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# Archaic Influences in the Origins and Development of Taino Societies

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**ABSTRACT.—Caribbean archaeologists have long assumed that the art of pottery making was introduced to the West Indies by the Arawak (Saladoid) peoples who first entered the islands around 500 BC. After their expansion stalled in the Mona Passage between Puerto Rico and Hispaniola, a new pottery series called Ostionoid developed, and a second wave of expansion supposedly began to the west and north resulting in the introduction of pottery to the other islands of the Greater Antilles and the Bahamas. Over the past 80 years evidence has accumulated that so-called "preceramic" Archaic peoples actually were making and using pottery in Cuba, Hispaniola and Puerto Rico long before Saladoid peoples arrived. This "Pre-Arawak Pottery Horizon" has largely been ignored because it does not fit the conventional model of island colonization. The presence of pottery among Archaic groups calls for a reinterpretation of the origins and development of the ethnohistoric Tainos. It is here argued that the Ostionoid developed among Archaic groups in Hispaniola, and that Ostionoid pottery styles then spread east to Puerto Rico, west to Jamaica and north to the Bahama archipelago. According to this hypothesis the origins of the Tainos are to be found in the Archaic cultures of Puerto Rico, Hispaniola and Cuba.**

**KEYWORDS.—Tainos, Caribbean archaeology, Pre-Arawak pottery horizon, systematics**

## INTRODUCTION

The "peopling and repeopling" of the West Indies (Fig. 1) has long been a major theme in Caribbean archaeology (Rouse 1989). Four major episodes of population expansion have been identified (Rouse 1992). The first involved Lithic age peoples from Central America who settled on Cuba and Hispaniola by 4000 BC (Keegan 1994; Wilson et al. 1998). Their material culture is characterized by a flaked-stone technology and the absence of pottery. A second wave of peoples, called Archaic, entered the islands from South America around 2500 BC (Keegan 1994). These people introduced ground-stone tools, and also are characterized as lacking pottery. Around 500 BC Arawak peoples from South America entered the islands and established settlements as far north as Puerto Rico. Called Saladoid, after the Saladero site in Venezuela, their arrival marked the beginning of the Ceramic age because it is believed that these peoples were the first in the West Indies to make and use pottery.[1] The Saladoid expansion stalled in Puerto Rico, and did not resume until at least 1,000 years later. When population expansion is thought to have resumed around AD 700 the pottery had changed in such significant ways that it is classified as belonging to a new series, called Ostionoid after the Punta Ostiones site (Cabo Rojo 8) in southwestern Puerto Rico.

The main premise of this scheme is that each age can be distinguished by its unique technological contribution. Flaked-stone tools mark the beginning of the Lithic age,

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[1]The la Hueca style (a.k.a, Huecoid or Huecoide) found in eastern Puerto Rico and some of the Lesser Antilles is contemporaneous with the early Saladoid. Chanlatte (2003) has proposed that this style represents a separate and perhaps earlier migration into the islands from South America. In contrast, Keegan and Rodríguez Ramos (2005) have noted the possibility that this style may actually have spread eastward across Puerto Rico, and that it reflects a melding of Saladoid-like pottery motifs and Archaic lithics. Whatever the case, the Huecoid is not a good candidate for the tradition out of which the Ostionoid developed.

ground-stone tools the Archaic age, and pottery first appears at the beginning of the Ceramic age (Rouse 1992). However, over the past 80 years evidence has accumulated that so-called "preceramic" Archaic peoples actually were making and using pottery in Cuba, Hispaniola and Puerto Rico long before Saladoid peoples arrived. This "Pre-Arawak Pottery Horizon" (Rodríguez Ramos n.d.) has largely been ignored because it does not fit the conventional model of island colonization.

The presence of pottery among Archaic groups calls for a reinterpretation of the origins and development of the ethnohistoric Tainos. Their origins currently are traced to the Ostionoid, which in turn is viewed as developing out of the Saladoid. This article argues that the origins of the Tainos actually should be placed among the Archaic peoples of Hispaniola and not among the ceramic age peoples of Puerto Rico. Elements of this hypothesis have been presented by a variety of Hispanic archaeologists (e.g., Chanlatte 2003; Dacal and Rivero de la Calle 1984; Ulloa and Valcárcel 2002; Veloz and Ortega 1996), but it has not received the attention that it deserves and has not been formulated in exactly the way it is here. I begin by reviewing the conventional model, turn next to evidence for the Pre-Arawak Pottery Horizon, and conclude by demonstrating that an Archaic foundation for Taino societies better fits the available data.

## The Conventional Model

According to the conventional model, Saladoid peoples colonized Puerto Rico and neighboring islands in the northern Lesser Antilles by around 500 BC. For some reason their expansion stopped at the Mona Passage between Puerto Rico and Hispaniola, and there is no evidence that the descendants of the Saladoid peoples moved into the rest of the Greater Antilles and the Bahamas until after AD 700.

It usually is assumed that the presence of

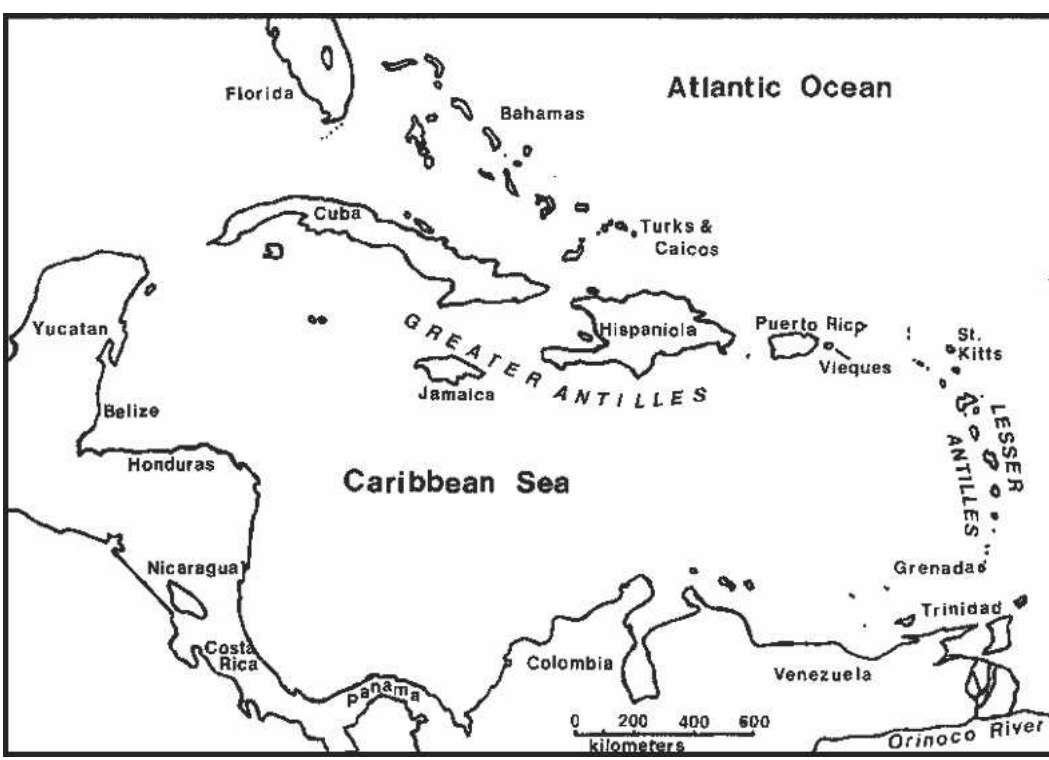


FIG. 1. Map of the West Indies.

well-established Archaic peoples in Hispaniola and Cuba, if not in Jamaica and the Bahamas, prevented Saladoid peoples from expanding into these islands (Veloz 1991, 1993; Rouse 1992). The problem with this scenario is that there also were Archaic peoples living in Puerto Rico and the northern Lesser Antilles when the Saladoid peoples arrived (Rouse and Alegría 1990), and the early appearance of pottery at the Archaic El Caimito sites in the Dominican Republic has been interpreted as evidence for peaceful interactions and the diffusion of pottery making across the frontier (Rouse 1986, 1992).

The tendency has been to ignore the "long pause" in Puerto Rico and to resume the time-space systematics after AD 700 (Keegan 1995, 2004). This date reflects Siegel's (1992) conclusion that the earliest Ostionoid style pottery (called Monserrate in Puerto Rico) did not appear before this date.[2] At this time the Saladoid peoples of Puerto Rico stopped making elaborate and highly decorated pottery vessels. In western Puerto Rico the end product was thin, hard, and smooth pottery that is largely undecorated except for red painting, red slipping, and black smudging. This Ostiones style pottery is characterized by straight-sided open bowls and boat-shaped vessels with loop handles on either end that rise above the rim. Simple modeled lugs and geometric figures on vessel walls are uncommon at the beginning of this period but increase in frequency and complexity over time. From the beginning there is an obvious division between "redware" (finely made vessels) and "crudeware" (Goodwin and Walker 1975), although both became thicker and coarser through time. The degeneration in the ceramic arts is especially evident in eastern Puerto Rico (Elenan subseries) where there is a dramatic decline in quality and aesthetics (Curet 1992).

The basic assumptions of the conventional model are: 1) Archaic age groups were aceramic (i.e., they did not make or use pottery); 2) pottery was first brought to the West Indies from South America by Saladoid peoples; 3) pottery reached Puerto Rico about 500 BC, but because the Saladoid expansion stalled in Puerto Rico, pottery was not introduced to the rest of the Greater Antilles at this time; 4) pottery vessels and designs were simplified during the 1,000 year pause in Puerto Rico resulting in the Ostionoid series; 5) the Ostionoid peoples brought pottery to the rest of the Greater Antilles and Bahamas when they resumed expansion to the west and north around AD 700. Following from these assumptions, pottery making could *only* have been introduced to those other islands by the Ostionoid peoples of Puerto Rico (Rouse 1986, 1992).

According to the conventional model pottery did not occur in the West Indies prior to the arrival of Saladoid peoples (Rouse 1992). This conclusion is wrong. Pottery occurs in Archaic contexts in Cuba, Hispaniola and Puerto Rico up to 2,000 years before the arrival of the Saladoids in Puerto Rico. In addition, pottery is present in other Archaic sites in Cuba and Hispaniola prior to the Ostionoid expansion.

## Pre-Arawak Pottery Horizon

A variety of names have been used to describe archaeological sites that have pottery associated with an Archaic stone tool kit (Keegan 2000). Cuban archaeologists have emphasized the addition of pottery to a particular way of life (*modo de vida*). For example, the terms "apropiadores ceramistas" (Tabio 1991; Rey Bettancourt and García Rodríguez 1988; Ulloa and Valcárcel 1997) and "protoagrícolas" (Dacal and Rivero de la Calle 1984; Godo 1997) are used to emphasize the adoption of pottery by people who did not practice agriculture (which is another assumption that needs to be examined more closely). Dominican archaeologists have tended to emphasize cultural affiliations by calling these peoples "Caimitoides" (after the El Caimito sites in the eastern Dominican Republic) and

[2]The beginning and end dates for ceramic styles in the Caribbean are a mess. Most of the radiocarbon dates were obtained years ago before isotopic corrections and calibrations were used (Davis 1988; Rouse and Allaire 1978).

"Cedeñoides," which suggests an affiliation with groups from western Venezuela (Veloz 1991). For his part, Rouse only recognized the El Caimito sites as having pottery in an otherwise Archaic context. He concluded that pottery making was introduced to the region by Saladoid peoples, and that it diffused across the Mona Passage to the eastern Dominican Republic. In trying to fit these data to his classification scheme Rouse (1992:92) violated his own taxonomic conventions and classified these people as belonging to the Archaic age: ". . . the makers of El Caimito pottery were El Porvenir people who copied Hacienda Grande-style pottery, thereby creating a dual culture. Because their El Porvenir heritage was dominant and their ceramics borrowed, I have assigned them to the Courian Casimiroid" (see Curet 2004 for a discussion of the taxonomy).

Reniel Rodríguez Ramos (n.d.) recently has suggested the more neutral term — "Pre-Arawak Pottery Horizon" — to describe this phenomenon. This term is used here because it avoids assumptions based on lifeways and cultural affiliations. In this regard it focuses on the one element, pottery, which is shared by these groups, and allows for the diversity of this phenomenon to be grouped under a single heading.

Mark Harrington (1921) was the first to mention pottery in Archaic sites during his extensive research in Cuba. Even Rouse (1942:133), in his research in the Maniabon Hills of eastern Cuba, mentioned the presence of pottery in the Archaic El Níspero site, but he concluded that it was ". . . deposited there after the abandonment of that site . . ." Furthermore, when Dacal and Rivero de la Calle (1984:111) wrote their synthesis of Cuban archaeology, twelve sites had been identified that belonged to what they called a "proto-agricultural" phase that was dated to between 500 BC and AD 500 (also see Veloz et al. 1991). The number of these sites has increased dramatically in recent years (e.g., Godo 1997, 2001; Rodríguez Ramos n.d.), and the earliest date for this phenomenon has been pushed back to 2160 BC in Cuba (Jouravleva 2002:36). Nineteen new dates for "preceramista" and "apropiadores ceramistas" sites from Santiago de Cuba and Holguín are reported by Ulloa and Valcárcel (2002: 232-233).

Similar sites have been identified in Hispaniola, Puerto Rico, the Virgin Islands, and the northern Lesser Antilles. In Haiti, Rainey (1941:24) and Rouse (1939, 1941:50) both mention the presence of pottery at the Archaic Couri 1 site, and Moore (1998) found "small crude sherds" at the Archaic Source Pascade II site, which was dated to 1090 BC. Unfortunately, there has been very little research conducted in Haiti so we do not know very much about the archaeology of this part of Hispaniola. Moreover, archaeologists have not looked specifically for a Pre-Arawak pottery horizon. In this regard, the discovery of Ostionan pottery in association with seven stone balls and a broken Couri blade at the site of Île à Rat on the north coast to the west of Cap Haïtien also may reflect a Pre-Arawak pottery component (Keegan 2001). Finally, Meillac style pottery has been radiocarbon dated to the 7$^{th}$ century AD along the border between the Dominican Republic and Haiti (Veloz et al. 1981). It is impossible to reconcile the emergence of this new and distinct style, with Rouse's (1992) conclusion that pottery was introduced by Ostionan peoples from Puerto Rico at virtually the same time. It was only by rejecting the early radiocarbon dates and pushing forward the beginning of Meillac to the 9$^{th}$ century that the unilineal model of ceramic evolution was preserved (Rouse and Allaire 1978).

The best documented sites outside of Cuba are in the Dominican Republic. Pottery associated with an Archaic tool kit is described from the El Caimito (La Caleta) and Musié Pedro sites, which date to as early as 300 BC (Veloz et al. 1974, 1976). Similar sites have been found in the eastern Dominican Republic (Rimoli and Nadal 1980), including the El Curro site in the Puerto Alejandro area of Barahona which dates to 1450 BC (Ortega and Guerrero 1981), and the Honduras and el Barrio sites which date to between 230 BC and AD 420. In addition, there are several sites near Punta Cana on the northeast coast that have decorated pottery that is described as

"proto-Chicoide" (Veloz 2001; Veloz and Ortega 1996:5). This Punta Cana phase (340 BC to AD 300) is then followed by the El Barrio phase (AD 300-700) for which Ortega et al. (2003) report early dates for the La Iglesia site that include an "Ostionoide" component that has been radiocarbon dated to AD 200 (1750 +/− 50 BP; Beta 179653); the date for La Iglesia is 500 years before Ostionoid pottery is found in Puerto Rico.

The first mention of pottery in an Archaic context on Puerto Rico was for the Corozo culture at the Playa Blanca and Jobos sites (Rouse 1952). Numerous other sites have been identified since then, including the Angostura site with a date of 1520 BC. At the Paso del Indio site a deeply buried strata with pottery (beneath 2 to 2.5 m of sediments) was dated to 2630 BC (García 1998). Other early evidence for pottery in Puerto Rico is reviewed by Rodríguez Ramos (n.d.).

In sum, the presence of pottery in pre-Saladoid and pre-Ostionoid Archaic contexts can no longer be denied. Dozens of sites that contain a largely Archaic tool kit and varying quantities of pottery have been identified from Cuba to the northern Lesser Antilles, and the sites date to as early as 2600 BC. Although most of the early sites contain very few potsherds, the frequency of pottery in otherwise Archaic sites increased through time.

*Pre-Arawak Pottery*

The majority of research on pre-Arawak pottery has been conducted by Cuban archaeologists (Jouravleva 2002; Ulloa 2001). Given the wide distribution and the small number of sherds at most sites it is not surprising that there is significant variability. Nevertheless, it is possible to describe a relatively common set of attributes (Rodríguez Ramos n.d.). The main vessels forms are small (4 to 12 cm orifice) to medium (18 to 24 cm orifice) globular bowls with round or flat bottoms and boat-shaped vessels. They were manufactured by coiling, and tend to have a thickness less than 1 cm, but ranging mostly between 4 and 8 mm. There are also plates and griddles at some of the sites, and these appear to have been made by flattening slabs of clay on a rigid surface. Some griddles have a raised, single coil around the circumference.

Temper tends to consist of sand, crushed rock, and/or quartz grit. In addition, grog temper has been noted in Cuba and the Dominican Republic (Veloz et al. 1976; Rimoli and Nadal 1983; Ulloa 2001). Some sites also have organic tempers including calcined shell, charcoal and/or ash, although in Cuba these comprise less than 30% of the temper (Jouravleva 2002:41). Finally, the use of self-tempering clays also has been noted in a small number of cases.

The pottery from these sites is usually highly oxidized, which indicates the use of open-firing techniques. There are, however, some sherds with black cores which may indicate a reducing environment or incomplete firing in an open-air environment. Based on their study of sherds from Cuba, Ulloa et al. (2001:39) concluded that the pots were fired at relatively low temperatures (600° to 900° F).

The vessels tend to have coarse finishes, although this may be a function of their age and post-deposition deterioration. Vessel surfaces were smoothed, which in some cases seems to have been accomplished with a spatula-like tool. Most of the sherds from this time are plain, although some are decorated with red, pink, white and/or black paint and/or slip, along with incised, punctate and modeled designs. Paints or slips were applied to the exterior, and in some cases the interior, of the vessels. Occasionally they occur with a red foundation and black or white paint. The combined use of paint and incision is observed in some late Archaic sites (Castellanos et al. 2001).

Incision is the most common decorative technique, and exhibits a great deal of variability. Rodríguez Ramos (n.d.) summarizes decorative treatments as follows: ". . . lineal incisions were made parallel to the rims (e.g., Dacal 1986; Lundberg 1989), perpendicular to the rims (e.g., Valcárcel et al. 2001; Tabio and Guarch 1966), and in angular patterns (e.g., Castellanos et al. 2001). In other cases curvilinear incision patterns have also been documented (e.g.,

García 1998; Veloz et al. 1976)." There is also zoned punctation (Ulloa and Valcárcel 2002), and the filling of incisions with black paint (Veloz et al. 1976). Finally, modeled appliqués and zoomorphic adornments representing birds and reptiles have been found in Barrio Phase pottery from the Dominican Republic (Ortega et al. 2003; Veloz 2001; Veloz and Ortega 1996).

From these descriptions it is clear that there was significant variability in the manufacture and decoration of pottery vessels as would be expected for a tradition that lasted over 2,000 years. Unlike Saladoid pottery, which has a highly formalized grammar (Roe 1989), these pots seem to reflect a period of experimentation where different pastes and different decorative techniques were explored. The one constant seems to be that the vessels mimic the shapes of containers that were made from gourds (Rodríguez Ramos n.d.). The decorations also may reflect designs that were used to decorate perishable containers made of wood or gourds, and they are similar to designs preserved on stone bowls from this time period. The transposition of designs from other media to pottery has been suggested for later ceramic styles, notably Meillacan pottery from Hispaniola (Rouse 1992).

## Return of the Archaics

A reconsideration of the evidence used to support the conventional model leads to a different hypothesis for the development and spread of Ostionoid cultures, and by extension to the emergence of Taino societies.

First, hemispherical bowls and boat-shaped vessels are the primary vessel shapes in Archaic sites. These also are the primary shapes for Ostionoid vessels. In contrast, Saladoid potters made a wide variety of vessel shapes (Roe 1989). If Ostionoid potters are the descendants of Saladoid potters, then why did they restrict their repertoire to the two shapes that are most common in Archaic sites?

Second, red surface treatments, including an oxidized paste, red painting and red slips are common on vessels from Archaic sites. In contrast, the Saladoids made extensive use of white paint on a red surface, black paint, and polychromes to represent a complex iconography. Why did the Ostionoids abandon these techniques and restrict surface treatments to the red coloration that is typical of Archaic vessels?

Third, a wide variety of zoomorphic lugs and adornos were affixed to Saladoid pots. Similar lugs and adornos are not found on vessels from Archaic contexts or on Ostionoid vessels. Why were the diverse and complex zoomorphic adornos of the Saladoid abandoned in favor of a more limited repertoire (e.g., bats, frogs and birds)?

Fourth, Saladoid deposits tend to have the remains of thousands of land crabs and very few mollusks, while Ostionoid deposits have thousands of mollusks and very few land crabs. The differences between these deposits are so dramatic that Rainey (1940) originally proposed that the former should be called the "Crab Culture" and the latter the "Shell Culture." There has been a great deal of debate concerning what this "Crab/Shell dichotomy" means in terms of cultural development. It has been suggested that the shift reflects either the overexploitation of land crabs, or a change in climate which produced drier conditions that reduced the habitat for land crabs and limited their availability. Nevertheless, land crabs were available during Archaic times, yet Archaic peoples chose not to exploit them. Whatever else may have occurred, mollusks were an important component of the Archaic diet in contrast to the Saladoid diet, and the greater frequency of mollusks in Ostionan deposits can be viewed as reflecting the continuity of Archaic diets.

Fifth, the Monserrate site, dated to around AD 700, is considered to contain some of the earliest Ostionan style pottery on Puerto Rico (Siegel 1992). Early Ostionoid ceramics in this site occur in association with beveled-edge gouges (*gubias*) made from the queen conch (*Strombus gigas*) shell. These shell tools are most common in Archaic sites, especially those in western Cuba, and are rare in most Saladoid sites. In addition, Ostionoid pottery from Île a

Rat, Haiti, is associated with stone balls and the stem of a blade, both of which are most common in Archaic assemblages. At the Paradise site in Jamaica, Ostionan pottery is associated with a well-developed flaked-stone technology, which is more typical of Archaic cultures (Rodríguez Ramos 2005).

Sixth, the wide distribution of Ostionoid sites, which appear almost simultaneously on the south coast of Jamaica and in the Bahamas, is hard to attribute to a source area in Puerto Rico. Early Ostionoid pottery at the Coralie site, Turks and Caicos Islands, has been traced to a clay source in Haiti (Cordell 1998). In addition, Cuban archaeologists do not recognize an Ostionoid colonization of their island (Ulloa, personal communication, 2005), yet there are well-developed ceramic traditions in Cuba.

All of the evidence points to a new conclusion. Early Ostionoid pottery and other associated cultural features most closely resemble late Archaic assemblages in Cuba, Hispaniola and Puerto Rico. It is far easier to explain the Ostionoid as the progressive development of Archaic peoples than it is to view the early Ostionoid as the degeneration of the Saladoid (Chanlatte 2003; Rodríguez Ramos n.d.). The directional arrow should be reversed. The most parsimonious explanation is that early Ostionoid pottery first developed among Archaic groups in Hispaniola.

*Conclusions*

The wide distribution of pottery in otherwise Archaic sites prior to the arrival of the Saladoids indicates that pottery was *not* introduced to the Greater Antilles by Saladoid colonists. This fact opens the possibility that pottery styles that first developed in Hispaniola then spread back to Puerto Rico. The hypothesis presented here proposes that three of the Ostionoid subseries (Ostionan, Meillacan, and Chican) developed first in Hispaniola and spread out from there. Ostionan pottery spread east to Puerto Rico, west to Jamaica, and north to the Bahama archipelago. Meillacan pottery spread west and north to Jamaica, Cuba, and the Bahamas; and Chican pottery spread east, west and north following the pattern established by previous diffusions. Moreover, we need to return to the old classification scheme in which Ostionoid, Meillacoid, and Chicoid are all recognized as distinct "series of peoples and cultures" (Rouse 1986). It no longer makes sense to view them as representing a single line of cultural evolution.

Situating the origins of the Ostionoid in Hispaniola solves a number of nagging problems in Taino studies. There are significant differences between Puerto Rico and Hispaniola in the distribution of ceremonial artifacts (McGinnis 1997; Ostapkowicz 1997), the media through which iconography was expressed (Roe 1995), community layout and monumental architecture (Curet 2003), house size and burial practices (Curet and Oliver 1998), and social and political organization (Curet 2002). As Curet (2003:19) recently noted: "Hispaniolan and Puerto Rican polities used significantly different ideological foundations, a reflection of differences in the nature of the political structure and organizations." He continues (2003:20): "Judging from the striking differences mentioned, they likely developed from distinct types of ancestral societies, and/or through different and divergent historical processes."

For 1,000 years Saladoid motifs served to maintain a regional cultural identity that united peoples in widely dispersed settlements on different islands. Yet the Saladoids were never able to establish more than a foothold in Hispaniola, and eventually the Archaic peoples who had prevented their westward expansion began to exert their influence over the Saladoids in western Puerto Rico. Caught in a vice between an expanding Archaic population to the west and Barrancoid influences from the south (Boomert 2000), the Saladoid system of representation collapsed. It was replaced by the vessel forms and motifs inspired by Ostionoid and Barrancoid peoples at either end of the archipelago, and resulted in the emergence of a variety of local styles and interaction spheres. In the Greater Antilles, the differences noted for Taino cultures in Hispaniola and Puerto Rico are indeed the outcome of distinct types of ancestral societies and divergent

historical processes. Taino societies in Puerto Rico reflect the syncretism of Saladoid and the Archaic-inspired Ostionoid, while the Tainos in Hispaniola and Cuba maintained more of their Archaic traditions.

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