# Geographic Distributions of Zoomorphic Motifs in Saladoid Ceramics

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#### **Abstract**

This article identifies over 20 different species and/or genera of animals represented in Saladoid ceramics. It surveys thousands of Saladoid zoomorphic ceramics in some 15 institutional collections in the Lesser Antilles and the United States with the aim of tracking the geographic distribution of zoomorphs. Strong regional interests in certain zoomorphs are appreciable in the distribution of animal and bird images. Chief among these regional variances are those between the Lesser Antilles and mainland Saladoid ceramics of the Lower Orinoco. Regional differences are also discernable between different groups of islands within the Lesser Antilles.

# Scope of the Study in Geographic Distributions of Zoomorphic Motifs

Between 2008 and 2010, I visited and photographed 15 collections of Saladoid-era ceramics from the Caribbean and Venezuela for my Ph.D. study of Saladoid ceramic zoomorphs. In the order visited, the collections were: the Museum of Antigua and Barbuda, and Field Research Centre in Antigua; the Peter Harris collection at the Pointe-à-Pierre Wildfowl Trust, the Archaeology Centre of University of the West Indies (St. Augustine campus) and the Tobago Museum in Trinidad & Tobago; the Florida Museum of Natural History; the National Museum and Art Gallery in Trinidad; Musée Edgar Clerc and Direction Régional des Affaires Culturelles in Guadeloupe; Musée Departemental d'Achéologie and Direction Régional des Affaires Culturelles in Martinique; the Yale Peabody Museum of Natural History's Anthropology Department in Connecticut; the National Museum of the American Indian's Cultural Resources Center in Maryland; and the St. Vincent and the Grenadines National Trust Museum in St. Vincent. During my fieldwork in the summer of 2008, I also visited and photographed objects from the display vitrine of Pre-Columbian artifacts at the Barbados Museum and many objects from the

substantial private collection of John Fuller in Antigua.<sup>i</sup>

Approximately 3,000 objects were photographed for comparative study. These represent a mixed quantity of objects accumulated from systematic archaeological excavations and surface collections by professional and avocational archaeologists, and various untrained individuals. Overall, surface collection provided far more numerous specimens in collections but professionally excavated objects figured more prominently in the institutional collections of Antigua, Guadeloupe, Martinique and Trinidad, and in the Yale Peabody collection of Venezuelan objects. Across all these collections, I identified at least 20 species of animals with natural referents in addition to a range of unidentifiable zoomorphs and clearly rendered anthropomorphs. There was often a direct correlation between the geographic origin of a ceramic zoomorph and the natural distribution of its animal or avian referent. Some identifiable species appearing in the ceramics of Venezuela appeared in very different proportions in the Antilles, and some species represented in Lesser Antillean ceramics did not appear in those of the mainland or vice versa. Interestingly, the Antillean ceramics showed a greater diversity of species than the Venezuelan ones.

Archaeological excavations on both the mainland and the islands are ongoing so that future discoveries might affect slightly the proportional incidences of Saladoid zoomorphic depictions in both regions' collections. But in the thousands of objects surveyed in my study, some conclusions can be drawn about the relative popularity of certain zoomorphs in the islands versus on the mainland. Cultural differences are evident in the different emphases and interests of the island and mainland Saladoid ceramicists respectively. Style differences in the depiction of zoomorphs common in both areas also suggest cultural distinctions.

## A General Description of Saladoid Zoomorphic Ceramics

Saladoid effigy vessels and adornos represent an impressive range of zoomorphs. Ceramic animals are treated in an almost equally prodigious range of styles, from terse or elaborate forms of stylization to mildly expressive naturalism to selective combinations of

these. Saladoid potters sometimes selected an emblematic feature of a zoomorph to represent the species or class metonymically, without much observation of other parts of the animal, such as the pronounced caruncúla and hooked beak of a vulture (**Figure 1**). The heads and faces of animals are very often the only part of a zoomorph featured in an adorno but the torso and legs of some land mammals and the shells of turtles and armadillos are also common subjects for the Saladoid potter. Tails also appear with some frequency, especially on effigy pots featuring heads and feet or flippers.<sup>ii</sup>



**Figure 1.** Distinguishing caruncúla atop hooked beak of the king vulture on vessel rim adorno, unknown site (probably Saladero), Venezuela, approximately 3 in. height. Museum of Antigua and Barbuda, Antigua. Photograph by author.



**Figure 2.** Composite, fanciful zoomorphic adorno, unknown site (probably Saladero), Venezuela, approximately 3 in. height. Museum of Antigua and Barbuda, Antigua. Photograph by author.



**Figure 3.** Anthropomorphic adorno that becomes crawling turtle when recumbent, unknown site (probably Elliot's), Antigua, Ceramic with traces of white slip, approximately 2 in. width. John Fuller collection, Antigua. Photographs by author.



**Figure 4.** Multiple views of polychromed composite turtle head adorno that becomes round body and displaced ears of armadillo when seen from above (*left*), unknown site, Barbados, 2 1/5 in. x 2 in. Barbados Museum, Barbados. Photographs by author.

Saladoid ceramicists observed many animals closely enough as to make their species or class identifiable in ceramics. In many cases, traits of several species from a single genus or family are combined into one meta-zoomorph that is, say obviously a psittacid but no parrot species in particular. However, many zoomorphs appear to be fanciful creatures with no referent in the natural world (Figure 2). And yet others are combinations of the established metonymic attributes of multiple zoomorphs (**Figure 3**). These hybrids can be composed of fused, stacked or superimposed species visible all at once or each species becoming apparent only from one viewpoint at a time as the handler turns or inverts the ceramic (Figure 4). These clever transformational adornments, combined with the ritual and funerary contexts of some excavated ceramics (Boomert 2000: 13, 83, 158-159) and conquest-era written accounts of the subsequent Taíno culture (Pané 1999) give evidence that Caribbean zoomorphic ceramics had symbolic content. Figural adorned ceramics continue to have ceremonial and mythological significance for tropical lowland Amerindians of South America (Roe 1995).

Much of the "Saladoid" zoomorphic vocabulary in modeled ceramics has Barrancoid origins on the Middle to Lower Orinoco but white-on-red slippainted Saladoid ceramics, which are more wholly attributable to Saladoid origins on the Middle Orinoco, also bear zoomorphic imagery albeit of a more limited range of subjects. The combined Saladoid-Barrancoid "Cedrosan" style that dominated the ceramic arts of the Antilles during the first half of the 1<sup>st</sup> millennium CE encompassed the zoomorphic topics and styles of both the Saladoid and Barrancoid modes of pottery-making and in this paper no distinction is drawn between these respective modes.

Style distinctions are noted between the "Cedrosan" Saladoid ceramics of the Lesser Antilles and the Huecoid ones found only in the northern Leeward Islands, particularly Guadeloupe. iv But it is my opinion that despite the clear differences between the deeply incised, grainy Huecoid zoomorphs and the more subtly incised and smoother Saladoid ones, their basic forms, especially those of canine adornos, seem to share a similar origin, perhaps on the Middle Orinoco. Additionally, the Huecoid and Saladoid potters evidently shared some sites in the Leewards (such as Morel in Guadeloupe and Trants in Montserrat), where both their artifacts are found in the same strata but also where some ceramics exhibit both Saladoid and Huecoid traits.vi Thus, Saladoid and Huecoid zoomorphs were often differentiated (or described as hybrid) in my inventory but are counted together in this paper as distinguishing the islands, as a related but unique cultural zone, from that of the Saladoid mainland.

### Methodology for Identifying Species in Saladoid Ceramics

In some collections, as much as a quarter of ceramic zoomorphs are unidentifiable. This is often due to some Saladoid potters' choice to geometrically simplify forms and not focus on any particular features that might fix species. Some of the unidentifiable zoomorphs do have prominent ears as to indicate they are not reptiles or birds (except perhaps owls with ear tufts), and are most likely mammals of some type. These adornos have been found throughout the archipelago but especially in the Windward Islands (**Figure 5**).

Many zoomorphs, however, are identifiable by species; others at least identifiable by genus or family. The uncertainty that might inhibit the identification

of some zoomorphs on the mainland is often not a factor in the islands. The narrow speciation of land mammals in any insular environment assists with identifying these zoomorphs more assuredly by process of elimination. Likewise, though the Caribbean boasts exceptionally high reptilian biomass (Malhotra and Thorpe 1999: 21) and many bird species as well (including many endemic species) (Raffaele et al. 1998), these belong to a relatively small number of genera, again aiding the identification of, say, bats or even sea turtle species in Saladoid ceramics. Additionally, unlike the uncertainty that can plague identifications of zoomorphs in twodimensional Pre-Columbian imagery such as painted ceramic adornments or rock art (and in textile and basket fragments of some mainland cultures as well), Saladoid adornos give far more indications, in three dimensions, with a degree of naturalism, and sometimes with color markings, of which animals they are meant to represent.



**Figure 5.** Unidentified mammal adorno, Friendship, Tobago, approximately 1 1/2 in. width. Tobago Museum, Tobago. Photograph by author.

Surveying thousands of Saladoid ceramic zoomorphs, one notes the recurrence of certain features even as they appear in a variety of styles. These common features sometimes can be used to identify particular species or genera among the zoomorphic representations. In many cases, the more often the same feature appears the clearer it becomes whether one's original, intuitive identification was mistaken or not. In a few cases, after seeing dozens of zoomorphs of a certain type, I was urged to change my original identification of which species or genus they might represent. Only at the end of my survey did I settle on criteria for identifying each zoomorph.

Verbal descriptions were developed from line drawings and photographs and these descriptions were then used to count species/genus incidences. In this way my criteria for identifying zoomorphic species and genera would not be merely subjective and capricious. If artifacts discovered in the future should challenge the applicability of any of these morphological criteria I and other scholars could modify such criteria point by point rather than dismissing the entire criteria set as mysterious. Likewise, if future discoveries of artifacts should reinforce my identifications of species and/or genera the component criteria that aided in that identification can be organized, augmented and employed by other scholars according to their needs.

The Saladoid potters produced a corpus of ceramics wherein attempts at speciation are often quite obvious. Using the following criteria, I was able to identify at least nine species of mammals; six species of birds; and at least five classes of reptiles in Saladoid ceramics.

Armadillos. An obviously mammalian adorno with long ears sometimes wider on their tops than bases; attached to a head that is rounder on the crown and comes to a snubbed point, with a convex forehead and any kind of incised and/or modeled banding across that forehead was identified as an armadillo (**Figure 6**). Banding on several vessel shards, especially from Grenada, also seemed to indicate that an armadillo shell pattern, perhaps of the nine-banded armadillo (*Dasypus novemcinctus*), had been incised on the outer walls of vessels (**Figure 7**). vii



**Figure 6.** Armadillo adorno with incised bands, unknown site (probably Pearls), Grenada, 1 1/2 in. length. Nelson's Dockyard Museum, Antigua. Photograph by author.



**Figure 7.** Vessel shards with incised designs resembling banded armor of armadillos, Pearls, Grenada, 1/2-1 1/2 in. width. Florida Museum of Natural History, Gainesville, Florida. Photograph by author.

Opossums. Adornos were identified as opossums when their heads bore some overall resemblance to armadillo adornos in profile but exhibited no horizontal banding on the head and had a more bulbous nose. There appears to have been some effort on the part of Saladoid potters to evoke the facial color markings of the black eared opossum (Didelphis marsupialis) especially, not in slip paint, but in incisions that frame the eyes and face, terminating at the bulbous nose (Figure 8 a and b). The mouths of these apparent opossum adornos are incised near or on the underside of the head, giving the mouth a wincing expression much like that of the actual animal (Figure 9). The ears of these adornos are not as prominent as those on the armadillo or dog adornos. In fact the forms of armadillo, opossum and dog heads are quite similar before the addition of ears, mouths or other distinguishing features, suggesting that Saladoid potters may have learned a basic syllabary of forms (perhaps from tradition-bearing instructors) and varied features to make different animals.



**Figure 8.** Opossum adornos with framed faces and bulbous noses, Erin, Trinidad: (a) adorno fragment, 1 7/8 in. length; (b) complete adorno, 3 in. length. National Museum and Art Gallery, Trinidad. Photographs by author.



**Figure 9.** Punctated opossum adorno, unknown site, Grenada, 1 in. length. Florida Museum of Natural History, Gainesville, Florida. Photographs by author.

Dogs. Saladoid dog adornos, and related Huecoid ones from the northern Leeward Islands, have shorter, rounder muzzles than those of armadillos, opossums or any other terrestrial mammal depicted in Saladoid ceramics. Rounded heads taper to the muzzle in a manner quite naturalistic for a small breed of dog, even when the features on the ceramics are quite stylized. In both Saladoid and Huecoid canine adornos, the torso and legs of the animal are often depicted, all part of a single, sometimes openwork adorno (Figures 10 and 11). In such cases the legs of the zoomorph emerge from the rim of the vessel creating openings beneath the animal's body, as the dog peers outwards, upwards or in towards the vessel's interior. Occasionally, dog adornos are augmented with pigments, emphasizing their noses and eyes (Figure 12).



**Figure 10.** White-on-red canine full-body adorno, unknown site (possibly Vivé), Martinique, approximately 1 1/2 in. x 1 1/2 in. Musée Départemental d'Archéologie Précolombienne et de Préhistoire de la Martinique. Photograph by author.



**Figure 11.** Huecoid canine adorno (with broken hind leg), Morel, Guadeloupe, 2 1/2 in. length. Direction Régional des Affaires Culturelles, Guadeloupe. Photograph by author.



**Figure 12.** Polychromed dog adorno representing either natural markings or ritualistically applied pigments, Vivé, Martinique, 2 1/2 in. length. Direction Régional des Affaires Culturelles, Martinique. Photograph by author.

Anteaters. Anteaters constituted most of the remainder in a class of adornos representing identifiable quadruped land mammals.viii Adornos that might be identified as coatis, raccoons, porcupines/coendous and rodents were extremely rare and inconclusive in their distinguishing traits. Also, while Boomert has noted the possibility of tapirs appearing in the ceramic record of the southernmost Saladoid range (Boomert 2003: 154), it is my opinion that the extremely elongated heads I have seen in collections from Venezuela to the Grenadines mostly represent anteaters (Myrmecophagidae and Cyclopedidae families) and their smaller Tamandua cousins. These have a long, downcurved nose that often ends in everted or thickened lip-like formations (Figure 13 a and b). These elongated zoomorphic heads are often cleverly worked into D-strap handles on the sides of vessels or linking rims to vessel walls. Unlike other land mammals, ears are often omitted in the representations of these animals.



**Figure 13.** Anteater D-strap handle adornos: (a) downward-facing, collared anteater on vessel rim, unknown site, Tobago, 2 1/2 in. x 2 in.; (b) upward-facing anteater on vessel rim, Lovers' Retreat, Tobago, 3 in. length (adorno only). Tobago Museum, Tobago. Photographs by author.

Monkeys. The land mammals described above, all can be classed together for their general shape with rounded heads tapering into narrower muzzles. But monkey adornos naturally employ a somewhat different morphology. Though the prognathic mouths of these images might be likened to that of other mammals, the otherwise vertical formation of their faces, heavy brow ridges and/or faces framed by hairlines distinguish monkey depictions clearly from those of quadrupeds (Figures 14 and 15). However, these simian features closely resemble the stylizations of anthropomorphs that appear in Saladoid ceramics. Even the laterally located nostrils so typical of the Platyrrhini branch of primates from which New World monkeys all descend do not clearly distinguish monkeys from people in Saladoid ceramics. Some stylized noses could represent nose ornaments worn by humans (Figure 15). Identifications of monkeys can thus be over-reported or under-reported in surveys of Saladoid ceramics, especially if the Saladoid penchant for hybrid imagery is not taken into consideration. I was conservative in my count of these would-be monkeys and thus found them fairly uncommon (Table 1).



**Figure 14.** Monkey vessel fragment with incised motif, Chancery Lane, Barbados, 3 1/2 in. x 2 in. Florida Museum of Natural History, Gainesville, Florida. Photograph by author.



**Figure 15.** Stylized monkey adorno, Mt. Irvine, Tobago, 2 in. x 1 in. Tobago Museum, Tobago. Photograph by author.

Manatees. A class of mammal adornos with large snouts and no ears was identified as West Indian manatees (*Trichechus manatus*). A particularly naturalistic Saladoid manatee adorno with Huecoidstyle incisions was photographed in Guadeloupe (**Figure 16**), but a variety of stylized variants appeared in other islands (**Figures 17 a, b and c**). Purely Huecoid manatee adornos also exhibited great variety and, fascinatingly, were often combined in hybrid forms with dogs, which emerged from their noses like the secondary adornos (or "alter-egos") that emerge from the foreheads of Saladoid adornos (**Figure 18**). Some, simpler Huecoid manatee adornos were located in an unusual position on the inside of vessels

near the rim, as if meant to peek just above the surface of the liquid contents thereof (Chanlatte Baik and Narganes Storde 2002: 27). While manatees appear on the pottery of both early ceramic cultures of the Antilles, they do not appear in the ceramics of the Lower Orinoco.



**Figure 16.** Manatee adorno, Morel, Guadeloupe, 1 in. x 2 1/2 in. Direction Régional des Affaires Culturelles, Guadeloupe. Photograph by author.



**Figure 17.** Styles of Saladoid manatee adornos, unknown sites, St. Vincent, Saladoid: (a) upturned head from vessel rim, 1 in. length; (b) tabular lug with incised snout and cranial design, 1 3/4 (length) x 1 1/2 in (width at broken base); (c) stylized head with curvilinear incisions on snout and eyes, 1 in. x 1 3/4. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photographs by author.



**Figure 18.** Huecoid composite canine-manatee adorno, Gare Maritime, Guadeloupe, 1 1/2 in. x 2 1/2 in. (adorno only). Direction Régional des Affaires Culturelles, Guadeloupe. Photographs by author.

Bats. The heads and wings of bats are common motifs in Saladoid ceramics. Their upturned noses, often with slit-shaped nostrils are distinctive features (Figure 19). Upturned noses are a typical characteristic of the leaf-nosed family of bats, Phyllostomidae, to which the fruit bats of the Caribbean belong (Figure 20). The ears of Saladoid ceramic bats are not particularly mimetic and in fact they often bear the stylization employed for human ears, located on the sides of the face with a circular motif at top or bottom in the manner of an earring or ear spool (Figure 21). What appears to be a curled bat wings motif appears on the interior and exterior of bowls, on the faces of ceramic anthropomorphs and on at least one pot stand from Tobago. The motif has a scroll-like shape, curled on each end and either flat or V-shaped in the middle (**Figure 22**). ix A triangular or circular motif in the center of these abstracted wings sometimes indicates the body or face of the bat.



**Figure 19.** Profile and frontal views of bat-face adorno, unknown site, Barbados, approximately 2 1/2 in. length. Barbados Museum, Barbados. Photographs by author.



**Figure 20.** Bat censer with pot stand rim, Arnos Vale Swamp, St. Vincent, Saladoid, approximately 22 in. height. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photographs by author.



**Figure 21.** Funerary bat faced vessel, Atagual, Trinidad, approximate 10 in. diameter. Peter Harris Collection, Pointe-à-Pierre Wildfowl Trust, Trinidad. Photograph by author.



**Figure 22.** Anthropomorphic adorno with scroll-like bat-wings motif connecting the eyes, Erin, Trinidad, 3 in. x 2 7/8 in. National Museum and Art Gallery, Trinidad. Photo by author.

Owls. Saladoid ceramic depictions of owls and other night birds are distinguished by their large eyes, often-round faces and decurved or wedge-shaped beaks, usually in combination (Figure 23 a and b). Some night bird adornos and vessel fragments, whether Saladoid or Huecoid, display the prominent ear tufts of endemic screech owls (Otus genus) (Figure 24); others, the heart-shaped faces of barn owls (Tyto alba) (Figure 23 a). Yet other ceramics seem to conflate a range of ocular, round-eyed birds with short, decurved beaks, seeming to include oilbirds (Steatornis caripensis). A few combine owl-like eves with the straighter, narrow beak of the nightjar (Caprimulgus genus) (Figure 25). My research into the mythology of all these nightbirds in tropical lowland and Pre-Columbian Caribbean culture indicated that this conflation of night birds was possible in Saladoid oral and artistic traditions.x



**Figure 23.** Different Saladoid owl depictions from Montserrat: (a) adorno with traced eyes and pointed beak, unknown site, approximately 2 in. width; (b) white-on-red vessel spout, unknown site, 5 1/2 in diameter (at base). Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.



**Figure 24.** Huecoid screech owl adorno with modeled ear tufts, Morel, Guadeloupe, 1 1/2 in. width. Direction Régional des Affaires Culturelles, Guadeloupe. Photograph by author.



**Figure 25.** Vessel fragment possibly depicting endemic nightjar (St. Lucia nightjar, *Caprimulgus otiosus*, or Martiniquian white-tailed nightjar, *Caprimulgus cayennensis*), Tourlourous, Marie Galante (Guadeloupe Archipelago), 1 7/8 in. width. Direction Régional des Affaires Culturelles, Guadeloupe. Photograph by author.

Vultures. Vultures are identified by powerful raptorial beaks, hooked on the end, with the enlarged nares that distinguish them from other birds with large beaks, such as parrots (**Figure 26**). However, in Venezuelan and Antillean Saladoid ceramics vultures and parrots do not only share some similar features

but are placed on the same unique part of jugs and bottles: the spouts (compare Figures 27 and 41). In the Antilles, Saladoid potters quite frequently also placed night birds on spouts (Figure 23 b) so that across the Saladoid territories parrots and hunting birds were given this apparently privileged place at the nexus of the shoulder, neck and handle of water vessels. In some examples, the Saladoid ceramicists took the trouble to make an open loop of the nares (Figure 28), clearly indicating the similar feature on turkey vultures (Cathartes aura). Other examples without this bold opening in the ceramic might also represent the turkey vulture but may be black vultures as well. Rarely, a large, crest-like formation atop the beak of a specimen might suggest the prominent caruncúlae of the non-endemic king vulture (Sarcoramphus papa) (Figure 1).



**Figure 26.** Stylized Saladoid-Barrancoid vulture adorno, Erin, Trinidad, 2 in. length. National Museum and Art Gallery, Trinidad. Photograph by author.



**Figure 27.** Vulture spout, Saladero, Venezuela, 2 3/4 in. length. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.



**Figure 28.** Turkey vulture adorno with looped nares, Saladero, Venezuela, 2 in. length. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.

Pelicans and Wading Birds. Long beaks in Saladoid adornos and strap handles can be identified as those of aquatic birds. Previous scholarship on Saladoid ceramics has tended to identify most long-beaked aquatic birds as pelicans (Kirby 1976: 15; Nicholson 1976: 259, 262). However, several different sets of features can be observed on these ceramic birds which lead me to conclude that they represent not only brown pelicans (Pelicanus occidentalis) but also ciconiiformes such as herons, xii egrets and ibises. xiii

Modeled ceramics can be identified as pelicans for their long, large, straighter beaks, especially when the potter has made some attempt to enlarge the lower beak (Figure 29). However, very few of these representations focus specifically on the distended gular pouch of the pelican as does an example from St. Vincent (Figure 30). In pelican adornos, the beak of the bird seamlessly joins the main part of the head, creating an uninterrupted contour from the tip of the beak to the top of the bird's head. Pelican adornos are usually placed on strap handles of vessels, their beaks pointed downwards along the strap handle. Since the strap handles are curved outwards, some aquatic birds adorning them have slightly curved beaks that follow the handle's contour, and these may or may not be modified pelican heads (Figure 31). Their beaks pressed tightly to the strap handles certainly imitate the aspect of a pelican at rest with its beak tucked into the feathers on its breast. Many such adornments, however, while attached to the convex curve of the strap handle, maintain the straightness of the bird's beak seeming to insist they are pelicans (Figure 32).

Other strap handle adornments feature long but very narrow bills, clearly demarcated from the birds' heads with a planar or linear boundary where spherical head meets elongated, conical beak (Figures 31, and 33 a and b). These seem to represent other aquatic birds such as herons and egrets. In many cases the narrow beaks that spring from these round heads are very curved, evoking the profile of an ibis (Figures 33 a and 34). A singular ceramic spout fragment from Martinique exhibits a round head, encircled eyes and conical beak with a distinct hook on the tip of that beak (Figure 35). The four common Caribbean bird species with this hook-like formation on the tip of their upper beaks are the vulture, pelican, cormorant and frigatebird. Pelican adornos ignore this hooked feature. The spherical head separated from the beak (as with ciconiid adornos) also seems to defy the convention for depicting pelicans. Likewise, the Martiniquian adorno's lack of emphasized nares as well as its location outside the zone where ceramic vulture imagery is usually found (see section on Distributions below) discourages the identification with that bird. Cormorants are lacking as a natural referent in Martinique since they are not endemic in most of the Lesser Antilles and thus the adornment most likely represents a magnificent frigatebird (Fregata magnificens). Indeed the ceramic strongly suggests the appearance of a frigatebird at a glance, is labeled as such in the Musée Departemental in Fort-de-France, and shell amulets from Guadeloupe and St. Lucia bearing similar encircled eyes on round heads with hook-ended beaks are even more clearly depictions of frigatebirds (Figure 36).



**Figure 29.** Pelican adorno, unknown site, Martinique, 2 1/2 in. length. Musée Départemental d'Archéologie Précolombienne et de Préhistoire, Martinique. Photograph by author.



**Figure 30.** Pelican adorno on incised dish fragment showing distended gular pouch, unknown site, St. Vincent, approximately 2 in. length. Smithsonian National Museum of the American Indian, Cultural Resources Center, Suitland, Maryland. Photograph by author.



**Figure 31.** Wading bird strap handle on censer fragment, unknown site, St. Vincent, approximately 7 in. diameter. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photograph and sketch of zoomorph by author.



**Figure 32.** Pelican strap handle, unknown site, Carriacou, 3 in. length. Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.



**Figure 33.** Wading bird adornos: (a) unknown site, Guadeloupe, 1 1/2 in. length; (b) unknown site, Guadeloupe, 2 in. length. Guadeloupe: Musée Edgar Clerc. Photographs by author.



**Figure 34.** Wading bird (possibly ibis) adorno, Erin, Trinidad, 1 3/4 in. length. National Museum and Art Gallery, Trinidad. Photograph by author.



**Figure 35.** Frigatebird spout fragment, unknown site, Martinique, 3 1/4 in. height. Musée Départemental d'Archéologie Précolombienne et de Préhistoire, Martinique. Photograph by author.



**Figure 36.** Frigatebird shell amulet, Portland, Guadeloupe, approximately 2 1/2 in. length. Guadeloupe: Musée Edgar Clerc. Photograph by author.

Ducks. The bodies and distinctive flat bills of ducks appear on a number of very different ceramic adornments. Several duck adornments incorporate a major part of the ceramic vessel rather than being confined to the adorno form as with many other zoomorphs. Some duck vessels adopt the shape of a duck's head (Figure 37) while others take the duck's body floating on water as their model (Figure 38). Two classes of adornos seem to represent the duck's head. One of these represents a fairly naturalistic, perhaps whistling duck species (*Dendrocygna* genus) (Figure 39). The other seems to reveal itself as a secondary image in hybrid representations of turtles. In this second variety of duck adorno, a highly stylized sub-group of turtle adornos with tall lateral (rather than sagittal) crowns atop their heads seem to become duck heads much like the less ambiguous duck adornos of the first variety, but only when the turtle adornos are laid face up (Figure 40).



**Figure 37.** White-on-red duck vessel fragment, unknown site, Martinique, approximately 10 in. length. Musée Départemental d'Archéologie Précolombienne et de Préhistoire, Martinique. Photograph by author.



**Figure 38.** Incised duck-shaped vessel, St. Catherine's, Trinidad, approximately 4 1/2 in. longer diameter. Peter Harris Collection, Pointe-à-Pierre Wildfowl Trust, Trinidad. Photograph by author.



**Figure 39.** Duck adorno with nostril loop (perhaps imitating large nares of whistling ducks), unknown site, Guadeloupe, 2 1/4 in. Guadeloupe: Musée Edgar Clerc. Photograph by author.



**Figure 40.** Turtle adorno head facing up with tall crown or "crest" that becomes duck bill when recumbent, unknown site, Bequia (Grenadines), 2 1/2 in. length. Tobago Museum, Tobago. Photograph by author.

Parrots and Macans. Saladoid depictions of parrots and other psittacids typically have large, but relatively short and decurved beaks quite similar to those of actual psittacidae (**Figure 41**). Even when their nares are emphasized to the point of resembling vultures' they are clearly meant to depict members of the

parrot family. Many have slightly raised eyes encircled by concentric incisions that emphasize these eyes or perhaps evoke color marking of specific species. These adornos, though they depict thick beaks in profile, can be quite narrow when viewed from the front: coming to a hatchet-like edge at their downcurved beaks (Figure 42). While it is relatively difficult to pick out specific psittacid species among these adornos, many are painted solid red (certainly, they are painted red more consistently than any other zoomorphic adorno), suggesting the coloration of scarlet macaws. However, the use of pigments and zone-polishing to mimic actual colors from nature is inconsistent in Saladoid ceramics (though there is some evidence for this with dog and snake ceramics in addition to these would-be scarlet macaws) and limited by the Saladoid mineral-based palette of reds, whites, blacks, and more rarely, some oranges, browns, mauves and gravish greens.

Psittacids are the only colorful species commonly depicted in Saladoid ceramics. Other forest birds are exceedingly rare. The few I found might represent songbirds such as those mentioned in later Taíno lore, perhaps twilight singing birds. Adornos representing heads and, sometimes, entire bodies of these birds pay little attention to speciation. At least one specimen showed the bird in flight (**Figure 43**).



**Figure 41.** Parrot spout, Erin, Trinidad, 1 3/4 in. length. National Museum and Art Gallery, Trinidad. Photograph by author.



**Figure 42.** Parrot or macaw adorno, Golden Grove, Trinidad, 1 7/8 in. length. University of the West Indies, Archaeology Centre, Trinidad. Photograph by author.



**Figure 43.** Swooping bird adorno, unknown site, Grenada, 4 in. length. Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.

Snakes. A depiction of a snake's head could easily be mistaken for that of a lizard. So snakes cannot be identified with certainty except by depictions of their tubular bodies rimming vessels or rarely, coiled or undulating on vessel rims and walls. Neither snakes nor lizards occur with any frequency in Saladoid ceramics of the Lesser Antilles so that identifying the few that exist in the region's collections is relatively easy.

The few specimens indicate that snakes took either the form of coiled adornos or that of serpentine tube ringing the circular or oval rims of vessels. In both cases the snakes raise their heads off the ceramic (Figures 44 a and b). Zone-polished nubbins among the triangular incisions on some snake rims from Venezuela evoke the circular markings of green anacondas (Eunectes murinus). But Antillean snake rim decorations are less elaborate (compare Figures 44 and 45).



Figure 44. Snake adornments with raised heads: (a) hollow snake rim on vessel fragment, Erin, Trinidad, approximately 8 in. length; (b) coiled snake adorno with incised markings, Bacolet Stadium, Tobago, approx. 2 in. height. (a) National Museum and Art Gallery, Trinidad; (b) Tobago Museum, Tobago. Photographs by author.



**Figure 45.** Hollow snake rim fragment with incised and zone-polished patterns, Saladero, Venezuela, 10 in. width. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.

Lizards. It is often only by process of elimination that certain rare adornos can be identified as lizards. These are small adornos depicting only the heads of these reptiles, with large eyes and flat, pointed muzzles (**Figure 46**). The species most likely represented in these simple sculptures would be anoles (*Anolis* genus) and the genera of pre-contact geckos, not iguanas with their prominent nuchal and dorsal crests or the flat-sided triangular heads of ground lizards.



**Figure 46.** Lizard adorno with possible dewlaps, Morel, Guadeloupe, 1 3/4 in. length. Musée Edgar Clerc, Guadeloupe. Photograph by author.

Crocodilians. Images of crocodilians in the Antilles restrict the more diverse crocodilian imagery of the Saladoid mainland to a rigid scheme of stylizations (compare Figures 47 and 48 to Figures 49 and 50). The heads of the Caribbean caiman adornos are flat, long tabs that presumably protruded off the sides or rims of vessels before they neatly snapped off as the pots broke. Mouths are located along the leading edge of these crocodilian tabs and lunette-shaped eyes, flat on the bottom and punctated in the center, are located on the side edges (Figures 49 and 50). Noses are the only facial feature located on the top of the tab, along with incised crosshatched, painted and/or modeled patterns suggesting the scales and scutes of the animal. The natural referent for these stylized tabular adornos would have been the black or speckled caiman (C. intermedius and C. sclerops respectively) of the Orinoco and other rivers of northeastern South America, and Trinidad. Yearly flooding of the Orinoco also would have washed exhausted caimans out as far as St. Vincent, the Grenadines and Grenada in Saladoid times as they have in recent centuries.xiii



**Figure 47.** Stylized, incised caiman adorno, Saladero, Venezuela, 2 3/4 in. length. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.



**Figure 48.** Adorno fragment depicting caiman muzzle with punctated nostrils, Saladero, Venezuela, 2 3/4 in. length. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.



**Figure 49.** Stylized caiman adorno with punctated scutes, unknown site, Carriacou, 2 1/2 in. length. Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.



**Figure 50.** Stylized caiman adorno, unknown site, Carriacou, 2 3/8 in. length. Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.

Frogs. Frog imagery is among the most diverse in Saladoid pottery. Some modeled frogs are plainly mimetic, clinging with flexed legs to vessel walls (Figure 51) in the manner of the region's many species of piping frogs (Eleutherodactylus genus). Others are abstract, minimal tabular adornos protruding slightly off pot rims (Figure 52). Some adornments combined the stylized features of frogs within the otherwise naturalistic contour of the animal (Figure 53) and yet other representations seem to adapt many of the aforementioned features and conventions to a program of painted adornment (Figure 54). A particularly abstract and very widespread Saladoid motif appears on modeled,

incised and painted pottery but also other arts throughout the Lesser Antilles: that of the four legs of a circular or oval zoomorph flexed in the manner of a frog with a complex system of tracery surrounding the body and legs of the motif. This is Petitjean Roget's frog "labyrinth" motif (1975: 177-180) found on amulets, pendants, trigonal zemis and other objects (**Figure 55**). This frog motif reappears in Taíno arts of the second millennium demonstrating its Pan-Antillean importance. It can be traced all the way back to Saladero where it appears to have had looser, more naturalistic precursors (**Figure 56**) before becoming a deft logo-like symbol from Saladoid Barbados to Taíno Hispaniola.



**Figure 51.** Frog adornment on vessel fragment, Mt. Irvine, Tobago, approximately 3 in. height. Tobago Museum, Tobago. Photograph by author.



**Figure 52.** Tabular frog lug on fragment of shallow dish, unknown site, Tobago, approximately 3 in. width. Tobago Museum, Tobago. Photograph by author.



**Figure 53.** Stylized frog adorno with elaborate plastic elements, Vivé, Martinique, 3 1/4 in. width. Direction Régional des Affaires Culturelles, Martinique. Photograph by author.



**Figure 54.** Vessel fragment with geometric, modeled frog limb, unknown site, St. Vincent, 3 x 2 in. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photograph by author.



**Figure 55.** Bowl with deeply incised circular, flexed-frog labyrinth motif on underside, Land's End, Barbados, approximately 7 in. diameter. Barbados Museum, Barbados. Photograph by author.



**Figure 56.** Interior and exterior of annular navicular vessel with flexed-frog incised polychrome motif, Saladero, Venezuela, 6 x 5 3/8 in. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.

Turtles. The carapaces of turtles are referenced in the semi-spherical shape of numerous ceramic vessels, from low bowls and dishes to the characteristically Saladoid everted "bell-shaped" vessels. Many of these ceramics have adorned rims featuring the head, flippers and sometimes the tail of sea turtles protruding beyond the flange of the rim (Figure 57). In many turtle adornos, at least three of the four most common sea turtle species of the Eastern Caribbean can be identified. The hooked noses of hawksbill and loggerhead turtles (Eretmochelys imbricata and Caretta caretta) are evident in some adornos (Figure 58) as are the round heads and thick, collar-like necks of leatherback turtles (Dermochelys coriacea). Green sea turtles (Chelonia mydas) have no facial features that might easily distinguish them in ceramic from other sea turtles but the rounder, more generic-looking turtle adornos may be these or simply unspecified turtles. Some turtles, including the more generic looking ones can nevertheless be expressively depicted in motion with their heads and/or flippers turning as if portrayed swimming (Figure 59). Punctated collars on these turtles would seem to be stylized representations of the thick, scaly skin on the un-retractable necks of sea turtles. Not all turtle adornos appear to be sea turtles. Several in St. Vincent and the Grenadines especially seem to represent freshwater turtles (terrapins), with prominent noses (Figure 60) and others might represent tortoises as well.

The selective naturalism of many adornos helps establish that much of Saladoid turtle imagery directly referenced the corporeal animal (and its behaviors), but perhaps while also invoking some traditional symbolism of the creature. Other, far more stylized renditions of the turtle also exist. Unlike some of the more naturalistic representations of turtles present on both the Saladoid mainland and islands, these more abstract turtles are not found among Venezuelan ceramics from the Lower Orinoco, one of the chief departure points for the Saladoid expansion into the Antilles. The almost perfectly round heads, circular or semi-circular eyes and appliquéd mouths of these Antillean turtle adornos are sometimes painted by contrasting white, red and/or black slip, emphasizing the incised or modeled facial features (**Figure 61**).

These round, often painted adornos appear in collections from Grenada to Puerto Rico, seeming to have evolved somewhere in the Windward Islands. Moravetz has catalogued several variations of these stylized turtles in St. Vincent (Moravetz 2005: 33-44), including some with elaborate crowns or crests above their heads (Figure 62). I interpret these often punctated and incised "crests" as representing the arch-shaped hollow behind the turtle's head created by the leading edge of the carapace (especially in green, loggerhead and hawksbill sea turtles but also land turtles). As mentioned above, some of these crests enable the turtles to become other creatures as the adorno is turned. Most of Moravetz's Vincentian variations appear throughout the Windwards and Leewards north of Tobago. No kind of "crested" turtle adorno is found in the Lower Orinoco. One vessel fragment from St. Vincent featured in twodimensional white-on-red slip paint the same round turtle head as in Lesser Antillean adornos (Figure **63**).



**Figure 57.** Turtle bowl with broken head, Saladero, Venezuela, approximately 11 in. length. Yale Peabody Museum of Natural History Anthropology Department, Greenwich, Connecticut. Photograph by author.



**Figure 58.** Hawksbill turtle adorno with punctated collar, unknown site, Montserrat, 1 1/2 in. length. Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.



**Figure 59.** Swimming turtle adorno, unknown site, Carriacou, approximately 3 in. width. Smithsonian National Museum of the American Indian Cultural Resources Center, Suitland, Maryland. Photograph by author.



**Figure 60.** Freshwater turtle adorno, Escape, St. Vincent, 2 in. length. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photograph by author.



**Figure 61.** Stylized turtle adorno with cranial protuberance, Vivé, Martinique, approximately 1 1/2 in. width. Direction Régional des Affaires Culturelles, Martinique. Photograph by author.



**Figure 62.** Turtle adorno with incised crown, unknown site, St. Vincent, approximately 4 1/2 in. height. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photograph by author.



**Figure 63.** Stylized turtle face painted on white-on-red vessel fragment, unknown site, St. Vincent, approximately 5 in. width. St. Vincent and the Grenadines National Trust Museum, St. Vincent. Photograph by author.

# Frequency and Distribution of Saladoid Zoomorphs

Given the varying sizes of collections from different islands and the fact that such collections were culled from a variety of sources, my tally of zoomorphs from the Lesser Antilles and the Lower Orinoco is far from quantitative. But overall trends in island-by-island and regional counts of the represented species/genera are appreciable and useful. While it is not possible to know truly how many of a certain type of zoomorph were ever made in a particular island or area, we might still get a general impression of the geographic distribution areas of certain types of zoomorphs. We might also gain a glimpse of relative distribution densities of certain ceramic zoomorphs, in large, comparable collections such as those of Antigua, Guadeloupe, Martinique, St. Vincent and the Grenadines, Trinidad and Tobago, and the Lower Orinoco. In large collections, the preponderances and absences of certain zoomorphs in the ceramic record are potentially meaningful. In my study, just over 500 zoomorphic ceramics were counted and photographed for the Lower Orinoco sites of Saladero, Barrancas and Los Barrancos, and well over 2,000 for the Lesser Antilles so that differences in geographic distributions are reported here as significant.

Reptile and amphibian imagery is found throughout the Saladoid world, from the Orinoco to Puerto Rico. This class of zoomorphs occurs in the highest numbers across the Saladoid sphere and in the highest concentrations on most islands. The preponderance of reptile imagery in the region results from the great numbers of turtle ceramics: over 60 in some collections of 200 zoomorphs or more. Frog images, though far less numerous than those of turtles are nevertheless, the second most common zoomorph in the Saladoid ceramics of the Lesser Antilles (**Table 1**). On most islands, frog ceramics occur in higher numbers than they do at Saladero, Los Barrancos and Barrancas on the Lower Orinoco where frogs were also a popular ceramic motif.

Snakes are very rare in Saladoid ceramics of both the mainland and the islands. This is an extraordinary feature of Saladoid ceramics, given the nearly universal importance of snake imagery in the Amerindian arts of ancestral South America, and the natural association between coiled pottery and snakes. Only single examples of snake imagery appear in Venezuelan and some island collections (**Table 1**).

There is an anomalous concentration of stylized caimans between Grenada and St. Vincent, centered at Carriacou (**Table 1**). Otherwise, this animal occurs almost as infrequently as snakes in the other islands. The few ceramic caimans found beyond St. Vincent and the Grenadines may even be trade items from within the caiman concentration area. Lizards, such as iguanas and ground lizards are entirely absent from the ceramic collections but a few adornos seeming to represent anoles have been found on a few islands (**Table 1**).

Birds are the second most common class of ceramic zoomorphs overall. They are widely distributed throughout the Lesser Antilles, though there are some atypically high counts of avian imagery in Guadeloupe and Montserrat that rival reptiles and amphibians in number. Vulture ceramics, consisting entirely of adornos, are mostly confined to the southernmost Lesser Antilles (Table 1). Duck ceramics are found, in small numbers, and only as far north as Martinique (Table 1). Other aquatic birds appear in Saladoid ceramics throughout the Eastern Caribbean. Most of these are pelicans but a significant number also represent wading birds (Table 1). Among these long-beaked bird images, I would assert that despite the fact that egrets and herons are a more common and widespread natural referent, the curvature of beaks and roundness of heads among these ciconiid adornos would suggest that many represent ibises.

By far, the most common birds in the Saladoid ceramic record of the Lesser Antilles are large-eyed night birds. This class of night birds is extraordinary in its distribution throughout the Lesser Antilles and its complete absence in the Lower Orinoco (**Table 1**). I found no owl-like adornos from the mainland but as many as 14 for some islands. The astounding 56 nightbirds found in Guadeloupe collections are a result of the even greater interest that Huecoid potters had in owls and other similar-looking birds. Both Saladoid and Huecoid ceramics have been found at Guadeloupian sites such as Morel and in some cases, zoomorphs found there display combined Huecoid and Saladoid traits.

Like night birds, ducks too are absent from the Lower Orinoco Saladoid ceramics, but that absence is perhaps less extraordinary than that of nightbirds, considering the low number of ducks found overall. The apparent absence of pelicans in the ceramic imagery of the Lower Orinoco, however, is as remarkable as that of night birds. I found no adorno heads representing pelicans for the mainland but an outstanding openwork adorno from Barrancas in Venezuela depicting a whole bird with large, spread wings and tail held down as if in the process of landing closely resembles a pelican (Figure 64). There is a second such swooping bird from Saladero, which is more stylized, but more polished in the Saladero manner, which bears less resemblance to a pelican in the shape of its head and beak, thus complicating whether these two specimens do in fact represent the impressive seabird. Thus the two most important birds in Antillean Saladoid ceramics are not of any importance in Lower Orinoco Saladoid ceramics.

Bat images are found in moderate to high numbers (i.e., five to 13 in collections of 100 or more ceramic zoomorphs for respective islands) throughout the islands. They are even more numerous on the Saladoid Lower Orinoco (**Table 1**). But they are strangely absent from collections in Antigua, an island with several species of bats providing ample natural referents. The cause of this absence of a Saladoid ceramic staple in Antigua is unknown but was probably a culturally driven election among of Saladoid ceramicists.

Land mammal imagery is the most diverse in terms of the number of species depicted. However, this imagery is concentrated in a zone spanning only the Saladoid mainland and the islands closest to the mainland (Tables 1 and 2). In fact, beyond Trinidad, the number and variety of land mammals trails off rapidly. Beyond the Grenadines, only canine representations appear regularly, though usually in low numbers. There is an explosion of canine imagery in Guadeloupe as a result of the Huecoid, Saladoid and hybrid deposits coexisting there, the Huecoid potters exhibiting a keen interest in dogs. I counted some 40 canine ceramics from Morel and Gare Maritime alone, compared to the highest Saladoid island counts of six, eight and nine in Martinique, Montserrat and Trinidad respectively (Table 1). Aquatic mammals, particularly manatees, seem to have been of some interest to Saladoid-era potters in the central Lesser Antilles, judging by the four manatee adornos found in St. Vincent and another four (with some Huecoid traits) in Guadeloupe; a

small modeled dolphin found in the Grenadines and singular dolphin and perhaps pilot whale adorno found in Antigua (**Figures 65 and 66**).



**Figure 65.** Possible cetacean (pilot whale) adorno, unknown site, Antigua, 1 in. x 1 in. Reg Murphy Collection, Antigua. Photograph by author.



**Figure 66.** Dolphin adorno, unknown site, Mustique (Grenadines), 2 in. length. Smithsonian National Museum of the American Indian Cultural

#### Discussion

The geographic distribution of ceramic zoomorphic motifs has interesting implications for Saladoid migration theory. Since the Antilles have relatively low mammal species diversity, the diverse incidence of land mammal imagery there is one of the best indications of lingering connections to South America, perhaps through trade, intermarriage and/or continued migrations from the mainland. But anteaters and even medium sized cats could (and still can) be found in Trinidad; opossums, rodents and even raccoons occur in some of the Lesser Antilles occurring in a naturally wild state (whether endemic or introduced by humans can be debated); and armadillos and dogs would have been brought by Saladoid settlers to the region (Wing 2001). Thus, all the terrestrial mammals in the Saladoid ceramic

record were likely encountered directly on the islands where they appeared as motifs or on the islands closely neighboring. But on islands where they were not encountered or encountered infrequently, depictions of these creatures usually waned.

The fact that the incidence of species represented in Saladoid ceramics often coincides with the incidence of the natural referents in the surrounding environment indicates that the Saladoid potters drew their inspiration for zoomorphic motifs from their proximate environment. Saladoid ceramicists did not simply bring and/or retain mainland motifs from their ancestral mainland. The increase in the incidence of turtle and frog motifs and the emergence of pelicans, ducks and manatees as new island motifs would support this hypothesis. Style differences also distinguish the Saladoid islands from the mainland. There is much greater diversity in the way that sea turtles are represented in the islands than on the mainland. This is not surprising, given the fact that marine turtles were a more familiar sight in the islands than on the Lower Orinoco so potters and other artisans had a greater opportunity to consider the animal as motif. Conversely, while there is also a great variety of frog imagery in the Antilles, in these islands, a looser mainland stylization of a squatting frog in aerial view was refined into a complex, quadripartite maze. This veritable hieroglyph united the arts of the island Saladoid and Taíno across time and space, but distinguished both these cultures from the mainland Saladoid.

There are notable exceptions to the 'inspiration from the natural environment' rule, such as the caiman-obsessed Carriacou Saladoid, where it is doubtful the potters saw many of these mainland (and Trinidadian) reptiles, and the bat-apathetic Antiguan Saladoid on an island where bats were varied and numerous.

The ascendance of owls and other night birds as paramount Antillean motifs with no known antecedent in Saladoid South America indicates that new Antillean zoomorphs did not arise in the island Saladoid pantheon because they were novel. Actual owls, oilbirds and nightjars abound on the Saladoid mainland so the selection of ocular nightbirds as a unique island motif seems more culturally driven than merely reactionary to the presence of owls and nightjars in the Caribbean night. Xiv Saladoid religion and/or culture itself seemed to have evolved new

symbolic needs in the islands and selected species as ceramic motifs that were just as well known on the mainland but not employed there as such.

It is also worth noting that, with the exception of parrots (possible solar symbols), the zoomorphs favored as motifs in island Saladoid ceramics are not particularly colorful. Rather they are often creatures with some relation to the night or to subterranean/sub-aquatic habitats where, in fact, color is often unimportant. This Saladoid preference for drably colored creatures in the sunny, florid islands of the Caribbean bespeaks the internal workings of the Saladoid imagination with regard to zoomorphic symbols. Creatures were not necessarily chosen as motifs for their spectacular markings, evidence that there was a symbolic program driving their selection that we are yet to decipher.

The number of times certain species appear on ceramics is not a reliable indication of their precise level of importance in the pantheon of iconic Saladoid zoomorphs. Other, more ephemeral arts of the Saladoid populations (such as masking, textiles, basketry, body paint etc.) could have rendered a zoomorph that was relatively rare in ceramics supremely important nevertheless. We can, however, speculate about the importance of certain zoomorphs in the realm of ceremonies that employed the use of ceramics and their contents. Ceramics link the animals modeled on them to the domestic and ritual spheres wherein pottery was used to present foods (perhaps foods appropriate to a vessel's shape and its zoomorphic adornments) in celebrations, was interred with the dead, and was placed on altars to various deified natural forces. In my doctoral dissertation Like Turtles, Islands Float Away: Emergent Distinctions in the Zoomorphic Iconography of Saladoid Ceramics of the Lesser Antilles, 250 BCE to 650 CE, I employed ethnographic analogy, including the study of traditional narratives and other mytho-symbolism as well as traditional remedies and ritual practices to suggest some possible contexts and meanings of the zoomorphs identified and discussed here.

	Venezuela	Trinidad	Tobago	Grenada	Carriacou/ Grenadines	St. Vincent	Martinique	Guadeloupe	Antigue	Montterret
Turtles	41	16	22	51	72	48	66	73	38	58
Progs	8	11	15	25	10	8	16	10	12	3
Caimans	4	2	2	3	6	3	1	2	0	1
Lizards	7	5	0	1	0	0	2	4	1	0
Snakes	2	1	1	1	0	0	1	0	2	1
Nightbirds: Owls/ Oilbirds/ Nightjars	0	7	3	14	9	9	14	56	12	13
Pelicans	1	4	3	1	3	7	3	1	5	1
Stilt Birds: Herons/ Ibises/ Egrets	2	1	0	0	5	8	2	4	0	3
Parrots	8	3	2	2	3	1	2	2	1	8
Ducks	0	2	2	0	6	6	2	0	0	0
Vultures	13	5	2	3	0	0	1	2	1	1
Frigatebirds	0	0	0	0	0	0	1	0	0	0
Dogs	52	9	0	2	2	0	6	40	1	8
Bats	11	9	4	7	13	8	5	9	0	3
Anteaters	9	8	7	1	0	1	0	0	0	0
Орозкита	7	7	2	3	1	0	1	0	2	0
Armadillos	2	2	5	4	2	0	1	0	0	0
Rodents	4	1	1	0	4	0	1	0	2	1
Manatees	0	1	0	0	0	4	0	4	0	0
Monkeys	3	5	1	0	1	0	0	0	0	0
Procyons: Raccoons/ Coatis	0	2	1	0	0	0	1	1	2	0
Peccaries	0	3	1	0	0	0	0	0	1	0
Felines	2	1	2	0	0	0	0	0	0	0
Others		l poscupine			1 porcupine; 1 dolphin				1 dolphin	l sasil

 Table 1. Species Motif Incidences in Sample Collections of Saladoid-Era Ceramics

	Venezuela	Trinidad	Tobago	Grenada	Carriacou Grenadines	St. Vincent	Martinique	Guadelsupe	Antigua	Montserrat
Reptiles/ Amphibians	62	36	40	81	88	67	86	98	53	67
Birds	53	25	26	41	34	53	25	123	19	51
Mammals (non-Human)	117	47	35	68	45	21	15	77	11	17
Fish	0	1	2	0	0	2	0	0	0	0
Anthropo- morphs	62	23	20	31	29	41	39	69	26	13
Others: Insects/ Arthropods/ Crustaceans	0	1	0	0	1	0	0	0	1	1

Table 2. Class Motif Incidences in Sample Collections of Saladoid-Era Ceramics

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#### Notes

i While the Barbados Museum's small display collection was photographed it was excluded from the incidence counts presented in this article. For St. Lucia's apparent post-Saladoid ascendance as a ceramic-making center and the resultant low incidence of Saladoid ceramics from that island in the collections I visited, St. Lucia also was regrettably not part of this study. In the U.S., the Florida Museum of Natural History and the Museum of the American Indian presented the bulk of the Grenadian ceramics counted in this study and the latter museum, almost all the ceramics for Montserrat and Carriacou. The Yale Peabody collection provided most of the Lower Orinoco ceramics counted here.

<sup>ii</sup> In most cases, only heads were counted so that legs and tails would not inflate zoomorph totals.

iii In this study, each identifiable species or genus in a hybrid representation was counted separately when possible so that a single adorno could be counted twice or more times as different zoomorphs or anthropomorphs. Most hybrids were combinations of one or two zoomorphs with a single anthropomorph.

iv Huecoid and Huecoid-Saladoid objects that seem to inflate certain zoomorphic counts are mostly confined to Guadeloupe and are far narrower in their speciation than either mainland or island Saladoid ceramics. Like the subsequent Taíno culture, the Huecoid ceramicists seem to have had a keen interest in owl imagery. But their interest in dogs as a ceramic motif is far more like that of the Saladoid, since the Taíno tended to fashion dog imagery in stone and wood rather than in ceramics. The Huecoid contemporaries of the island Saladoid also shared an interest in manatees that was not shared by Saladoid mainlanders.

VLa Gruta/Ronquin canine adornos from the Middle Orinoco, one of which can be found at the Yale Peabody Anthropology Department, are remarkably similar to both Huecoid and Antillean Saladoid canine ones (as illustrated here in figures 10 and 11). Their whole bodies, rather than just their heads, are depicted. They have the same alert posture, with their heads cocked and are placed in the same position on the pot: facing upwards, heads near the rim and legs sprouting from the vessel wall creating an open space beneath their torsos.

vi See the discussion of Saladoid/Huecoid coexistence at Trants in Petersen and Watters (1995).

viii An early expectation to find images of peccaries in my survey of Saladoid collections was never realized. Zoomorphs with snouts in my survey usually had no ears, and fit the overall criteria for manatees far more closely.

ix Compare figure 22 with Mattioni and Nicholas (1972: figure 62). A similar motif appears on an incised concave Taíno vessel in Bercht (1997: figure 20). This scroll-shape can also be made into twin receptacles of a single vessel as in the example from Chanlatte Baik and Narganes Storde (2002: 28).

vii Boomert illustrates an intact armadillo effigy vessel with circular shell patterns about its shoulders but banded patterns as described here on the rest of its body (2000: 200).

<sup>x</sup> Using traditional narratives and ethnographic analogy with geographically and linguistically related contemporary tropical lowland people and the Conquest-era Taíno, my Ph.D. dissertation study concentrated largely on the possible contextual meanings that may have been assigned to Saladoid ceramic zoomorphs. Considering the symbolic value of each zoomorph added another layer of distinctions between islands and mainland zoomorphs besides what we see just in the geographic distributions of these.

xi Peter Harris has suggested that some ceramic "pelicans" in fact may be herons (1980: 527, 545, 549). Peter Roe has also argued for the presence of herons in Pre-Columbian petroglyphs in Puerto Rico (1991: 647).

xii While scarlet ibises (*Eudocimus ruber*) are mostly confined to Trinidad and Venezuela, both they and migrant glossy ibises (*Plegadis falcinellus*) are sometimes observed in the Lesser Antilles (Raffaele et al. 1998: 235; Silva and Wilson 2006: 74).

xiii Landings of flood-beaten, dead and exhausted caimans have historically happened around September when the Orinoco pushes silty freshwater out to sea, the currents sweeping objects and animals in this water northwards (Sutty 1993: 62-63).

xiv In the Antilles, oilbirds are largely confined to Trinidad, but their frugivorous diet, echo-location and nesting in colonies makes them distinctly like fruit bats (Kenefick 2008: 148).