious Glazeware variability!

**Bulletin 6, A Survey of the Biscuit Ware Area in Northern New Mexico,** is reviewed by Rory Gauthier and Cynthia Herhan who point out that Mera's survey of the Biscuit Ware area, essentially, was an effort to chart demographic changes in the northern Rio Grande, from



the Lower Rio Chama to Santa Fe. This theme of demographic processes, was re-visited by Mera in Bulletin 8, focusing on the Rio Grande Glaze Ware sites. Mera's inventory of Biscuit Ware sites in the northern Rio Grande focused on the defensibility, or not, of their situation, and he speculated on the possibility that regional hostilities might have been responsible for sites located in more or less inaccessible settings. Gauthier and Herhan briefly review the more recent literature of 'warfare' in the Biscuit Ware region and note that much of the evidence is restricted to the Chama Basin villages. Interestingly, review of surveys of the Santa Cruz drainage indicates clearly that much of the western face of the Sangre de Cristo range, east of the Rio Grande, was no longer inhabited by the beginning of Biscuit A times, or ca. A.D. 1325 ~ 1350, as only a small handful of sherds of that type are reported (Marshall and Walt 2007). It is at the end of Wiyo ~ beginning of Biscuit A that many, if not most, of the well-known Chama Basin sites appear to have grown to relatively large sizes, for reasons as yet not satisfactorily explored.

Finally, the reviewers note the paucity of "Tsankawi" Black/cream from the lower Chama villages, and its frequency at large, late sites on the nearby Pajarito Plateau (Tsirege, Tsankawi, and so on). They suggest, and I agree wholeheartedly, that it was to those large nearly inaccessible villages that Castañeda's account of the Barrionuevo expedition's encounter at the pueblo of Yunqueyunque referred to in 1540-1541. As a result, they suggest that the accepted end date of Tsankawi Black/cream (formally described as Sankawi) might be later than generally stated, and cite the OSL date obtained on a single sherd of this type (OSL date of 1680± 27, with an error percentage of 6.9; e.g. Ramenofsky and Feathers 2002:146). A significant number of factors affect the accuracy of OSL dating of surface ceramics, however, and the article by Ramenofsky and Feathers fails to discuss the potential of such factors that might have resulted in an inaccurate date on the sherd in question (see Feathers 2008).

**Bulletin 7, Observations on the Archaeology of Petrified Forest National Monument**, is reviewed by Sara Herr who emphasizes the prehistoric 'crossroads' for the exchange of ideas and technology, and the ceramic 'interface' between indigenous and migrating people through this critical arena during the late 13<sup>th</sup> and 14<sup>th</sup> centuries. Herr lists 29 ceramic types found in the region, both indigenous and trade, or local copies of non-local types, of which 13 were initially described by Mera in the 1934 Bulletin. Herr discusses the need to understand the "behaviors" that created the type and ware variability in ceramics of this, as yet, under-investigated region, situated between 'brown-ware' (i.e., "Mogollon") and 'gray-ware' (with apologies, "Anasazi") traditions. She emphasizes the need to learn how technologies (temper materials, firing strategies, clay sources) and design combined and evolved to produce the variability initially described by Mera and subsequently elaborated by Hays-Gilpin and van Hartesveldt, now more than 10 years ago. There is an error in which F. W. Hodge is identified as "Hodges" in the text and references cited.

**Bulletin 8, Ceramic Clues to the Prehistory of North Central New Mexico.** In this in-depth overview of the development of the 'Rio Grande White Ware' series, reviewed by Reggie Wiseman, Mera set forth his thoughts on the relationships between ceramic developments in the Chaco-San Juan regions and their seeming counterparts on the eastern peripheries of the pueblo 'heartland'. Wiseman, clearly, has a difficult task in reviewing not only Mera's notions, but in attempting to provide the reader with a synthesis of more recent thinking on Mera's original essay. The reader will find much to chew on in both of the essays! Suffice it to say that it is

clear that the ceramic ‘history’ of the eastern pueblo world remains something of a muddle that involves an understanding of the ‘movement’ both of people and ideas (and perhaps, materials, such as ‘potting’, ‘slip’ clays, and paint?); the exploration of reasons why, and under what conditions which technologies and canons of style, were, or were not deemed acceptable by local potters and their communities; how and why did ceramic traditions persist, or not; as well as the ‘roles’ played by various ceramic vessel forms and their attributes in social contexts; and, of course, do potsherds really ‘speak’ languages (Tewa Polychrome?), when and/or why? Wiseman wisely leaves aside such theoretical issues for others to consider and, for the most part, avoids the temptation to engage with Mera’s speculations on the languages of the ‘cultures’ that produced the types he described, and concentrates on providing a useful review of more recent research.

Mera’s review of the ancestry of the Rio Grande White Ware series ends with a brief introduction to subsequent series, the Rio Grande Glaze Wares, describing a locally-made Los Padillas Glaze-polychrome as an “intermediate” variety between the western glaze type, St Johns Polychrome, and his earlier described Agua Fria Glaze-on-red. Mera (p. 32) notes that this transitional type, which he named here, Los Padillas Glaze-Polychrome, bears “both broad and narrow lines” in white matte paint only just below the exterior rim of bowls. Wiseman suggests that Los Padillas G-P remain a type, as it is “geographically and temporally distinct from Heshotauthla Polychrome” with thin white lines on bowl exteriors and, occasionally also black paint (Carlson 1970:82).

Wiseman (p. 216) includes an observation from Hayward Franklin, who stated that “the key difference between Los Padillas and Arenal seems to be the use of sherd versus rock temper – a difference so minor that only variety status is warranted.” This is in error, although the increasing use of crushed rock for temper characterizes the Glaze Ware series. Confusion over what is Los Padillas G-P and a little used type name, Arenal Glaze-polychrome, results from Mera’s original description in 1933, in which he called “Arenal Glaze-Polychrome” bowls with thin line white exterior decoration. Included, he said, is a “variety of this sub-type [of Agua Fria], which is rarely encountered, [and] has black glaze elements added to the normally white decoration.” In Bulletin 8, he called the exterior white lined type, “Los Padillas Glaze-Polychrome” (rather than the earlier, “Arenal”). The distinctions reflect western styles (St. Johns and Heshotauthla Polychromes), but whether to retain the two names (or combine them: “Los Arenales”!) for the Rio Grande look-alikes is a question.

**Bulletin 9, Population Changes in the Rio Grande Glaze Paint Area.** Emily Brown succinctly reviews current ‘causal’ explanations for the late prehistoric aggregation of populations that Mera treated in this classic survey report of Rio Grande Glaze Ware sites. As with the Biscuit Ware area survey Mera treated with in Bulletin 6 (infra), he again resorted to ‘external threats’, presumably, from hostile eastern neighbors from the Plains as a major factor leading to the aggregation of populations that characterize many of the late Rio Grande pueblo communities. The usual culprits, Southern Athapaskans, reflects a theme that has been around for a good many years in the Southwest; although Ralph Linton (1944) long ago pointed out the limited ability (if any at all) of nomadic hunter/gather peoples to effectively dislodge pueblo peoples from their inward-oriented, multi-roomed and contiguous-walled villages. Nevertheless, Baugh (2008) has argued that the Santo Domingo Pueblo story of the destruction of a number of

pueblos by Wichita peoples, if it has any basis in fact, should be a lesson to the contrary (and see Bandelier 1892; White 1935); and recall that the accounts by Castañeda refer to similar 'recent' destruction of pueblos by non-pueblo people between the Rio Grande and Pecos Pueblo.

Eschewing the notion of 'alien others' from the Plains, recent efforts to promote inter-pueblo strife, the result, perhaps, of environmental degradation and/or competition for resources, resulting in aggregation, have come to be argued as likely explanations for obvious hostilities in the late pueblo worlds. Brown reviews these and related issues, and suggests that the Rio Grande late Classic Period was one during which "community boundaries first become visible architecturally," and to "heightened territoriality and community definition" (and see Habicht-Mauche 1993). Regardless of one's particular bias as the most likely explanatory processes that gave rise to the survey data compiled here by Mera, Brown notes that his efforts remain fundamental to subsequent discussions of the Rio Grande Classic Period and the processes that engendered what Mera so carefully recorded.

**Bulletin 10, A Variation of Southwestern Pueblo Culture.** Although the work reported in this pioneering study was not by Mera, the excavation of this small Glencoe Phase site on the Rio Peñasco on the east slopes of the Sacramento Mountains of east-central New Mexico, was carried out by Jesse D. Jennings under the auspices and direction of the Laboratory of Anthropology's Staff Archaeologist, Dr. Harry Mera. The brief report by Jennings and co-author, physical anthropologist, Georg Neumann represents the first such professional work in the region, as Wiseman notes in his review. Wiseman briefly reviews contacts with the adjacent Lincoln Phase people, suggesting that, in spite of proximity and evidence of exchange between the two 'cultures', the Glencoe Phase inhabitants maintained a separate identity until their 'disappearance' from the archeological record ca. A. D. 1350. Wiseman suggests that the occurrence of both deep and shallow 'pithouses' at Glencoe Phase sites might reflect seasonal differences; furthermore, that 'open' sites and rock shelters in the area of the Guadalupe Mountains might well reflect other aspects of Glencoe Phase strategies, including storage of collected wild resources. Regarding the sherds reported from these sites (Richard Brown and Roberts Shelter), Wiseman notes that the majority is Jornada Brown, and he argues that the presence of ceramics is not necessarily associated with maize agriculture (or horticulture?).

Wiseman briefly also discusses Neuman's physical anthropological section of the report, and points out that, although Neuman concluded that the residents of LA 2000 "were essentially Puebloan in character," subsequent investigators (Rocek and Speth 1986:167) of Lincoln Phase remains from the Henderson Site remarked on their "resemblances to both the Pueblo populations...and, more markedly, to the more scattered peoples of western Texas..." Results from Speth's work at Bloom Mound south of Henderson might provide additional information on the physical characteristics of the people of this extreme eastern frontier of the pueblo world.

**Bulletin 11, ["An Outline of"] Ceramic Developments in Southern and Southeastern New Mexico.** In his review of this lengthy survey of brown ware traditions by Mera, Reg Wiseman focuses on the difficulties in distinguishing between Jornada and El Paso Brown types, and discusses at some length the considerable variation in overlapping attributes of temper and its preparation, clay sources and firing 'strategies', and surface finish that might or might not be sufficiently consistently observed to allow the archeologist to decide on the appropriate

nomenclature. Wiseman notes Mera's original hypothesis, that the Brown Ware varieties of the considerable region over which they are found stem from an underlying Mogollon Brown Ware tradition remains the accepted thinking. Wiseman provides a table listing the regions and sub-regions of the occurrence of these types (Gladwin and Gladwin 1934), together with published (and unpublished) investigations that discuss the types and varieties encompassed by the term 'brown ware'. Wiseman also has provided a table of estimated dates for an overall 'sequence' from "Red-slipped Brown" through Lincoln Black-on-red. Together with his rather detailed overview of the various attributes recorded (or not) for these various Brown Ware types, the information in the tables is a useful contribution to those who are not intimately familiar with the ceramics of the regions covered by Mera's Bulletin (and this reviewer must be counted among them).

Not mentioned by Wiseman is an interesting aside briefly reviewed by Mera at the outset in this survey: the occurrence of cranial deformation on the small series of human remains reported up to that time. This is a theme briefly discussed by Georg Neuman in Bulletin 10, and in both instances, the possibility that 'others' are represented among the otherwise 'puebloan' inhabitants of the region, is alluded to. I find this quite interesting in the light of Erik Reed's various discussions of the seemingly sudden occurrence of occipital deformation in late prehistoric pueblo sites where, before, lambdoidal deformation apparently was a norm (e.g. Reed 1949, 1981; Morgan 2010). The observation that pronounced occipital deformation was a prehistoric Caddo trait (e.g. Krieger 1946:175-176) is of some interest in this regard; but, rather than 'resident' Caddo people, might this reflect merely a different style of cradleboard? Krieger's (1946) detailed discussion of similarities in bowl forms of late Caddo styles and the sudden appearance in the Rio Grande Glaze series of similar 'carinated' forms (Glazes C ~ D), as well, suggests that, perhaps there is more to Pueblo and Southern Plains contacts than Southwestern archeologists have been willing to consider?

*Since Mera: The Original Eleven Bulletins with Essays and Opinions Derived from Recent Research* is available at <http://newmexico-archaeology.org/books/>.

### References cited

Bandelier, Adolph F.

1892 Final Report of Investigations Among Indians of the Southwestern United States Carried on Mainly in the Years from 1880 to 1885. Part II. *Papers of the Archaeological Institute of America*. American Series IV. Cambridge.

Barnett, Franklin

1969 *Tonque Pueblo: A Report of Partial Excavation of an Ancient Pueblo IV Indian Ruin in New Mexico*. The Albuquerque Archaeological Society. Albuquerque.

Baugh, Timothy G.

2008 "The Anthropologies of Trade and Exchange: An Essay on Kirikir'i-s and Southern Plains Political Economy." *Plains Anthropologists* 53/208 (Memoir 40), pp.415-430.

Carlson, Roy L.

1970 White Mountain Redware: A Pottery Tradition of East-Central Arizona and Western New Mexico. *Anthropological Papers of the University of Arizona Number 19*. The University of Arizona Press. Tucson.

Davis, Hester A.

2008 Remembering Awatovi. The Story of an Archaeological Expedition in Northern Arizona, 1935-1939. *Peabody Museum Monographs, Number 10*. Peabody Museum of Archaeology and Ethnology. Harvard University. Cambridge, Massachusetts.

Feathers, James K.

2008 "Luminescence Dating In Archaeology." In, *Land Conveyance and Transfer Data Recovery Project: 7000 Years of Land Use on the Pajarito Plateau* (edited by Bradley J. Vierra and Kari M. Schmidt), Chapter 12, LA-UR-07-6205. Los Alamos National Laboratory. Los Alamos.

Frisbie, Theodore R.

2011 "Historical Background of the Reprinting with Updates: Laboratory of Anthropology Technical Series Bulletins." In, *Words and Sherds. Papers in Honor of Meliha S. Duran & David T. Kirkpatrick* (edited by Emily J. Brown, Carol J. Condie, and Helen K. Crotty), pp. 105-108. The Archaeological Society of New Mexico No. 37. Albuquerque.

Gauthier, Rory P.

1987 "Ceramics," In, *Howiri: Excavation at a Northern Rio Grande Biscuit Ware Site*, by Denise Fallon and Karen Wening, pp. 35-47. Museum of New Mexico Research Section, Laboratory of Anthropology Notes 261b. Santa Fe.

Gladwin, W. and H. S.

1934 A Method for the Designation of Cultures and Their Variations. *Medallion Papers. No. XV*. Globe.

Habicht-Mauche, Judith A.

1993 *The Pottery from Arroyo Hondo Pueblo, New Mexico: Tribalization and Trade in the Northern Rio Grande*. School of American Research Press. Santa Fe.

Harlow, Francis H.

1970 "History of Painted Tewa Pottery." In, *The Pottery of San Ildefonso Pueblo*, by Kenneth M. Chapman (pp. 37-51). The School of American Research and University of New Mexico Press. Albuquerque.

1973 *Matte-Paint Pottery of the Tewa, Keres and Zuni Pueblos*. Museum of New Mexico Press. Santa Fe.

Honea, Kenneth H.

1968 "Ceramics." In, *The Cochiti Dam Archaeological Salvage Project, Part 1: Report on the 1963 Season* (assembled by Charles H. Lange), pp. 111-169. Museum of New Mexico Research Records No. 6. Santa Fe.

Kidder, Alfred Vincent, and Anna O. Shepard

1936 *The Pottery of Pecos, Volume II*. Yale University Press. New Haven.

Krieger, Alex D.

1946 *Culture Complexes and Chronology in Northern Texas*. The University of Texas Publication No. 4640. Facsimile Reprint, Gustavs Library ([www.gustavslibrary.com](http://www.gustavslibrary.com)).

Linton, Ralph

1944 "Nomad raids and fortified pueblos." *American Antiquity* 10:28-32.

Marshall, Michael P., and Henry J. Walt

2007 *The Eastern Homeland of San Juan Pueblo: Tewa Land and Water Use in the Santa Cruz and Truchas Watersheds: An Archeological and Ethnogeographic Study*. Cibola Research Consultants Report No. 432. Albuquerque.

Morgan, Michèle E.

2010 "A Reassessment of the Human Remains from the Upper Pecos Valley, Formerly Curated at the Peabody Museum of Archaeology and Ethnology, Harvard University." In, *Pecos Pueblo Revisited: The Biological and Social Context* (edited by Michèle E. Morgan), pp. 27-41. Papers of the Peabody Museum of Archaeology and Ethnology, Harvard University. Cambridge, Massachusetts.

Orcutt, Janet D.

1999 "Chronology," In, *The Bandelier Archeological Survey: Volume 1* (edited by Robert P. Powers and Janet D. Orcutt), pp. 85-115. Intermountain Cultural Resources Management, Anthropology Program Professional Paper No. 57. Government Printing Office. Washington, D. C.

Ramenofsky, Ann F., and James K. Feathers

2002 Documents, Ceramics, Tree Rings, and Luminescence: Estimating Final Native Abandonment of the Lower Rio Chama. *Journal of Anthropological Research* 58/1:121-60.

Reed, Erik K.

1949 "The Significance of Skull Deformation in the Southwest." *El Palacio* 56/4:106-119

1981 "Human Skeletal Material from the Gran Quivira District." In, *Contributions to Gran Quivira Archeology* (edited by Alden C. Hayes), pp. 75-118, Publications in Archeology 17, National Park Service, U.S. Department of the Interior. Government Printing Office. Washington, D. C.

Rocek, Thomas R., and John D. Speth

1986 *The Henderson Site Burials: Glimpses of a Late Prehistoric Population in the Pecos Valley*. Museum of Anthropology, University of Michigan Technical Reports Number 18. Ann Arbor.

Snow, David H.

1963 Excavation field notes from Sapawe, LA 306, p. 15. ARMS

1972 (review of) The Pottery of San Ildefonso Pueblo, by Kenneth M. Chapman. *El Palacio* 78/2:45-47.

Snow, David H., and Hayward H. Franklin

2015 'Nodes of Individuality' and the Dimensions of Rio Grande Glazeware Variability. In *The Archaeological Society of New Mexico, Volume 41*. In press.

White, Leslie A.

1935 The Pueblo of Santo Domingo, New Mexico. *Memoirs of the American Anthropological Association Number 43*. Menasha.

Woodbury, Richard B.

1993 *60 Years of Southwestern Archaeology. A History of the Pecos Conference*. University of New Mexico Press. Albuquerque.



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Bice, Richard A. and William L. Sundt

1968 An Early Basketmaker Campsite – Report on AS-1, a Field Project of the Albuquerque Archaeological Society. Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A.

1968 Tonque Pueblo, Docent Handbook, for Exhibition Prepared by the Albuquerque Archaeological Society for the Museum of Albuquerque, September 7, 1968.

Barnett, Franklin

1969 Tonque Pueblo: A report of partial excavation of an ancient pueblo Indian ruin in New Mexico. Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A.

1970 Basketmaker III – Pueblo I Manifestations on the Rio Puerco of the East. Technical Notes, No. 1, Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A. and William M. Sundt

1972 Prieta Vista: A Small Pueblo III Ruin in North-Central New Mexico. Report of the Excavation of the AS-3 Site by the Albuquerque Archaeological Society in Cooperation with Eastern New Mexico University. Albuquerque Archaeological Society, Albuquerque, NM.

Barnett, Franklin and William M. Sundt

1973 San Ysidro Pueblos: Two Prehistoric Pueblo IV Ruins in New Mexico. Albuquerque Archaeological Society, Albuquerque, NM.

Barnett, Franklin

1974 Sandstone Hill Pueblo Ruin, Cibola Culture in Catron County, New Mexico. Albuquerque Archaeological Society, Albuquerque, NM.

Wiseman, Regge N.

1986 An Initial Study of the Origins of Chupadero Black-on-white. Technical Note No. 2, Albuquerque Archaeological Society, Albuquerque, NM.

Schroeder, A. H.

1987 Vidal Great Kiva Site, LA 16254, Progress Report for 1986. Albuquerque Archaeological Society, Albuquerque, NM.



Sundt, William M., and Richard A. Bice

1989 Tijeras Canyon Sites AS-10: Preliminary Report. Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A., Sheila Brewer, Bettie Terry, Phyllis Davis, Gordon Page, Elizabeth Kelley, William Sundt and Joan Wilkes.

1990 The Vidal Great Kiva Near Gallup, New Mexico, Summary Status Report. Albuquerque Archaeological Society, Albuquerque, NM.

King, Dudley W., and Richard A. Bice

1992 Subfloor Channels in Prehistoric Ruins: Anasazi Region of the Southwest. Albuquerque Archaeological Society, Albuquerque, NM.

Olson, Nancy H., and Richard A. Bice, edited by Alan, M. Shalette

1995 The Albuquerque Archaeological Society: the first Twenty-Five Years, 1966-1991. Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A.

1997 Field Guide to Mid-Rio Grande Pottery. Technical Note No. 4. Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A.

1998 Prehispanic Pueblo Pottery, second edition.

Bice, Richard A., Phyllis S. Davis and William M. Sundt

1998 The AS-8 Pueblo and the Canada de las Milpas, a Pueblo III complex in North-Central New Mexico. Albuquerque Archaeological Society, Albuquerque, NM.

Bice, Richard A., Phyllis S. Davis and William M. Sundt

2003 AS-5, Indian Mining of Lead for Use in Rio Grande Glaze Pain, Report of the AS-5 Bethsheba Project Near Cerillos, New Mexico. Albuquerque Archaeological Society, Albuquerque, NM.

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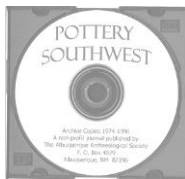
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