

The Basics of Hohokam Ceramic Identification

Marc Severson, Tucson, 2019

Introduction.

Over the last nearly fifty-odd years I've spent a lot of time looking at old broken dishes. I've also been lucky enough to have consulted with several recognized experts in the field of southwestern archaeology. It has allowed me to cobble together a sense of what those fragments of bowls and jars might mean, at least as far as it relates to the archaeologist.

I am going to try and impart some of those ideas to the reader so that one can get an idea of how to field ID a sherd of Hohokam pottery with a reasonable assurance of certainty: realizing, of course, there is no such thing as absolute certainty in archaeology because archaeology uses scientific methods to study human behavior. While the science part can be said to be rather hard and fast, the human behavior is not bound by any accepted laws of archaeological study. Humans can always choose to 'break the rules' and leave us baffled.

Additionally, there is no way to prove much of what we agree upon in archaeology. We can't go back in time, point to a specific behavior and say, "See? I was right!" I have sometimes remarked that archaeologists tend to be neurotic because their entire careers may be based upon their best guess.

With those caveats in mind, let's continue.

The publication of Gila Pueblo's report on "Roosevelt 9:6" in 1932, established the name 'Hohokam' for the prehistoric inhabitants of southern Arizona. Prior to that, the sites of southern Arizona excavated by foundations like Gila Pueblo had been referred to as "the Red-on-Buff Culture", demonstrating exactly how much weight was given to the ceramics recovered from their villages.

Hohokam comes from the O'odham, *huhugam* - "all used up". In the O'odham language, pluralizing or emphasis is given to a word by doubling the first syllable. Thus, *hugam* is "used up", and *huhugam* is really used up, all gone! Asoné Akimel O'odham put it to Julian Hayden, "You can't live there anymore." (Hayden, personal comm.)

The first step in identifying decorated Hohokam ceramics is to ascertain if one is looking at a 'buffware' or a 'brownware'. Buffwares are the diagnostic Hohokam decorated ceramic (see above), produced by the prehistoric people living along the Gila and Salt river drainages. Brownwares were common over most of the rest of the areas frequented by the Hohokam but specifically in the areas in and around the Tucson Basin.

Buff paste is lighter, more porous, unpolished, and tempered with muscovite (silvery) micaceous schist or gneiss and a little quartz. A buff paste can be anywhere from pale

tan to a rosy pink in color. It has no carbon streak. Buffwares can have bits of caliche in the body of the clay. Buff clays such as were used by the Hohokam came from near the Gila River.

It's notable that the Gila-Salt plain pottery - Gila plain, is a brownware, so they were definitely selecting for specific clays and not just using what was handy.

Brown paste is darker, more dense and heavier, generally polished, sometimes smudged, and tempered with sand which may contain some mica, either muscovite (silvery) or biotite (gold to black). Brown paste is light brown to dark gray, or black if smudged, in color, and usually has a carbon streak running through the sherd. Brownwares are sometimes intentionally slipped.

The Hohokam buffwares were first described by Haury from work at Snaketown in Gladwin, et al, 1965. Haury refined his initial descriptions in his return to Snaketown about three decades later, published in 1976.

Initially, the brown wares of the Tucson basin were thought to be simply imitations of the more dominant Gila-Salt buffwares and they were described as such by Isabel Kelley from her work at the Hodges ruin in 1937. These descriptions existed only in manuscript form until Gale Hartmann edited and published the Hodges material in 1978.

Since then we have realized that the differences between the Gila-Salt ceramics and the Tucson basin ones are much greater than Kelley presented, especially as we move forward in time. Wallace spends a great deal of time discussing this issue in the Valencia report (Dolle, et. al. 1985). I will try to point out the most salient differences as in discussing Hohokam pottery as a whole.

A note about sequences.

Many people have published or refined ceramic time sequences and developed specific time periods for each phase. I am not addressing the variety of those here. Since the introduction of a Hohokam chronology in Gladwin, 1965, literally uncounted numbers of researchers have weighed in on what they believe the time designations should be. Most recently, Henry Wallace and James Heidke, among others, have reworked and fine-tuned the ceramic sequence for the Hohokam.

Here's a basic list of phases and periods: (note these do not necessarily equate temporally)

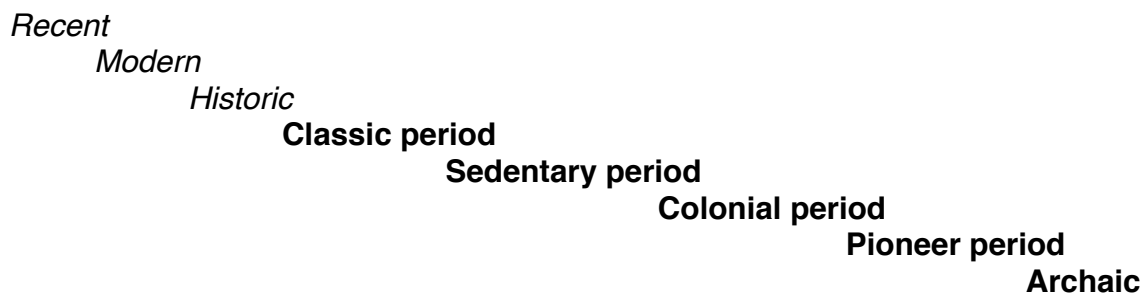
	<u>Gila/Salt Basin</u>	<u>Tucson Basin</u>
PERIOD	(approx end date: 1450 A.D.) PHASE	PHASE
Classic	Civano	Tucson
	Soho	Tanque Verde (Sells)*



(Ed. note: some researchers place Late Rincon in the early Classic Period, some see it as transitional, I leave it in the Sedentary Period.)

* Alternate names that have been used.

Remember, looking at a single piece of broken pottery is like getting a GPS reading: it is a small place within a much larger space, or a point in a continuum. I think of sherds as a tiny ink dot—representing a moment in time—on a thick rope line that is history. Phases are tools to help us simplify and understand the complex, but when in doubt, periods are more useful:



In other words, there is overlap; one archaeologist's early Santa Cruz is another one's late Gila Butte, but they are both Colonial.

Typing sherds

Assuming we are looking at sherds, you have to know whether it is from a jar or bowl. If the interior of the sherd is rough, or there are anvil marks (round indents about the size of a quarter to a half-dollar) it's a jar. If the interior is finished, or the decoration is on the interior (and it is not part of a rim) it is a bowl.

Classic wares (I'm working backward through time.)

Bowls are more common and easier to i.d. because of layout. If the design is on the exterior of a bowl it is either a Classic ware, Tanque Verde R/br* or Casa Grande R/b**; or a late Sedentary ware, Sacaton R/b or Rincon R/br. The primary decorative field for Classic period bowls is the exterior surface.



Fig. 1 Tanque Verde Red on brown bowl

The diamond crosshatch design element is diagnostic for identifying Tanque Verde R/br. It is commonly contained within a band or a framed area:

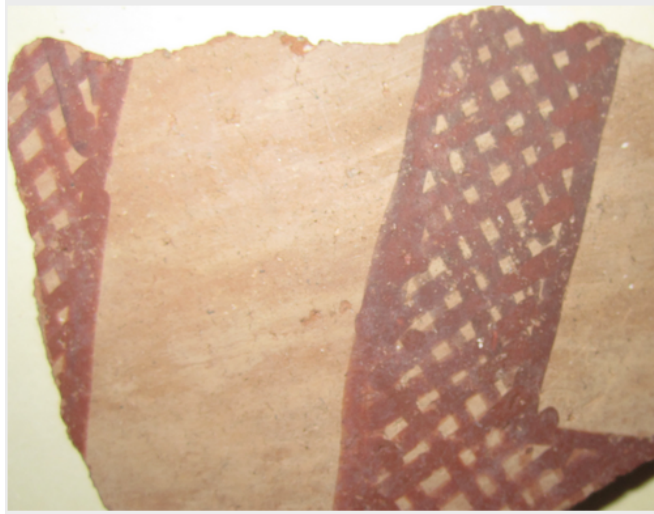


Fig. 2 Diagnostic diamond crosshatch of TanqueVerde R/br

For Tanque Verde R/br jars, look for the common rectilinear elements, opposed barbed lines or scrolls, diamond crosshatch, and open spaces.



Tanque Verde Red-on-brown jar (ASM 21232) from Martinez Hill (AZ BB:13:3[ASM]). Photo by Patrick D. Lyons, courtesy of the Arizona State Museum, University of Arizona.

Fig. 3, note the high straight neck, layout in bands and panels, and the diamond crosshatch.

Spanning the whole Classic Period, Tanque Verde is found in association with Gila Polychrome, Sells Red, Tucson polychrome, Tonto polychrome, Casa Grande R/b, and San Carlos Red on brown to name just a few.

The Salado polychromes deserve a paper all their own but I will briefly address the most common one: Gila Polychrome. Gila Polychrome is ubiquitously found across southern Arizona. It is a ceramic marker for the 1300s. Gila poly is a brown paste, nearly always

bowls, with a red slip, a white decorative field with black designs; or as I like to say, “it is black on white and red all-over.”

The white paint of Gila polychrome tends to be friable, crazed, and crackled on the surface. Sometimes you can ID Gila poly just by finding a sherd with a polished red slip on the exterior, and a crazed white paint residue on top of the red interior.



Fig. 4 Gila Polychrome bowl. Notice flaking white paint.

The Salado polychromes, like Gila poly, and the associated red wares; apparently take the place of the buffware bowls for the Hohokam in the Classic period in the Gila-Salt area. The recurved bowl shape is common in these wares (see Fig. 11 H below). Classic period buffware jars tend to be large, a trend that started in the Sedentary period.

Casa Grande R/b vessels are mostly jars. Very few bowls of this type have been found. The most common vessel form of Casa Grande R/b is the high neck jar with a distinct decorative element on the neck different from the body design. Design layout is similar to Tanque Verde R/br: rectilinear—combinations of panels, triangles, and bands—sometimes offset or banded and separated by open areas. Capped fringes as bands are common. The jars have shoulders at various levels: high, mid-vessel, and low as was common in the Sedentary (see Fig. 5A-C respectively below). A white slip, or scum is also fairly common (Fig. 5 A&C).

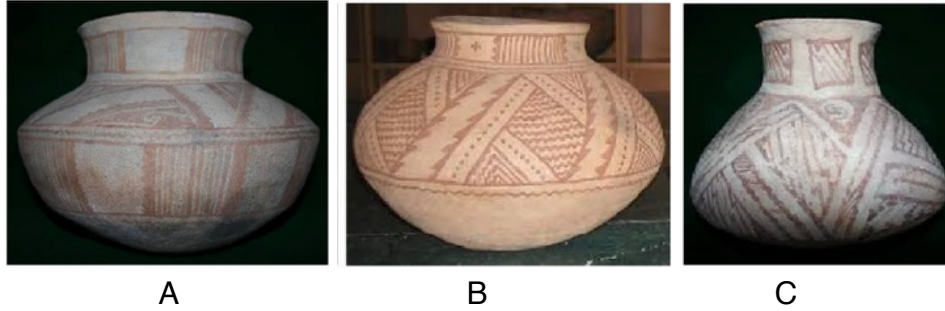


Fig. 5 Casa Grande R/b jars (from Crary)

Tanque Verde Red on brown bowls have a precise design layout. The primary decorative field is the exterior of the bowl. There is a secondary decorative field in the form of a band of decoration on the interior, just below the rim. Finally, they have rim lines (see Fig. 1 above).

There is a type, occasionally seen, called Topawa R/br which reverses this layout, i. e. the primary field is on the interior, there is a band of decoration just below the rim on the exterior, and a rimline.

*R/br = Red on brown

**R/b = Red on buff

Sedentary wares

Unlike Casa Grande R/b, Sacaton R/b jars feature low, sharp shoulders. The Gila shoulder is a diagnostic and you can reliably say Sedentary period for both buff wares and brown wares when you see a sharp shoulder.



Fig. 6 Sacaton R/b jar with a gila shoulder

Sedentary jars commonly have sharply returned rims (see Fig. 7D). From the Colonial period to the Sedentary period there is a steady progression of the jar rims becoming more sharp returned.

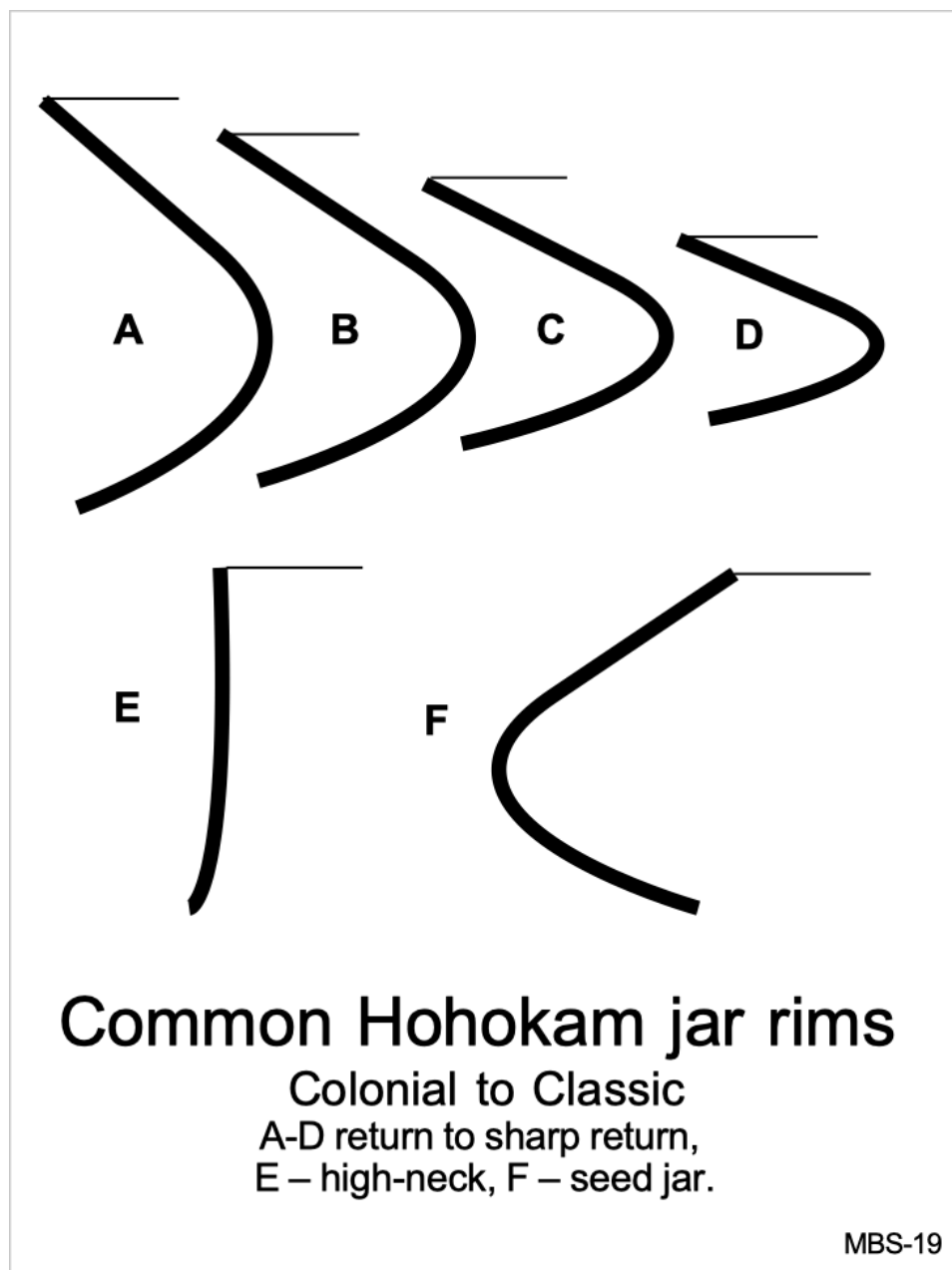


Fig. 7

*(note: the rims are shown as flat merely as an expediency.
They can be rounded, tapered, flat, knobbed, bulbed or irregular)*

As the pottery transitions from Colonial to Sedentary jar rims go from returned to sharp returned: the more sharply the jar rim is returned, the later it is. Rincon phase jars also have rim lines—a painted line covering the top edge of the rim.

Absent a rim, jar sherds must be identified by design elements which I will discuss later.

If we are looking at a bowl sherd identification becomes a little easier. While the primary decorative field in the Classic was the exterior of the vessel, in the Sedentary most of the bowls have a primary interior decorative field. Layouts are often banded, quartered, offset quartered or combinations. Open spaces are common as are bordering lines dividing the different areas (see Fig. 8).

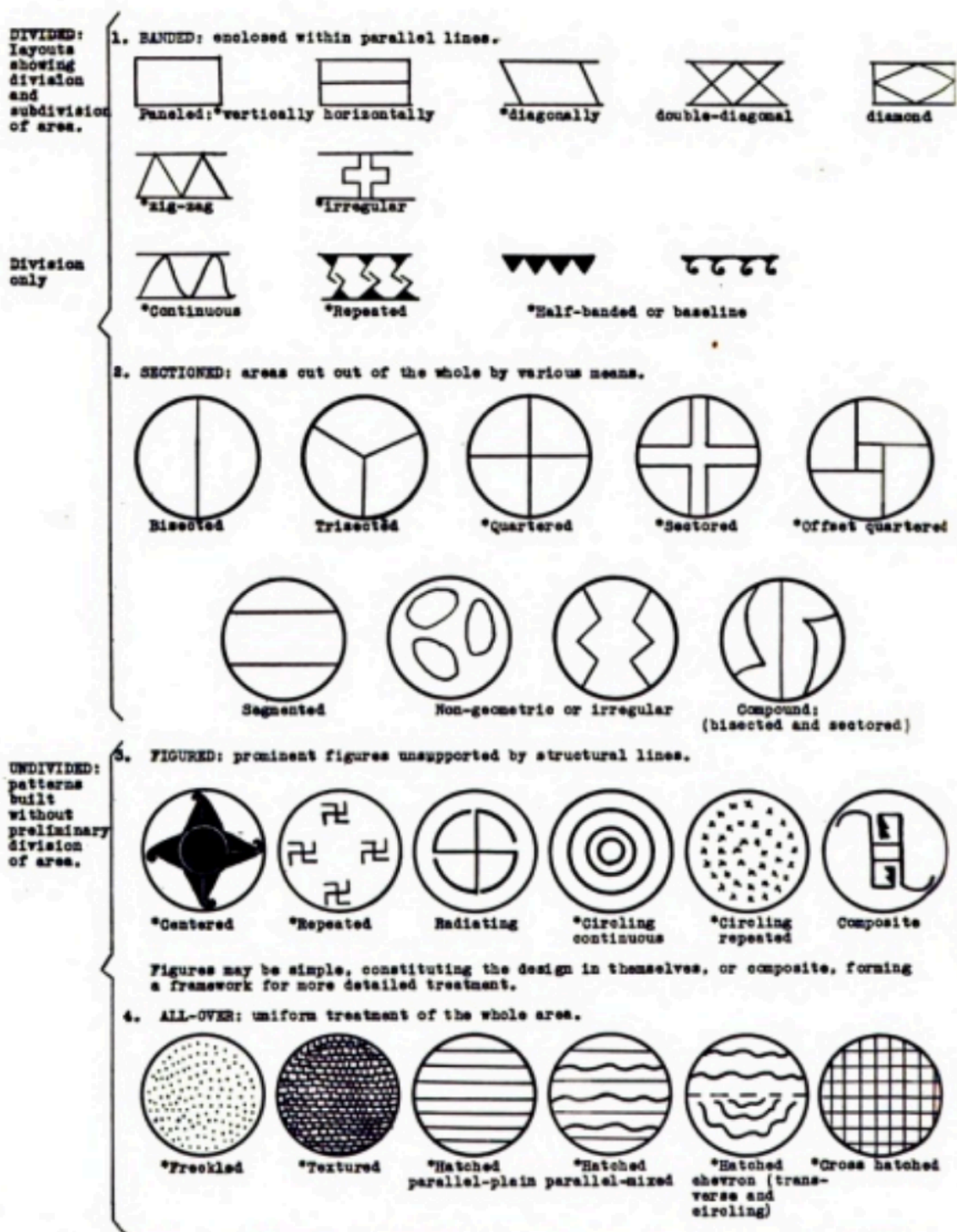


FIG. 1. OUTLINE CLASSIFICATION OF PREHISTORIC SOUTHWESTERN POTTERY DESIGN STRUCTURE

Examples starred (*) occur in Hohokam pottery

Fig. 8 fr. Amsden, 1936

Flare-rim Sedentary buffware bowls are common but usually do not have trailing lines. Sedentary brown ware flare-rims are a little less common, but most have trailing lines,

often widely spaced (greater than 5cm. apart) and sometimes paired. Paired trailing lines with a 'squiggle' also occur in the Sedentary (see Fig. 9). Sedentary buffware bowls may have painted rims. Sedentary brownware bowls always have rim lines.

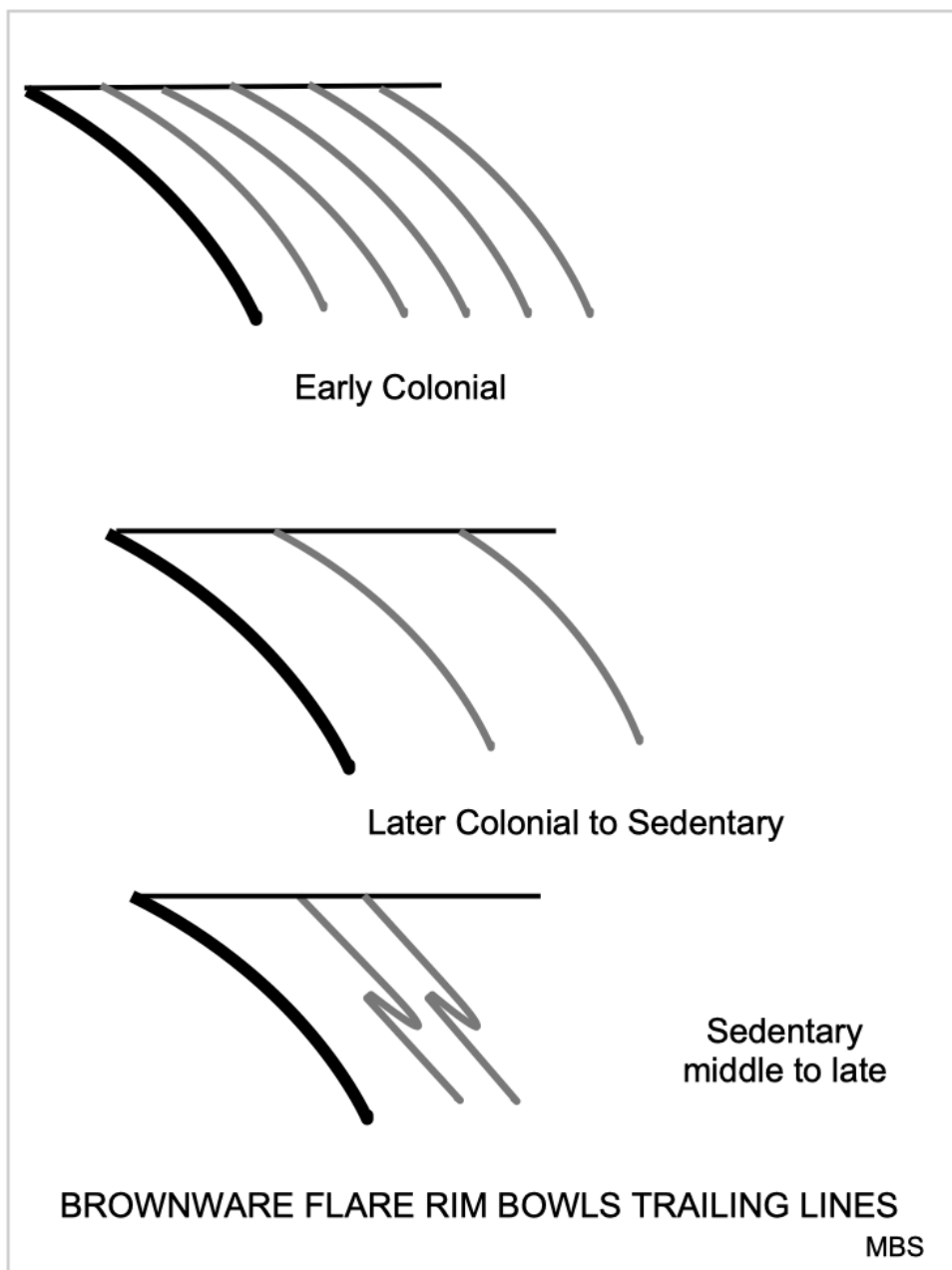


Fig. 9 Brownware Trailing lines

Line-work in the Sedentary is wider than in preceding phases and the overall impression is of sloppier, or rushed painting. Thicker framing lines encompassing elements with thinner lines are common (see for example Fig. 6 above. The framing lines of the panel are thicker than the fringe lines.) Sedentary wares sometimes have a self-slip, a whitish scum, that forms due to a chemical reaction on the exterior.

Colonial wares

There are two phases in the Colonial Period in both the Gila-Salt basin and the Tucson basin. In the G-S basin there are the Santa Cruz phase (later) and the Gila Butte phase(earlier) while in the Tuc. basin are Rillito and Cañada del Oro respectively.

Santa Cruz phase bowls usually have trailing lines on their exterior. The interior primary field features all-over designs sometimes arranged in continuous circles or quartered design layouts, both unbordered. The elements can be arranged in a spiral sometimes rising from a central scroll at the bottom. They can also have repetitive small elements filling the entire space. Triangles, scrolls, or free form elements, pendant from the rim are common (Fig. 9B).

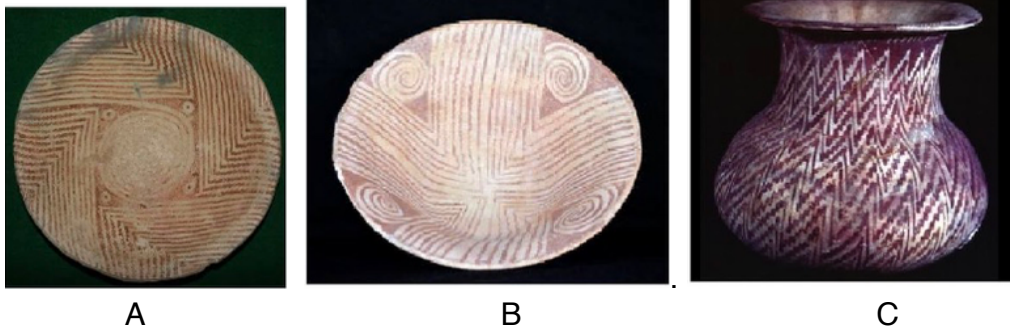


Fig. 9 Sa. Cruz R/b fr. Crary.

Interior rims often feature pendant fringes (see Fig. 10).



Fig. 10 An open, unbordered, circular layout from the Colonial

Gila Butte bowls are similar in layout but may also feature hatched elements. Trailing lines are more numerous or may be replaced by hatched pendant chevrons (see Fig. 11).

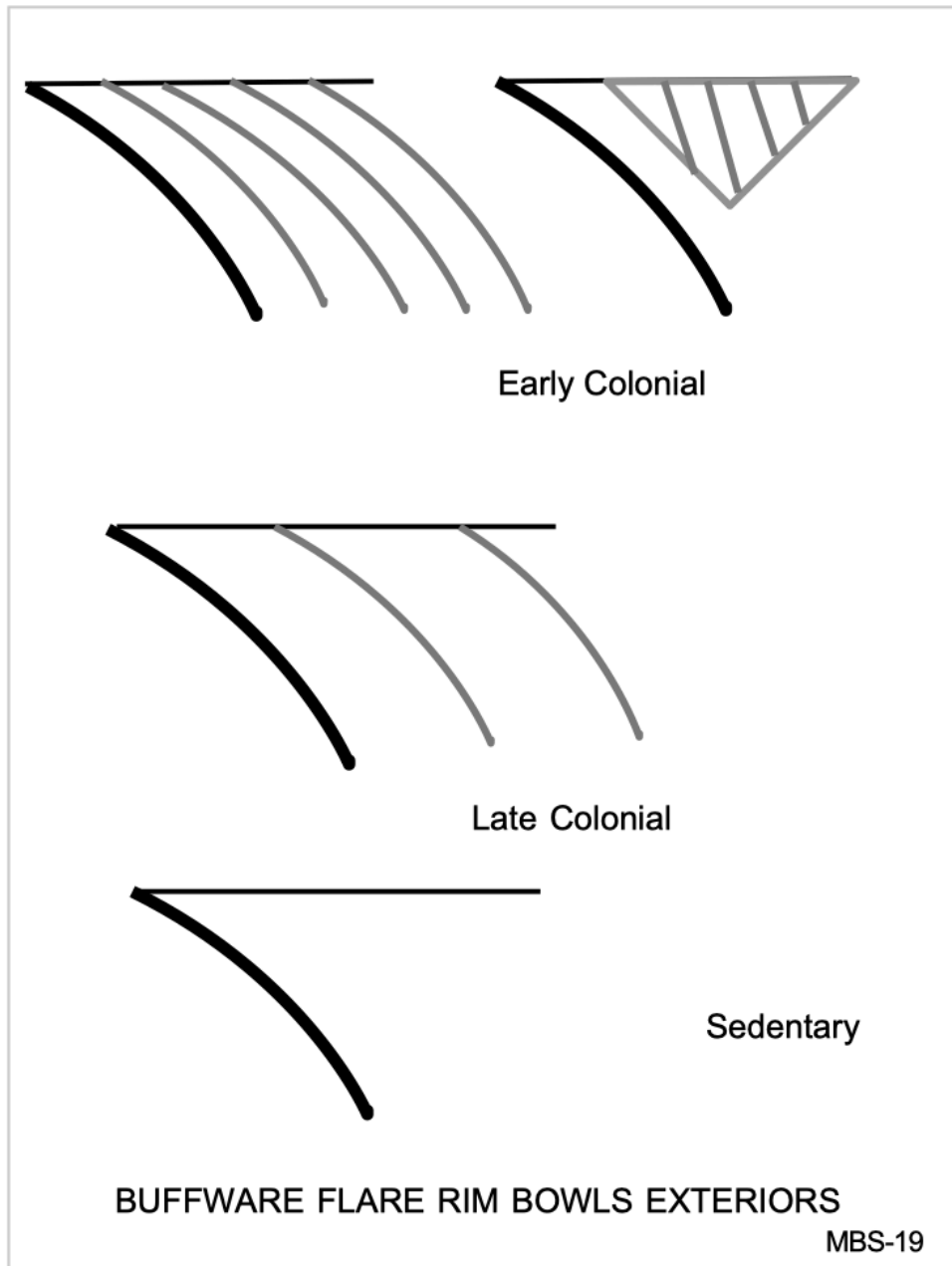


Fig. 11 Buffware bowl exteriors

Other common bowl forms include: shallow (or plates), out-curve, hemispherical, straight sided, and incurved (see Fig. 12D-H).

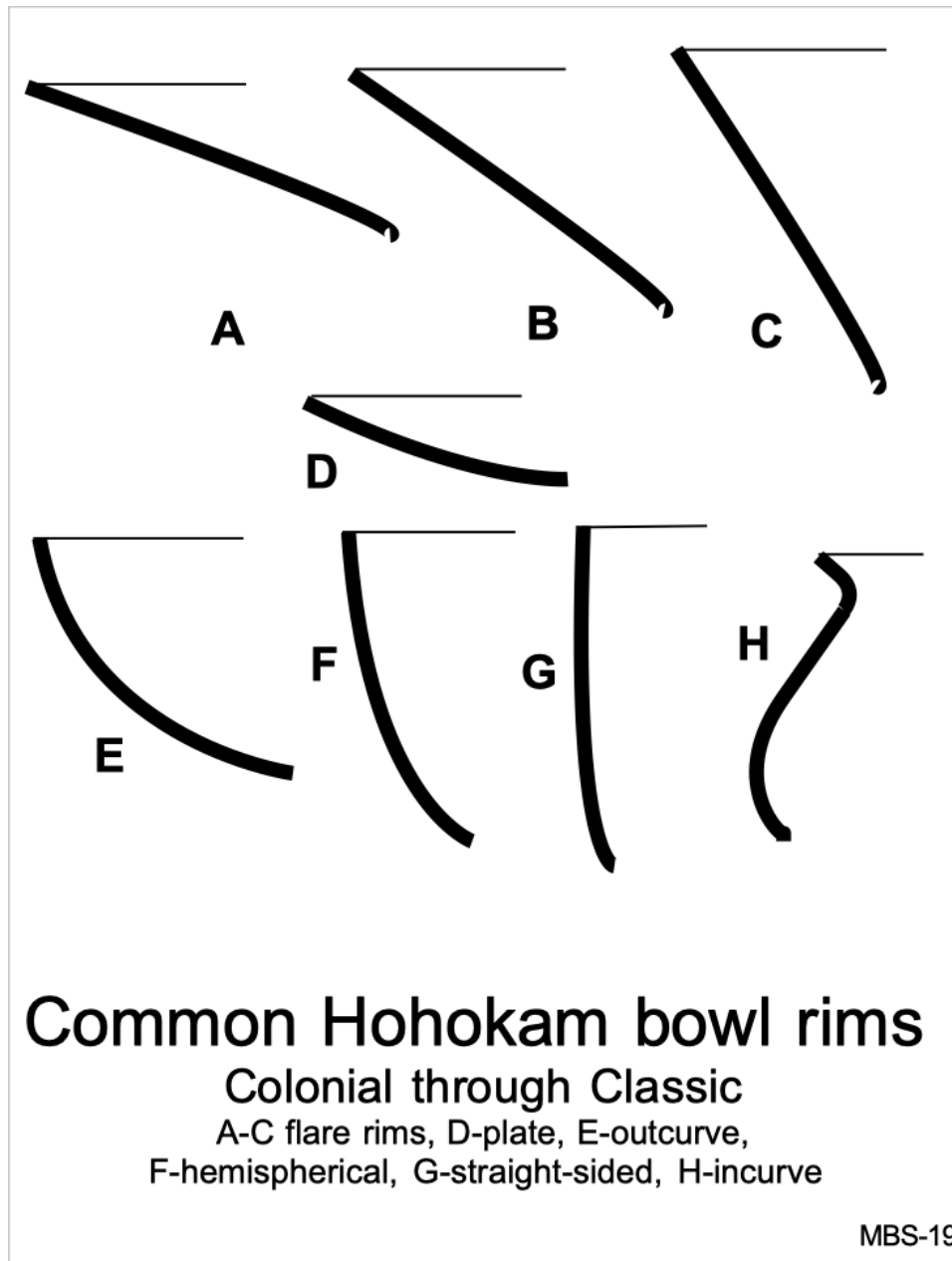


Fig. 12 Some common Hohokam bowls

The primary decoration for Gila Butte R/b includes: winged scrolls, hatched life forms, negative life forms, and all-over designs of small elements; very similar to Santa Cruz R/b. Sometimes the only way to tell the two apart is to look on the exterior to see how close together the trailing lines are: the closer the lines, the earlier the piece (see Fig. 11).

Shallow scoring is common on Gila Butte R/b bowl exteriors. In contrast it is uncommon to see scoring on Cañada del Oro R/b bowls. Otherwise the design elements between the two are quite similar.

Pioneer wares

My experience is that Pioneer wares are un commonly found on then surface of sites but I will describe them briefly. The only shared Pioneer period ceramic type between the G-S basin and the Tucson basin is Snaketown R/b or R/br. Bowl exteriors often show regular, deep scoring leaving evenly spaced grooves on the exterior with painted designs often added over the scoring.

Hatchure filled elements are common with polishing over designs. Hatched chevrons are more common than they are in Gila Butte R/b and Cañada del Oro R/br and exterior trailing lines are numerous. Large hatchure filled scrolls, often interlocking and fringed or with saw-tooth edges, are an interior decorative motif. Snaketown paste tends to be gray or soot-clouded, apparently due to poor firing controls.

In the Gila-Salt basin Snaketown is predated by Sweetwater Red-on-gray and Estrella Red-on-gray. Both of these types are brown ware clays and are often referred to as red on brown in the Tucson context. The red-on-gray names are maintained by precedence in Haury (1976) and Gladwin (1965).

Sweetwater designs are commonly hatched and because the background is gray and the paint can vary greatly in consistency, the elements can appear to be negative. Exterior scoring or grooving occurs in about 20% of the bowls (Haury,1976).

Estrella Red-on-brown is little more than a crudely painted Gila plain. There is some polishing of the exterior sometimes over the design. Deep 'U-shaped' scoring is seen on small bowls. Broad lines, hatchure, and some rectilinear elements are painted on exteriors or interiors and a red slip can also be added to the exterior.

In the Tucson basin, the Tortolita phase has a variety of early experimental brownwares. Heidke (2003) equates the Tortolita phase with Haury's Vahki phase. He describes a 'broadline' red-on-brown, purple-on-red, and even a broadline polychrome as well as Tortolita Red, and Vahki Red — a Gila-Salt ware.

A note on distinguishing Tortolita Red from Rincon Red: Tortolita Red's slip is thin and variably polished whereas Rincon Red has a thick, powdery interior slip and exterior polishing striae are horizontal (Heidke, 2003).

Vahki Red is a long lived early redware from the Gila-Salt basin. It has a thin reddish brown to magenta colored slip, polishing striae, visible mica, as tends to be thin-walled. Grooves are seen on Vakhi Red in the Estrella phase (Haury,1976).

Jar designs

Absent the advantages that bowls offer with layout, jar sherds are identified by the design. Working forward this time:

Gila-Salt Basin

Gila Butte R/b — hatchure filled elements, winged scrolls, life forms.

Santa Cruz R/b — all-over small elements, stylized lifeforms, fine lines.

Sacaton R/b — areas divided into contained units (panels), open areas, linework is thicker and less precise than Santa Cruz.

Casa Grande R/b — panels and bands of decoration, sawtooth, capped fringes, wavy capped fringes, paired opposing elements separated by open areas within panels.

Tucson Basin

Cañada del Oro R/br — decorative elements very similar to Gila Butte red-on-buff except on a brown paste.

Rillito R/br — similar to Santa Cruz R/b excepts gradates more easily into Rincon R/br than Sa. Cruz does with Sacaton. Smudging less common in Rillito. Mostly curvilinear designs.

Rincon R/br — designs are laid out in decorative fields — vessels quartered, paneled, panels and bands. Open areas. Increase in rectilinear designs. Complexity of layout increases through phase. Gila shoulder is a diagnostic.

Tanque Verde R/br — (see Figs. 1-3 above) Panels and bands, opposed elements: sawtooths, fringes, capped fringes, rectilinear scrolls. Diamond crosshatch is a diagnostic.

Closing remarks

The preceding is not meant to be an exhaustive appraisal (though writing it did exhaust me) but rather an introduction. There are many authors far more adept in the field who are available to the determined student. I have sought merely to give a starting point for the newly graduated professional or avocational archaeologist to begin their study of Hohokam ceramics. It is a fascinating subject that remains fluid and ever-changing. My hope is that by helping to allow for field ID, sherds can be left, in the field.

Henry Wallace of Archaeology Southwest has made the following suggestion for a general procedure:

- Start by determining ware (buff ware, brown ware, Salado ware, other)
- Next, vessel part (rim, body, shoulder)
- Next, vessel shape (bowl jar, specialized form) and note that the design rules do not work with specialized forms.
- Next, assess if rim is painted or not if a brown ware (yes- Sedentary or later)
- Next assess shoulder type if a shoulder or rim form if a rim sherd.
- Now look at design.

[This paper is an outgrowth of a lesson I gave for Pima Community College archaeology students many years ago. I appreciate the opportunity Jeff Martin has given me to resurrect the remnants of a discipline that I once devoted a great deal of my professional life to studying.]

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