



# POTTERY SOUTHWEST

Volume 25, No. 3  
Fall 2006 (\$3.00)

November, 2006  
ISSN 0738-8020

**In This Issue:** Meet *Pottery Southwest's* new editorial board members on pages 2-3. From Joan Mathien we take a look at *Ceramic Studies in Chaco Canyon* followed by Meghan Trowbridge's work on *Maker's Marks on Chacoan Black-on-White Ceramics*. A short excerpt from the Maxwell Museum's recent *Pottery Mound: The 1954 Field Season* rounds out the issue and prepares our readers for our **Special Winter Issue** on *Rio Grande Glazeware Classification at Pottery Mound, New Mexico*. Continuing features include "Recent Dissertations and Theses", "On the Shelf", and "On View". Finally, we are providing 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 28 for how-to).

## CONTENTS

	<u>Page(s)</u>
<b>Introducing <i>Pottery Southwest's</i> editorial board members</b> .....	2-3
<b>Ceramic Studies in Chaco Canyon</b>	
by Frances Joan Mathien .....	4-13
<b>Maker's Marks on Chacoan Black-on-White Ceramics</b>	
by Meghan Trowbridge.....	14-20
<b>Excerpt from <i>Pottery Mound: The 1954 Field Season</i></b>	
by Jean H. Ballagh and David A. Phillips, Jr.....	21-22
<b>Recent Dissertations and Theses Abstracts from ProQuest</b>	
<i>Production, exchange, and social identity: A study of Chupadero</i> <i>black-on-white pottery (New Mexico)</i> by Tiffany C. Clark Ph.D.....	23
<i>The emergence of Jicarilla Apache enclave economy during the</i> <i>19th century in northern New Mexico</i> by Bernice Sunday Eiselt Ph.D. ....	24
<i>Community reorganization in the southern zone of the Casas Grandes</i> <i>culture area of Chihuahua, Mexico</i> by Karin Burd Larkin Ph.D. ....	24-25
<b>On the Shelf: Recent Publications of Interest</b> .....	25-27
<b>On View: In Museums and on the World Wide Web</b> .....	27-28
<b>How to Submit Papers and Inquiries</b> .....	29
<b>Order Form for Archival CD of Pottery Southwest</b> .....	30

M. Patricia Lee, Chair, Pottery Southwest Publications  
*Pottery Southwest* is a non-profit journal of the Albuquerque Archaeological Society

## Introducing *Pottery Southwest's* editorial board members

by  
M. Patricia Lee  
Chair, Pottery Southwest Publications

As Chair of Pottery Southwest Publications and as an editor, I am convinced that one of my primary responsibilities is to ensure the growth and longevity of *Pottery Southwest*. Towards that end we are extremely fortunate that the following distinguished individuals have agreed to lend their talents to our publication. At the outset of *Pottery Southwest's* revitalization, Dave Phillips and Christine VanPool provided immeasurable support with their commitment to our editorial board. Now, I am proud to announce the following additional members to *Pottery Southwest's* editorial board:

**David R. Abbott** is an Associate Professor of Anthropology at Arizona State University. He has designed and is conducting a long-term research program focused on modeling the ancient exchange and social networks that composed the Hohokam regional system and developing the unique contribution that ceramic research can make to the study of prehistoric communities. He earned his Ph.D. from Arizona State University in 1994.

**Leslie Cohen** holds a BA in English Literature and Creative writing from Brown University, an MA in Education and a Master's in Anthropology and Archaeology from Harvard University. Her research focuses on the ceramics of the Mogollon and Northern Rio Grande regions of New Mexico. She also coordinates a site steward program in Santa Fe and is a Research Associate of the Laboratory of Anthropology, Santa Fe.

**Patricia L. Crown** received her PhD from the University of Arizona in 1981 and is Professor of Anthropology at the University of New Mexico. She has conducted field investigations in the Ancestral Pueblo, Mogollon, and Hohokam areas of the American Southwest. Most of her research has concerned the manufacture and exchange of ceramics in the Southwest. Her books include *Ceramic Production in the American Southwest* (edited with Barbara Mills, University of Arizona Press) and *Ceramics and Ideology: Salado Polychrome Pottery* (University of New Mexico Press). She is currently writing a book on how children learned to make pottery in the past.

**Kelley Hays-Gilpin** received her doctorate from the University of Arizona in 1992, and is currently Associate Professor of Anthropology at Northern Arizona University. She serves as the Edward Bridge Danson Chair of Anthropology at the Museum of Northern Arizona, where she oversees the Colton Ceramic Repository for Colorado Plateau ceramics. Her research focuses on ancestral Hopi art and lifeways, iconography, ceramics, rock art, and fiber perishables. Her publications include *Prehistoric Ceramics of the Puerco Valley, Arizona* (with Eric van Hartesveldt) in the Museum of Northern Arizona Ceramic Series, *Prehistoric Sandals of Northeastern Arizona: the Earl H. and Ann Axtell Morris Research* (with Ann C. Deegan and Elizabeth Ann Morris), and *Ambiguous Images: Gender and Rock Art* (winner of the 2005 Society for American Archaeology Book Award).

**Donna Glowacki** has been involved in Southwest archaeology since 1992. She recently completed her dissertation at Arizona State University and is currently an archaeologist at Mesa Verde National Park and a research associate with Crow Canyon Archaeological Center. Her research focuses on social changes leading to regional depopulation and migration in the Northern San Juan region, pottery production and exchange, and the formation of aggregated villages.

**Peter McKenna** has been involved in Southwest archaeology since 1968 and is presently working as an archaeologist for the Southwest Region of the Bureau of Indian Affairs in Albuquerque. He continues an interest in mid-range methods of analysis and ceramic classification systems and how those approaches might be applied to ceramic interpretation(s). He received an M.A. from Eastern New Mexico University. His publications include *The Architecture and Material Culture of 29SJ1360 Chaco Canyon, New Mexico*. Reports of the Chaco Center 7. Division of Cultural Research, National Park Service, Albuquerque (1984), *Aztec Black, Pottery Southwest*, 19(1):1-7, and Regional Patterns of Great House Development among the Totah Anasazi, New Mexico. In *Anasazi Regional Organization and the Chaco System*, edited by D.E. Doyel, pp. 133-143. Maxwell Museum of Anthropology, Anthropological Papers 5. University of New Mexico, Albuquerque with H. Wolcott Toll (1992).

Continuing on our editorial board are:

**M. Patricia Lee**, Chair, Pottery Southwest Publications, holds a BA/MA in anthropology from Hunter College and is ABD in archaeology at the City University of New York. Her research interests include the international four corners region of Sonora, Chihuahua, Arizona, and New Mexico as well as pre-contact ceramics and iconography. She earned a Graduate Certificate in Historic Preservation and Regionalism from the School of Architecture and Planning, University of New Mexico in 2005.

**David Phillips** has been involved in Southwest archaeology since 1970 and is currently the Curator of Archaeology at the Maxwell Museum, University of New Mexico. He is also an adjunct Associate Professor of anthropology at UNM. He received his Ph.D. from the University of Arizona.

**Christine S. VanPool** received her doctorate from the University of New Mexico and is now a visiting Assistant Professor at the University of Missouri-Columbia. Her research focuses on Casas Grandes archaeology, ceramics, and iconography, along with general questions concerning archaeological method and theory, and shamanic and gender practices throughout northern Mexico and the American Southwest.

# Ceramic Studies in Chaco Canyon

Frances Joan Mathien

“*Culture and Ecology of Chaco Canyon and the San Juan Basin*”<sup>1</sup> is a synthesis of the National Park Service’s (NPS) research conducted in northwestern New Mexico between 1969 and 1985. Because the volume of material collected during surveys and excavations/tests at two dozen archaeological sites, I took a historical approach when writing sections that cover studies of the Preceramic, the early Pueblo, and the Historic periods, as well as natural resources and the environment. Each section covers what was known about these topics prior to 1969, the goals of the research, and the results. In addition, studies are placed within the framework of a major study of cultural and ecology that was ongoing at the time of the Chaco Project, and some directions for future research are offered.

The early Pueblo occupation, with its spectacular architecture, elicited numerous topics for investigation. Prior studies of Chaco ceramics resulted in two descriptive series (Hawley 1934, 1936, 1939; Roberts 1927), which were later updated by Gordon Vivian (1959, 1965; Vivian and Mathews 1965). There remained many questions regarding type descriptions, chronology, change from mineral to carbon paint in Chaco, production, and importation. Based on initial studies of temper materials by A. Helene Warren (1976, 1977, 1980), and through ceramic analyses of Thomas C. Windes, Peter J. McKenna, and H. Wolcott Toll (Toll and McKenna 1997:Appendix A; Windes and McKenna 1989), we now have a well-dated sequence of pottery types with more detailed descriptions for the Chaco series. For example, Windes (1985) paid particular attention to Chaco-McElmo Black-on-white, a type that has a short temporal span and reflects affinity with other black-on-white types in the San Juan Basin. Other studies are reviewed below; references cited allow the reader to go directly to original reports. The results of these studies had important consequences for the interpretation of social organization by Chaco Project personnel.<sup>2</sup>

## Ceramic Chronology

Evidence from two sites provides details pertaining to ceramic assemblage change from the late A.D. 800s through the early 1100s. At 29SJ629, 150 years of occupation produced a predominantly Red Mesa Black-on-white ceramic assemblage. Both the transitions from Kiatuthlanna Black-on-white to Red Mesa Black-on-white and from Red Mesa Black-on-white to Gallup Black-on-white indicate a continuum in ceramic development (Toll and McKenna 1993). At Pueblo Alto (29SJ389), the lowest deposits in the Trash Mound indicate use of a Red Mesa Black-on-white assemblage, which was replaced by a Gallup Black-on-white assemblage dating ca. A.D. 1050 to 1100. Evidence for a Late Mix ceramic assemblage comes from rooms/kivas within the great house that were used as trash repositories (Toll and McKenna 1987; Windes 1987). Additionally, by using KYST, a multidimensional scaling software program, Windes (1987[I]:253-269; 1993:333) was able to refine the temporal placement of ceramic types at Pueblo Alto and 29SJ629. The ceramic descriptions and chronological placements of ceramic types have been used to compare data among outlying communities and evaluate links between communities and events in more recent models of social organization (e.g., Mills 1986). Tables in Mathien (2005:Appendix B) correlate the various chronologies used by Chaco Project personnel.

## Ceramic Production and Importation

There is some evidence, but less than one might expect, for pottery production in Chaco Canyon during the Bonito Phase (ca. A.D. 900-1140). Toll and McKenna (1997:156, Table 2.67) list types of data (kaolin cakes, balls of clay, unfired clay sherds, paint, scrapers, polishers, and other tools) recovered from excavated sites. Basketmaker III-Pueblo I sites have more convincing evidence than later Bonito Phase sites, especially when compared with data from the San Juan Basin. A lack of potters' tool kits among grave goods in the Classic Bonito Phase (Akins 1986) supports the suggestion of importation, possibly due to a lack of fuel in the canyon by this time.

Studies of temper confirmed an increase in numbers of ceramic imports through time and indicated acquisition from the south, west, and east existed throughout the Pueblo occupation. There were, however, shifts in percentages through time. Although the percentages of imports are lower at earlier times, all major imported temper types found throughout time in Chaco Canyon ceramics are represented in the samples recovered at Basketmaker III and Pueblo I sites (Toll and McKenna 1997: Table 2.58). Prior to the A.D. 800s, these imports included a number of brown wares, red wares, and smudged wares of the Forestdale/Woodruff series that are attributed to the eastern Arizona and southern New Mexico or Mogollon regions. Some Lino Red ceramics may have been brought in from the San Juan Basin. Only a small percent of the gray ware and white ware was imported from areas in the San Juan Basin. Between A.D. 800 and 920, approximately 55.1 percent of the gray ware and 38.9 percent of the white ware came from areas throughout the San Juan Basin. Trachyte (from the Chuska area) and chalcedonic sandstone were the dominant temper types. A conservative estimate of total imported wares reached 50.4 percent during the Classic Bonito Phase. The data support conclusions of Anna Shepard who conducted a study of a sample of sherds from Pueblo Bonito (Judd 1954).

## Ceramic Ware Forms and Design Styles

Changes in ceramic wares, forms, and design styles parallel those found throughout the Anasazi region. The treatment of gray ware jar surfaces went from smoothly scraped during the earliest period to texturing (wide neckbanding) on the upper one-third of the jar necks, probably around A.D. 850 to 925. Decorated wares are not common prior to A.D. 700. Slips are not common prior to A.D. 850. White wares increase through time with the greatest number present after A.D. 820. There was some change in design elements between the early and late Red Mesa Black-on-white ceramic period. There was a change in design styles from "isolated to continuous lines bisecting or quartering the vessel, to designs pendant from rims. Hachure was recorded on less than 5 percent of Pueblo I vessels; it was the dominant design around A.D. 1050 to 1100 (Toll and McKenna 1997:a43).



Chaco Bowl

Courtesy: Chaco Culture National Park, CHCU 7230

### Ceramic Craft Specialization

Toll (1985; Toll and McKenna 1977) evaluated the assumption that the more standardization in size, the more likely there was craft specialization. He considered the recognized broad based ceramic shifts throughout the Anasazi region. He was unable to determine the exact level of ceramic specialization. There was no evidence for production of specialized forms by producers attached to elite leaders. The technology used to produce special forms was shared over a wide area and appeared on even the more abundant ceramic forms. Based on temper analyses, production took place at various locations. Yet, at least some producers made more than they needed. Toll suggests that by A.D. 1100 it is possible that a combination of some individuals, or even community specialists, existed and that there may have been a low level of specialization.



Chaco Bowl

Courtesy: Chaco Culture National Park, CHCU 29371

## Indications of Social Organization

At 29SJ1360 pottery types in Pithouse B, where two women and two children were recovered, included Red Mesa Black-on-white and narrow-neckbanded culinary ware that are generally dated to the Early Bonito Phase. The presence of early Gallup Black-on-white, Escavada Black-on-white, and Mancos Black-on-white, however, placed the terminal use of this structure at around A.D. 1020 to 1030. Pairing of open and closed pottery forms (e.g., two early Gallup Black-on-white pitchers) on both sides of the firepit suggested the possibility that two nuclear families used this structure. This was supported by the two possible clusters of bone tools on distinct sides of the bench (McKenna 1984).

Recovery of one cylinder jar sherd at 29SJ1360 (McKenna 1984:197-191) suggests ties for this site to Pueblo Bonito, which has the greatest numbers of cylinder jars recovered to date (Toll 1990). This sherd and part of a macaw skeleton, plus Akins' (1986) craniometric analysis of human remains also suggest a possible tie with Pueblo Bonito that is not yet found at other small sites in the canyon.

At 29SJ627, mealing rooms 19 and 20 were associated with a high number of white wares and might be part of the grinding complex. The presence of features and white wares in of two rooms in the pairs of storage rooms (rooms 4/9 and 16/19), while the other rooms had no features and higher numbers of culinary wares, also suggests differences in types of storage, possibly long- and short-term (Toll and McKenna 1992:225).

At 29SJ626, Windes (1993:187, 404) found evidence for intentional breakage of overall indented corrugated jars at abandonment. He suggested that purposeful destruction of these Chuskan vessels, which are later than the other ceramics at 29SJ626, was possibly due to inability to cope with bad times between A.D. 990 and 1040.

A trench through the trash mound at Pueblo Alto (Windes 1987[II]) revealed three types of deposition dating from A.D. 1040 to 1100. The earliest pottery types consisted mainly of construction debris and a Red Mesa assemblage. The intermediate layers contained a Gallup ceramic assemblage, two of which contained faunal remains suggestive of feasting activities. When ceramic data were compared with those from trash middens at small house sites (Toll and McKenna 1987; Windes 1987[II]:615), these layers were not considered representative of typical year-round habitation, even though Akins's (1984) faunal analysis suggested year-round use. Based on the unusually high number of ceramics and lithics, Toll and McKenna (1987) thought that this site was used either intermittently or was the location of large periodic gatherings in which many vessels were broken. Additionally, a cache of six broken Gallup Black-on-white bowls that were part of a trash deposit shortly after construction episodes ended suggested an intentional offering that compared to contemporary Zuni practices (Toll and McKenna 1987:178-181).

Because Pueblo Alto was occupied for some time after trash deposition on the mound ceased and this trash was not disturbed, Windes (1987[II]:667) suggested a special function for this feature, here and at other great houses of the same period. A planned ritual landscape proposed for great house areas (Stein and Lekson 1992) was implied and led to the model of Chaco as a ritual center. Yet Wills (2001) questions whether the trash mounds were

“intentionally” constructed for ritual. Because the faunal remains do not represent seasonal discard but suggest year-round use (Akins 1984), Wills suggested that the higher number of ceramics in the midden represent the feeding of the labor force during construction-related activities; this construction may have been ritually motivated, but not necessarily a planned deposition of materials to form the mound.

The deposition of trash in unused rooms rather than the trash mound at Pueblo Alto, which included the Late Mix ceramic assemblage after A.D. 1100, suggested a change in social organization at the end of the Classic Bonito Phase (Gallup ceramic assemblage).

Some scholars, e.g., Washburn (1980), examined similarities in the form of cylinder jars to support the possibility that Mesoamerican influence played a role in the development of complex society in Chaco. Toll's (1990) reappraisal of cylinder jars indicates a number were produced in the San Juan Basin. More recent investigations by Crown and Wills (2003) indicate that some were even repainted. Their limited distribution, most in Pueblo Bonito, suggests a role during period ceremonial events.

Who was responsible for ceremonial events has not been resolved. Although Lister (1978) recognized that external influences were possible, Mathien (1986) concluded that long-distant contact was more likely to have been through intermediaries in a down-the-line manner that passed goods and information among various peoples. Some Chaco Project investigators proposed the development of local elite managers, but do not agree on how they evolved or the level of stratification achieved (see Judge 1989, 1991). In contrast, Toll (1985; Toll and McKenna 1997) suggests a low level of ceramic specialization would better fit with concepts of a Chaco World organized through “costumbre” in which communal knowledge of what is done and how it is done is applied to ceramic production and distribution, as well as to social relationships and ritual observance. His ideas are closer to those of Gwinn Vivian (1990), who used a Tewa model of dual social organization to explain how leadership might produce the organization necessary to support the Bonito Phase in Chaco Canyon and the San Juan Basin. How the San Juan Basin was integrated is still debated and will not be solved without further research (see discussions in Lekson 2006<sup>2</sup> especially Sebastian 2006).

### Summary

Analyses of ceramics helped define the Early, Classic, and Late Bonito Phases and distinguish changes that occurred among them. These analyses led to questions about the function of some features, in particular the great houses and their trash mounds, the number of people living in these features, and the relationship of these features to small sites. The data could be used to support several models for social organization (hierarchical, dual leadership, etc.). These models were evaluated against environmental reconstructions to determine that although climatic change did affect social organization, it was not the only factor. Some social changes were probably the result of other cultural events. Thus, many questions remain to be answered, some aided by ceramic studies.



## References

Akins, Nancy J.

- 1984 Temporal Variation in Faunal Assemblages from Chaco Canyon. In *Recent Research on Chaco Prehistory*, edited by W. James Judge and John D. Schelberg, pp. 225-240. Reports of the Chaco Center No. 8. Division of Cultural Research, National Park Service, Albuquerque.
- 1986 *A Biocultural Approach to Human Burials from Chaco Canyon, New Mexico*. Reports of the Chaco Center No. 9. Branch of Cultural Research, National Park Service, Santa Fe.

Crown, Patricia L. and W. H. Wills

- 2003 Modifying Pottery and Kivas at Chaco: Pentimento, Restoration, or Renewal? *American Antiquity* 68(3), July 2003.

Hawley, Florence M

- 1934 *The Significance of the Dated Prehistory of Chetro Ketl*. University of New Mexico Bulletin 246, Monograph Series 1(1). University of New Mexico and School of American Research, Santa Fe. University of New Mexico Press, Albuquerque.
- 1936 *Field Manual of Prehistoric Southwestern Pottery Types*. University of New Mexico Bulletin No. 291, Anthropological Series 1(4). University of New Mexico, Albuquerque.
- 1939 Additions to Descriptions of Chaco Pottery Types. In *Preliminary Report on the 1937 Excavations, Bc 50-51, Chaco Canyon, New Mexico*, edited by Clyde Kluckhohn and Paul Reiter, pp. 49-53. University of New Mexico Bulletin 345, Anthropological Series 3(2). University of New Mexico, Albuquerque.

Judd, Neil M.

- 1954 *The Material Culture of Pueblo Bonito*. Smithsonian Miscellaneous Collections 147(1). Washington, D.C.

Judge, W. James

- 1989 Chaco Canyon-San Juan Basin. In *Dynamics of Southwest Prehistory*, edited by Linda S. Cordell and George J. Gumerman, pp. 209-261. Smithsonian Institution Press, Washington, D.C.
- 1991 Chaco: Current Views of Prehistory and the Regional System. In *Chaco and Hohokam: Prehistoric Regional Systems in the American Southwest*, edited by Patricia L. Crown and W. James Judge, pp. 11-30. School of American Research Press, Santa Fe.

Lister, Robert H.

- 1978 Mesoamerican Influence on Chaco Canyon, New Mexico. In *Across the Chichimec Sea. Papers in Honor of J. Charles Kelley*, edited by Carroll L. Riley and Basil C. Hedrick, pp. 233-241. Southern Illinois University Press, Carbondale.

Mathien, Frances Joan

- 1986 External Contacts and the Chaco Anasazi. In *Ripples in the Chichimec Sea. New Considerations of Southwestern-Mesoamerican Interaction*, edited by Frances Joan Mathien and Randall H. McGuire, pp. 220-240. Southern Illinois Press, Carbondale.

McKenna, Peter J.

- 1984 *The Architecture and Material Culture of 29SJ1360, Chaco Canyon, New Mexico*. Reports of the Chaco Center, No. 7. Division of Cultural Research, National Park Service, Albuquerque.

Mills, Barbara J.

- 1986 Regional Patterns of Ceramic Variability in the San Juan Basin: Ceramics of the Chaco Additions Inventory Survey. Final Report Contract PX 7029-5-C034. Branch of Cultural Research, National Park Service, Santa F

Roberts, Frank H.H., Jr.

- 1927 *The Ceramic Sequence in the Chaco Canyon, New Mexico, and Its Relation to the Cultures of the San Juan Basin*. Ph.D. dissertation, Harvard University, Cambridge, MA.

Sebastian, Lynne

- 2006 The Chaco Synthesis. In *The Archaeology of Chaco Canyon: An Eleventh Century Pueblo Regional Center*, edited by Stephen H. Lekson, pp. 393-422. School of American Research Press, Santa Fe.

Toll, H. Wolcott

- 1985 *Pottery, Production, Public Architecture, and the Chaco Anasazi System*. Unpublished Ph.D. dissertation, Department of Anthropology, University of Colorado, Boulder.

- 1990 A Reappraisal of Chaco Cylinder Jars. In *Clues to the Past. Papers in Honor of William M. Sundt*, edited by Meliha S. Duran and David T. Kirkpatrick, pp. 273-306. Papers of the Archaeological Society of New Mexico: 16.

Toll, H. Wolcott, and Peter J. McKenna

- 1987 The Ceramography of Pueblo Alto. In *Investigations at the Pueblo Alto Complex, Chaco Canyon, New Mexico, 1975-1979. Volume III. Artifactual and Biological Analyses*, edited by Frances Joan Mathien and Thomas C. Windes, pp. 19-230.

Publications in Archeology 18F, Chaco Canyon Studies. National Park Service, Santa Fe.

- 1992 The Rhetoric and the Ceramics: Discussion of Types, Function, Distribution, and Sources of the Ceramics of 29SJ627. In *Excavations at 29JS627, Chaco Canyon, New Mexico. Volume II. The Artifact Analyses*, edited by Frances Joan Mathien, pp. 37-248. Reports of the Chaco Center No. 11. Branch of Cultural Research, National Park Service, Santa Fe.
- 1993 The Testimony of the Spadefoot Toad Ceramics. In *The Spadefoot Toad Site: Investigations at 29SJ629, Chaco Canyon, New Mexico. Volume II: Artifactual and Biological Analyses*, edited by Thomas C. Windes, pp. 15-134. Reports of the Chaco Center No. 12. Branch of Cultural Research, National Park Service, Santa Fe.
- 1997 Chaco Ceramics. In *Ceramics, Lithics, and Ornaments of Chaco Canyon. Analyses of Artifacts from the Chaco Project, 1971-1978*, edited by Frances Joan Mathien, pp. 17-530. Publications in Archeology 18G, Chaco Canyon Studies. National Park Service, Santa Fe.

Toll, H. Wolcott, Thomas C. Windes, and Peter J. McKenna

- 1980 Late Ceramic Patterns in Chaco Canyon: The Pragmatics of Modeling Ceramic Exchange. In *Models and Methods in regional Exchange*, edited by Robert S. Fry, pp. 95-117. SAA Papers No. 1. Society for American Archaeology, Washington, D.C.

Vivian, R. Gordon

- 1959 *The Hubbard Site and Other Tri-wall Structures in New Mexico and Colorado*. National Park Service, Archaeological Research Series No. 5. Washington, D.C.
- 1965 *The Three-C Site, an Early Pueblo II Ruin in Chaco Canyon, New Mexico*. University of New Mexico Publications in Anthropology No. 13. University of New Mexico, Albuquerque.

Vivian, R. Gordon, and Tom W. Mathews

- 1965 *Kin Kletso: A Pueblo III community in Chaco Canyon, New Mexico*. Technical Series 6(1):1-115. Southwest Parks and Monuments Association, Globe, AZ.

Vivian, R. Gwinn

- 1990 *The Chacoan Prehistory of the San Juan Basin*. Academic Press, San Diego.

Warren, A. Helene

- 1976 Technological Studies of the Pottery of Chaco Canyon. Ms. On file, Chaco Culture National Historical Park Museum Archive, University of New Mexico, Albuquerque.

- 1977 Source Area Studies of Pueblo I-III Pottery of Chaco Canyon 1976-1977. Ms. On file, Chaco Culture National Historical Park Museum Archive, University of New Mexico, Albuquerque.
- 1980 Production and Distribution of Pottery in Chaco Canyon and Northwestern New Mexico. Ms. On file, Chaco Culture National Historical Park Museum Archive, University of New Mexico, Albuquerque.

Washburn, Dorothy K.

- 1980 The Mexican Connection: Cylinder Jars from the Valley of Oaxaca. In *New Frontiers in the Archaeology and Ethnohistory of the Greater Southwest*, edited by Carroll L. Riley and Basil C. Hedrick. *Transactions of the Illinois Academy of Science* 72(4):70-85.

Wills, Wirt H.

- 2001 Ritual and Mound Formation During the Bonito Phase in Chaco Canyon. *American Antiquity* 66(3):433-451.

Windes, Thomas C.

- 1985 Chaco-McElmo Black-on-White from Chaco Canyon with an Emphasis on the Pueblo del Arroyo Collection. In *Prehistory and History of the Southwest. Collected Papers in Honor of Alden C. Hayes*, edited by Nancy Fox, pp. 19-42. Papers of the Archaeological Society of New Mexico: 11. Ancient city Press, Inc., Santa Fe.
- 1987 *Investigations at the Pueblo Alto Complex, Chaco Canyon, New Mexico, 1975-1979. Volumes I and II.* Publications in Archeology 18F, Chaco Canyon Studies. National Park Service, Santa Fe.
- 1993 *The Spadefoot Toad Site: Investigations at 29SJ629, Chaco Canyon, New Mexico.* Reports of the Chaco Center No. 12. Branch of Cultural Research, National Park Service, Santa Fe.

Windes, Thomas C., and Peter J. McKenna

- 1989 Cibola Whiteware and Cibola Grayware: The Chaco Series. Presented at the Northwest New Mexico Ceramics Workshop of the New Mexico Archeological Council, Red Rock State Park, Gallup.

#### Footnotes

<sup>1</sup> "Culture and Ecology of Chaco Canyon and the San Juan Basin," by Frances Joan Mathien, can be obtained by contacting the Chaco Canyon Bookstore, P.O. Box 220, Nageezi, NM 87037-0220 or [chcu.wnpa.org](http://chcu.wnpa.org). Cost of the volume is \$45.00 plus \$9.50 for shipping and handling for a total of \$54.50.

<sup>2</sup> Because many conclusions about social organization reached by NPS several decades ago needed updating, NPS initiated a program designed by Lekson that included several conferences to update interpretations of this period. *"The Archaeology of Chaco Canyon, New Mexico. An*

*Eleventh Century Pueblo Regional Center*” edited by Stephen H. Lekson<sup>1</sup>(2006), is available through the School of American Research Press, P.O. Box 2188, Santa Fe, NM 87504-2188 or sarpress.sarweb.org. Hardcopy costs \$60.00; paperback is \$34.94. A \$7.00 shipping and handling charge should be added to your check.

## **Maker's Marks on Chacoan Black-on-White Ceramics**

Meaghan Trowbridge

Maker's marks are common across the globe and throughout history. They are utilized for a variety of reasons, including ownership, identification, and prestige. Here, I investigate a sample of whole vessels and ceramic sherds from sites within Chaco Canyon in Northwestern New Mexico to determine if maker's marks are present in the ceramic record of Chaco Canyon, and to what extent they may have been used and repeated.

Ethnographically, maker's marks have been noted in the modern ceramic industry of the central sierra of Peru (Donnan 1971: 464), where it is common for a number of different families to produce similar pottery to be sold at the local market. In this situation, groups of pots made by different families are often stored together in one place. For this reason one or more of the parties will incise a distinctive mark on their own pots, to separate their pots until they are sent to the market to be sold. Another reason given for incised potters' marks in Peru today is the need to conserve fuel, which often results in a number of potters firing their vessels in a single, large firing. In this situation, it is common for potters to mark their vessels before a communal firing to prevent the confusion of having to identify a large number of similar pots from the ashes of a fire (Donnan 1971).

Archaeologically, there has been little work done on the issue of maker's marks. In a small study of Early Iron Age pottery, Papadopoulos (1994) notes a series of vessels from the Aegean region that contain potters' marks including incised, painted, and stamped marks found in varying inconspicuous locations on the vessels. These marks are interpreted as having served a number of functions, such as "marks of ownership, capacity, commodity, provenance... or destination" (Papadopoulos 1994: 478). In a study of Neolithic potters' marks, Vitelli proposes that the use of such marks indicates the regular relocation of potters within different settlements, and could signify marriage patterns and kinship ties within the Neolithic communities (Vitelli 1977: 30). Timothy Earle considers ceramic maker's marks from a variety of locations to be a clear indication of material ownership as well as the rights and responsibilities associated with the possession of property (Earle 2000: 53).

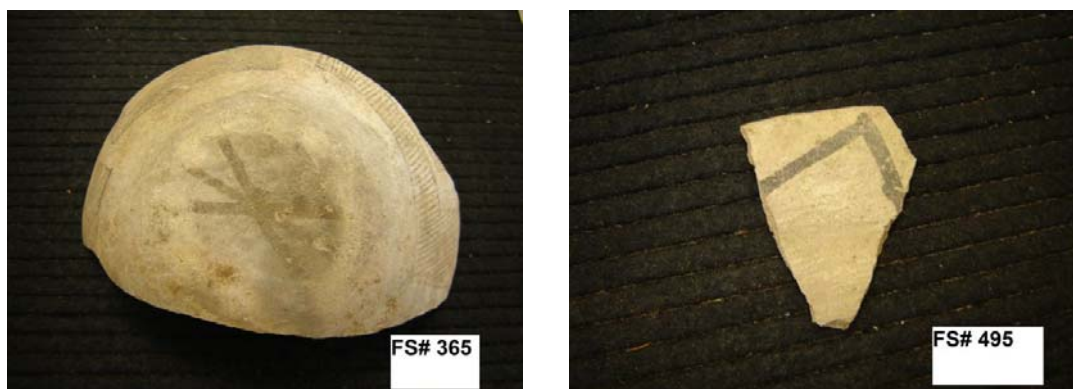
In the American Southwest, few studies have examined maker's marks. Alden Hayes, in his project report from the Weatherill Mesa survey (1964: 49), notes that on Mancos corrugated wares, "the painting of simple designs such as circles, squares, or bird tracks inside the jar near the rim, perhaps as an owner's mark, is common". H. Wolcott Toll (1990: 291) also briefly mentions "ownership" marks found on the bases of Chacoan cylinder jars, but does not attempt to interpret their function or meaning. Thomas Windes (1984: fig. 6.3) identifies "ownership" marks as a design trait of Cibola Whiteware, the dominant whiteware found in Chaco Canyon, New Mexico. Windes (1984: 104) notes the location of these marks on the exterior rims of bowls, the interior rims of jars, and the bases of vessels, and reports that vessels containing these marks account for 18 percent of the total vessel collections from Chaco Canyon.

In looking through literature on the ceramic assemblages from the Chaco Canyon region, there are a few photographs of vessels that appear to show maker's marks (Lister and Lister

1978: fig. 30, 46). During the University of New Mexico and National Park Service's joint work on the Chaco Project excavations in the 1970's, there was an analysis code assigned specifically to bowl rim sherds that showed painted designs on their exteriors. Toll and McKenna report 167 sherds with this exterior bowl motif (1997: 454).

For this study, I wanted to investigate the issue of maker's marks in the Chacoan ceramic record to see what kind of new information they might contribute to our knowledge of ceramic production and exchange in Chaco Canyon. With Tom Windes' data (1984) as a starting point, my interest was in seeing what percentage of Chacoan whole vessels would show evidence for maker's marks, to what extent the maker's marks found might be repeated on different vessels, and if sherds collected from the trash mounds at Pueblo Bonito would mirror the whole vessel findings. Windes (1984:104) reported that 18% of the whole vessel collection from Chaco Canyon showed evidence for maker's marks, so I expected to find that the percentage of whole vessels in my sample with maker's marks would most likely be less than 30 percent, and that the percentage of sherds with evidence for maker's marks would be significantly less than the whole vessel percentage, due to simple ratios of whole vessel size to the number of sherds produced in the breakage of a single vessel.

To look at maker's marks on black-on-white vessels from Chaco Canyon, I examined 165 whole vessels and 503 total sherds. Roughly 69% of the whole vessel sample consisted of bowls, and the remaining 31% consisted of jars and pitchers. The sherd sample was made up of 64% bowl rim sherds, 29% jar and pitcher rim sherds, and 7% basal sherds of either bowls or jars. All of the ceramics analyzed were black-on-white decorated wares collected from within Chaco Canyon. One hundred of the whole vessels analyzed were from the National Park Service's Chaco Center collection, and 65 of the whole vessels were from the Maxwell Museum of Anthropology collection. The whole vessel sample contained vessels collected from many different sites within Chaco Canyon. All of the 503 analyzed sherds were collected as part of the Chaco Stratigraphy Project, which is systematically re-excavating trenches through the Pueblo Bonito trash mounds that were originally dug in the 1920's by Neil Judd and the National Geographic Society. Only rim sherds and basal sherds were included in the sample, because the expectation was that maker's marks would only be found in those areas of vessels.



**Figure 1:** Examples of maker's marks found on sherds from the Pueblo Bonito trash mounds. Courtesy of Chaco Stratigraphy Project.

The attributes recorded for each whole vessel and sherd showing a maker's mark included stylistic classification of design, form type, the location of the maker's mark on the vessel, and the design of the maker's mark itself. When originally going through the samples, I looked for any designs that were obviously not a part of the overall decoration style of the vessel on the unpainted exterior rims of bowls, the unpainted interior rims of jars, and the bases of all vessels. Any markings on these surfaces that did not match the overall vessel designs were recorded as marker's marks and photographed. The recorded designs included mostly those done in black paint, but a few designs were painted using a white slip on the unslipped surface of the vessel.



**Figure 2:** Examples of maker's marks found on whole vessels.  
 Courtesy of the Chaco Culture National Historical Park Museum Collection.

Table 1: Summary of sample and results.

**Whole Vessels**

	Sample Size	# With Maker's Marks	% With Maker's Marks
Bowls	98	11	11.2%
Jars	67	5	7.5%
Total	165	16	9.7%

**Sherds**

	Sample Size	# With Maker's Marks	% With Maker's Marks
Bowls	320	6	1.9%
Jars	145	3	2.1%
Bases	38	1	2.6%
Total	503	10	2.0%

After the original analysis of the samples, I reevaluated the photographs of the recorded maker's marks and was able to eliminate a number of them from my results. A few of the



marks that I had originally thought might be maker's marks appeared to be only mistakes, or marks that had occurred as a result of a brush slip while painting a band around the rim of a vessel. In addition, there were seven whole bowls and three bowl rim sherds that all had two parallel lines extending perpendicular to the rim about one or two inches on the vessel exterior (figure 4). Initially, I had thought this might be a recurring maker's mark. With more attention, I noticed that all of these double-lined marks were actually extensions of the solid bands painted around the rim of these vessels, on all of which the rim was left unpainted between the two downward-extending lines. This appears to be significant and unique to only the vessels with solid rim lines, and not ticked rims. It has been suggested (Patricia L. Crown- personal communication, 3/06; Thomas C. Windes- personal communication, 4/06) that these marks are linked to similar line breaks on historic Pueblo ceramic vessels. I excluded all examples of these extended rim lines from my results and do not consider them to be maker's marks, but instead an integral and symbolic part of the design for the vessels on which they occur.



**Figure 3:** Examples of extended rim lines excluded from study results. Courtesy of the Maxwell Museum of Anthropology, University of New Mexico and the Chaco Culture National Historical Park Museum Collection.

In my sample of whole vessels, 9.7% showed evidence for maker's marks. There was a calculated percentage of 11.2% for whole bowls with maker's marks, and the whole jars and pitchers had a percentage of 7.5% with maker's marks. From the sample of sherds analyzed, 2% of the total sample showed evidence for maker's marks. The bowl rim sherds showed a percentage of 1.9%, the jar rim sherds showed a percentage of 2.1%, and the basal sherds had a percentage of 2.6% with maker's marks (Table 1). I believe that the difference between these resulting percentages and the percentages cited by Windes (1984) could be a direct result of the exclusion of vessels with extended rim line breaks, as discussed above.

None of the recorded maker's marks are repeated on more than one vessel from this sample. Out of 26 marks documented from both the whole vessel and sherd samples, two of the marks were painted with white slip on an unslipped surface, while all of the others were painted with black paint on either a slipped or unslipped surface. Only three of the marks were found to be on the exterior base of vessels, two on bowls and the third from a jar. With the exception of the three basal marks, all of the other maker's marks were found on the exterior rims of bowls

and the interior rims of jars and pitchers. There was not one particular stylistic type that was associated with the marks found in this study. Windes (1984:104) found the highest percentage of vessels with maker's marks on vessels with Gallup and Chaco black-on-white styles, but I found that both Puerco and Red Mesa black-on-white bowls showed close to the same percentages of vessels with maker's marks as did the Chaco black-on-white vessels.

I believe that maker's marks are exactly what the name implies: marks intentionally added to a ceramic vessel by the potter before firing for identification purposes. I do not call these markings "ownership" marks, because I do not necessarily think that they indicated ownership or possession of pot by a particular person or group. In order for the marks to designate ownership, the pots would have had to have been originally produced specifically to belong to an individual, because of the necessity that the marks be applied pre-firing.

As in the ethnographic example from Peru (Donnan 1971), fuel in the American Southwest during the time of Chaco Canyon's peak was a scarce resource. It is possible that a number of potters would have fired their vessels together, rather than having many small, repeated firings. In this scenario of communal firing, it makes sense for potters to mark their vessels for easy identification after the firing process. This interpretation also fits with the haphazard way that many of the marks seem to have been applied, and the lack of uniformity in design, size, and location of the marks— as if they were quick additions to the vessels immediately before the firing occurred.

It is also possible that maker's marks in Chaco Canyon could have served as marks of prestige for the potters themselves. In modern cultures, artists sign their work before distributing it as a way of informing anyone who sees the artwork that they created it. Once an artist becomes well known, it is the signature that can often increase the value of the art. In Chaco Canyon, the high volume of non-local ceramics makes it certain that ceramic specialists made at least some of the ceramics found in the canyon. Those specialists might have had their own unique marks to designate their pots. However, if the maker's marks were in fact intended as signatures, I would expect to see examples of repeated maker's marks on different vessels, which did not occur in this study. I would also expect that there should be skill and effort put into the design of the marks, which does not seem apparent in these results.

Future research could be greatly improved if provenience and context were known for all vessels. It would be very interesting to see whether the percentage of vessels with maker's marks was greater in particular sites or rooms than in others. A regional study of maker's marks could also show patterns on a larger scale and possibly help to understand the role of maker's marks in exchange systems throughout the Southwest. Finally, the sample should include a larger number of whole vessels and sherds.

For future studies, I am also interested in the difference between maker's marks painted with slip and the more common black marks. In Chaco Canyon, it has been proposed that slip material was difficult to come by, and therefore more valued as a resource in the ceramic production sequence (Windes 1984: 100). If it is true that slip was a valued and scarce resource, it could be significant that some vessels display slipped marks while the majority of the vessels in the sample do not.

By studying maker's marks, especially in a place as dynamic as Chaco Canyon, there is enormous potential to learn more about the production and exchange of ceramic vessels in the prehistoric Southwest.

*All photographs taken by Meaghan Trowbridge. Please do not duplicate without permission.*  
Meaghan Trowbridge, Department of Anthropology, University of New Mexico.  
Contact: matrow@unm.edu

#### Acknowledgements

I owe credit to several people who provided great assistance in the completion of this study. The Chaco Stratigraphy Project, under the direction of W.H. Wills, has provided all sherds from the Pueblo Bonito trash mounds included in this study, which could not have been possible without the support of both the National Science Foundation (grant # BCS-0408720) and the National Geographic Society (grant # 8011-06). Many thanks to Wendy Bustard of the Chaco Culture National Historical Park Museum Collection, and to David Phillips of the Maxwell Museum of Anthropology, for granting me access to their collections of Chacoan whole vessels. I greatly appreciate the generosity and expertise of Thomas Windes and I could not have had the opportunity to present this paper in any medium without the invaluable guidance and advice of Patricia Crown.

#### References

Donnan, Christopher B.

1971 Ancient Peruvian Potters' Marks and Their Interpretation Through Ethnographic Analogy. *American Antiquity*, 36(4): 460-466.

Earle, Timothy

2000 Archaeology, Property, and Prehistory. *Annual Review of Anthropology*, 29:39-60.

Hayes, Alden C.

1964 *The Archaeological Survey of Weatherill Mesa, Mesa Verde National Park, Colorado*. Archaeological Research Series, no. 7-A. National Park Service, Washington, DC.

Lister, Robert H. and Florence C. Lister

1978 *Anasazi Pottery*. Maxwell Museum of Anthropology, Albuquerque, New Mexico.

Papadopoulos, John K.

1994 Early Iron Age Potters' Marks in the Aegean. *Hesperia*, 63(4):437-507.

Toll, H. Wolcott

- 1990 A Reassessment of Chaco Cylinder Jars. In *Clues to the Past: Papers in Honor of William Sundt*, edited by David Kirkpatrick, pp. 273- 298. Archaeological Society of New Mexico, Albuquerque.

Toll, H. Wolcott, and Peter J. McKenna

- 1997 Chaco Ceramics. In *Ceramics, Lithics, and Ornaments of Chaco Canyon: Analyses of Artifacts from the Chaco Project, 1971-1978*, edited by Frances Joan Mathien, pp. 17-512. Publications in Archaeology 18G, National Park Service, Santa Fe.

Vitelli, K. D.

- 1977 Neolithic Potters' Marks from Lerna and the Franchthi Cave. *Journal of the Walters Art Gallery*, 36:17-30.

Windes, Thomas C.

- 1984 A View of the Cibola Whitewares from Chaco Canyon. In *Regional Analysis of Prehistoric Ceramic Variation: Contemporary Studies of the Cibola Whitewares*, edited by Alan P. Sullivan and Jeffrey L. Hantman, pp. 94-119. Arizona State University, Tempe.

# Pottery Mound: The 1954 Field Season

by  
Jean H. Ballagh  
David A. Phillips, Jr.

## Maxwell Museum Technical Series No. 2

Maxwell Museum of Anthropology MSC01, 1050, 1 University of New Mexico Albuquerque,  
New Mexico 87131-0001 [www.unm.edu/~maxwell](http://www.unm.edu/~maxwell)

### PREFACE

A quarter-century ago, Tainter and Gillio (1980:54) pointed out that Pottery Mound “is a topic urgently requiring explanation.” Even so, the site remains on the edge of most archaeologists’ field of vision. In Volume 9 of the *Handbook of North American Indians* (Ortiz 1979), the index lists Pottery Mound just once (see Ellis 1979:439). On Martin’s (1979:63) map of the Mogollon area, the upper edge of the Eastern Periphery just brushes the lower Rio Puerco. On Cordell’s (1979a:131) map of Eastern Anasazi branches, Pottery Mound is at the east edge of Acoma- Laguna territory, well south of the Albuquerque district. Wendorf and Reed (1955:Fig. 1, 133) defined the southwest boundaries of the Upper Rio Grande culture area as the Rio Puerco on the east and a line drawn east-west through Isleta Pueblo on the south, leaving Pottery Mound just outside that area. Stuart and Gauthier (1988) and several Forest Service/Bureau of Land Management overviews (Berman 1979; Cordell 1979b; Tainter and Gillio 1980) also show Pottery Mound outside the Rio Grande area. Stuart and Gauthier align the site with their Acoma-Laguna axis, though just barely. Their base map (Stuart and Gauthier 1988:5), drawn from Forest Service administrative units, shows Pottery Mound as just within the northeast corner of their Mt. Taylor unit of west-central New Mexico. On a more detailed map (Stuart and Gauthier 1988:120), that portion of the Puerco has moved into Cordell’s Albuquerque district.

In more recent research the site’s affiliation has been shifted east. Spielmann (1998a, 1998b:9) groups Pottery Mound with the Rio Abajo sites, including the Piro pueblo of Qualacu on the east bank of the Rio Grande (see Marshall 1987). Dittert (1998:82) places Pottery Mound just east of his Acoma Culture Province. Cordell (1997:404) includes Pottery Mound with Rio Grande sites in a discussion of immigration from the San Juan Basin and architectural evidence for the presence of the katsina cult. Stuart (2000:148–149) relates it to the earlier Hidden Mountain Site and other sites along Rio Grande tributaries.

Archaeological boundaries are often acknowledged to be arbitrary, but the repeated placement of Pottery Mound at or near such boundaries is telling. While archaeologists know of the site and its kiva art, they often seem unable (or unwilling) to work it into studies of the demographic, social, and other changes of the Pueblo IV period. This tendency undoubtedly relates to the site’s research history. After brief visits in the early 1900s by Warner (1928a, b), Luhrs (1937), and Mera (1940), Frank Hibben of the University of New Mexico began excavations at the site in 1954; his last known fieldwork there was in 1989. Except for limited studies in 1979 (by a UNM field school contingent directed by Linda Cordell), all excavation at

the site in the 20th century was led by Hibben. Unfortunately, he never produced a comprehensive description of the work; his published output was limited to a book on the kiva art (Hibben 1975), two brief reports in *American Antiquity* (Hibben 1955, 1966), and popular articles (Hibben 1960, 1967). Otherwise, the site is described fragmentarily through topical articles, theses, dissertations, and passages in books.

The profession's failure to grapple with Pottery Mound may stem in part from reluctance to deal with claims that the site included a large platform mound and other evidence of strong ties with Mesoamerica (Hibben 1966). The bigger problem has been the inability to evaluate such claims, or reach independent conclusions about Pottery Mound, due to a lack of information. In 2003 the Maxwell Museum discovered a number of student notebooks, maps, and other documents in Hibben's emeritus office and lab, apparently held by him for the contemplated (Hibben 1987:36) but never completed general report on Pottery Mound. His lab also held numerous boxes of collections from the site. Shortly afterward, a complete or near-complete series of photographs of the kiva murals was found at his home. The documents and collections found in 2003, combined with those already at the Maxwell Museum, provide a reasonably thorough description of the work at Pottery Mound. There is only so much that can be done with half-century old records and collections but to the extent that they can be made to yield useful information, this will be done. Our plan is to prepare separate descriptive reports of each of the official field seasons, followed by a report on the salvage years.

We did not include a comparative and synthetic final chapter in this report. Given finite time and energy, we believe that the greater good lies in getting out as many descriptive reports as possible, leaving others to derive their own conclusions (which they are apt to do anyway). Meanwhile, we will encourage specialists to conduct topical research, beginning with Hayward Franklin's analysis of the pottery from the 1979 stratigraphic excavation. Once detailed information from each field season is widely available, the site will be more accessible, both to specialists and those interested in synthesizing its history. Pottery Mound will then take its rightful place in Pueblo prehistory. (Copyright 2006 by the Maxwell Museum of Anthropology, University of New Mexico)

NOTE: The full text complete with maps, tables, photos and illustrations is available at [www.unm.edu/~maxwell](http://www.unm.edu/~maxwell).

## Recent Dissertations and Theses Available From ProQuest

**Note:** The dissertation citations and abstracts contained here are published with permission of ProQuest Information and Learning. Further reproduction is prohibited without permission. Copies of dissertations may be obtained by addressing your request to ProQuest Information and Learning, 789 E. Eisenhower Parkway, P. O. Box 1346, Ann Arbor, MI 48106-1346. Telephone 1-800-521-3042: Web page:

[http://www.proquest.com/products\\_umi/dissertations/individuals.shtml](http://www.proquest.com/products_umi/dissertations/individuals.shtml).

Title: *Production, exchange, and social identity: A study of Chupadero black-on-white pottery (New Mexico)*

Author: Clark, Tiffany C., Ph.D., Arizona State University, 2006

Document: Publication No. AAT 3210115, ISBN 0-542-58977-X, 446 pages

**ABSTRACT:** Regional production and exchange of ceramic goods are integral to economic systems and political and social processes. Archaeological study in the American Southwest has traditionally focused on understanding the organization of a single component (production *or* distribution) within a regional ceramic economy. In recent years, however, researchers have suggested that a more integrated approach to the study of production and exchange is needed to elucidate the broader social contexts in which these economic activities took place. This dissertation explores the connections and interrelationships between production and distribution systems in the Salinas and Sierra Blanca regions of central New Mexico during the early Pueblo IV period (A.D. 1250/1270--1450). Focusing on Chupadero Black-on-white pottery, this comparative study evaluates organizational variability in regional economic systems in order to understand how social relations structure, and are structured by, different production and exchange practices. Three dimensions of regional ceramic economies are considered--- production, exchange, and social identity. Although these dimensions involve intertwined social and economic processes, aspects of each may be delineated through the consideration of a few key parameters. Incorporating data from complementary chemical and mineralogical compositional sourcing studies, organizational aspects of Chupadero production and distribution systems are assessed for the Salinas and Sierra Blanca regions. Technological and design style information obtained from a ceramic attribute analysis are then used to examine the social contexts of production. The inclusion of this additional analytical component brings a more socially oriented perspective to the study of regional ceramic economies and allows for the investigation of the structure of social networks that is independent from, and complementary to, the social inferences that derive from ceramic production and exchange data. Results of the compositional and stylistic analyses suggest that a complex interplay of social and economic factors were responsible for shaping the regional ceramic economies that developed in central New Mexico in the early Pueblo IV period. These factors include regional differences in population size and distribution, involvement in pan-regional interaction spheres, and use value of Chupadero vessels. Though Chupadero production and exchange systems in both study regions appear to have been influenced by the same constellation of factors, the particular effects of each vary according to the specific, historically contingent conditions that were present in the Salinas and Sierra Blanca regions in the late thirteenth and early fourteenth centuries.

Title: *The emergence of Jicarilla Apache enclave economy during the 19th century in northern New Mexico*

Author: Eiselt, Bernice Sunday Ph.D., University of Michigan, 2006.

Document: Publication No. AAT 3208450, ISBN 0-542-56896-9, 641 pages.

**ABSTRACT:** Previous characterizations of Plains-Pueblo interaction highlight the important role that Apaches played in the regional socioeconomic system of the precontact American Southwest. However, Jicarilla Apache responses to state expansion after A.D. 1550 and the evolution of forager-farmer interactions during the historic period remain unstudied. Enclavement, the encapsulation of an ethnic community within a larger society, is characteristic of many nomadic groups existing as coherent sociocultural entities within polyethnic state systems. This dissertation examines the nature of nomadic enclaves and the process of enclavement using Jicarilla Apache historic and archaeological materials. I argue that enclave formation during the pre-reservation period incorporates many elements of preexisting Plains-Pueblo relationships and that enclavement enabled the Jicarilla to preserve traditional aspects of society well into the 19<sup>th</sup>-century. Jicarilla enclavement involved the expansion of exchange networks with settled agriculturalists, the occupation of secondary niches within a settled zone, and the reorganization of labor practices. The evolution of the Jicarilla enclave is traced from the precontact era to the 19<sup>th</sup>-century using ethnohistoric references. Enclave ideology, social organization, and economy are reviewed based on ethnographic documents. A specific case study using archaeological materials from the Chama Valley of New Mexico reveal the ways in which the Jicarilla Ollero enclave occupied the northern Rio Grande by establishing mutualistic ties with rural Hispanic and Pueblo Indian villages. Specific insights into the productive economy of Jicarilla women are reconstructed from ethnographies, oral interviews, apprenticeship with traditional potters, and detailed studies of whole ceramic vessels and fragmentary ceramics found in museum collections. A major contribution of the study is the generation of a raw micaceous clay database developed through survey of clay sources from 1998 to 2001. Over 150 clay samples were submitted for Instrumental Neutron Activation Analysis (INAA) at the Ford Nuclear Reactor, University of Michigan, Ann Arbor. Clay samples were matched to 500 micaceous sherds recovered from Apache, Pueblo, and Hispanic archaeological sites. Source matches help to identify patterns of land use, the organization of pottery production and technology, and aspects of ceramic exchange that are characteristic of enclaved Apaches as well as their sedentary Pueblo and Hispanic neighbors.

Title: *Community reorganization in the southern zone of the Casas Grandes culture area of Chihuahua, Mexico*

Author: Larkin, Karin Burd, Ph.D., University of Colorado at Boulder, 2006.

Document: Publication No. AAT 3207692, ISBN 0-542-55241-8 , 395 pages.

**ABSTRACT:** This research examines local responses to the pan regional phenomenon of cultural reorganization during the 13<sup>th</sup> century in the Casas Grandes culture area. Between AD 1150 and 1300, inhabitants throughout the culture area witnessed a dramatic transformation in social organization. Alterations in community layout, site distribution, architectural styles, and material culture strongly suggest shifting economic ties, new religious/political ideologies and/or changing community identities. This social reorganization resulted in increased socio-political complexity and changing community organization. Previous models explaining reorganization in the Casas Grandes culture area have either discounted the cultural historical trajectory of the period leading to these changes, or ignored macro-regional patterns that could have significantly



impacted the local population. The end of the 13<sup>th</sup> through the 15<sup>th</sup> centuries was a period of mass migration and reorganization throughout the Greater Southwest. Unfortunately, these macro-regional patterns have not been taken into account in previous explanations for the Casas Grandes culture area. In addition, all previous explanations for culture change have focused on explaining this reorganization from the perspective of the largest and most spectacular site in the region, Paquimè. This research was designed to fill in gaps in archaeological understanding of social and community reorganization by investigating the dynamics of culture change and its affects on local and regional community and tradition. I use the concepts of community, memory, and tradition to study how reorganization affected communities at different scales. I examine changes in ceramic technology and decoration to understand the dynamic tension involved in the social reorganization of the 13<sup>th</sup> century. By looking at changes in hidden and visible attributes on ceramics from the Casas Grandes culture area, I identify cultural continuity and discontinuity in the ceramic traditions over time in different community networks at different scales. This research demonstrates that local traditions played a vital role in mediating social changes during reorganization in the Casas Grandes culture area and that different communities were affected in different ways. Reorganization is not a standardized process that can sweepingly cover a large geographic scale. Even though reorganization happened over large areas at roughly the same time, change was manifest differentially in various regions depending on local history and tradition.

### **On the Shelf**

Brody, J. J.

2005 Mimbres Painted Pottery: Revised Edition. School of American Research, Santa Fe.

"The Mimbres cultural florescence between about AD 1000 and AD 1140 remains one of the most visually astonishing and anthropologically intriguing questions in Southwest prehistory. In this revised edition, noted Mimbres scholar Dr. J. J. Brody incorporates the extensive fieldwork done since the original publication in 1977, updating his discussion of village life, the larger world in which the Mimbres people lived, and how the art that they practiced illuminates these wider issues. He addresses human and animal iconography, the importance of perspective and motion in perceiving Mimbres artistry, and the technology used to produce the ceramics. This lively, engaging work will interest archaeologists, art historians, and all people who enjoy the beauty of Mimbres pottery. Featuring over one hundred new illustrations and insights drawn from a lifetime of study and contemplation, this book is much more than a revised edition; it establishes a new standard for the artistic interpretation of a classic Southwestern culture for the new century." ([http://sarpress.sarweb.org/sarpress/index.php?main\\_page=index](http://sarpress.sarweb.org/sarpress/index.php?main_page=index))

Society for American Archaeology

2005 Ceramics in Archaeology: *Readings from American Antiquity 1936-2002*.  
Compiled By Hector Neff. Society for American Archaeology. Washington, D.C.  
(<http://www.saa.org/>)



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

From the Foreword

"Although three decades have passed between the beginning of the Albuquerque Archaeological Society's field work and the completion of this report, this report is still an historic first not just for New Mexico but for the entire country. This is a major milestone in archaeology, the first recorded excavation of a prehistoric lead and early historic lead/silver mine in the United States of America.

"Lead isotope studies have demonstrated that Rio Grande Pueblo potters almost exclusively used galena (lead) from the veins within 800 meters of the Bethsheba mine in the early 14<sup>th</sup> century (Habicht-Mauche, et al., 200, 2002). This report and the work conducted by Warren (1974) confirm that the Bethsheba and/or other veins within one-half mile were mined by AD 1300. . . ."

"This report is also the first published report on the excavation of a Spanish or Mexican silver/lead or lead mine in the country." Homer E. Milford, Abandoned Mine Lands Bureau, New Mexico Mining and Minerals Division.

Paperback: \$22.00 plus \$3.50 shipping and handling, CD in pdf format: \$12. Please make checks payable to: The Albuquerque Archaeological Society, P. O. Box 4029, Albuquerque, NM 87196

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

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 13<sup>th</sup> 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.

Paperback: \$22.00 plus \$3.50 shipping and handling, CD in pdf format: \$12. Please make checks payable to: The Albuquerque Archaeological Society, P. O. Box 4029, Albuquerque, NM 87196

## On View

### In the Museums

#### **Born of Clay: Ceramics from the National Museum of the American Indian**

November 5, 2005–May 30, 2007

George Gustav Heye Center, New York

The 301 remarkable pieces in this exhibition span 5,000 years and four distinct regions the Andes, eastern North America, Mesoamerica, and the southwestern United States. These clay creations are explored as the products of ongoing, complex societies and individual artistry. The exhibit includes the ideas of eight contemporary potters from the four regions who express the idea that despite differences in the composition, form, and decoration of pottery, Native potters share respect for ancestral traditions, a belief in the sacredness of clay, and an appreciation for the changing use of ceramics. (<http://www.nmai.si.edu>)

#### ***The Secrets of Casas Grandes***

November 5, 2006 – October 2007

Museum of Indian Arts & Culture / Laboratory of Anthropology, Santa Fe



Ramos Polychrome jar with horned serpent iconography, Casas Grandes, AD 1200-1450. 16.2 cm. x 19.0 cm. Edward Ledwedge collection, Museum of Indian Arts & Culture / Laboratory of Anthropology, 8313/11

This exhibit is unique in its focus on the archaeology and ceramics of Casas Grandes, Northern Mexico, a little-known prehispanic culture of the Greater Southwest. Concentrated around the prehistoric site of Paquimé in northwestern Chihuahua, Casas Grandes was the most complex society of its time, blending elements of ancestral Puebloan and Mesoamerican culture. During the Medio period of A.D. 1200-1425, Casas Grandes was a major regional center of interaction and trade, with evidence of ball courts and exotic artifacts such as copper, shell, turquoise, and macaws.

Specialist potters made striking, intricately-painted effigy vessels and geometric polychrome ollas. The vibrant pottery features elaborate symbolic imagery and depicts humans, supernatural beings, and animals, including macaws, owls, fish, turtles, lizards, feathered and horned serpents, and other fantastic creatures. Some scenes portray dancing figures with animal headdresses, and appear to tell stories of transformation from the human to spiritual realm. Along with other archaeological evidence, the variety of ceramic forms and intriguing iconography offer a window to the ancient Casas Grandes world.

Today these ceramics are considered remarkable works of art, and several recent museum exhibits have displayed them from the perspective of art history. The current exhibit differs by exploring what the ceramics tell us about the people who made and used them—beyond their beauty as art objects—and by considering the larger society in which they functioned in utilitarian and ritual contexts. The exhibit presents current archaeological findings and highlights future research problems that concern the remaining secrets of Casas Grandes.

### **On the World Wide Web**

There are many valuable resources now available on the World Wide Web. Here are just a very few relating to Southwestern pottery. Please feel free to send your suggestions and/or comments for inclusion in future issues of *Pottery Southwest*.

#### **Arizona State Museum online**

Some 20,000 Southwest Indian whole-vessel ceramics combine to form the focus of ASM's POTTERY PROJECT. Spanning 2000 years of life in the unique environments of the American desert Southwest and northern Mexico, the collection reflects almost every cultural group in the region. This collection - the largest and most comprehensive of its kind - is one of the nation's most significant cultural resources. It has been designated an Official Project of the *Save America's Treasures* program, a public private partnership between the White House Millennium Council and the National Trust for Historic Preservation to celebrate and preserve our nation's cultural legacy. (<http://www.statemuseum.arizona.edu/exhibits/pproj/index.asp>)

#### **Logan Museum of Anthropology**

The Logan Museum of Anthropology at Beloit College in Beloit, Wisconsin, possesses a superb collection of artifacts from the ancient Southwest. The vast majority were collected during excavations undertaken by the Museum in the 1930s under the direction of Paul Nesbitt. From 1929 to 1931, field work was done at the Mattocks Ruin in the Mimbres Valley of New Mexico resulting in an extensive collection of pottery and other artifacts from the Mimbres people. From 1931 to 1939 focus shifted to another group of Mogollon sites in the Reserve area of New Mexico. Work at the main site, the Starkweather Ruin, was supplemented by exploratory digs at the Hudson and Wheatley Ridge Ruins. These sites yielded a large number of Mogollon artifacts of all types. To these were added extensive surface sherd collections from important sites all over the Southwest. (<http://www.beloit.edu/~museum/logan/>)

#### **Lowell D. Holmes Museum of Anthropology**

"Through the Eyes of the Pot: A Study of Southwest Pueblo Pottery and Culture,  
The Morgan Collection of Southwest Pottery"  
Wichita State University, Wichita, Kansas

In 2002, the Lowell D. Holmes Museum of Anthropology at WSU received more than 100 Southwest Pueblo pots and a large library of related books from WSU alumnus Jack Morgan. On the Web site, the photographs of 109 pots, most of which are from the Morgan collection, can be rotated 360 degrees. The site also contains biographies of 54 potters represented in the collection, and the history of the pueblos where the pots were made. Many of the pots were made by well-known Pueblo artists. (<http://www.holmes.anthropology.museum>)

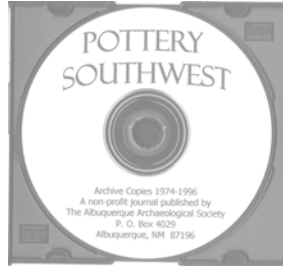
## SUBMISSIONS TO POTTERY SOUTHWEST

The availability of *Pottery Southwest* in electronic format creates opportunities for communicating with a wide audience in a sophisticated manner. It also creates formatting challenges far beyond those of printing and/or photocopying. Some of our contributors have requested that we provide guidelines for submissions. Readers with dial-up connections have requested that we keep the size of the publication under 1,000 KB. Following are some tips on how to make this electronic transition as painless as possible:

<b>Author Information</b>	Please include all the information you want in the publication including your contact information so that readers may contact you directly.
<b>Length of Paper (word count)</b>	Major papers should try to be in the range of 3,000 to 5,000 words or a maximum of 30,000 characters counting spaces. (To find out the length of your paper in MS Word go to Tools and click on Word Count.) Inquiries and Updates as well as dissertation abstracts and notices should be in the 500 to 1,500 word range.
<b>Page Margins</b>	Top, bottom, left and right margins should all be 1 inch.
<b>Headers and Footers</b>	Please note that any headers and footers will be removed before inclusion in the complete issue. It is best not to include them in your submission.
<b>Font Type and Size</b>	Our preferred font and size is Times New Roman, 12 point.
<b>Spelling and Grammar</b>	Please be certain to use the spell check and grammar check features of your word processor before submission. Authors are responsible for the accuracy of their work.
<b>Paragraph Format</b>	Paragraphs should be single space, flush left, double space or 12 points between each paragraph.
<b>Images (number &amp; pixels)</b>	Please limit all images to 640 x 480 pixels maximum in jpg. Whenever possible please try to limit the number of images to no more than six. Images should be submitted as a separate file as well as within the document. When lining up images the easiest way is to create a table and insert the image into a cell. The row below the image can be used for its label. This is much easier than trying to line up text under an image. To learn more about size see <a href="http://www.microscope-microscope.org/imaging/image-resolution.htm">http://www.microscope-microscope.org/imaging/image-resolution.htm</a> .
<b>Text Boxes</b>	We recommend avoiding text boxes; use a table format instead.
<b>Format Of Spreadsheets, Tables, etc.</b>	Importing spreadsheets, pie charts, etc. from Excel into a Word document should not present a problem. However, if you do this, please send us a separate copy of what you use so that we may assure that the transition works smoothly.
<b>Bibliographies</b>	In order to make formatting go smoothly, we are requesting that bibliographies not include any tabs or spaces to make text line up. This causes havoc for conversions. Thus, please follow this format: <b>Author (last name, first name) year title, etc.</b> We will insert hanging indents so that the text lines up properly.
<b>Tips On Using Ms Word</b>	If you are in doubt as to where paragraph returns, tabs and/or spaces have been used to line up text in your document, click on the paragraph symbol in your tool bar at the top of your screen. This will reveal where these formats have been used.

Over the summer we may change our internet service provider. In the interim "Camera ready" submissions should be sent to [psw@unm.edu](mailto:psw@unm.edu) with a copy to [pottery\\_southwest@hotmail.com](mailto:pottery_southwest@hotmail.com). Finally, please don't be shy about contacting us if you have questions about submissions; we'll be happy to help. Your contributions are needed to keep *Pottery Southwest* viable. Additional formatting tips are at SAA's site at <http://www.saa.org/publications/Styleguide/styframe.html>.

**ORDER FORM**  
**for POTTERY SOUTHWEST**  
**1974-1996 Archive CD**



TO: *Pottery Southwest*  
 c/o Albuquerque Archaeological Society  
 P. O. Box 4029  
 Albuquerque, NM 87196

Number of CDs	Send to PLEASE PRINT CLEARLY	Price per CD	Total
	Name: _____ Address: _____ City: _____ State: _____ Zip Code: _____ E-Mail (optional): _____	\$5.00 for AAS members and students	
	Name: _____ Address: _____ City: _____ State: _____ Zip Code: _____ E-Mail (optional): _____	\$7.50 for non- members	
	<b>AMOUNT ENCLOSED:</b>	\$ _____	

YOUR NAME & ADDRESS (if different from above):

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

E-Mail (optional): \_\_\_\_\_