

Chapter 13

Religious Organization in the Late Ceramic Caribbean

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Introduction

This volume's goal of employing rock art to address issues regarding the internal and external dynamics of religion begins here with considering religion as a set of interconnected and changeable components. Table 13.1 presents a number of, through certainly not all, elements by the major categories of cognitive aspects, practices, sociopolitical features, and material correlates.

Recent cognitive neuroscience research as applied to religion (see for example Whitehouse 2004; Whitley 2008) has opened up new avenues of investigating the origin, maintenance, and changes in religious systems, as well as emphasizing that religions engage the emotions. Levels of psychological involvement range from high to low within normal to altered states of consciences. Rituals, ceremonies, and prayers may involve a single individual to transnational communities in open/public or closed/private settings. Sociopolitical features include practitioners that range from priests and lay leaders to shamans that through various mechanisms exercise high to low degrees of control and integration. Religious belief and practices may also entail material correlates such as structures (churches, shrines), particular landscape features (mountain tops, caves, sink holes/cenotes), objects (special containers and rock art), and substances (particular foods, hallucinogenic ingredients).

Religious systems additionally interconnect with the political, social, and economic segments of societies. For instance, in the Caribbean, various researchers (Rouse 1992; Roe 1993; Oliver 1998, 2005) have argued that ball courts and plazas (level prepared earthen surfaces) likely served as places for communal activities involving singing, dancing, and the playing of a ball game that had religious as well as social and political connotations.

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Table 13.1 Components of religion

Category	External expression
<i>Cognitive features</i>	
Transmission of religion	Formally learned (texts, specific educational program) to knowledgeable individual or small group informal acquisition
Emotional intensity	High to low
Emotional states	Unaltered or normal consciousness versus altered states of consciousness
<i>Practices</i>	
Rituals	Large-scale/small-scale, open/closed, public/private
Ceremonies	Large-scale/small-scale, open/closed, public/private
Prayers	Communal to private
<i>Sociopolitical features</i>	
Practitioners	Hierarchical priesthood, lay leaders, prophets, shamans
Scale	Large to small scale
Belief system	Formal theology to ideologically heterogeneous
Structure	Centralized to decentralized
<i>Material correlates</i>	
Structures	Public places of worship and shrines; marked and unmarked landscape features, private household altars/shrines
Objects	Special containers and clothing, figurines, different-scaled everyday items (ceramics, weapons), rock art
Substances	Particular foods, body paints, incense, hallucinogenic ingredients

Source: After Whitehouse 2004:74, Table 4.1

The complex interactions that characterize the religious system and its relationships with other cultural segments also characterize the link between rock art and religion. The images themselves are material correlates that further reflect or interact with the cognitive, performance, and sociopolitical aspects of religion. The figures and forms provide visual referents to draw out desired emotional states. Certain types of rock art worldwide were apparently produced as a result of shamanistic trances (see Lewis-Williams 2002) or as has been inferred in the Caribbean to represent cosmological as well as mythic themes and personages (see Oliver 1998, 2005). Rock art locations are forms of marked landscapes, frequently denoting sacred or other-worldly spaces. The images were employed in a wide range of religious practices and, as we propose in this chapter, with attributes such as location and degree of design element repetition reflecting levels of institutional control and hierarchical development.

Religions as interconnected and flexible systems are also characterized by both change and stability across time and space. Harvey Whitehouse's (2004) Theory of Modes of Religiosity represents one formal ordering of these dynamic component relationships. His framework relates the inward cognitive mechanisms for the origin, maintenance, and change of religions with their outward beliefs, rituals, and organizational structure. Cultures possess or tend towards one or more idealized modes:

Cognitive Optimum—a low level of religious organizational principles found in all cultures.

Doctrinal Mode—a high level of religious organizational principles characterized by large-scale, standardized, centrally regulated religious traditions with frequently repeated rituals.

Imagistic Mode—a high level of religious organizational principles typified by small-scale, ideologically heterogeneous, non-centralized religious traditions with infrequently repeated rituals.

We have noted (Cinquino et al. 2003; Hayward et al. 2007, 2012) that while the region's rock art maintains an overall unique identity, a high degree of image variability or site-specific distinctiveness is nonetheless apparent. We interpreted (Hayward et al. 2007) this distinctiveness as reflecting an imagistic or even optimum mode during the Late Ceramic Period, A.D. 600–1,500, the primary phase of precontact rock art production (Roe 2009). We also considered that a possible shift to a more doctrinal mode might have been taking place by the end of the period. Roe (2004), Siegel (1999), Oliver (1998, 2005) and Walker (1993), among others, have made a case for parallel increased stratification in the social, political, and religious realms by the end of this period. Intensification does not always equate with the doctrinal mode, as more than one mode can coexist within a religious tradition or sociopolitical entity (Whitehouse 2004:8).

In this essay, we continue to explore this doctrinal-mode shift possibility through the technique of cross-media isomorphism (after Roe 1993, 2004). After accounting for media-based differences, the procedure involves the charting of structural and visual parallelisms across different material classes. One expectation of a doctrinal-mode religious organization would be a significant or a consistent presence of such parallelisms. We suggest that one such parallelism—a circle-dot-flanking-triangle motif—found in rock art, ceramics, and sculptured stone artifacts reflects apparent successful attempts to more effectively structure the religious system. This restructuring may have complemented rather than displaced the earlier imagistic or more individualized, decentralized organization. The focus here is on materials from the Greater Antillean island of Puerto Rico which possesses a significant percentage of rock art and sculptured stone artifacts.

The region's investigators also draw upon information from culturally cognate South American lowland native groups, as well as ethnohistorical accounts of Amerindians at Contact, in particular Taíno groups in the Greater Antilles. Inferences from the ethnohistorical sources indicate that the most likely restructurers of the Late Ceramic religious organization were the emerging or the protohistoric Taíno religious and sociopolitical elite segments of societies. Their motivation was to augment personal and group influence through the increased use and control of esoteric or spiritual information materialized as ritual symbols, objects, and places. The repetition of visual elements across various media and placement within the landscape served to underscore and physically proclaim their raising prestige vis-à-vis their own and competing groups. The linkage of “elite power derived through control of religious knowledge and organization” has been made in a Caribbean context by

various investigators including Oliver (1998, 2005, 2009), Siegel (1999), and Wilson (1990). Our position builds upon this line of reasoning and in particular owes a debt to Roe's (1993, 2004) earlier cross-media work and observations.

Our reasoning also assumes that images or designs on these referenced material class objects are symbolic and not merely decorative elements. Ethnographic studies and the ethnohistorical sources clearly indicate that this is a plausible, if not likely, supposition. For example, a deeply rooted symbolic context for pottery manufacture and use is found among the Kari'na natives of northeast Suriname (Vredenburg 2004). Oral tradition attributes the Milky Way to a group of women who found a good source of clay in the sky but never returned leaving only their footprints as the stars in the sky; water spirits are connected to different clay sources; rituals surround the collection of certain river pebbles used to polish the vessels in order to appease and show respect to the water spirit; the typical ceramic decorations of fine-line paintings in geometric shapes are in some cases said to be inspired by spirits through dreams, while the origin of all decorative patterns on different materials including pottery is considered the gift of the moon-woman or alternatively the result of markings of a mythical snake that were left on the body of a man. For the Kari'na pottery making is an integrated process involving belief and ritual-laden production that results in finished vessels with symbolic or social value.

The Design Layout, Rock Art, and Sacred Places

Like the aforementioned example, we propose that the circle-dot-flanking-triangle design layout found in rock art, ceramics, and sculptured rock artifacts is similarly embedded in a symbolic context. Once completed, the ascribed value of these objects offered an opportunity by the emerging Chican Ostionoid or protohistoric (A.D. 1,200–1,500) Taíno sociopolitical and religious elite to enhance their prestige, as well as to more formally organize their respective and intersecting realms of influence.

This design layout or complex in Puerto Rican rock art has thus far been found as petroglyphs on cave walls and at ball courts. Petroglyphs and pictographs are widespread and abundant within the Caribbean though not evenly distributed. Several islands possess relatively higher densities including Puerto Rico numbering over 500 sites within approximately 9,000 km². In addition to ball courts, plazas, and caves, the island's rock art is also found on inland rock formations and on boulders along rivers or ocean edge (Roe 2009:204–211).

Ball courts and plazas represent level prepared earthen surfaces wholly or partially lined with stone slabs, earthen embankments, or both. Most of the examples are rectangular in shape (alternative forms being square, oval, circular) ranging in size from under 100 square meters to one at 43,000 square meters in the Dominican Republic. Typically these enclosures are demarked with single lines of earth-embedded upright stone slabs or low-lying boulders along two sides with open or unmarked opposing sides. Puerto Rico possesses the majority of these structures in the Caribbean (low hundreds), with a significantly lesser

number (forty or less) reported from the Greater Antillean islands of Cuba, Hispaniola, and the Virgin Islands. Most of the island's enclosures occur as single precincts within or associated with habitation sites; multi-enclosure locations range from 2 up to 10 or 12 as at Tibes and Caguana (see description below) (Hayward and Cinquino 2012:105,107–112).

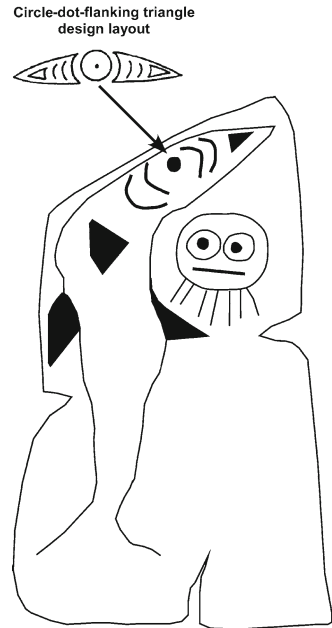
Descriptions found in ethnohistorical sources, as well as the physical characteristics of recorded enclosures, suggest that these structures were open, public spaces that served a variety of functions organized and led by the sociopolitical and religious elite. Activities specifically outlined included the playing of a game with a solid rubber ball, hence the term ball court, and *areitos*. These involved recitals and performances of chiefly, community, and religious histories accompanied by drinking, feasting, and mock battles that apparently varied according to the particular occasion. Instances might include deaths and marriages of chiefs, declarations of war or peace, times of natural disasters, and arrivals or departures of important people. Local to regional chiefs organized the *areitos* that encompassed such actions as composing or selecting the songs during performances and providing the food, drink, and other necessary items. *Areitos* apparently varied in scale from small local community affairs to multi-village occasions involving large number of chiefs, elite, and commoners either as participants or spectators (Alegría 1983, 1997:21; Oliver 2005:263–264; Sued-Badillo 2003:259–274; Wilson 2007:119–123).

Ball courts and plazas also commonly contained rock art at single- to multi-precinct sites numbering from as little as one image to the lower hundreds on multiple stone row alignments (Hayward and Cinquino 2012:105). Enclosures first appear in the archaeological record at the beginning of the Late Ceramic Period, A.D. 600, with a subsequent florescence especially at the end between A.D. 1,200 and 1,400 (Rouse 1992; Alegría 1983; Oliver 1998, 2005). The increase in the number and layout complexity of enclosures, along with such detectable changes as the introduction of new or elaboration of earlier material cultural items and shifts in settlement systems, are considered to reflect the transformation of the Early Ceramic, 250 B.C. to A.D. 600, tribal, non-stratified societies into the incipient and later complex, socially two-tiered Taíno chiefdoms in the northern Caribbean at and immediately before Contact (see for example Oliver 1998, 2005; Rouse 1992; Siegel 1999; Walker 1993; Wilson 2007).

These single- to multi-level chiefdoms have been characterized as elite-dominated sociopolitical structures where control primarily derived from persuasive abilities and kinship ties. Chiefs or leaders from a single village to supra-regional polities interacted with supernatural entities or *cemís* (deities, ancestral spirits, and natural forces) to attract retainers and maintain the support of the commoners who made up the majority of the population. They could mobilize people for agricultural labor, as well as military service; they might lead military operations that could involve thousands of warriors. Chiefs redistributed food and goods during their lifetimes and at death when much of their material wealth was given away to mourners during *areitos* celebrated in their honor (Oliver 2005:241–244, 2009; Sued-Badillo 2003:259–274).

Chiefs were assisted in their roles by other high-ranking individuals and relatives who, among other responsibilities, implemented chiefly policies, administrated

Fig. 13.1 Two petroglyphs from the El Bronze ball court, Puerto Rico, with the circle-dot-flanking-triangle design layout (redrawn from Oliver 1998:41, Fig. 25)



villages or subregions, and organized long-distance trading expeditions. Chiefly/elite religious roles and functions were counterbalanced by shamans who were also intimately involved with *cemí* spirits through rituals and paraphernalia. Although their roles overlapped, it appears that chiefly/elite *cemí* encounters focused on soliciting advice and help regarding public community-wide political affairs, while those of the shaman centered on individual physical-spiritual health and well-being (Oliver 2005:241–245).

Roe (2009) as well as Hayward and Cinquino (2012) suggest that rock art development at ball courts parallels these evolving sociopolitical structures. Ball court petroglyphs display an overall increase in image complexity and iconographic conceptual design from the Late Ceramic's mid (A.D. 900–1,200) to end phase (A.D. 1,200–1,500), although not all later sites necessarily exhibit such developed traits as fully rendered images or involved layouts. The mid-phase ball court site of Tibes on the south coast, for instance, dating to A.D. 1,000/1,100–1,200/1,300 possesses 10 precincts where some 17 images are found on 12 boulders from the main square-shaped enclosure. The petroglyphs represent small undeveloped humanlike faces and simple facial-body forms with a prevailing anthropomorphic theme (Roe 2009; Hayward and Cinquino 2012:107–110,113).

Successive images become more elaborate as at El Bronze, a one-precinct site also on the south coast with around 17 images on 11 boulders dated to somewhat later than Tibes at A.D. 1,100–1,200 (Robinson et al. 1985). An emphasis on facial embellishments including elaborate headgear and internal elements is evident, along with the depiction of a large shark in profile adjacent to a humanlike face (Fig. 13.1) (Roe 2009: 220).

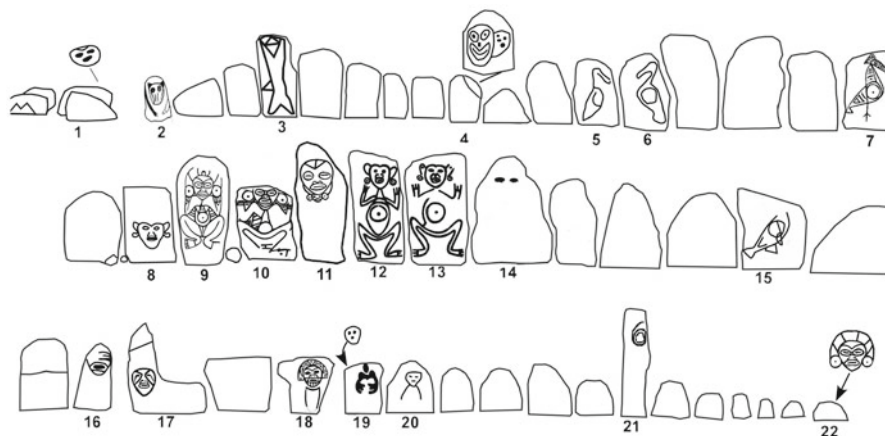


Fig. 13.2 Petroglyph sequence from the west side of Plaza A, Caguana, Puerto Rico (redrawn from Oliver 1998:121, Fig. 39)

We repeat Roe's (1993:662, Note 21) observation that the dot and flanking semi-circles and triangles that represent the natural features of eye and gill slits of the shark become transformed into a circle-dot-flanking-triangle petroglyph design layout that figures prominently at the later premier Caguana ball court complex, the enclosure at Jácana, and Cueva Negra on Mona Island, a political dependency off the west coast of Puerto Rico.

Caguana is the largest enclosure site on Puerto Rico with 12 precincts located in the west-central highlands. Twenty-six of the remaining 35 images are found at the site's central square or Plaza A—24 on 22 boulders along the west side and 2 petroglyphs from the east alignment confirmed by only early 1900s' photographs. While Caguana was initially settled around A.D. 700, the primary occupational phase and associated ball court construction date to the last phase of the Late Ceramic, A.D. 1,200–1,450. The enclosure images are notable among the island's rock art assemblages not for their great number, but for their degree of elaboration and integrated iconographic themes. Fully detailed anthropomorphs, complex facial designs, developed face and body forms, as well as fish, bird, and abstract designs are all present (Oliver 1998; Hayward et al. 2012:107, 110–111, 113–115, 118) (Fig. 13.2) (Roe 2009).

Two of the most elaborately executed images are female and male anthropomorphs rendered in a frog-like pose with developed headgear that occupy the center of Plaza A's west alignment (Fig. 13.3, upper row).

These, in addition to other design elements such as rounded earplugs, indicate enhanced status or group identities. They are complemented by a less detailed pair (Fig. 13.3, lower row) separated by a boulder with a complex facial image. As Roe (1993) aptly points out the circle and dot elements of the design layout are prominent and make up the navels in all four figures.

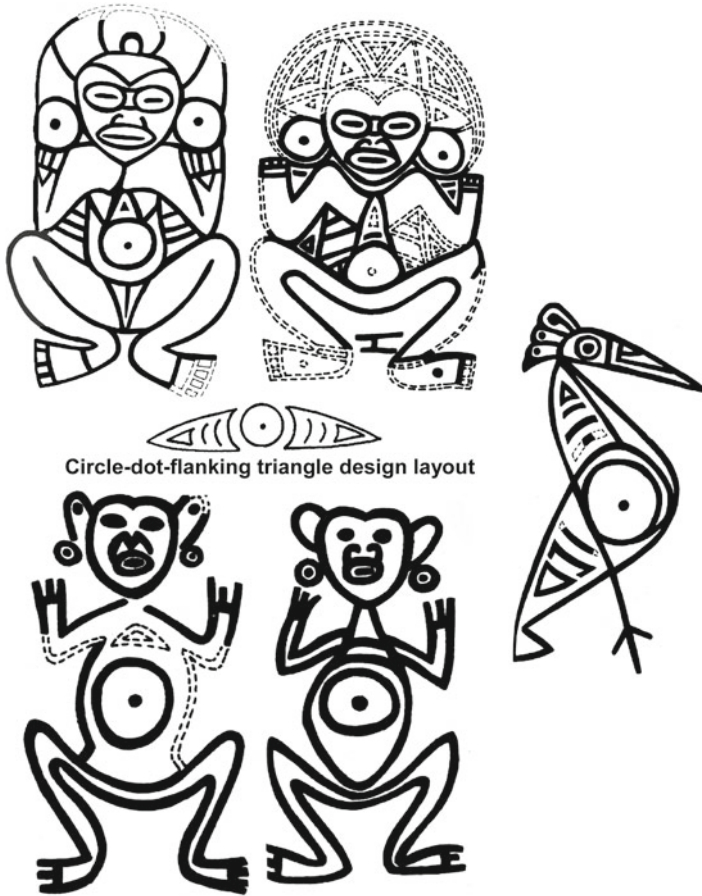


Fig. 13.3 Four fully detailed anthropomorphs (top petroglyph numbers 9 and 10; bottom 12 and 13) and bird image (right petroglyph number 7) (numbers refer to petroglyph ordering of Fig. 13.2) from west side of Plaza A, Caguana, Puerto Rico (Roe 1993:665–667, 669, Figs. 3a, 4, 5b, c, 7, respectively)

Roe (1993) further observes that the triangle and semicircle elements within the larger vertically orientated triangle are directly connected to the circle-dot and in the case of the female figure act to differentiate her breasts. The chest triangles and rectangles form the ribs suggesting skeletonized or deceased beings. Roe adds that the triangle- and rectangle-formed hands attached to the large earspool repeat the chest design layout, thereby enhancing its effect, or importance.

The layout also accounts for the entire body portion of one of the bird forms (Fig. 13.3, right). The circle-dot forms the main body of this long-beaked bird, with proportionally emphasized opposing triangles in addition to internal triangles and curved lines that make up the neck and tail. A stick foot, dot-and-lines crest, and a long beak with enclosed pupil for an eye and triangle designs complete the motif.

Another prominent example of the circle-dot-flanking-triangle layout comes from the Jácana PO29 site on the south coast of the island (Loubser 2009, 2010; Loubser et al. 2010). Jácana possesses a single enclosure containing a large number of images, currently recorded as some 62 on 25 stone slabs from the north, south, and west alignments, as well as 1 displaced near-site boulder. Two major occupations are indicated—one from the beginning of the Late Ceramic A.D. 650–900 and the second from the end phase A.D. 1,300–1,500. The enclosure and at least the north-side petroglyphs date to the second major occupational phase (Hayward and Cinquino 2012:111–113,115).

A prevailing anthropomorphic theme is evident at Jácana, with most images ranging from simple to complex facial designs, in addition to simple facial-body motifs with occasional zoomorphic (two possible unmodified boulders suggesting owl shapes) and pit-line elements. It is the two fully rendered anthropomorphic figures on the north wall that are of particular relevance to the present discussion since they are stylistically nearly identical to the two fully executed anthropomorphs from Caguana (Fig. 13.4, left and center) (Loubser 2009, 2010; Loubser et al. 2010).

Sex is again indicated, with a repeat of the frog-like pose with developed headgear. The circle-dot forms the navel in both Jácana figures where one side or half of the flanking triangle with an internal small triangle or triangle-like design and curved line is orientated perpendicular to the circle-dot. Other triangles and curved rectangles fill in the chest area, as at Caguana, giving a skeletonized appearance. Arms are upright in all four examples. Dissimilarities are observable as well, including the marked 90° rotation of the head on the Jácana boulder 9 figure along with a bottom-attached inverted, humanlike face which would have been below the enclosure's surface (Loubser 2009, 2010; Loubser et al. 2010).

The large multi-chambered Cueva Negra on Mona Island's west coast contains one petroglyph and three pictographs considered to date to the Chican Ostionoid or the Taíno period, A.D. 1,300–1,500. The three pictographs represent two complex faces—one human and the other monkey-like—while the third represents a generic lizard. The anthropomorphic petroglyph once again is strikingly similar to those fully detailed from Caguana and Jácana (Fig. 13.4, right). Fleshly frog-like legs on this male are matched by a rounded abdomen that instead of a dot and skeletonized elements depicts a humanlike face. A triangle-dot design connects the abdomen to the face that stresses the earlike circle-dot-triangle layout. The cave may well have been used for religious rituals and ceremonies (Dávila Dávila 2003:179–185, 262, 273, 333–335, 438–440).

Various researchers have offered interpretations of the Caguana petroglyphs wholly or in part (Stevens-Arroyo 1988:162; Roe 1993), as well as the Jácana assemblage. Oliver (1998, 2005, 2009) provides the most comprehensive structuralist-based iconographic decoding of the Caguana petroglyphs. He views the assemblage as a micro-representation of backward-in time-projected Taíno cosmological beliefs which served to articulate different sociopolitical segments, as well as the living with the nonliving world.

The world, according to the animistic beliefs of Caribbean precontact native populations, included the earthly plain with living people and an underworld and



Fig. 13.4 Fully detailed anthropomorphs from (1) north boulder alignment at Jácana ball court, Puerto Rico (petroglyph numbers 9 and 5 *left upper* and *lower*, respectively); (2) west side of Plaza A, Caguana, Puerto Rico (petroglyph numbers 9 and 10, *center upper* and *lower*, respectively); and (3) Cueva Negra, Mona Island (petroglyph number 1, *right*). Sources: Jácana, redrawn from Loubser et al. 2010; Caguana, Roe 1993:665–666, Figs. 3a and 4; Cueva Negra, retraced from Dávila Dávila 2003:333, Fig. 25

sky realm inhabited by supernatural entities or *cemís*. These included mystical or godlike forces, life-sustaining energies, supernatural beings (some of whom were named), and spirits of the dead. *Cemís* could manifest themselves in a variety of ways or objects such as smells, rocks, and animals. Their manifestations might, though not always, require some form of more permanent representation made from a number of materials including wood, preserved skeletal remains, and, not illogically, rock art. These objects were considered not only to represent supernatural beings and forces but also to embody their powers and were also called *cemís* (Alegría 1997:23; Oliver 2005:246–248; Stevens-Arroyo 1988).

Within this context, Oliver (1998, 2005, 2009) considers that the four dominant centrally located fully executed and less detailed anthropomorphs represent the ancestors and descendants of the governing chiefs of Caguana, manifested as *cemís*. The remaining petroglyphs serve to emphasize their status, in addition to

representing components of the cosmological world order just noted. Communal events at the main enclosure likely focused on *areitos*, where the secular and sacred activities discussed above were acted out, and would have projected the political and religious prominence of the area and its rulers. Chiefs, as outlined above, had intertwining political and religious roles that included maintaining the proper balance between the spiritual and natural worlds that ensured the good order and material well-being of the people. As objects with embedded *cemí* power, these central petroglyph images were active, not merely passive, participants in the ceremonies. Further, they would have served as witnesses to the validation of the current ruler and sociopolitical order that linked individuals to various social strata and groups to groups at local or higher political levels.

Loubser (2009, 2010; Loubser et al. 2010) in his less extensive than Oliver's treatment of the Jácana petroglyphs employs a similar approach. Relying on ethno-historic sources, as does Olivier, he also considers that the petroglyphs represent *cemís* matching individual petroglyphs to specifically described *cemís* (see Stevens-Arroyo 1988 for such descriptions). For instance, the two fully elaborated male and female anthropomorphic figures in Fig. 13.4 (left) Loubser identifies as deceased chiefs standing in for or by virtue of their status linked to the *cemís* Yaya the supreme or high god and Attabiera guardian of female fertility (Stevens-Arroyo 1988:221–223, 226).

Regardless of the specific interpretations of the rock art at the enclosure sites of Caguana and Jácana, they all firmly relate the images to the spiritual realm. Rock art at caves is similarly ascribed to *cemís* or spirits of dead ancestors with attendant religious rituals and ceremonies. Ball court structures and caves marked these particular locations within the surrounding landscape as “sacred,” “apart from normal activity,” and “other worldly” with rock art reinforcing this status. Yet as Oliver (1998, 2005) for example has argued enclosures and associated rock art were multifunctional as suggested by the ethnohistorically described mix of religious and secular activities led by individuals with intersecting religious, economic, and sociopolitical roles. These individuals or groups took advantage of, and proclaimed their prestige through, the construction of enclosures and their symbolic-laden images.

The Design Layout and Chican Ostionoid Ceramics

The circle-dot-flanking-triangle layout also appears to be a late development in the Greater Antillean ceramic sequence. That sequence largely coincides with the arrival of groups from the lowlands of northeast South America that begin moving into the region around 450 B.C. The Saladoids bring with them an established pottery-making tradition, settled village life, and full-time horticulture into a region already populated with Archaic hunter-gather groups that nonetheless produced ceramics on a lesser scale and engaged in low-level plant manipulation. The post-Archaic cultural development period or Ceramic Age is divided into Early and Late

Table 13.2 Chronological framework and ceramic sequence for prehistoric Puerto Rico

Chronological period	Ceramic series/subseries/styles	Calendric dates
Early ceramic	Saladoid	
First phase	Early Cedrosan Saladoid/Hacienda Grande, La Hueca	300 B.C.–350/400 A.D.
Second phase	Late Cedrosan Saladoid/Cuevas	350/400–600 A.D.
Late ceramic	Ostionoid	
First phase	Early Ostionan and Elenan Ostionoid/pure or early Ostiones and Monserrate	600–900 A.D.
Second phase	Late Ostionan and Elenan Ostionoid/modified Ostiones and Santa Elena	900–1,200 A.D.
Third phase	Chican Ostionoid/Esperanza, Capá, and Boca Chica	1,200–1,500 A.D.

Sources: Rouse (1982, 1992)

Periods and subdivided into two and three phases, respectively. The associated ceramic series for the Early Ceramic is the Saladoid followed by the Late Ceramic Ostionoid. Saladoid ceramics are found throughout the Lesser Antilles, Virgin Islands, Puerto Rico, and eastern Hispaniola, the latter region apparently representing a frontier zone between the newly arrived Saladoid groups and the resident Archaic populations (Rouse 1992; Wilson 2007).

A commonly employed spatiotemporal model for Caribbean prehistoric cultural and ceramic development is that of Rouse (1992:52–53, Figs. 14 and 15). His framework for Puerto Rico during the Ceramic Age is presented in Table 13.2 with columns for the cultural phases, calendric dates, and associated ceramic styles (assemblages of ceramic or other material cultural items characteristic of one or more sites), series (sets of closely related styles shared by groups from assumed common origin), and subseries (an intermediate taxonomic unit between series and styles).

The early Cedrosan Saladoid Hacienda Grande and La Hueca styles (300 B.C.–A.D. 350/400) are characterized by poly- and bichrome, as well as incised designs on a variety of thin light tan-colored straight-sided and sharply angled vessel forms as sketched in Fig. 13.5 (top row).

Red, orange, white, and black were employed in polychrome painting and slipping, while the more numerous finely executed bichrome designs featured white-on-red (WOR) combinations. A particular form of incision was common, termed zoned incised crosshatching (ZIC) where areas were outlined with broad, deep lines and then filled in with lightly incised crosshatching. Detailed modeled zoo- and anthropomorphic forms or *adornos* on lugs or handles were also common. The later Saladoid Cuevas style ceramics (A.D. 350/400–600), while maintaining the manufacture of thin well-made vessels, also feature decreasing ZIC-type incising, less well-executed WOR designs, and softening of wall profiles (Wilson 2007:67, 74–75; Rouse 1992).

While the designs within all styles of Puerto Rican Saladoid pottery are highly variable and frequently include curvilinear elements as the examples in Fig. 13.5

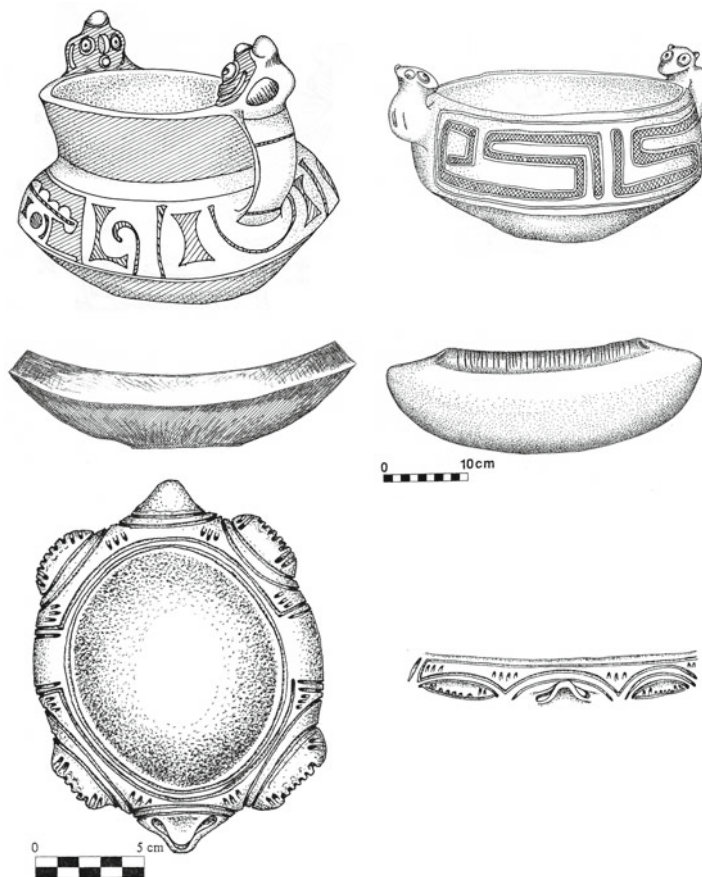


Fig. 13.5 Representative vessels of Hacienda Grande style, white-on-red jar with modeled adorno on handles (*upper left*); La Hueca, ZIC decorated open bowl with modeled dog adorns (*upper right*); Monserrate-style open shallow bowl (*center left*); Santa Elena-style open bowl with thick incised rolled rim on upper shoulder (*center right*); Esperanza-style open bowl with accompanying upper shoulder incised line design (*lower left and right*, respectively). Sources: Hacienda Grande, Roe 1989:348, Fig. 20; La Hueca, Roe 1989:359, Fig. 31; Monserrate, courtesy of Peter G. Roe; Santa Elena, Roe and Ortíz Montañez 2011: Fig. 2c; Esperanza, Roe and Ortíz Montañez 2011: Fig. 20e, g, respectively

illustrate, the circle-dot-flanking design layout is not one of them (Roe 1993, 2004). Nor is it apparently found in the succeeding early and middle phases of the Ostionoid series. The series has often been described in the literature as one of simplification where the well-executed poly- and bichrome painted designs and modeling are replaced by an increasing importance on incision for decoration applied to less well-made vessels (Rouse 1992; Roe 1993:649, 2004:117–125). A change is also noted in the number of pottery styles on Puerto Rico which increase from three to seven as noted in Table 13.2.

The early Pure Ostiones and Monserrate styles (A.D. 600–900) retain certain technologies and vessel forms of the Saladoid series including red-painting, yet increasingly display differentiation in forms and decoration. Simpler, thicker, and coarser vessels are typical of the Monserrate style with bowls being the predominate form (Fig. 13.5, center left). Black, negative resist, and smudged motifs are added to the set of decorative techniques that still include incised and red-painted/slipped designs. The Pure Ostiones style displays less differentiation however, with a continuance of thin, fine, and smooth-surfaced vessels similar to Saladoid ones. A higher frequency of red-paint, red and lilac slips, and polished surfaces are found in the Pure over Monserrate style (Curet 2005:20–21).

The second-phase Modified Ostiones and Santa Elena ceramics (A.D. 900–1,200) display modeling and incision, especially in the execution of zoomorphic and anthropomorphic handles that refer back to Saladoid precedents. Simple shapes again predominate in the Santa Elena style with vessels increasingly being thicker, coarser, and rougher (Fig. 13.5, center right). The use of red paint and slip is reduced. Incision is frequently found as rough, vertical, rectilinear lines close to bowl rims, often complemented by applique strips. The Modified Ostiones style is still defined by thin, fine, and smooth pottery that also retains most of the prior phase's shapes. Red paint and lilac slip are evident, with incised designs becoming more frequent and oft times similar to those of Eastern Hispaniola of the same period, as well as the later Puerto Rican Chican Ostionoid (Curet 2005:21–22).

The Chican Ostionoid is the final or the protohistoric ceramic phase (A.D. 1,200–1,500) and is also the most widely distributed of the post-Saladoid series in the region. Chican style ceramics are found from Cuba, Hispaniola, Puerto Rico, the Virgin Islands, and the northern Lesser Antilles. Esperanza vessels typically have rounded bases and incurving shoulders (Fig. 13.5, lower row). Modeled and incised attached figures, in addition to appliquéd features on handles and vessels, are present. Both the Esperanza and Capá styles are typified by incising that consists of combinations of curved lines and punctuations that often are found above the shoulders of inward sloping bowls (Rouse 1992).

Among those combinations of incised lines and punctuations as Roe (1993, 2004:125–126, figs. 7.9 and 7.10) points out is the circle-dot-flanking-triangle layout (Fig. 13.6).

The derivation or the transference of the layout from the Caguna, Jácana, and Cueva Negra petroglyphs is straightforwardly seen in the detailed anthropomorphic central circular abdomens and associated body part triangles with short lines as discussed above (see Fig. 13.4), in addition to the long-beaked bird image from Caguana (see Fig. 13.3, right). Both the anthropomorphic and bird images exhibit a simple 90° rotation of chest elements, in the case of the anthropomorphs, and the neck and wing elements of the bird, to flanking or vertically opposing positions around their central circle-dot middles. These appear as repeating layouts across the upper incurving shoulder of commonly occurring Chican bowls which are made with a pronounced shoulder and restricted opening on round to flat bases. Roe (1993) adds that the triangle and rectangular forms on the crowned anthropomorphic figures at Caguana, and now at Jácana, also repeat typical Chican ceramic geometric designs.

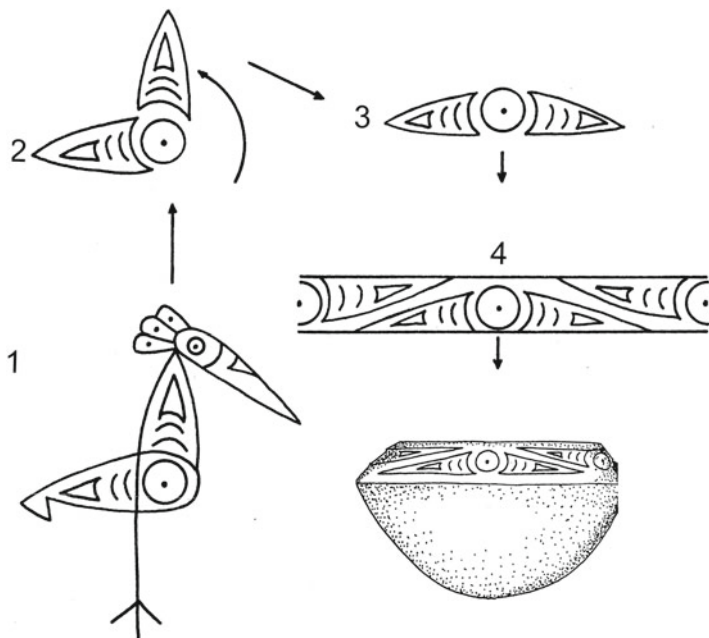


Fig. 13.6 Circle-dot-flanking-triangle design layout derivation from bird petroglyph number 7 at Plaza A, Caguana, to Chican Ostionoid ceramics (Roe 1993:670, Fig. 8)

Gender, material composition, and design analysis of Caribbean ceramics are among the investigative topics in the literature beyond low-level descriptions and functional categorizations. Roe (2004) in particular over the years has argued that Western art conventions applied to present as well as past Amerindian art fail to capture the rich symbolism and meaning behind even seemingly geometric designs. Their animistic world view, reconstructed from ethnographic observations and ethnohistorical accounts, includes notions of hidden and present realities, human/animal/spirit transformations or associations, and drug-induced visions that form a distinctly different context for the production of designs or “art” across different media from ceramics to small-scale sculpture.

Roe considers that the pictorial dualism or visual ambiguity trait seen in Cedrosan Saladoid, Elenan, and Chican Ostionoid ceramics, as well as the island’s Late Ceramic rock art, is one such manifestation of this distinct cognitive framework. Pictorial dualism incorporates such conventions as mirror and nested images, as well as motifs with interlinked designs that incorporate multiple meanings or representations depending upon the viewing perspective. Examples cover modeled adornos (molded figures as or on vessel handles) that reveal, upon rotation, different anthropomorphic or animal images as in a front-facing squid whose features at two other angles form another sea animal and a bulging-eyed fish; the inverted face (below the surface of the ball court and thus “hidden” from normal view) at the bottom of the elaborately detailed anthropomorph with a 90° turned head from the

north row of the Jácana ball court (see Fig. 13.4, upper left); or the Cueva Negra petroglyph with a humanlike face in its abdomen (see Fig. 13.4, right).

Roe further argues that simple geometric circles, a prime Chican motif, with or without dots and flanking triangles are highly charged with meaning. Circles appear in Taíno art as markers of major joints, like the femur and hip ball-and-socket pairing, and most particularly the abdomen with the center dot therefore standing in for the navel. Ethnographic and ethnohistoric sources record that the joints, abdomen, and other such body openings—ears, mouths, lips, and eyelids—were considered doors or portals into the body where the soul resided (see Oliver 2009:68, 142 for head as a locus for the soul, Roe 2004:126 for body as locus). Further, one noted explanation for illness is the intrusion of malevolent spirits into the body that contaminate or obscure the soul. Curing of this kind of disease involves sucking or extracting the spiritual contagion, and relatedly, blowing or sending the pathogen to one's enemies.

The body's openings conceived of as entry and exit points of soul matter or energy would naturally also possess protective mechanisms. Roe proposes that circles symbolically express these entry points that at the same time guard against spiritual contagion and soul-capture. Just as the facial openings have additional skin fold protections as in ears for the ear canal, the curved lines and triangles surrounding the circles may represent additional portal control features. Extending Roe's line of reasoning to the Cueva Negra anthropomorph with a facial image in its abdomen (see Fig. 13.4, right) may mean that this figure (perhaps a shaman or a political-religious elite) was especially adept at either capturing other souls or guarding against evil soul intrusion and hence illness.

The Design Layout and Sculptured Stone Artifacts

Sculpted and worked stone, bone, shell, coral, and wood artifacts from the prehistoric Caribbean cover a wide range of categories from lithic blades to finely detailed pendants of exotic materials and seaworthy wood canoes. Lithic and ground stone tools were manufactured by the earliest settlers who by the end of the European-interrupted cultural development also showcase large, elaborately detailed single- and multiple-composite wood, stone, fiber, and even human bone items (Rouse 1992; Wilson 2007). We are here concerned with a subset of these later-in-time artifacts—sculpted ground stone collars, three-pointers or *cemís*, and elbow stones—that are considered functionally related and that also display the circle-dot-flanking-triangle layout. Walker's 1993 dissertation still stands as the most comprehensive study of these artifact classes, that has since been complemented by Sued-Badillo's (2001) discovery of additional stone collars and Oliver's (2009) interpretation of the design motifs.

Stone collars are large oval rings pecked and grounded from largely non-exotic materials such as finer grained sedimentary and metamorphic rock, in addition to coarse-grained sandstones and siltstones (Fig. 13.7, upper row).



Fig. 13.7 Representative sculpted stone artifacts: Slender stone collar with design element components (*upper right*); massive stone collar (*upper left*) (scale approximate for stone collars); elbow stone (*center*); small undecorated three-pointer (*lower left*); and large three-pointer with detailed anthropomorphic design (*lower right*). Note: All examples from Puerto Rico except for the small three-pointer from Dominican Republic. Sources: Slender stone collar, redrawn from Walker 1997:86, Fig. 64; massive stone collar, redrawn from Walker 1997:81, Fig. 58; elbow stone, redrawn from Walker 1997:88, Fig. 65; small three-pointer, redrawn from McGinnis 1997:96, Fig. 71; and large three-pointer redrawn from McGinnis 1997:99, Fig. 75

The collars are divided into two size categories of massive and slender based on their relative thicknesses since both possess similar overall dimensions. Those overall dimensions in Walker's sample averaged 18 by 24 in. (45 by 31 cm); the weight average for slender examples was 11 pounds (5 kg) and for the massive variety 34

pounds (16 kg). All have minimal designs and many exhibit elaborate zoomorphic and anthropomorphic images along with geometric motifs. Walker's designated features include (see Fig. 13.7, upper right) a prominent bulbous projection or boss section at one point of the collar; exterior upper and lower decorated panels on one side of the boss; a prepared, but undecorated section on the other side of the boss; and a shoulder portion that completes the ring outline (Walker 1993).

The overwhelming majority of the region's stone collars are from the eastern Greater Antilles, most particularly Puerto Rico, followed by Hispaniola and the Virgin Islands; a few are from the Lesser Antilles. Production at present is noted only for the Late Ceramic (A.D. 600–1,500), with Walker maintaining that massive collars preceded slender ones. In his dissertation, Walker (1993) included some 120 stone collars whose numbers now stand at 465 due to Sued-Badillo's (2001:71–73) recent locational efforts. Sued-Badillo has not however published a design analysis of the additional stone collars.

Elbow stones are similar in size to the boss and adjacent decorated and undecorated portions of stone collars that they closely resemble. Most of Walker's twenty-four examples were all made from locally available sandstone, with the majority undecorated. However, eight possessed anthropomorphic images on one of the arms as in Fig. 13.7, center. Fifteen were from Puerto Rico; one each from the Dominican Republic, Vieques (a Puerto Rican politically dependent island to the east), St. Thomas (one of the US Virgin Islands), and possibly Guadeloupe in the Lesser Antilles; and five had no provenience. Dating is limited. The elbow stone from St. Thomas was found in association with Elenan Ostionoid ceramics (A.D. 900–1,200) and Walker proposes that the simple undecorated versions preceded the decorated ones with corresponding date ranges of A.D. 600–1,250 and 1,250–1,500. Although provenience data for Walker's sample was limited, both stone collars and elbow stones are found in association with enclosures and Chican Ostionoid pottery (Walker 1993).

Three-pointers or *cemís*, so called because of their triangular shape in cross section consisting of a higher central and lower flanking pointed ends, tend to come in small 1–3 in. (3 to 7 cm) lengths and large 6–12 in. (15–30 cm) sizes. The small ones made from clay, stone, shell, and coral are usually undecorated (Fig. 13.7, lower left) that offer a strong counterpoint to the large sculpted stone variety, frequently with complex zoomorphic and anthropomorphic designs as exemplified in Fig. 13.7, lower right. Objects identified, though not described, as *cemís* in the ethnohistorical accounts are considered to include both the decorated and undecorated three-pointers that would therefore represent, as well as embody, *cemí* spirits and forces as outlined above. Walker included in his study some 200 of the large three-pointers made from a number of commonly occurring fine to coarse-grained stone. The large examples, like stone collars and elbow stones, were produced during the Late Ceramic and are not widely distributed. The small versions, however, are noted from the beginning of the Ceramic Period and continue to be produced alongside the large examples. They also differ in their distributional patterns and frequencies. Small three-pointers are found throughout the Caribbean in a variety of contexts (e.g., caves, middens, habitation sites), and numerically outnumber the larger sculpted stone categories: thousands versus mid-hundreds (Sued-Badillo 2001: 71–73; Walker 1993).

Walker (1993), following earlier suggestions and his own research, argues that these three classes of stone artifacts are functionally interrelated sets of composite objects. The first set involves the pairing of large three-pointers onto the undecorated panels of stone collars. Elbow stones represent a labor-saving shorthand version of stone collars where the stone loop portion was likely replaced by wood, basketry, or cloth. At first, large three-pointers were attached to the undecorated arm, as with stone collars. The later decorated versions correspond to the transference of three-pointer images directly onto elbow stones, thus serving as a second type of composite artifact.

In his analysis of the design fields from 106 stone collars, Walker (1993:295–310) considers that the exterior lower decorated panels form a compound motif that he terms a “headless fish.” The panel outlines a fish body with tail and fins (but without a head) that progresses from an easily recognizable fish to more stylized versions. It is the body or the interior portion of the fish outline where the circle-dot-flanking-triangle design layout is evident, as in Fig. 13.7, upper row. Variations on the now familiar layout are also evident and can be derived via a series of steps that are illustrated in Fig. 13.8.

These steps or derivational chains logically set out changes in a core design based on a number of rules such as union (combine elements), rotation, and horizontal or vertical compression. In the case of the triangle core layout, a series of design changes (Chain B) can be obtained via deletion, duplication, and rotation, where the circle-dot portion of the core is largely dropped and replaced by triangle, diamond, and diagonal line motifs. In Walker’s sample, thirty-five (33 %) possessed some form of the circle-dot-triangle-flanking layout; twenty-four (23 %) displayed another derivational chain motif based on chevrons (Chain A); three (3 %) were classified into a miscellaneous category; and forty-three (41 %) had no interior body design to the delineated fish forms.

The exterior upper panels of stone collars are also decorated with a motif that Walker (1993:311–321) terms bird-frog twins (Fig. 13.9).

This is another example of the visual ambiguity art form where viewed from the side the designs incorporate the head of some type of water bird with sharply curved beaks that upon a 90° vertical rotation of the collar (seen from above) become transformed into human/frog heads with necks and open mouths. These motifs always occur in reflecting or opposing pairs, be they of one or two sets. None of Walker’s 42 massive stone collars had the design, while half of the 64 slender or later-in-time collars did have the design. The bird-frog twin motif may also incorporate a centrally placed figure, which evolves from simple geometrical outlines to a well-developed normally bat-like facial form; the figure was present on 20 (63 %) of the slender collars with the bird-frog twin design.

A wide range of anthropomorphic and zoomorphic designs alone or in combination are found on large three-pointers that incorporate the three points and surfaces in between as illustrated in Fig. 13.7 (lower right). Heads are emphasized that may also be accompanied by such body parts as legs, backs, arms, and wings. Naturalistic and abstract representations of birds, reptiles, and mammals are identifiable including hummingbirds, owls, snakes, and frogs. The elements of the circle-dot-flanking-triangle layout can figure prominently within overall designs, again as illustrated in

Fig. 13.8 Circle-dot-flanking-triangle design variants of Chain B sequence (retraced from Walker 1993:303, Fig. 5.8)

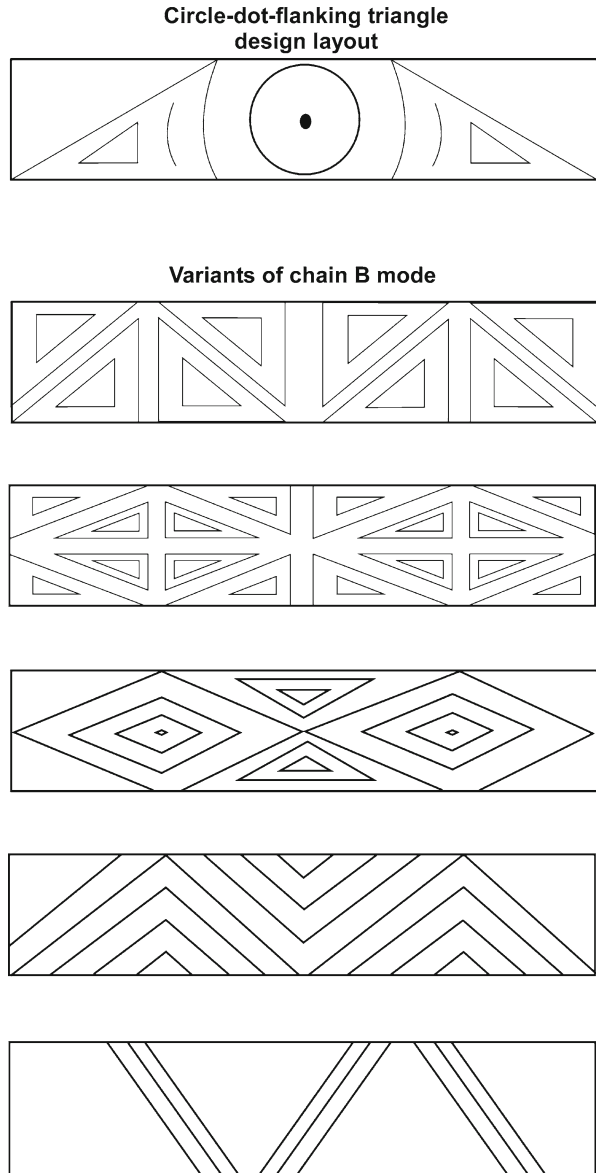
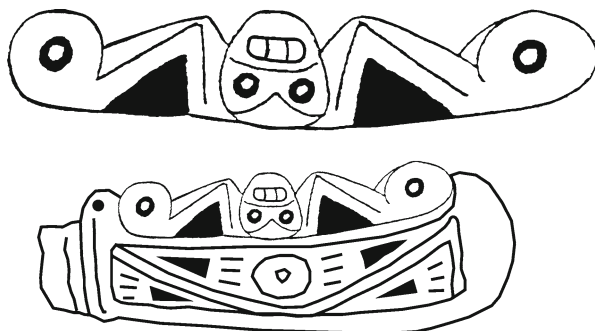


Fig. 13.7 (lower right) with the circle-dot for the hip and shoulder joints (see above discussion on significance) and what are probably earspools. Additionally circles, dots, triangles, and curved or straight lines are used to complete body parts (e.g., ribs, backbone) or fill in the design sections (Walker 1993:360–363).

Fig. 13.9 Bird-frog twin design theme with central bat-like upside down figure (*upper*) and its placement on a stone collar decorated exterior panel (*lower*); design is a variant of the circle-dot-flanking-triangle layout (retraced from Walker 1993:317, Fig. 5.10)



Anthropomorphic forms are the only type of images found on elbow stones that are similar in design to comparable images on three-pointers, a situation that further supports Walker's (1993) three-category interrelationship proposal. Frequently, only the face was depicted but, as the image in Fig. 13.7 (center) demonstrates, the disproportionately accentuated face is bounded by headgear, upright arms to the earspools, and a body with a circular abdomen and frog-like flexed legs that clearly echoes the fully rendered anthropomorphic petroglyphs at Caguana, Jácana, and Cueva Negra.

Apart from passive messages that stone collars, elbow stones, and large three-pointers convey, as in representing labor- and skill-intensive artifacts, Walker (1993) as well as Oliver (2009) argue that their design motifs codify active symbolic messages. For Walker (1993:421–433, 1997:84–87), the headless fish and bird-frog twin motifs on stone collars embody certain recorded myths of the Taínos. The headless fish composite may represent the gourd in the story of Yaya, the supreme *cemí* spirit (see above discussion of Jácana petroglyphs). Yaya banishes his son Yayael who nonetheless returns, prompting Yaya to kill him and afterwards place his bones in a gourd hung from the roof. One day he wishes to see his son which makes his wife happy and she takes down the gourd only to discover that the bones have turned into fish, which they eat. Later in the myth cycle two sets of twin *cemís* decide to seize Yaya's gourd with the fish, but only one of the four caracaracol/*cemí* quadruplets, identified in the myth as Deminán, actually dares to take the gourd. Yaya surprises them while they are eating the fish and during their escape the gourd is broken, letting loose the waters of the sea and the fish in it. The bird-frog opposing motifs would stand in for the twin *cemís* in the myth, and the central figure most likely is Deminán, the only one of the caracaracol quadruplets that is named.

The two internal fish body design motif chains, Chain A chevrons and Chain B the circle-dot-flanking-triangle layout, are related to the Yaya myth, but as Walker (1993:426, 430–432) argues could also be another instance of the multiple identity and hence messaging trait of Taíno art. The chevron designs may represent basketry as well as fish scales, while the triangle layout may also reference the woodpecker-wooden-bride myth or how men re-obtained women. Men had lost their women, but

one day saw creatures fall from trees that were neither men nor women. They tried to catch them thinking they could convert them into women. They needed help to capture the creatures which they obtained from four caracaracol or *cemí* spirits, likely the two sets of twins of the Yaya myth. After securing the beings, they got a woodpecker and fastened him to the creatures so that his pecking in the appropriate area would transform them into women.

Oliver (2009:130–139) offers complementary yet distinctive iconographic interpretations of the three stone artifact classes. For example, he also references the ocean-aquatic life origin myth cycle of Yaya equating the headless fish design with Yayael or his descendants in their transformed natures as fishes and thus sources of food. The fish forms on petroglyphs like those at Caguana and El Bronze (see Figs. 13.1 and 13.3, right) may likewise embody the same mythic message. Oliver takes a more anthropomorphic viewpoint of the single- or the double-twin figures seeing them as representing a single personage where the triangle layout group of Chain B instead of referring to another myth displays the body consisting of arms, legs, and abdomen, or in the case of central bat forms folded wings. The circle-dot is the abdomen as Roe (1993) proposes, while the triangles depict feet and legs.

This interpretive shading underscores the common link or function provided by the triangle layout across worked stone for fully detailed anthropomorphs as either the only bodily depiction on stone collars or the part of the body depiction (e.g., ribs, chest, arms) on petroglyphs, elbow stones, and three-pointers. The fleshly frog-like body forms may allude to notions of ancestral fertility or in the case of the twin images to personages as bearers of spiritual or esoteric knowledge. Oliver 2009 considers that the central figures represent bats, who in Taíno oral traditions symbolize the souls of the dead, thus reinforcing the link between the living and spirit worlds.

A discussion on the iconographic interpretation of stone collars, elbow stones, and large three-pointers can easily be expanded from these and other sources (see for example Stevens-Arroyo 1988). The present treatment is intended to demonstrate that multiple readings are possible and not necessarily contradictory given the nature of precontact native art forms. While the messages overtly referenced the religious and cosmological realms, the symbolically codified meanings also carried a social value that was used by aspiring individuals or groups to enhance their influence and prestige. Both Oliver (2009) and Walker (1993) argue that these interrelated artifacts, given their relatively scarce number, association in the case of at least stone collars with ball courts, large size, and high degree of decoration, were used by the political elite in large-scale or group-orientated public ritual theater and ceremonies. A chief displaying a stone collar, as Oliver (2009:134) suggests, with the headless fish image would be signaling his direct association to the mythic Yayael and therefore his legitimate control over matters regarding marine and fresh water resources.

Considerations

Religion viewed as a dynamic, open, and changing or changeable system nonetheless possesses an ordered structure among its constituent components. Those components include beliefs, actions, emotions, and people that are directed by certain individuals who conduct these actions at certain locations and employ certain objects. Rock art within this scheme serves to reinforce the sense of special place be it of a religious or other intersecting nature (political, theatrical, economic), in addition to serving as referents to personages, deeds, and events in the mythic past or every day present.

Harvey Whitehouse's Modes of Religiosity is one such ordered framework that focuses on the origin and maintenance of the formal external organization of religious systems. Cognitive, doctrinal, and imagistic modes represent a continuum from low-level to high-level organizational forms that are found in all cultures with more than one state possible within a given society. We suggested that Late Ceramic (A.D. 1,200–1,500) Taíno chiefdoms in the northern Caribbean, particularly in Puerto Rico, were undergoing a shift from the less structured imagistic mode to the more structured doctrinal form. Our logic rested on three factors: the assumption that native art was at least partially embedded in a symbolic context, the use of cross-media visual analysis, and the employment of ethnohistoric sources and ethnographic analogy.

One expectation of Whitehouse's model is that increasing religious organizational structure is reflected in the presence of redundant art styles or forms. We traced one such form—the circle-dot-flanking-triangle layout—across various media including rock art at the three Puerto Rican sites of Caguana, Jácana, and Cueva Negra; Chican Ostionoid ceramics; and the interrelated artifact classes of stone collars, elbow stones, and large three-pointers/*cemís*. The layout's multimedia presence strengthens the case for a shift to the doctrinal mode by the end of the Late Ceramic. Perhaps more critically, we point out that arguments based on redundant art styles can be made regardless of knowing the specific meaning or symbolism; the fact that repeated motifs or thematic layouts are or are not present can be used to argue for or against one of these modes.

In the Caribbean, proposals for specific meanings for rock art, ceramic, and sculpted stone designs are possible due to a range of available ethnohistoric sources and direct ethnographic analogs. As the foregoing discussion indicates, the meanings may be multiple and overlapping. Although these sources suggest that the coded messages relate to religious or cosmological beliefs, it is the political and religious elite, most particularly chiefs and their close retainers, who use and control these motif-bearing objects and places to increase their individual and associated group prestige and status. Religious or symbolic imagery used to further political-religious goals is effective if everyone (or nearly so) in the culture realizes that this person or group has control over spiritual forces, and that this control is

signaled via such visual forms as certain designs on rock art, ceramics, and sculpted stone items. It may be precisely the chiefly intersecting religious and political roles or the political nature of religious roles that at least in part accounts for the apparent increasing structure of Late Ceramic Caribbean religious organization.

The continued production of small three-pointers into this period further suggests the operation of dual modes of organization. The apparently successful attempts at restructuring the religious organization (doctrinal mode) took place at the subregional or the regional levels involving sizeable public or closed but chiefly led communally oriented ceremonies, largely leaving unregulated local and individual rituals and practices (imagistic mode).

Our position is not entirely new. Others including Siegel (1999), Roe (2004), Oliver (1998, 2005, 2009), and Walker (1993) have proposed intensification of the religious organization by the end of the Late Ceramic, while Roe (2004) considers that cross-media isomorphism or art style redundancy is linked to increasing sociopolitical organization, though not specifically to the religious structure. We differ from the foregoing investigators in our employment of Whitehouse's theoretical framework to frame the research and interpret the results.

Our argument is also meant to be tested. Further testing avenues include the identification of additional repeating design themes which can and have been identified (see Walker 1993); the identification and delineation of the circle-dot-flanking-triangle layout on other media; the undertaking of a design analysis of Sued-Badillo's (2001) stone collar sample that should provide corresponding data and insights; and expanding intersecting design themes when paring large three-pointers onto stone collars begun by Oliver (2009).

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