More than Meets the Eye:
Slip, Paint, and Color
Horizons on Ancestral Pueblo Pottery

By Suzanne L. Eckert, PhD

Might the fine hachure lines on many ancient southwestern black-on-white pottery vessels have been visualized as blue-green, symbolizing water?

IMAGINE THE COLOR!
Compare this colored photo of a Tularosa Black-on-white bowl with the uncolored image in Figure 5 below. (Photo courtesy of Suzanne L. Eckert, color by Old Pueblo Archaeology Center)

Also in this issue: Meet the Members of Old Pueblo Archaeology Center’s Board of Directors .................................................................................................................. 13
Old Pueblo Archaeology Center Upcoming Activities.................................................................................................................. 19
More than Meets the Eye: Slip, Paint, and Color Horizons on Ancestral Pueblo Pottery

Suzanne L. Eckert, PhD
Head of Collections, Arizona State Museum, University of Arizona

In 2006, at the end of my chapter in The Social Life of Pots synthesizing Ancestral Pueblo glaze wares (see suggested readings at the end of this article), I mused that “understanding broader decorative horizons provides a different perspective that may allow insights into social dynamics on a scale greater than one allowed by examination of region series alone.” I then went on to briefly describe three decorative horizons that might merit consideration in future research. As this was one of my first publications as a young archaeologist, I distinctly remember an anonymous reviewer commenting that this discussion on horizons “doesn’t really get us anywhere, does it?”

I disagreed at the time, and I still disagree. Although I have since learned to not take reviewers’ critiques so hard, I have continued to think about design horizons over the course of my career. So when asked to provide a submission for the Old Pueblo Archaeology bulletin, I decided to use this platform to further consider design horizons on Ancestral Pueblo (Figure 1) pottery and discuss how these horizons help us understand ancient pots, and the people who decorated and viewed them.

Some Definitions

Throughout this article I will discuss terms related to pottery design and technology that may be used differently by others. As such, I start with some definitions so as to help avoid any confusion.

A pottery type is a collection of characteristics recognized by archaeologists as regularly occurring together on pottery, is usually temporally sensitive, and was produced in a restricted region (think Sikyatki Polychrome or Mimbres Classic Black-on-white). A pottery ware is a tradition of pottery making that was produced for a long time period but in a restricted region (think Hopi Yellow Ware or Mogollon Brown Ware).

A pottery horizon is a characteristic that crosscuts multiple regions. For example, many Arizona archaeologists associate ‘yellow’ pottery with the Hopi area while many New Mexico archaeologists associate ‘yellow’ pottery with the Galisteo Basin; it was David Snow who noted in his 1982 discussion of Rio Grande Glaze Ware that yellow pottery may be a design horizon and that the yellow pottery of the Galisteo Basin may have been ideologically associated with the contemporaneous yellow pottery of the Ancestral Hopi region in the fourteenth and fifteenth centuries. Although horizons often last for only a relatively short period of time, some can be fairly longstanding.

A slip is a pottery surface treatment that is applied as liquefied suspension of clay particles in water or, in other words, a watered-down clay that often has a consistency ranging from whole milk to heavy cream. On Ancestral Pueblo decorated pottery, a slip was usually applied to the entire vessel surface that
was to be painted (the interiors of bowls and exteriors of jars), and also often applied to the surface that was not to be painted (mostly exteriors of bowls and interiors of jar necks).

A **paint** (Figure 2) is a colored substance that is applied in patterns to create designs on a vessel surface. Paints can be made from organic material (e.g., plants or charcoal), minerals (e.g., hematite or galena) or a combination of the two. The paint is usually what is thought of as the geometric or figurative design while the slip is often thought of as the background (Figure 3); so in archaeology pottery type nomenclature, a “black-on-white” type would have black paint and a white slip.

Slips and paints are so much more than the designs they portray. For the remainder of this article, I discuss various types of color horizons that have been identified on Ancestral Pueblo pottery. In the American Southwest, color combinations on pottery have been recognized for a long time as important to chronology building (and I have joined the many archaeologists who quip to field school students that Ancestral Pueblo pottery becomes more colorful through time, except when it doesn’t).

**Figure 2** (left). Different types of paints applied to Ancestral Pueblo pottery

Carbon paints (top) are made from organic material; mineral paints (middle) are made from geological materials; and glaze paints (bottom) are a special instance of mineral paint where the correct combination of ingredients and firing temperature have been achieved. (Photo by the author)

**Figure 3** (below): Mesa Verde Black-on-white bowl with geometric designs (ASM# A-4731); note that the black figures were created with paint while the background white color was created with a slip.

---

**About the Photographers and Photographs**

Except where noted, all photographs in this article are by Star Ikamba with assistance from Max Mijn. Ikamba is a student employee at the Arizona State Museum through San Miguel High School’s Corporate Work Study Partners program. He is an intuitive photographer who seeks to learn from mistakes.

Max Mijn is a photographer and digital asset specialist at the Arizona State Museum. Mijn is a visual artist whose work generally centers around lens-based media but is not limited by discipline.

Except where noted, all images are courtesy of the Arizona State Museum, The University of Arizona (https://statemuseum.arizona.edu/).
However, as so beautifully expressed by Marit Munson in *Color in the Pueblo World*, “cultural associations of color among the Pueblos are deep and complex. Color symbolizes directions, identifies group affiliations, cures ailments, affects the weather, and manifests katsina and other spiritual beings, among other things.” As such, we need to expand how we think about colors and color combinations to include questions about why potters may have made their color decisions and how Ancestral Puebloans may have viewed those colors.

**Color Horizon #1: Hachure**

One of the archaeology articles that has had a profound effect on how I view pottery design was written by Stephen Plog in 2003. If you haven’t read this article, you should. Since reading it, I have never viewed the use of hachure (thin, parallel lines used to fill the interior of design elements such as steps, bands, and triangles; Figure 4) on Ancestral Pueblo pottery the same.

Simply put, Plog argues that hachure was used by potters to represent the color blue-green on black-and-white pottery produced during the eleventh and early twelfth centuries in northwestern New Mexico’s Chaco region. Plog discusses the common use of hachure on pottery from this period. He then goes on to examine the use of color on decorated nonceramic objects from the Chaco region, such as painted wooden and stone objects. He finds almost no hachure on such nonceramic objects, but also finds parallels between the use of hachure on black-and-white pottery designs and the use of blue-green pigments on nonceramic objects. These findings, along with the importance of the color blue-green as represented by the abundant use of turquoise in the Chaco region, form the foundation of his argument.

Plog recognizes that the use of hachure on Ancestral Pueblo pottery extends well beyond the spatial and temporal constraints of his study. Hachure was applied regularly on pottery types throughout the Ancestral Pueblo region, as well as in the Mogollon region (Figure 1). Potters in these regions were decorating their vessels with hachure starting as early as 900 CE, possibly earlier, and were using it commonly through the early 1300s. It was incorporated into both black-on-white (Figure 5) and black-on-red (Figure 6) pottery designs. Potters included hachure on bowls, jars, canteens, ladles, and unusual forms. Given the extent of hachure as a design motif across
multiple ceramic wares and types found across two archaeological regions, it absolutely fits my definition of a design horizon.

The importance of blue-green in Ancestral Pueblo cosmology extends far beyond the Chaco Phenomenon and well into historical and modern Pueblo thought. Blue-green is associated with moisture, fertility, and general well-being. As such, it should not be surprising that potters found a way to represent the color on a medium in which blue-green is difficult to produce. Hachure seems like a logical solution given that, when viewed from a distance, the eye often perceives such close parallel line work as gray; in the correct light, gray can often be perceived as having a slight blue cast.

Figure 6. A Pinedale polychrome bowl (ASM# 2008-823-45) dating to the early fourteenth century
Note the use of hachure-filled design motifs along with squiggle-filled ones. If Plog’s arguments can be expanded to black-on-red pottery designs, then the hachure-filled motif would have been viewed as a blue design on a red background. Would the squiggle-filled design have been viewed as black? Or another color?
The wide use of hachure comes to a fairly abrupt end during the first half of the 1300s. I argue that its discontinuation is a result of a new design horizon on Ancestral Pueblo pottery – the development and spread of glaze paint.

**Color Horizon #2: Glaze Paint**

The widespread use of glaze paint as a design horizon began in the western portion of the Ancestral Pueblo region in the late twelfth century and then quickly spread to the Rio Grande area. Glaze paint was not produced at Ancestral Hopi villages nor in villages in the northern Rio Grande area, but was otherwise the dominant paint choice for Ancestral Pueblo potters from the late 1200s to approximately 1700 CE. Potters applied glaze paint to all of the common vessel forms, and glaze-painted vessels appear to have been used for multiple purposes including food and water storage as well as food service.

Early glaze-painted vessels are also associated with larger bowl sizes (over 30 cm in diameter), new paint and slip color combinations, new design layouts, and an increase in iconographic and representational motifs. Given this suite of characteristics, many archaeologists have speculated that large glaze-painted bowls may be associated with an increase in feasting events. These feasts, in turn, may have been part of ritual practices and ideologies associated with social integration and group wellbeing that Ancestral Puebloans began to emphasize as people from different backgrounds began to live together in large nucleated pueblos.

(More definitions!) A *glaze paint* (see Figure 2) is a vitrified substance fused onto the surface of pottery. (To vitrify is to convert silica into glass by exposure to heat.) To produce a glaze paint requires two conditions: the correct ingredients and a hot enough temperature. In terms of ingredients, a glaze paint is a special case of a mineral paint. Ancestral Pueblo glaze paint recipes included silica, a flux, alumina, and colorants. Silica is a common mineral that melts to form the glass.

A *flux* is an additive that lowers the melting point of silica, allowing the glass to form at relatively lower temperatures. Alumina is a naturally occurring chemical compound that helps to control the viscosity of melted glass. Common colorants in Ancestral Pueblo glaze recipes include copper, iron, and manganese; these metal oxides may also have acted as a flux. In terms of temperature, silica can begin to melt at around 1,000°C (1,832°F), which is right at the upper range of the heat produced in informal pit and surface kilns used by Ancestral Pueblo potters.

The ability to create a hot enough fire would have been a skill in its own right. Ultimately, glaze paint is not a technology that can be copied by viewing a finished vessel. Potters needed to have had the correct ingredients and the correct firing temperature because without both, a glaze paint would not have formed.

The need to have learned this technology, rather than to have been able to copy it, has important implications that numerous archaeologists have considered for how glaze paint technology spread, but is beyond the scope of discussion in this article.

How is the development of glaze paint as a design horizon related to the discontinued use of hachure as a design horizon? I argue that the use of glaze paint became a representation of blue-green that replaced the need for hachure. The earliest glaze-painted types are also pottery types that have hachure incorporated into their design (Figure 7). We also know that the earliest glaze paints were copper-bearing. Copper-
bearing minerals are quite often blue-green (think turquoise, malachite, azurite).

Initially, potters were probably using copper-bearing minerals to make their mineral paint recipes (the blue-green color probably having had significance even if the color disappeared upon firing). At some point, the right combination of ingredients and hot enough pit kiln resulted in a glaze paint. Quickly, potters were able to figure out how to reproduce what was initially a fortunate coincidence.

But glaze paints are shiny, they appear ‘wet,’ and recent research on Pueblo color symbology has pointed to the importance of ‘shiny’ as a characteristic with similar cosmological significance as the color blue-green. As such, the need to represent blue-green with hachure was replaced with (I argue) a better representation. I suspect it was not a coincidence that copper-based glaze recipes were quickly replaced by lead-based glaze recipes, the lead primarily coming from the ‘shiny’ mineral galena. Ultimately, as glaze became the dominant paint type on Ancestral Pueblo decorated pottery, use of hachure all but disappeared.

The use of glaze paint to represent water and moisture, and possibly fertility and general well-being, becomes even more apparent during the later centuries of glaze-painted pottery production. The latest pottery types in the Rio Grande Glaze Ware sequence, produced from approximately 1480-1700, are so runny that they often drip down the surface of the vessel (Figure 8). It has been argued that this runny paint was a mistake, that potters “lost control” of their glaze during Spanish colonialism.

A much more satisfying explanation for this runny glaze was provided by Spielmann and colleagues, who suggested that potters were intentionally making their paint runny so as to hide religious symbols from the Spanish. Although I love the active rebellion ascribed to potters in this latter argument, both arguments are problematic because Pueblo glaze paints start becoming runnier in the mid 1400s prior to the Spanish entering the Southwest. I agree with Spielmann and colleagues that it was an esthetic choice, however, I argue it was an intentional decision by potters to make the glazes run so that the paint looked even more like water.

Pueblo potters quit producing glaze painted pottery ca. 1680-1700, that is, during the era of the Pueblo Revolt and its aftermath. It has been argued that this was due to changes in exchange networks, new restrictions placed on the Pueblo villagers by the Spanish on their re-entry into the region, and potters’ loss of access to the lead-bearing minerals required to make the glaze paints. However, the answer may not be so straightforward; all potters turning their back on a 400-year tradition seems to me to require changes in cultural design esthetics as well as the ritual contexts in which glaze-painted pottery had been a vital part.

I am not suggesting that Pueblo cosmology fundamentally changed, but rather how that cosmology was expressed fundamentally changed. But this is highly speculative on my part, and requires further research into eighteenth century Pueblo pottery production and technology.

**Color Horizon #3: Polychrome Slips**

The final color horizon I address is the occurrence of polychrome slips. For simplicity’s sake in this discussion, ‘dark’ slips include shades of reds, oranges, and browns while ‘light’ slips include variations
on whites, yellows, and light grays. Ultimately, what I am focusing on here is the combination of a ‘dark’ slip and a ‘light’ slip on the same vessel that, most commonly in my research, translates as red and white. Throughout most of time on Ancestral Pueblo pottery, potters applied a single slip color to their vessels. Starting in the late thirteenth century, potters began to apply two slip colors to some of their vessels (Figure 9); a design esthetic that archaeologists refer to as polychrome slips. (Vessels with single slip colors also continued to be made.)

On bowls, polychrome slips were normally applied with a light slip on the interior and a dark slip on the exterior. On jars, polychromes slips were normally applied in bands with light slips dominating the top portion of a jar and dark slips dominating the bottom or base. Other combinations are not uncommon: Tonto Polychrome displays red and white slips applied in ‘ribbons,’ while Hidden Mountain Polychrome bowls have a light slip on the exterior and a dark slip on the interior. Once started, polychrome slips continued to be applied to vessels into the historic and contemporary periods. This practice was (and is) widespread, crosscutting pottery wares, types, and regions.

I have explored the use of polychrome slips at various sites in various regions, most notably in the Ancestral Zuni area and the Lower Rio Puerco of the East area. In the Ancestral Zuni area, there are two decorated pottery types most commonly produced in the late 1200s and early 1300s: Heshothaauthla Polychrome (Figure 10), which is defined as having a red slip, and
Kwakina Polychrome (Figure 11), which is defined as having a red slip on bowl exteriors and a white slip on their interiors. Both pottery types are primarily large bowls that I, and others, have interpreted as reflecting their use in feasting contexts.

Heshotauthla and Kwakina Polychromes were both made throughout the Ancestral Zuni region by potters from the same production tradition and who had access to the same set of clay and paint resources. In addition, potters were employing a similar suite of design layouts, motifs, and elements on both pottery types. These two types cannot be distinguished by their bowl exteriors in terms of slip color or painted designs. In other words, the truly dramatic difference between these two types is the bowl interior slip color.

During the same time period in the Lower Rio Puerco of the East area, the pottery production patterns are different. For my study in this area, I focused only on decorated bowls. In the late 1200s and early 1300s there are multiple decorated bowl types produced in the area and recovered from both large villages in the area. All of the types are primarily large bowls, which I have interpreted again as reflecting use at feasting events. Although all of the pottery was produced with the same suite of local clays, potters were adding different local materials as tempers (the hard, grainy material added to clay prior to making a vessel) to these local clays.

Different pottery types in the Lower Rio Puerco area tend to have different design layouts, motifs, and elements as well as different slip colors on the interior. Bowl interior slip colors range from white to yellow to orange to buff to red. In general, the different tempers, interior slip colors, and design elements co-occur. Despite all of these differences, most all of these types share the same design feature: 98 percent of the decorated bowls have polished red-slipped exteriors with the same kind of designs. So, like in the contemporaneous Ancestral Zuni area, these pottery types cannot be distinguished by their bowl exteriors.

In both the Ancestral Zuni and Lower Rio Puerco areas, the identical exterior designs on large bowls suggest a conscious attempt by the painters of these bowls to make them indistinguishable from one another at a distance. However, the various interior slip colors on large bowls would have been viewed only by those near the bowls, probably those who were using them. At this moment in time in both study areas, more people were living together in larger nucleated villages than ever before. The residents of the Ancestral Zuni area seem to have been primarily different kin groups with a long history in the region but probably with different oral traditions concerning their ancestry. In the Lower Rio Puerco area, the residents of these newly built large villages consisted of both local residents and newly arrived immigrants.

As mentioned above, it has been argued by numerous archaeologists that new ceremonial practices were adopted during this period throughout the Ancestral Pueblo world to help integrate social groups with different backgrounds who were now living together in large villages. Feasting events were part of this integrative practice. I argue that what was happening in terms of polychrome slip decoration is that during these feasts people were using these bowls to signal that “we are all the same” on the exterior of their bowls to all the feast participants. At the same time, they were using these bowls to signal that “we have a unique origin story” on the interior of their bowls to the people using those bowls. Although entirely speculative on my part, it is possible that the choice of interior slip color represented the direction from which ancestors migrated because color is associated with specific cardinal directions among so many Pueblo groups.
Conclusion

In some ways, my exploration of the above design horizons has led to even more questions. For example, the Salado Polychrome series (Pinto Polychrome, Gila Polychrome, Tonto Polychrome, Cliff Polychrome) appears to be part of the polychrome slip horizon starting in the late 1200s; but then in the mid-1300s, the potters making Tonto Polychrome (Figure 12) took polychrome slip application in a whole new direction. Does this change reflect a change in how polychrome slips were being used to impart meaning? Or was the Salado Polychrome series never part of the horizon discussed above?

Another example: there are many Ancestral Pueblo vessels that date prior to 1200 CE that archaeologists type as being black-on-white but that have design elements that suggest ancient potters may have viewed them differently. Recently, Deborah Huntley and I have argued that some Mimbres “black-on-white” bowls are unslipped on the exterior, resulting in these bowls having a browner appearance than the bowls that are slipped white on the exterior. Are these examples of polychrome surfaces (even if technically not slipped)? Similarly, there are bowls that have been called “black-on-white” by archaeologists that clearly have white paint on the bowl exterior (Figure 13). Why would potters paint white
on the exterior unless that surface was meant to be read as a color other than white? Is archaeological nomenclature making us miss aspects of Ancestral Pueblo design? Maybe.

It has been my goal this article to provide a broader perspective on how we think about pottery design by couching my discussion within the framework of design horizons. However, I in no way mean for this to be the end of the discussion. There are other possible design horizons on Ancestral Pueblo pottery that could be, and in some instances are being, considered: the line break, the florescence of yellow and buff slips across the Pueblo World, the application of thin white lines, the use of red filler to name just a few.

Another possible horizon that I find interesting but am not sure how to interpret is the existence of different “rules” of paint color application on Ancestral Pueblo pottery. For example, “Salado rules” where red and black never touch is more common in the Western Pueblo World, while “Ramos rules” where red and white never touch is more common in the Eastern Pueblo World. To add complexity to the discussion, both sets of rules seem to have been in use on pottery in the Casas Grandes World. But ultimately, my point is, there are many different design horizons to be explored that might provide new insights into Ancestral Pueblo pottery and the people who used it.

I would like to end with a brief comment about one of my favorite sherds that keeps me humble in my research. It is a Rio Grande Glaze Ware (Figure 14) from the Pottery Mound bulk material that I examined for my dissertation. I love how it expresses the control that potters had over what they were doing. The color gradient on this sherd not only throws a wrench into my interpretations concerning polychrome slips, but it is also a testament to the phenomenal skill that the potter had in decorating her vessel.

Too often when I was a graduate student, I was told that oranges or browns were firing “mistakes” or that potters “didn’t know what they were doing” or that potters had “lost control” of their glaze paint. I have no doubts that learning happened, mistakes happened, accidents happened, and experimentation happened. But this sherd shows that potters knew exactly what they were doing, and more often than not, we should assume that things we don’t understand may be a mistake in our seeing, and not a mistake in their making.

![Figure 14. My favorite sherd — a Rio Grande Glaze Ware sherd from Pottery Mound. (Photo by the author, use of image courtesy of the Maxwell Museum of Anthropology, University of New Mexico)](image)

**About the Author**

**Suzanne L. Eckert** is the Head of Collections at the Arizona State Museum, University of Arizona. Much of her research is focused on exploring the spread of glaze-painted pottery technology throughout the Ancestral Pueblo World and the social, ritual, and economic changes associated it.

**Acknowledgments.** This article summarizes many of the ideas that have come out of discussions with my colleagues who hold as great a passion as I do for Southwestern pottery and the potters who made it: Judith Habicht-Mauche, Deborah Huntley, Patrick Lyons, Kari Schleher, and David Snow. Thanks also to Maxine McBrinn who, while not a ceramicist, always adds insightful comments about style, color, and technology. In addition, I would like to express my deepest gratitude to Old Pueblo Archaeology Center and the Board of Directors for their continued dedication to bringing the past to the public during the very difficult last two years; Al Dart, you are a gem and inspiring in your ceaseless dedication to public outreach and the field of archaeology.
Suggested Readings


Would you like to subscribe to the *Old Pueblo Archaeology* bulletin? If you are not currently an Old Pueblo Archaeology Center member and would like to receive future issues of the bulletin, as well as other membership benefits described at [https://www.oldpueblo.org/about-us/membership/](https://www.oldpueblo.org/about-us/membership/), please complete and send us the application form below with your payment for your selected membership category, or go to [http://www.oldpueblo.org/forms/mbrfrm.php](http://www.oldpueblo.org/forms/mbrfrm.php) to join online.
Meet the Members of Old Pueblo Archaeology Center’s Board of Directors

Old Pueblo Archaeology Center is a 501(c)(3) nonprofit organization based in Tucson. Its board of directors is Old Pueblo’s policy making and administrative review body responsible for the oversight of all of the organization’s business. The board holds regularly scheduled meetings every other month.

The board’s power and responsibility include maintaining a viable and positive image for Old Pueblo, establishing basic policy directives for Old Pueblo’s operation, controlling the corporation’s revenue and expenditures including adoption of an annual budget, and continuously evaluating and critiquing Old Pueblo’s programs, performance, and activities. The board employs an Executive Director and others to implement board policies and programs, and engages in activities necessary or appropriate to provide funds for the operation and maintenance of the organization.

Board Members and Officers

Old Pueblo Archaeology Center’s current officers of the board are President Monica Young, Vice President Samuel Greenleaf, Secretary Patricia Wiedhopf, and Treasurer Monica Prillaman. Some information about each of them, and about each of Old Pueblo’s other current board members, is given below in sequence by the number of years each has served on the board.

Samuel “Sam” Greenleaf is Old Pueblo Archaeology Center’s longest-serving board member (since 2004) and has been the organization’s vice president since 2015. Sam is a retired building engineer and general contractor whose skills and experience have come in handy – to say the least! – for taking the lead in overseeing and implementing most of Old Pueblo’s construction and maintenance projects.

Sam with his grandson Chance

A former member of the Arizona Archaeological and Historical Society’s board of directors (1988-1989), Sam still is an active avocational archaeologist who teaches Old Pueblo’s arrowhead making and flintknapping workshops. He also volunteers a significant amount of his time assisting with the children’s education programs offered by Old Pueblo Archaeology Center.

Monica Zappia Young (board member since 2011, Secretary 2012-2014, President since 2014) is an Arizona native, having received her B.A. in 1984 and her M.A. in Anthropology in 2010 at The University of Arizona. She works at the Arizona State Museum as a Curatorial/Museum Specialist in the Office of Ethnohistorical Research and as Research Specialist in the Permits Office, serves as Secretary/Treasurer on the board of directors for the nonprofit Southwestern Mission Research Center, and does administrative research and outreach for the nonprofit Friends of Tucson’s Birthplace at Tucson’s Mission Garden.

Monica (right) and friend

Monica’s research interests include ethnohistory, historical archaeology, Spanish colonial borderlands, documentary editing, and genealogy. She has been President of Old Pueblo Archaeology Center since January 2014.
Patricia “Pat” Wiedhopf (board member and Secretary since 2014) retired as Special Staff Assistant to former Pima County Attorney Barbara LaWall. Pat actively participates in organizations that create opportunities for women’s growth, leadership, and power; increase women’s participation in the political process; address the changing needs of education; and stand against racism.

Pat

Pat received her B.A. in Secondary Education with a major in English literature and minor in art from The University of Arizona. She serves on several nonprofit boards and political action committees and is president of the Vista Del Rio Residents Association. The Vista Del Rio Cultural Resource Park at the entrance to Pat’s neighborhood was established to ensure archaeological preservation and protection of what is left of a large Rincon-phase Hohokam village inhabited between 1000 and 1150 CE. Support to preserve this site was initiated and spearheaded by the VDRRA’s board of directors, who continue to provide ongoing stewardship of the park. Pat was one of the VDRRA board’s several members who received site stewardship training. In 2007 the VDRRA received a $65,000 grant from a portion of the Tohono O’odham Nation gaming revenues to assist with park up-keep, stewardship, and education programs.

VDRRA has partnered with Old Pueblo Archaeology Center since then to educate children and adults about the ancient Hohokam who lived at Tucson’s Vista Del Rio archaeological site and elsewhere in southern Arizona. Under the leadership of the VDRRA board the park received the 2005 Governor’s Heritage Preservation Honor Award, the 2007 Tucson Xeriscape Contest Award, and the 2009 Historic Preservation Certificate from the Tucson-Pima County Historical Commission.

Monica “Nica” Prillaman (board member and Treasurer 2004-2006 and again since 2017) is self-employed as a Certified Public Accountant providing accounting and tax services for individuals and small businesses. A member of the American Institute of Certified Public Accountants and the Arizona Society of Certified Public Accountants, she has over 30 years of experience in public accounting and 15 additional years in business.

Nica

Nica first became involved with Old Pueblo Archaeology Center in 2002 when, through a former employer, she worked with then-Treasurer JoAnn Cowgill to provide accounting and tax services to Old Pueblo. She was first elected to Old Pueblo’s board in 2004 and served as Treasurer from then until 2006. Nica’s exposure to anthropology through a course at the University of Arizona and through a tour of the Hopi reservation engendered a respect for the mission of Old Pueblo Archaeology Center to educate and promote the appreciation of the history of traditional cultures.

Lynda Klasky (board member since 2015), originally from Toronto, moved to Arizona as a child for the sunny climate. She traveled to Africa, Asia, South America, Central America, and most of Mexico in pursuit of a lifelong passion for history and archaeology.

Lynda

Lynda’s retirement from a 30-year career at the University of Arizona created time to volunteer with the Arizona Site Stewards, Pima Community Col-
lege Archaeology Centre, Old Pueblo Archaeology Center, Produce on Wheels Without Waste, Tucson food and lodging for the homeless, the Tucson Museum of Art Library, and Pima County Library. Lynda also is a docent at the historic San Xavier Mission and an ambassador for Tucson Audubon Society.

Mitchell “Mitch” Kagen (board member since 2016) fell in love with archaeology while growing up in New York. As an undergraduate college student, he participated in his first dig in 1975, at the Street archaeological site outside Oneonta, New York. Continuing his study of anthropology, Mitch transferred to the University of Arizona where he participated in the excavation of the Hardy archaeological site at Fort Lowell Park from 1977 to 1979. A career change led to a Bachelor of Science in Public Administration and a Master of Science in Education.

Mitch asked that his photo not be included!

Although Mitch has been employed in the legal field for over 30 years, he still maintains his passion for archaeology. He has been a longstanding board member of the Vista del Rio Residents Association that helped establish and continues to maintain and preserve an award-winning City of Tucson park dedicated to the rich, ancient Hohokam village below. In addition to his ongoing role as a steward of the site, Mitch has partnered with Old Pueblo Archaeology and the Tohono O’odham Nation to conduct educational programming for children and adults about the early inhabitants in southern Arizona and the need to both preserve and respect all archaeological sites.

Amy Jo “AJ” Vonarx is a K-12 educational designer and STEM teacher, born and raised in central Pennsylvania. Once an archaeologist, she received Anthropology degrees from Penn State (BA) and the University of Arizona (MA), with a Master’s Degree in Secondary Science Education (MA) from the University of Michigan. Currently, she works as an educational consultant and evaluator, collaborating on inclusive, accessible laboratory units, science internships, and field learning experiences.

AJ

With over 10 years of archaeological survey and excavation experience in Mexico, Guatemala, and the Southwest, her former employers include the Arizona State Museum, the Drachman Institute for Land and Regional Development, the University of Arizona AMS Radiocarbon Laboratory, and a number of cultural resource firms. Much of her archaeological research involved partnership with Fire Scientists and other specialists in Forensic Science. She built on these experiences during a few years as an on-call Crime Scene Surveyor/ Mapper and Micro-Evidence Documentation Specialist for fire and law enforcement. AJ has served on the Public Education Committee of the Society for American Archaeology, as Vice-President for Membership of the Society for Archaeological Sciences, and as Old Pueblo’s Treasurer.

Charles R. “Butch” Farabee (board member since 2018) is a 1960 graduate of Tucson High School, then the University of Arizona with a BS in Zoology, an MS from California State University, Fresno, in Public Administration, and then the FBI Academy. In addition to serving three years on the Tucson Police Department in the mid-1960s, he retired from 35 years with the National Park Service in 1999, serving in 11 different areas, rising through the ranks from field park ranger to superintendent. In several of these national park areas he was either directly responsible for protecting archaeological and historical sites and in two others had overall responsibility for these culturally significant treasures.

Butch
Butch loves the Southwest, Arizona, and northern Mexico, and is very interested in precontact and postcontact history as well as the natural history these areas have to offer. He is the author of books about National Park Service rangers and search and rescue including *Death, Daring and Disaster: Search and Rescue in the National Parks; National Park Ranger: An American Icon; Off the Wall: Death in Yosemite* (coauthored with Dr. Michael Ghiglieri); *Big Walls, Swift Waters: Epic Stories from Yosemite Search and Rescue*; and *Diving in the National Park Service: An Administrative History* (coauthored with Daniel J. Lenihan; available free online).

**Dr. Martina Dawley** (board member since 2019) accepted the position of Senior Archaeologist for the Hualapai Nation’s Department of Cultural Resources in 2019, and in 2021 she was promoted to the position of Tribal Historic Preservation Officer and Director of the Department. From 2010-2019 she served as Manager for American Indian Relations at the Arizona State Museum (ASM), Assistant Curator for American Indian Relations for the ASM, Adjunct Faculty member of Pima Community College in Tucson, and Lecturer in American Indian Studies at Arizona State University.

Martina

Since 2013 Martina has served on the Arizona State Historic Preservation Office’s “Tribal Consultation Work Session” Planning Committee, the University of Arizona (UA) Native Faculty Group, the Mellon Opportunity for Diversity in Conservation Advisory Board in the UCLA/Getty Conservation Department, Community + Museums Collaboration Guidelines Core Group at the School of Advanced Research: Indian Art Research Center in Santa Fe, and founder and CEO of Neoglyphix: The All Indigenous Aerosol Artists Collective. She received the UA Southwest Institute for Research on Women Thesis Award in 2009, the UA Centennial Achievement Doctoral Award in 2013, and the UA Cooperative Extension and UA Life & Work Connections Walk across Arizona Challenge Award in 2015, and was a winner in the 2015 Tucson Youth Poetry Slam’s Educator Competition Slam competition.

Martina received her Bachelor of Arts degree in Anthropology with a focus on southwestern archaeology in 2006, and her Master of Arts and Doctorate degrees in American Indian Studies from the UA in 2009 and 2013, respectively.

**William “Bill” Gillespie** (board member since 2019) received his Bachelor’s and Master’s degrees in Anthropology from the University of Colorado at Boulder. While at Colorado he spent four summers doing archaeological survey at Mesa Verde National Park and excavating in Mancos Canyon on the Ute Mountain Ute homelands. He was a member of the Chaco Project, doing research for the National Park Service in Chaco Canyon in northwestern New Mexico.

Bill

Bill moved to southern Arizona in 1984 and began working as an archaeologist for the Coronado National Forest in 1989, continuing in that capacity until retiring at the end of 2015. As Forest Archaeologist he was responsible for overseeing the preservation and management of the numerous and varied heritage sites on the Forest’s 1.8 million acres. Among his longtime interests are the relationships of past peoples and the landscapes and environments they lived in, the history of indigenous peoples in the Southwest and their interactions with European Americans, zooarchaeology, historical archaeology, and the history of the Forest Service and other land-managing agencies. He also enjoys continuing work with Arizona Site Stewards and other volunteers, including rock-art researchers in the Tucson area and at Chaco Canyon.
Maegan Lopez (board member since 2020) comes from New Fields, Arizona on the Tohono O’odham Nation, located near the Baboquivari mountains and the edge of the U.S./Mexico boundary. Maegan works full time as a teacher aide in the Special Education Department at Há:sañ Preparatory and Leadership School – a bicultural, college preparatory, charter high school in Tucson, designed for Indigenous students. She also works as an Assistant Gardener for Mission Garden, an agriculture museum and heritage tree project located at the base of Tucson’s “A” Mountain.

For several years prior to her Há:sañ and Mission Garden work, Maegan worked for the Tohono O’odham Nation’s Health and Human Services Department, providing health education, management, and wellness programs through traditional foods and physical activity, working with all ages across the Nation and contributing in many ways to the wellness of the O’odham.

Maegan has a son named Max, her Dad’s name is Lloyd, her Mom’s name is Kathleen and her sister’s name is Juliette. Both extended family and close family members have been huge influences in Maegan’s path and knowledge. Maegan was added to Old Pueblo’s board of directors in a May 2020 special election.

Anabel Galindo (board member since 2021) received her PhD from the University of Arizona. Her work explores the Yaqui community, identity, and mobility from the late colonial to the early 20th century. Using mobility as a theoretical framework, she emphasizes the importance of moving away from misconstrued notions about Indigenous Peoples and their history.

Anabel works for the Pascua Yaqui Tribe Department of Language and Culture as a history instructor, developing classes and curriculum for community members of all ages to engage in Yaqui history through a multidisciplinary approach. She is a proud mother of two beautiful daughters, and together they are learning the beautiful Yaqui language.

Asa Sherry (board member since January 2022) grew up attending school and living with his mother in New Jersey, while returning to Tucson to spend summers and winter breaks with his father. His mother firmly believed in introducing him to other cultures, living in one of the most culturally diverse regions of the country and travelling internationally. With his father, Asa spent summers traveling to Native American reservations in Arizona, New Mexico, and Montana. In 1996 at age 16 he and a friend did a summer internship with Old Pueblo Archaeology, and the positive experience influenced both of them in their undergraduate pursuits.

Asa went on to attend the University of Arizona from 1998 to 2004, majoring in Anthropology and minoring in Classics. His original focus was in archaeology but shifted to cultural anthropology after some particularly inspiring classes. He took several semesters of history courses and additional archaeology classes after graduation, establishing a further academic background in history before returning to the University of Arizona for a Master’s degree in Education (received in 2015). Asa has worked for the Tucson Unified School District since 2010, be-
ginning as a substitute and receiving his full teaching certifications and endorsements in 2015. He has since taught 6th grade Honors Social Studies and Language Arts, 8th grade Gen Ed Social Studies, and 7th/8th grade GATE Social Studies (his long-standing and current position).

Through teaching Asa has established a relationship with several organizations in Tucson and remains an active supporter of the Tucson Jewish Museum & Holocaust Center, the Pima Air & Space Museum, and the Arizona History Museum. Outside of his professional pursuits he has spent several years volunteering at the Loft Cinema, the Community Food Bank, and as a contributing member of the Southern Poverty Law Center.

Old Pueblo’s Executive Director

Allen “Al” Dart, a Registered Professional Archaeologist, is Old Pueblo Archaeology Center’s Executive Director and an ex officio board member. Al earned his B.A. and M.A. degrees in Anthropology from the University of New Mexico and the University of Arizona, respectively. From 1975 to 2019 he was employed as a professional archaeologist sequentially with the Museum of New Mexico, the US Bureau of Indian Affairs, the Arizona State Museum (University of Arizona), private cultural resources consulting firms, Old Pueblo Archaeology Center, Pima Community College, and the USDA Natural Resources Conservation Service. He co-founded Old Pueblo in 1993 with Carolyn O’Bagy Davis and Marc Severson, was appointed full-time Executive Director when the board of directors was formed on January 11, 1994, and since 2008 has volunteered his time as Old Pueblo’s Executive Director.

Al serves on the nonprofit Southwestern Mission Research Center’s board of directors (Past Vice President and President). He is a member of Old Pueblo Archaeology Center (charter member), the Albuquerque Archaeological Society, the American Rock Art Research Association, the Archaeological Conservancy, Archaeology Southwest, the Arizona Archaeological and Historical Society (AAHS; Past President, life member), Arizona Archaeological Council, Arizona Archaeological Society (AAS), the Arizona State Museum (charter member), the Friends of Pueblo Grande Museum, the Grant County (NM) Archaeological Society, the New Mexico Archaeological Council, the Pacific Coast Archaeological Society, the Pinal County (AZ) Historical Society (life member), the Register of Professional Archaeologists, the Society for American Archaeology, and the Texas Archaeological Society.

Al has been a presenter for the Arizona Humanities “AZ Speaks” program since 1997, a volunteer instructor and Zoom tech host for the University of Arizona’s Osher Lifelong Learning Institute (OLLI) since 2009, and an instructor for Oasis Albuquerque since 2021. From 2003-2010 he led tours and taught classes for Pima Community College’s Community Campus program. Al has received the AAS Professional Archaeologist of the Year Award, the AAHS Victor R. Stoner Award, the Arizona Governor’s Archaeology Advisory Commission Award in Public Archaeology, and other honors for his efforts to bring archaeology and history to the public.

Old Pueblo’s Mission

Old Pueblo Archaeology Center’s mission is to educate children and adults to understand and appreciate archaeology and other cultures, to foster the preservation of archaeological and historical sites, and to develop a lifelong concern for the importance of nonrenewable resources and traditional cultures. Old Pueblo has been an incorporated 501(c)(3) nonprofit organization in the State of Arizona since 1994.
All times listed here are “ARIZONA/Mountain Standard Time,”
which prior to November 6, 2022, is the same as Pacific Daylight Time.

Thursday May 19, 2022: Online
“Third Thursday Food for Thought” free Zoom online program
featuring “The Elk Ridge Community in the Mimbres Pueblo World”
presentation by archaeologist Barbara J. Roth, PhD
7 to 8:30 p.m. Free
Register at this link:
https://us06web.zoom.us/webinar/register/WN_1tPSlzRPQiO30CZ5u-0sYw.

Wednesday June 8-August 24, 2022: Online
“Archaeology of the Southwest” 12-session online adult education
class with archaeologist Allen Dart
6:30 to 8:30 p.m. each Wednesday evening June 8-August 24. $99
donation ($80 for Old Pueblo, Arizona Archaeological Society, and
Friends of Pueblo Grande Museum members)
To register contact Old Pueblo at 520-798-1201 or
info@oldpueblo.org.

Thursday June 16, 2022: Online
“Third Thursday Food for Thought” free Zoom online program featuring
“Diné History’s Impact on Jewelry” presentation by Nanibaa Beck,
cosponsored by Arizona Humanities
7 to 8:30 p.m. Free.
Register at this link:
https://us02web.zoom.us/webinar/register/WN_8QpCuw1XQ6O09j51eJVwDQ.

Thursday July 21, 2022: Online
“Third Thursday Food for Thought” free Zoom online program
featuring “Ecological Knowledge and Practices of Traditional
Southwestern Agriculturists” presentation by Gary P. Nabhan, PhD
7 to 8:30 p.m. Free.
Register at this link:
https://us06web.zoom.us/webinar/register/WN_ruxu_i6vRo2lZMKfykrIUA.
More Old Pueblo Archaeology Center Upcoming Activities

All times listed here are “ARIZONA/Mountain Standard Time,” which prior to November 6, 2022, is the same as Pacific Daylight Time.

**Tuesday July 12, 2022: Online**

“Indigenous Interests” free Zoom online presentation, topic and guest speaker to be announced
7 to 8:30 p.m. Free.
Register at this link: https://us06web.zoom.us/webinar/register/WN_Wn7PTGxBQSaQ1PLWfoOLnA.

**Thursday August 18, 2022: Online**

“Third Thursday Food for Thought” free Zoom online program featuring “The Full Story of Pueblo Grande (or at Least a Few Chapters)” presentation by City of Phoenix Archaeologist Laurene Montero
7 to 8:30 p.m. Free
Register at this link: https://us06web.zoom.us/webinar/register/WN_yVTuQ1QLOSOnrcWw.

**Tuesday September 13, 2022: Online**

“Indigenous Interests” free Zoom online presentation, topic and guest speaker to be announced
7 to 8:30 p.m. Free.
Register at this link: https://us06web.zoom.us/webinar/register/WN_I6V1sk2PTEukauXCO3DvQ.

**Thursday September 15, 2022: Online (Encore from March 17)**

“Third Thursday Food for Thought” free Zoom online program featuring “The Sinagua: Fact or Fiction?” presentation by archaeologist Peter J. Pilles, Jr.
7 to 8:30 p.m. Free.
Register at this link: https://us06web.zoom.us/webinar/register/WN_hLUS_B7-R_exp0XxQAKrBw.
And MORE Old Pueblo Archaeology Center Upcoming Activities!

All times listed here are “ARIZONA/Mountain Standard Time,” which prior to November 6, 2022, is the same as Pacific Daylight Time.

**Wednesdays September 21-December 14, 2022: Online**

“The Hohokam Culture of Southern Arizona” online adult education class with archaeologist Allen Dart

6:30 to 8:30 p.m. each Wednesday September 21-December 14 except skip October 26. $99 donation ($80 for members of Old Pueblo, Arizona Archaeological Society, and Friends of Pueblo Grande Museum).

To register contact Old Pueblo at 520-798-1201 or info@oldpueblo.org.

**Thursday September 22, 2022: Tucson-Marana, AZ**

“Autumn Equinox Tour to Los Morteros and Picture Rocks Petroglyphs Sites” with archaeologist Allen Dart departing from near Silverbell Road and Linda Vista Blvd. in Marana, Arizona

8 a.m. to noon. $35 donation ($28 for Old Pueblo and Friends of Pueblo Grande Museum members).

To register contact Old Pueblo at 520-798-1201 or info@oldpueblo.org.

**Tuesdays October 4 and 18, 2022: Online**

“Understanding Indigenous Mexico through the Maya and Aztec Codices” two-session online adult education class with ethnohistorian Michael M. Brescia, PhD

6:30 to 8:30 p.m. each Tuesday. $50 donation ($40 for members of Old Pueblo, Arizona Archaeological Society, and Friends of Pueblo Grande Museum.

To register contact Old Pueblo at 520-798-1201 or info@oldpueblo.org.

**Saturday October 8, 2022: Tucson**

“Arrowhead-making and Flintknapping Workshop” with flintknapper Sam Greenleaf

9 a.m. to noon. $35 donation ($28 for Old Pueblo and Friends of Pueblo Grande Museum members)

To register contact Old Pueblo at 520-798-1201 or info@oldpueblo.org.
Old Pueblo Archaeology Center’s *Archaeology Opportunities* Membership and Discounts Program

*Archaeology Opportunities* is a membership program for persons who wish to support Old Pueblo Archaeology Center’s education efforts and perhaps even to experience for themselves the thrill of discovery by participating in research. Membership is also a means of getting discounts on the fees Old Pueblo normally charges for publications, education programs, and tours. Members of *Archaeology Opportunities* at the Individual membership level and above are allowed to participate in certain of Old Pueblo’s archaeological excavation, survey, and other field research projects, and can assist with studies and reconstruction of pottery and other artifacts in the archaeology laboratory. Membership benefits include a 1-year subscription to the *Old Pueblo Archaeology* electronic quarterly bulletin, opportunities to participate in Old Pueblo’s member-assisted field research programs, discounts on publications and archaeology-related items, and invitations and discounts for field trips and other events.