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FROM WHENCE THEY CAME, NOBODY KNOWS, OR DO WE? BASKETRY IMPRESSED CERAMICS FROM THE WOLPER COLLECTION.

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ABSTRACT

Provenience of any artifact is essential to fully understand that item and its relationship to the site from which it came, as well as to inform us about the people who made and used it. For various reasons it is sometimes impossible to assign a provenience. This does not then mean that the artifact is silent and devoid of information. The Wolper Collection from the New World Museum, San Salvador Island, Bahama Archipelago, indicates no specific provenience for the thousands of artifacts contained therein. Yet, I believe we can learn a vast amount of information from this collection about Palmetto ware ceramics, Lucayan basketry, and choices made by the members of the various Indian settlements on San Salvador.

The Lucayans made negative basketry impressions in their ceramics, thus leaving us a rich medium through which we may study their basketry technology and grammar. I have studied the basketry impressions from several Lucayan sites on San Salvador and noted certain similarities, but also found a number of differences, from site to site. In this paper I will explore some of those differences and show how this may help us, not only learn more about the variety of weaves and materials used by the Lucayans in their basketry, but also assign *possible* sites of origin to some of the ceramics in this vast collection.

INTRODUCTION

"Baskets are containers in which the threads of human history and the natural world intertwine and hold endless possibilities of creative expression." Joan Carrigan, Canadian basketry artist.
(quote from home page - http://joancarrigan.com/index.html)

For approximately ten years Mrs. Ruth Wolper explored the island of San Salvador doing surface collecting and some excavating (Hoffman 1970:4). She accumulated a large mass of materials: ceramics: local Palmetto ware and non-local examples, shells, bone, and wood. Mrs. Wolper set aside a portion of her home to display these artifacts calling it the "New World Museum". Unfortunately, Mrs. Wolper did not identify where she found each item or group of items, therefore, the information she had concerning their point of origin has largely been lost. Charles Hoffman does note that Mrs. Wolper told him, while he was excavating the Palmetto Grove site in 1965, that "some of these vessels are from the Creek Site on the opposite side of the island..., but that one or two are from Palmetto Grove itself" (Hoffman 1970:13). This tidbit gives us a starting point from which to work to try to locate the origins of a few of the thousands of ceramic sherds in this collection. I believe I can make an educated guess about the origins of several of the ceramic artifacts in this collection.

Initially, I decided to base this assessment on basketry attributes such as element width, shape, appearance, plant materials utilized, as well as the general condition of the ceramics, the weave patterns, and a bit of intuition from having handled thousands of impressed Palmetto wear ceramics. While this was not completely feasible, certain suggestions I believe to be reasonably valid may be drawn through comparisons to weaves and artifacts from known sites. I am certainly not

tainly not claiming that I will be able to actually identify with certainty the original location of any of these ceramics.

Additionally, I will describe some of the weaving techniques and elements of the complex weaves found on the Palmetto ware within the New World Museum Collection, including the second known impression of fabric in the Bahamas.

Negative basketry impressions on ceramics are an important class of artifacts in the Bahama Archipelago. Originally deemed to be a by-product of ceramic production, and thus of no value for cultural investigation (Hoffman 1967, 1970:12), these impressions are the only remaining evidence of the vast array of basketry made and used daily by the Lucayan Indians of the Bahama (Berman and Hutcheson 1997, 2000), and Turks and Caicos (Keegan 1997) Islands. Impressions are, in some instances, so clear that the type of plant material used can be discerned without magnification. In Figure 1, the linear veining typical of the *Sabal palmetto* palm is easily seen. This impression also shows a fairly crisp, clean impression that would be difficult to achieve if it was the byproduct of hand building the ceramic vessel on a fairly loosely woven basketry mat (see Hutcheson 2001, 2008).

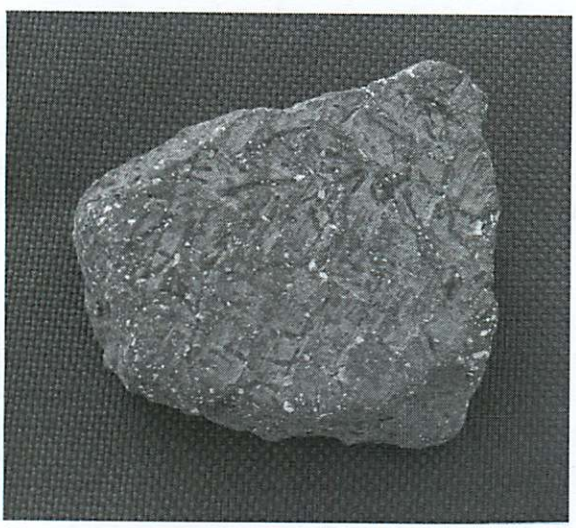


Figure 1. NWM no. 185: 2/2 Twill Plaiting, Low Relief without intentional shifts. Material: Sabal palmetto.

Many impressions are not this clear, in part due to post-depositional processes that have corroded or eroded the sherd surfaces. All of the Lucayan ceramics, thus far, have been excavated from middens. Columbus reports in his *Diario* that the Indians of the Bahamas kept their houses "swept and clean" (Dunn and Kelly 1988:93). These sherds have had considerable amounts of household sand, dirt, ash, and other detritus thrown in on top of them, not to mention bioturbation from land crabs and plant roots. Even so, they can be coaxed into revealing information about the basketry through the use of molding compounds which give a positive face to the negative basketry impression and thus allows the human mind to see a basket, even if it is not a pristine view.

The body of impressed Palmetto ware speaks of a very uniform basketry grammar throughout the island. I believe that this will hold true throughout the archipelago once all of the ceramics housed by The Antiquities, Monuments and Museums Corporation have been investigated. I am currently looking systemically at the various basket-impressed ceramic assemblages for San Salvador and this will eventually extend throughout the archipelago.

As you can see by the chart in Figure 2, the element width variation is not significantly different from site to site. There are differences between the sites to a degree, but not enough to tie a specific artifact to any given site by these criteria. Similar graphs from all of the sites look very much like this one from the New World Museum collection. The one thing that can be said about the artifacts represented by this graph and tables is that they belong together.

In Figure 2, the widest element widths for all sites represent one weave type, 1/1 simple plaiting, while the narrowest elements have several explanations. Fabric accounts for a limited number of the smallest measurements at Palmetto Grove and the New World Museum. The narrow widths at Long Bay and Pigeon Creek, as well as

the majority of narrow elements at Palmetto Grove and the New World Museum, generally represent wicker, but also occasionally extremely fine twill plaiting.

New World Museum Element Width Variation:
Mean, Standard Deviation, Range

NWM	Pigeon Creek	Palmetto Grove	Long Bay
Count 208	Count 265	Count 205	Count 261
Mean 4.8	Mean 6.3	Mean 4.0	Mean 4.9
SD +/- 1.92	Range 2.0 – 17.0	Range 1.0 – 13.7	SD +/- 2.35
Range 1.4 – 15.6			Range 1.8 – 17.4

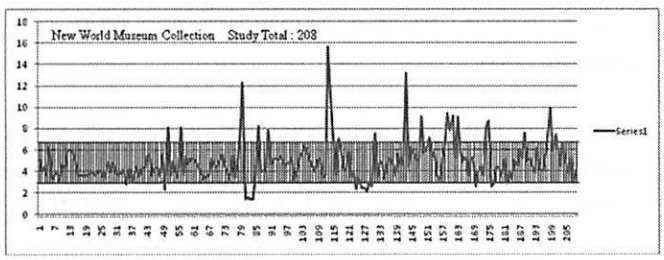


Figure 2. Comparative measurements for three Lucayan sites and ceramics from the New World Museum.

There are, fortunately, other attributes that can be used to help place these ceramics. The variation of complex weaves from site to site, and the size and condition of the artifacts themselves help identify possible places of origin.

METHODOLOGY

Determining the Weave

For those who are not familiar with the process I use in the study of basketry impressions, I will briefly elucidate. I use a dental alginate (seaweed-based) molding compound. Jeltrate® Plus Fast Set (Dentsply International, Mildford, DE) was selected because it is lightweight and transports easily as a powder, has low dusting character, is non-toxic to humans and the environment, and requires no special equipment. It also releases easily from friable unglazed ceramics such as the Palmetto ware. Any cool fresh water source is acceptable for mixing the alginate and dental stone (Hutcheson 2008, Berman and Hutcheson 2000).

The molds made from the impressed ceramics clearly show the positive face of the basketry and are essential for the basketry study. I do not remove the artifacts from the Bahamas. Therefore I also make casts from the molds to represent the sherds. Casts can be made of any plaster, but due to durability and fine detail retention, dental stone is preferable. I use Vel-Mix dental stone from Kerr Lab, Orange, CA (Hutcheson 2008:71, Berman and Hutcheson 2000).

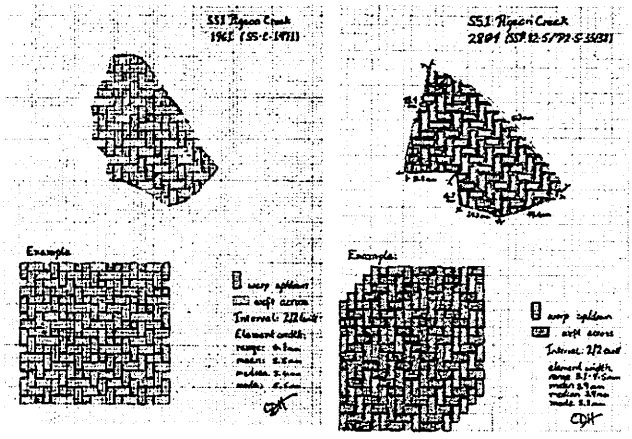
Measurements are made from the original sherds, but can be made from the casts at a later date if necessary. Due to shrinkage and the flexible nature of the alginate, it is not advisable to take measurements from the molds. The molds are stored in heavy zippered plastic bags and kept out of direct sunlight, which causes rapid deterioration. The alginate is not designed for long-term storage, but I have been able to keep molds for up to ten years with careful management (Hutcheson 2008).

Once the complexities of the weaves have been deciphered, after many hours of primarily examining the molds, but using also photographs and casts, I will draw out the interlacing on graft paper. After I am certain I have the weave correctly rendered, I will extrapolate from this to create a more complete picture of the weave. I then weave this to be certain it is a functional pattern of interlacing (Hutcheson 2008). Figure 3 shows two examples of the worksheets.

Mold Compound Effects on the Artifacts

Over the course of the past fifteen years I have found no adverse physical effects of the alginate compound on the various study collections. At the time of molding, occasionally some crumbling at the most friable edges occurs. It is possible to remove or damage water-based pigments painted on sherd surfaces due to contact with the wet alginate (Drooker 2001). Since this decorative technique is not present on Palmetto ware, it is not a problem when studying Lucayan ceramic artifacts. Virtually all molding compounds currently in use leave surface residues that

hinder Carbon 14 dating (Minar et al. 1999). As a seaweed derivative, this will be true of the alginate as well. One can eliminate this problem by setting aside several artifacts of each category for carbon dating or other analyses (Drooker 2001).



a. b.

Figure 3. These are typical worksheets with the weave, as it appears on the sherd, and the extrapolation of the patterning. PC 1961(a) is the Staggered A Pattern, while PC 2804 (b) represents the only non A pattern shift thus far found in Lucayan basketry.

Weave Types

The general classes of weaving for basketry are plaiting, subdivided into simple plaiting, a 1-over-1-under (1/1) interlacing, also known as "plain" or "checkerboard" weave (Adovasio 1977), and twill plaiting, a 2-over-2-under (2/2) weave sometimes referred to as "herringbone". In Twill plaiting, the elements, or basketry strips, are woven in a staggered series of 2-over-2-under giving the appearance of stair steps. Refer to Figure 1. Wicker is considered a special case of simple plaiting although generally it uses a stiff material for the weft (stationary horizontal element) and either flexible or stiff materials for the warp (active vertical element), yet it retains the 1-over-1 interval (Emery 1994, Adovasio 1977). Coiled, or "sewn", basketry has not been found in the Palmetto ware impressions. This type of basketry construction is prevalent in North America, especially in the Southwest, but is also known in the Southeast (Adovasio1977, Harvey 1997). The last type of basketry is twined, another class that does not appear in these impressions. Twining, the final construction type, occurs in basketry and fabric, but the two uses are carried out differently. In basketry, the rows continue around in a single direction; in fabric the rows go back and forth due to loom construction (Harvey 1997:58, Emery 1994). They have very different appearances. I have found twined fabric in one small sherd from Palmetto Grove. It is spun fiber with alternating S and Z-twist rows of countered twined cloth (Hutcheson 2001).

Additional clarification is needed to describe visual differences within the twill impressions. There are smooth flat examples which contrast with those that I refer to as having topography or an undulating surface. I am certain that these differences are due to the materials used, but as I cannot verify this with actual basketry artifacts, I must describe the differences (Hutcheson 2001.

Complex twill patterns are created by the use of alterations in the primary 2/2 interval of interlacing, called a shift. There is one four-row sequence that predominates within the Palmetto ware basketry grammar. I call it the "A Pattern" shift (often designated in my notes and charts simply with the capital letter A). Figure 4 shows the altered weaving sequence in the interlacing. This shift sequence is used upright, inverted, and facing left and/or right, singly or in combinations to create some amazing patterns (Berman and Hutcheson 2000). There is a further alteration to this shift sequence that I refer to as the "Staggered A Pattern", which alters rows B and C slightly, becoming c) 2/2/2 and b) 2/1/1/2. This altered shift sequence is used in more limited ways, such as to create borders or to divide a woven field (Berman and Hutcheson 2000).

The only shift sequencing found thus far in Lucayan basketry that does not utilize the A Pattern progression also creates a divide in the woven field. It is seen in Figure 3b. This sequence is active in both warp and weft, as opposed to all A

Pattern sequencing where one direction always remains in the 2/2 primary interval.

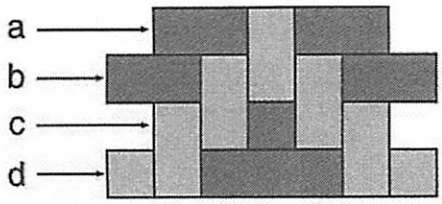


Figure 4. The "A" Pattern: a) 2 over/1 under/2 over (2/1/2), b) 2 over/3 under/2 over (2/3/2), c) 2 under/1 over/2 under (2/1/2), d) 2 under/3 over/2 under (2/3/20. In this pattern the over/under action is always carried out by the weft elements (horizontal). The warp remains constant in the 2/2 primary interval of interlacing.

In addition to the different classes of weaves there are some other variations in the basketry impressions. I have found several selvage edges (the finished edge of the basket, mat. or fabric), some non-woven plant materials (most of which seem to be several types of palm fronds), and two types of fabric production – countered-twining, the only example being from Palmetto Grove site (Hutcheson 2001, Hutcheson and McWeeney 1999) and twill weaving found in the New World Museum collection. I will go into more detail about these shortly.

Within the twill plaiting category there are numerous designs using the A pattern and staggered A pattern. Some are very complex and almost all have clearly been made by highly skilled weavers. It is quite plausible that these complex weaves had color. Almost certainly there were designs being created purely with colored materials even though the impressions appear to be plain. Today, local weavers smoke palm fronds before preparing them as basketry elements. Different palms produce a variety of colors ranging from tans to deep red-browns when smoked. Adovasio indicates that in some cultures it is common to create designs solely by the use of colored elements without having any shifts in the weave (Adovasio 1977:120).

Occurrence

Basketry impressions occur on virtually all of the inhabited islands of the Bahama Archipelago (Keegan 1997, Sears and Sullivan 1978). Aside from San Salvador (Hoffman 1967, 1970; Rose 1982, 1987; Berman and Hutcheson 1997, 2000; Hutcheson 2001, 2008) some of the islands include Great Abaco, Eluthera (Granberry and Winter 1978), Crooked (Granberry 1952, Winter 1978), Cat (MacLaury 1970), New Providence (B.A.T. 1982/83:15), and Grand Bahama (personal communication Perry Gnivecki 1998). There are several sites in the Turks and Caicos with basketry-impressed Palmetto ware as reported by William F. Keegan (1997) with further instances in Cuba (Jago Cooper personal communication 2004, Mary Jane Berman personal communication 1997) and Puerto Rico (Chanlatte Baik 2005, Brecht et. al 1998). Additionally, Jim Petersen, et. al (1997) report scattered incidences of impressed ceramics in the Greater and Lesser Antilles, and in Guiana (Evans and Meggers 1960). There are reported instances along the coast of South America (Berman and Hutcheson 2000:418).

I have looked at collections of basketry-impressed ceramics from three sites on San Salvador: Pigeon Creek, Palmetto Grove, and Long Bay. I know there are basketry impressions found at the late phase of North Storrs Lake (personal communications with Perry Gnivecki 2008 and Jeff Blick 2008) and at the Ward Minus sites (personal communications with Jeff Blick 2008), but I have not as yet studied these latter collections.

The earliest secure date for the appearance of impressed ceramics in the Bahamas is AD 1200 and they continue until after European contact (Berman and Hutcheson 2000:419). As I examine more impressed ware from different sites and islands, I hope to be able to describe more completely the variation of weaves and materials, as well as to see if the patterns and/or materials are used as cultural markers.

DISCUSSION

Each of the sites that I have studied reinforces the fact that the Lucayans have a uniform basketry tradition and grammar; each site has unique aspects as well. One of the most striking features thus far is that Palmetto Grove and Long Bay have one unique weave pattern that is not found at any other site. Pigeon Creek has several very complex patterns, but again they are not found elsewhere on the island. Some possible explanations for this are post-depositional preservation, choices about where to excavate, particulars of curation, and so forth. Or that the Lucayans actually are making choices that reflect inter and intra group markers.

Palmetto Grove

The distinctive weave found at Palmetto Grove utilizes the "A Pattern" shift in four directions with the apex of the "A" pointing in toward the center. This is a quartered field design, drawing the eye to the middle. See Figure 5. This pattern could stand alone or be part of a larger, more complex design. New World Museum sherd no. 125 is the same pattern. If this is indeed unique to Palmetto Grove, NWM no. 125 could be one of the sherds Mrs. Wolper mentioned to Charles Hoffman in 1965 as being from that site.

Pigeon Creek

Pigeon Creek is the largest site on San Salvador and seems to have the highest number of basketry-impressions per assemblage. Richard Rose is one of the few early researchers to actually quantify the basketry-impressed ceramics; he shows 14 percent of 3,226 sherds as being "mat marked" (Rose 1982:134). The most complex weave thus far was originally found at Pigeon Creek. The sherd does not allow us to see what is beyond the outer zigzag pattern which surrounds the complex central weave. However, the New World Museum example has part of this complex weave at the bottom and then moves into a variation of concentric lozenges mixed with zigzags. See Figure 6. This may well be what is shown in the Pigeon Creek example. Regardless, the complex portion is the same; thus I would tentatively label it as from Pigeon Creek.

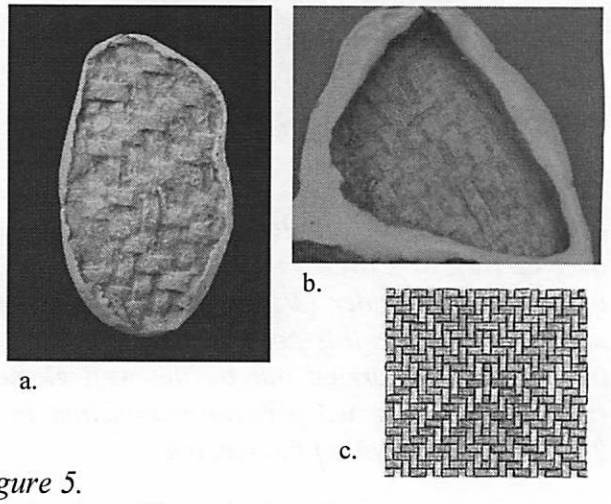


Figure 5.
Here, a) mold, and c) schematic, for Palmetto Grove no. 371is a quartered field design in high relief. While, b) mold, NWM no. 125 is the same weave sequencing only in low relief.

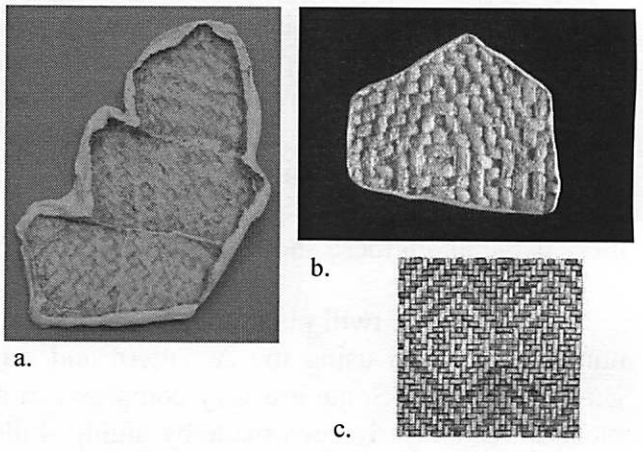


Figure 6. NWM nos. 11-14 a) mold, has the distinctive "winged box" of this complex pattern in the lower portion. Pigeon Creek no. 3000 b) mold, and c) schematic, are a clearer view of the same design.

Another quartered field design with a 2/2 twill low relief multi-part A pattern that looks like concentric lozenges was found at Pigeon Creek. This design uses the A Pattern in four directions, but unlike the Palmetto Grove weave, the apex of the "A" is pointing outward. See figure 7. There

are numerous whole and partial examples of this weave in the New World Museum collection. The question is, do they all belong to Pigeon Creek? Or has this weave just not been identified at any of the other sites thus far.

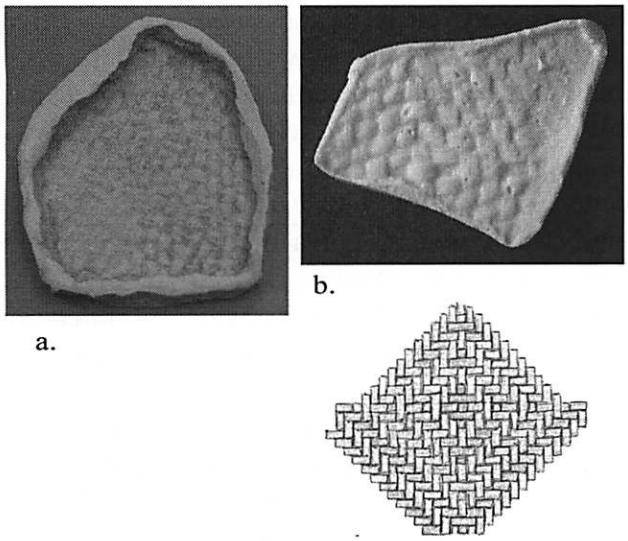


Figure 7. The lozenge pattern can be seen in the lower right corner of NWM no. 163 a) mold, and an identical interlacing is seen in Pigeon Creek no. 30436 b) mold and c) schematic.

There are several examples of a weave that appears to be serpentine on the artifact. The rows of interlacing actually do go straight across, utilizing the A Pattern shift alternating between upright and inverse applications every 3 to 5 rows. This actually creates a zigzag pattern on paper, but in the basketry they have a more fluid look as noted in Figure 8.

Pigeon Creek has two weaves that act as either borders or to divide a woven field. As noted above, one is created by altering the A Pattern, which I call the "Staggered A Pattern", and the other is a totally unrelated shift sequence (Figure 3). I only have the Staggered A Pattern in the New World Museum collection.

The most complex weave, along with the concentric lozenges, the serpentine, and Staggered A Pattern designs have only been heretofore described from Pigeon Creek. Does this mean that all of these New World Museum artifacts belong to this one site? Additionally, many of these complex weaves are on relatively large sherds; again, this is more comparable to Pigeon Creek than Palmetto Grove, Long Bay, or the few sherds I have seen from North Storrs Lake and Ward Minus. These are interesting questions which have as yet no clear answers.

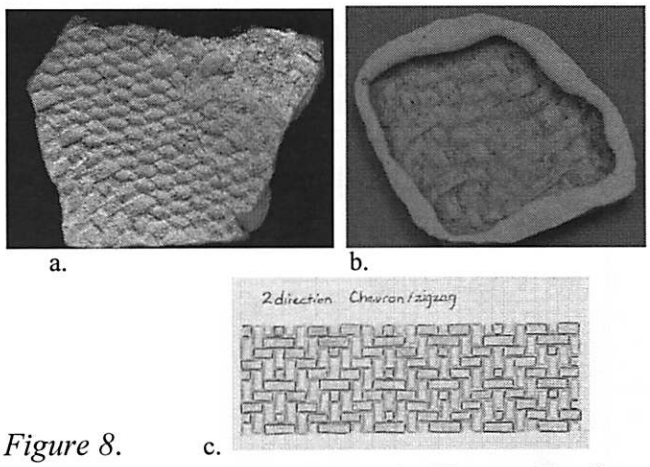


Figure 8. Serpentine appearing weaves in Pigeon Creek no. 2204 (a, cast) and NWM no. 110 (b, mold) are actually woven straight across as shown in the schematic (c).

Fabric

One of the most amazing and rewarding things I have found in the New World Museum collection was that of another type of fabric construction. I was hoping for more of the twined fabric like that from Palmetto Grove, but to find a twill weave is extraordinary. See Figure 9. This is an important find even though we may never know its site of origin. Soil analyses to source the clays used by various Lucayan potters could help find the origin of this and many other ceramic artifacts. Until more of that kind of data is available, further excavations and systematic cataloguing of existing collections remains the only means for deterring how prevalent this type of fabric construction was among the Indians of San Salvador.

Finding a second fabric manufacturing method is culturally significant because it increases our knowledge of the weaving variability of the Lucayans on San Salvador. Columbus records the use of woven loin cloths on women, as well as netting and hammocks on San Salvador (Dunn and Kelly 1988). Until the twined fabric impression was found at Palmetto Grove, there was no hard evidence of Lucayan fabric in the Bahamas (Hutcheson 2001). We now know that they not only wove fabric, but that they used several production methods. We still do not know what fibers were used for either type of weaving. Perhaps with additional impressions, one day we might.

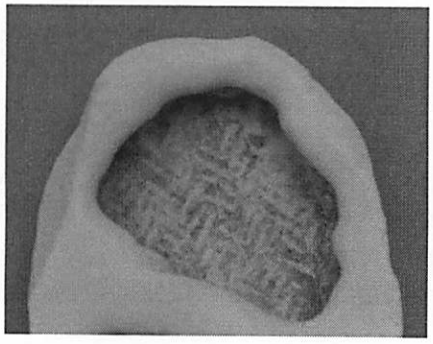


Figure 9. NWM no. 88 is a very loosely woven Twill Fabric impressed into a griddle. There are sixteen fabric impressed sherds from the same griddle.

Plant Materials

We have far more questions than answers about what materials the Lucayans used in basketry and fabric production. There is work being done on new pond cores for the island (personal communication Tina Niemi 2009) and I hope the results will help us answer some of the many unknowns about basketry and fabric material choices by identifying the range of plants that were available at the time. The environment of San Salvador has certainly changed since the last Lucayan gathered basketry supplies. We hope to better understand their past options in the near future.

Lucinda McWeeney, a paleoethnobotanist at Yale-Peabody, has identified the use of *Sabal palmetto* at Pigeon Creek, but not at Palmetto Grove (Hutcheson and McWeeney 1999, Hutcheson 2001) or Long Bay. Referring back to Figure 1, the very distinctive morphology of *Sable palmetto* is very clear in the impressions. Silver Thatch Palm, *Cocothrinax argentae* – the most ubiquitous basketry material used in the Bahamas today – was thought a likely material in some of the impressions from both Pigeon Creek and Palmetto Grove, along with various grasses (*Poacea* family) and several types of monocotyledonous plants – possibly cattail (*Typhaceae* family) (Hutcheson and McWeeney 1999, Hutcheson 2001:189-91, McWeeney and Hutcheson 2006).

In June 2009, Carol Landry looked at a sample of the basketry molds and suggested that *sedges* were a likely material for some of the fibers I have referred to as being "ribbed" (personal communication, June 2009) in a number of the 1-over-1 simple plaiting impressions. McWeeney and I have looked closely at cattails as a prime candidate for this class of material. It is interesting that the "ribbed" elements only occur in 1/1 simple plaiting. If this material can be positively identified then we will have a better chance of understanding why the Lucayans only used it in this one type of weaving.

When it comes to fibers for the fabric impressions, it would be easy to simply say it is cotton. There are abundant references to cotton in Columbus' journal entries for the Bahamas, as well as in the writings of other early Spanish chroniclers. Sauer tells us that Columbus "repeatedly references cotton in the Bahamas, Cuba and Espanola" (Sauer 1966:56). In Dunn and Kelly's version of Columbus' *Diario,* we see that on October 13th the Santa Maria arrives on Fernandina and observes that the married women wore "shorts made of cotton" (Dunn and Kelly 1988:95). However, cotton was not the only fiber the Lucayans could process into spun cordage. Sauer refers to Columbus' diary, October 16th in the Bahamas, stating that the Indians also used "*Agave* and *Furcraea*, under the names of *hene-*

quen and *cabuya*, and also *maguey* and *pita*...", which Oviedo describes as being retted to extract the fibers (Sauer 1966:61); these three are all of the family *Agavaceae* (Wikipedia). Oviedo also notes that hibiscus fibers "(*mahoe*, *mahagua*, *damahagua*, and apparently *H. tiliaceus*) w[ere] prized for cordage and nets" (Sauer 1966:61).

Robin Brown (1994, 2003) has experimented with many of these same materials, and more, in Florida to determine what materials and processes the early Floridians may have used to get various types of spun cordage, rope, and twine. He has been successful in creating spun fibers from agave / "sisal", bear grass (*Xerophyllum tenax*), corn husks (modern), *Sabal palmetto* leaf and trunk fibers, Cypress bark, Mulberry bark, Willow bark and Spanish Moss (Brown 1994, 2003). The *Sabal palmetto* leaf fibers and agave produced a nice thread (Brown 1994, 2003) that is quite comparable to that seen in the fabric impressions.

The material choices available are numerous; exactly which fibers the natives of San Salvador were selecting remains to be unraveled. Were they all making the same choices? Were there site specific associations for certain fibers? Did family units express individuality through the selection of favorite materials? The fact that Palmetto, thus far, only appears in Pigeon Creek impressions suggests these are possibilities that need further investigation.

CONCLUSION

From the earliest historical and ethnographic accounts we know that the Native populations of the Americas had very complex and extensive fiber industries. They made items of basketry, fabric, netting, and cordage, from raw and processed fibers for mundane and ceremonial usage (Mason 1900, Fewkes 1909, Roth 1929, O'Neale 1949, Wilbert 1975, Reichel-Dolmatoff 1985, Brecht, et al. 1988, Guss 1988).

The ceramics that I believe were collected by Mrs. Wolper from Pigeon Creek have basketry patterns that have thus far only been identified at that site. This fact, coupled with the fact that Pigeon Creek tends to have larger sherds than the other sites on the island, and that they are, over all, better preserved, lends support to my assessment that they may belong with that collection. Many of the more complex weaves in the New World Museum collection are also on larger better preserved artifacts.

The same idea would hold true for Palmetto Grove and Long Bay in that, thus far, they have only one complex weave each; neither of which is found at any other site. The sherd size and characteristics are comparable at these two sites and quite different from Pigeon Creek. I believe that soil salinity may play a part in this difference in ceramic preservation or breakdown. Salt is quite detrimental in ceramic production. Too much causes a weak friable product. I strongly suspect that it has an adverse effect on the unglazed, un-vitrified pottery made by the Lucayans as well. I understand that Pigeon Creek has a higher salinity than the ocean; however this may not mean that the soil does as well. Atlantic storm tides may deposit more salt, more often, in the soils along that side of the island, thus making those Lucayan sites less hospital for ceramic preservation. This is something that needs investigating.

In conclusion, I hope I have provided some understanding of the complexity and diversity of Lucayan fiber arts and technology on San Salvador in the late occupation phases. I do understand that the potential assignment of artifacts from this collection is very tenuous, and I would not count them in any site assemblage based solely on these criteria. That said, regardless of the origin of any of the New World Museum ceramics, they are a significant addition to our understanding of the Lucayan basketry and fabric technology and grammar on San Salvador.

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