

PROCEEDINGS

OF THE

FORTEENTH SYMPOSIUM

ON THE

NATURAL HISTORY OF THE BAHAMAS

Edited by
Craig Tepper
and
Ronald Shaklee

Conference Organizer
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Gerace Research Centre
San Salvador Bahamas
2011

Cover photograph – “Iggie the Rock Iguana” courtesy of Ric Schumacher

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Printed at the Gerace Research Centre

ISBN 0-935909-95-8

**TEXT AND CONTEXT: THE SPANISH CONTACT PERIOD
IN THE BAHAMA ARCHIPELAGO**

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ABSTRACT

The purpose of this paper is twofold: first, to demonstrate that our understanding of the Spanish Contact Period in the Bahamas can be amplified by moving beyond the idea that it represents a meeting of the Old and New Worlds on 12 October 1492 as a *transformative, single event* in history, and rethinking it as a *complex of dynamic cultural processes, contextualized over time and space*, and second, the use of historical sources to provide a *set of cultural contexts* for the 15th-16th century Spanish artifacts archaeologically recovered on San Salvador Island, and elsewhere in the Bahama Archipelago.

HOMAGE TO DR. DONALD T. GERACE

This is a third conference designed to honor Dr. Donald T. Gerace and the research station he founded 40 years ago. It is more appropriate that we gather here on San Salvador to both celebrate and cerebrate that event, because over the past 40 years, the College Center of the Finger Lakes, the Bahamian Field Station, and the Gerace Research Centre of The College of the Bahamas, has not just seen titular change, but has also functioned as a transformative place in our respective lives, as well as in our professional contributions to our disciplines. Through all of this, there has been one constant, and at the same time, a catalyst, and that has been Don Gerace.

Don Gerace continues to encourage both prehistoric and historical archaeology in the Bahamas. However, the *first* landfall of Christopher Columbus on *Guanahani*, although locationally contested, has always been near and

dear to him; hence, my contribution to this session.

INTRODUCTION

Writing in *De Orbe Novo* (1511), about 19 years after Columbus's landfall in the Bahamas, Peter Martyr referred to the *Lucayas* as the "useless" islands (Sauer 1966: 159-160). 500 years later, one discovers that the Bahama Archipelago may still constitute an "intellectually useless" group of islands to archaeologists and historians (for exceptions, see Berman and Gnivecki 1995; Craton 1986; Gnivecki 1995; and Keegan 1992). The Quincentenary of the "rediscovery" of the New World by Europeans momentarily rekindled an interest in the peoples who encountered Columbus in A.D. 1492-1493. However, after noting the initial encounter with the Lucayans between Friday, October 12th through Saturday, October 27th, most scholarly interest shifts to the complex societies of the Aztecs, Mayas, and Incas. After "first contact" with the Lucayans, the Bahamas sink into historical obscurity, periodically cast into textual light by Spanish exploration and slaving operations (e.g., Gnivecki 1995; Granberry 1979-1981; P. Hoffman 1990).

The purpose of this paper is twofold: first, to demonstrate that our understanding of the Spanish Contact Period in the Bahamas can be amplified by moving beyond idea that it represents a meeting of the Old and New Worlds on 12 October 1492 as a *transformative, single event* in history, and rethinking it as a *complex of dynamic cultural processes, contextualized over time and space*, and second, the use of historical sources to provide a *set of cultural contexts* for the 15th-16th century Spanish artifacts

archaeologically recovered on San Salvador, and elsewhere, in the Bahama Archipelago.

SPANISH ARTIFACTS ON LUCAYAN SITES

Spanish artifacts have been recovered during long-term systematic, controlled excavations at two sites on Salvador Island: the Long Bay site (SS9) and the Three Dog site (SS21) (Bate 2011; Berman and Gnivecki 1993, 1995; Gnivecki 1995; C. Hoffman 1987a, 1987b). This contact material was recovered from “living areas” or “activity areas” in association with Lucayan artifacts; in short, these artifacts may reflect a mutual participation in each other’s cultural system.

On Monday or Tuesday, October 15, 1492, Columbus observed a lone Lucayan in a canoe between Santa Maria de la Concepcion (Rum Cay) and Fernandina (Long Island) transporting dried leaves, a string of Spanish glass trade beads, and two *blancas* (Dunn and Kelley 1989: 83, 85; Ife 1990: 33-39). This indicates that this particular Lucayan was a participant in an interisland exchange system (Fried 1979). The incident described here raises the possibility that the archaeological recovery of Spanish artifacts on Lucayan sites may not be the result of direct Spanish-Lucayan contact, but rather, reflects indirect contact as mediated by an indigenous interisland exchange system. What seems like a *definitive time-marker* of Spanish contact in the form of artifacts is rendered somewhat ambiguous by the possibility of (an) indigenous Lucayan interisland exchange system(s) (Berman 2011, this volume; Berman and Gnivecki 1993, 1995; Gnivecki 1995; C. Hoffman 1987a, 1987b; Keegan and Mitchell 1987).

Further, the frequency of Spanish shipwrecks on the reefs in the Bahamas, and elsewhere in the Caribbean, raises the possibility that Spanish contact material might, in part, be derived from salvaged wrecks, and introduced into Lucayan interisland exchange systems (Deagan 1985; Gnivecki 1995; Marken 1994; Mitchem 1992; M.T. Smith and Good 1982; M.T. Smith 1987; R.C. Smith 1987). In short,

the Spanish-Lucayan encounter may have been, ultimately, a series of *one-way encounters* of Lucayan pragmatically salvaging Spanish wrecks for “exotics” to exchange and/or heirloom as “valuables”. Such a scenario is not an atypical one for the Bahamas, or other parts of the Caribbean, which has been characterized by a long-standing history of wrecking and salvage as an important component of economic activity (Craton 1986). Rather than view Spanish artifacts as *time-markers of an historical event*, artifacts as “exotics” directly given to the Lucayans by the Spanish, or salvaged from wrecks by the Lucayans, they could have entered (a) pre-existing interisland exchange system(s) as a *process* that *exchanged* them over space and time. Critical to all of this is the potential curation (or heirlooming) of exotics/valuables by the Lucayans themselves, irrespective of their origin(s). The Spanish-Lucayan Contact Period might therefore have had a duration over several decades, rather than a truncation in time due to slaving and disease (Granberry 1979-1981; Sauer 1966).

In addition to direct-exchange and salvaging of wrecked vessels, there is a third process by which Spanish artifacts could have entered a Lucayan interisland exchange system: careening of Spanish ships (e.g., Bradford 1973: 145, illustration; Thomas 2003: 360-1, illustration). For example, in 1508, Sebastián de Ocampo set sail along the northern shore of Cuba with two vessels for an eight month voyage, and during that time, “...he careened his...two vessels—which involved hauling them up on the beach, removing and washing the ballast, cleaning the bottom, and caulking the seams... (Weddle 1985: 21-22).” The careening process involved various types of tools and hardware, which could have been lost at the repair site (see Thomas 2003: 360-1, illustration). This could have been another source of Spanish artifacts; again, a *one-way process of salvage* by the Lucayans.

ARCHAEOOMETRY OF CONTACT

Brill et al. (1987: 257-266) used lead-isotope analysis to examine lead samples from eight artifacts from the Long Bay (SS9) and Three Dog (SS21) sites to identify Iberian mining sites. Brill et al. (*Ibid.*: 264-266) conclude that these artifacts constitute a coherent analytical group and that they may have been brought to San Salvador on a single voyage. Furthermore, in addition to Columbus, Juan Ponce de Leon, Spanish slavers, and Lucayan traders could have brought them (see Tables I-III, and VI). The time frame for this spans October 12, 1492 until 1513. C. Hoffman (1987b: 242), excavator of the Long Bay site, gives a range of Spanish contact between A.D. 1492-1513/16, and more conservatively, as late as 1560. He admits the possibility of slave-raider contact and indigenous Lucayan exchange as possible conduits for Spanish artifacts at Long Bay. Berman and Gnivecki (1993, 1995) and Gnivecki (1995; this paper) concur with Brill et al. (1987) and C. Hoffman (1987b).

Keegan and Mitchell (1987: 104, 107) report they recovered four Spanish olive jar sherds from the surface of archaeological sites on Long Island, Little Exuma, and Acklins Island. They attribute the presence of these objects to the possible existence of a Lucayan exchange network (*Ibid.*: 107). A counter argument is that the Spanish olive jars broke while obtaining fresh water for ships from these three islands. In this scenario, the Spanish olive jars sherds could have been left *in situ* where the jars broke, or were picked up by the Lucayans as “exotics”, and brought back to their residences.

For example, while the author of this paper was conducting archaeological research in the highlands of Peru, master weavers from the city of Ayacucho would sometimes collect Middle Horizon painted pottery sherds from site surfaces, in order to recycle the exotic design elements into their contemporary weaving designs. In short, recycling and movement of archaeological remains occurs both in the past and in the modern world; the motives might not be the

same, but the outcome of artifact dislocation from *in situ* contexts is the same.

SPANISH ARTIFACTS: HISTORICAL AND ARCHAEOLOGICAL PERSPECTIVES

Examination of Columbus's *Diario* for the Bahamas reveals that a variety of artifacts were given to the Lucayans: red caps/bonnets, glass beads, hawk's bells, Portuguese *çeotis* (Spanish *blancas*), brass jingles, metal lace-ends, broken pottery and glass, and other things of small value (see Table III). The historical description in Columbus's *Diario* contrast to the actual excavated remains from the Long Bay site (SS9) and the Three Dog site (SS21) on San Salvador Island, which expands the list, to include: specifically, *melado* and *majolica* sherds, planking nails (or spikes), metal hooks (or bent planking nails), metal knife blade fragments, a bronze D-ring, a bronze buckle, a copper grommet, a plain metal button, and an *arquebus* ball (see Table IV). Archaeologically, we see that more is going on between Columbus and his crew and their interaction with the Lucayans, than is reflected in the *Diario*. Table V reflects a discordance between the *Diario* (e.g., items of trade and exchange, domestic), and the archaeological remains, in that, more personal items (e.g., metal button, bronze D-ring, bronze buckle, and knife blade fragments), ship hardware (e.g., planking nails (or spikes), metal hooks (or bent planking nails), and flat metal fragments), and arms (e.g., knife blades fragments, *arquebus* ball), are retrieved from various archaeological contexts at the Long Bay (SS9) and Three Dog (SS21) sites. The discordance between the *Diario* text and the archaeological contexts, might reflect *different source pathways* of the artifacts recovered (e.g., shipwreck and careening/repair salvage) versus direct contact with Christopher Columbus and his crew.

THE SPANISH “OBSERVED” BY THE LUCAYANS

At the outset, it might seem absurd to discuss Lucayan “observations” of the Spanish

in the Bahama Archipelago; where is the evidence? The Lucayans undeniably had direct contact with the Spanish on land and at sea in 1492 (e.g., Dunn and Kelley 1989; Fuson 1987; Ife 1990; for multiple translations of the primary texts). On a more speculative level, the Lucayans probably observed Spanish landfalls for exploration, food and water provisioning, and slaving operations. Undoubtedly, the Lucayans both observed and salvaged Spanish careening/repair operations and shipwrecks. Is there any concrete physical evidence of Lucayan observations of the Spanish? According to C. Hoffman (1972: 9-11, Figures 1-2), there are petroglyphs in a rock shelter, near Colonel Hill, on Crooked Island, depicting the Spanish. One petroglyph depicts an individual wearing a helmet and carrying a cross (Ibid.: 10). A second petroglyph depicts someone carrying a sword (Ibid.: 11). Although Columbus, did not use the cross-staff for navigation, it is possible that the petroglyph does not depict a cross, but rather a cross-staff, and therefore reflects a later Spanish intrusion into the Bahamas (Bradford 1973: 105, illustration; Maddison 1998).

THE SPANISH "PRESENCE" IN THE BAHAMAS

Intensive Spanish activity in the Bahama Archipelago lasts from 1492-1526, with a peak of slaving operations from 1509-1515 (see Tables I-II). However, exploration, slaving, and through-faring persisted until 1526, and even later. Undoubtedly, exploration, slaving, through-faring, shipwreck, marooning of individuals, provisioning, vessel careening and repair, and sexual relations with the Lucayans, provided numerous pathways for European artifacts to be introduced either directly by the Spanish, or indirectly to the Lucayans, via indigenous interisland exchange systems (see Table VI). In addition, Spanish activities on land and at sea provided routes of artifact loss, deliberate discard, and opportunity for Lucayan recovery and recycling into their cultural system (see Table VI).

According to the historical sources, the Bahamas was depopulated of Lucayans between c. 1520-1550 (see Tables I-II). The possibility exists that either the Lucayans learned to evade the Spanish slavers, or that the Lucayan population density declined to such low levels that slaving in the Bahama Archipelago was not profitable. We should not be surprised if Lucayan remains are found dating to the latter half of the 16th century (e.g., C. Hoffman 1987b: 242).

THE BIOCULTURAL ANATOMY OF CONTACT

It has not been my goal to initiate a postmodern *deconstruction* of the significance of Spanish contact material in the Bahamas, but rather, to *rethink* how we might *interpret* systematically excavated, or surface recovered, remains from Lucayan sites as a result of *complex cultural processes played-out over time and space*. It is an undeniable fact that the bulk of Spanish contact material is derived from the Long Bay site (SS9) on San Salvador, and the archaeological decision of whether we argue for a *single event in time* (e.g., the landfall of Christopher Columbus, on 12 October 1492), or alternatively, recast this interpretation as the result of a complex series of encounters (including the former) played-out over time and space, has profound implications for *how* we conceptualize the Spanish Contact Period. The former interpretation truncates Spanish-Lucayan contact in time, while the latter interpretation extends it over time and space well into the 16th century (see Table I, possibly, beyond 1526).

What about biocultural encounters? Certainly the Spanish had nonconsensual and consensual sexual encounters with the Amerindians of the Caribbean as documented, for example, by Michael Da Cuneo's Letter on the Second Voyage of Columbus, 28 October 1495, describing his brutal sexual encounter with a Carib woman in his cabin (Da Cuneo 2005: 89-90; Lunenfeld 1991: 283). Amerigo Vespucci describes Amerindian women as characterized by being sexually insatiable, prone to male emascu-

lation, cannibalism, and being "...libidinous beyond measure" (Lunenfeld 1991: 282-283; see also Montrose 1993: 180-181, for the former three labels). This contrasts with the reports of Gonzalo Fernández de Oviedo y Valdés of the practice of homosexuality in the islands, which was denied by Bartolomé de Las Casas (Ibid.: 281-282, 284-285).

In other first contact situations (e.g., the Pacific), it was not unusual to exchange "consensual" sexual favors for European "exotics". Sexual exchanges are another *process* by which European artifacts could enter an indigenous cultural system (see Table VI).

An unintended consequence of sexual encounters was disease and pregnancy. Sexually transmitted diseases, as well as other non-STDs, can leave their diagnostic markers on osteological remains (e.g., tuberculosis, syphilis) (Mays 1998: 126, 135-140).

Sexual encounters can lead to pregnancy and the introduction of European genes into indigenous populations like the Lucayans. However, bone and genetic markers reflecting European introduced diseases and DNA in Lucayan skeletons await future research in these areas.

Another measure of Spanish-Lucayan contact can be assessed by the study of starch grains (Berman and Pearsall (2008). For example, if starch grains from European domestics were recovered from Lucayan artifacts, and starch grains from New World domesticates were recovered from Spanish artifacts, then a different *process* of biocultural exchange will have been documented.

Finally, from the perspective of zooarchaeology, the presence of the Old World roof rat (*Rattus rattus*) in Lucayan contact period sites would reflect contact with the Spanish (Reitz and Scarry (1985: 78). Certainly, with roof rats aboard ships, we would expect to see cats (*Felis domesticus*). Cats and rats could have had a competitive impact upon the hutia populations associated with Lucayan contact period sites. The recovery of cat and rat bones from sites would again mark a process of contact, and inadvertent exchange.

In an attempt to resolve these complex issues, the author anticipates resumption of excavations at the Long Bay Site (SS9), in order to comparatively evaluate, not only the *spatial organization of the contexts* of Spanish contact material at the site, but the artifacts and ecofacts themselves (e.g., starch grain recovery, bones, technological and symbolic transfers, recycling/reuse).

CONCLUSIONS

Rather than conceptualize the Bahamas as "useless" islands (e.g., Peter Martyr in *De Orbe Novo* (1511), this paper has argued that the study of Spanish-Lucayan interactions was a *complex of dynamic cultural processes, contextualized over time and space*, worthy of sustained archaeological and historical rethinking, and scholarly reinvestigation. Further, we must move beyond the ground-breaking work of Crosby (2003) on the Columbian Exchange, and examine Lucayans *agency as cultural actors* in their interactions with the Spanish. The Spanish-Lucayan Contact Period is not just a narrative of the victorious over the vanquished, it must also embody a narrative of *cultural agency and resistance* that awaits to be discovered.

ACKNOWLEDGEMENTS

We would like to thank Dr. Donald T. Gerace, Chief Executive Officer, Kathy Gerace, and Tom Rothfus, Executive Director of the Gerace Research Centre, San Salvador, Bahamas for their respective support, patience, encouragement, and making our field logistics "less stressful" for research over these many years. Dr. Keith Tinker, former director, and Michael P. Pateman, Bahamas Antiquities, Museums, and Monuments Corporation, and Dr. D. Gail Saunders, former director of the Bahamas Archives, should be acknowledged their encouragement and support of our research in the Bahamas. We would like to also recognize the late Dr. Charles A. Hoffman (Northern Arizona University, Flagstaff) for introducing us to the Long Bay site (SS9); we miss our discussions in

the field, lab, and at meals at GRC. In particular, Dr. John Winter (Molly College) should be singled out for his support and insights about “all things Bahamian”, and our wonderful foray together into the archaeological complexities of the Long Bay site in 1999. Finally, we extend a profound thank you to the people of the Commonwealth of the Bahamas, and San Salvador in particular, who have served as generous hosts to Perry L. Gnivecki and Mary Jane Berman, since December 1983. This overview is only a small measure of our gratitude and appreciation for their kindness and generosity.

Please do not cite this article without written approval of the author, because it is part of a lengthier manuscript under preparation (Gnivecki, in preparation).

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Table I: Spanish Activity in the Bahamas Archipelago: 1492-1526+.

Date(s)	Individual Involved	References
1492	Cristoforo Colón	Dunn and Kelley (1989: 57-117)
1499-1500	Juan de la Cosa	Parry and Keith (1984: II: 147)
1499-1500	Alonso de Hojeda	Sauer (1966: 112, 159)
1499-1500	Vincente Yanez Pinzón	Burns (1965: 90-91); Craton (1962: 40; 1986: 40)
1499-1500	Amerigo Vespucci	Parry and Keith (1984: II: 163-164)
1508-1509	Nicholas de Ovando	Sauer (1966: 158-159)
1509	King Ferdinand	Sauer (1966: 158-159)
1509-1512	Most intense slaving activity	Sauer (1966: 160)
1509-1515	Intense slaving activity	Floyd (1973: 133-134); Parry and Keith (1984: II: 175, 282)
1511	King Ferdinand	Burns (1965: 101)
1513	Peter Martyr	Craton (1962: 39)
1499-1500	Vincente Yanez Pinzón	Craton (1986: 41-44); Davis (1935); Quinn (1979: I: 234-235; 237-238); Sauer (1966: 160)
1513	Ponce de León	Weddle (1985: 40)
1513	Diego Miruelo	Weddle (1985: 46)
1513	Juan Bono de Quejo	Weddle (1985: 40)
1513-1514	Antón de Alaminos Diego Bermúdez	Quinn (1979: I: 237-238); Weddle (1985: 40)
1513-1514	Juan Pérez de Ortubia	Craton (1986: 44); Weddle (1985: 40)
1515-1516	Diego Velázquez	Weddle (1985: 55)
1515	Bahamas largely depopulated	Parry and Keith (1984: II: 282)
1514-1516	Pedro de Salazar	P. Hoffman (1990: 6)
1514-1517	Francisco Gordillo	P. Hoffman (1990: 5)
1514-1517	Toribio de Villafranca	P. Hoffman (1990: 5)
1519	Francisco de Barrionuevo	Parry and Keith (1984: II: 390)
1521	Lucas Vázquez de Allyón	Craton (1986: 44-45); P. Hoffman (1990); Quinn (1979: I: 248, 255, 257)
1521	Francisco Gordillo	P. Hoffman (1990: 6-7)
1521	Pedro de Quijos	P. Hoffman (1990: 6-7); Quinn (1979: I: 257-258)
1521	Alonso Fernandez Sotil	P. Hoffman (1990: 7)
1525	Pedro de Quijos	P. Hoffman (1990: 36-37)
1526	Lucas Vázquez de Allyón	P. Hoffman (1990: 44, 55)
1521-1526	Bahamas depopulated	Quinn (1979: I: 258, 265)
c. 1550	Bahamas depopulated	Weddle (1985: 23)

Table II: Historical Sources.

Date	Individual Involved	Historical Sources
1492	Cristoforo Colón	Dunn and Kelley (1989: 57-117)
1499	Vincente Yanez Pinzón	"lost two ships on the Exumas in 1499 (Craton 1962: 40)"
1499-1500	Amerigo Vespucci	"the Bahamas were harried for slaves; Vespucci said that 232 were loaded and that the entire profit of the voyage amounted only to five hundred ducats (Sauer 1966: 112)."
1502-1509	Nicolás de Ovando	"The harvest of the Lucayo natives began under Ovando...(Sauer 1966: 159)."
1509-1527	Diego Colón	Lucayan enslavement "was extended under royal orders in the government of Diego Columbus. One of the first royal orders to the later on August 14, 1509... (Sauer (1966: 159)."
1513	Peter Martyr	"in the waters off the northern coasts of Cuba...lie so many islands, great and small, that I can scarcely believe what is told of them; although I am kept informed of all the discoveries. Within twenty years that have elapsed since the Spaniards arrived there they claim to have explored 406 of these islands, and to have carried off forty thousand inhabitants of both sexes, to satisfy their unquenchable appetite for gold." Martyr quoted in Craton (1962: 39) "there only remains today a very small number of them, either in the Spanish colonies or in the archipelago itself." Martyr quoted in Craton (1962: 39)
1513	Ponce de León	9 March 1513: Caicos Islands (Craton 1962: 42) 9/10-13/14 March 1513: La Yaguna (Mayaguana), Amaguayo (Sama-na), Managua (Rum Cay (Craton 1962: 42) 14 March 1513: Guanahaní (San Salvador) (Craton 1962: 42) 27 March 1513: Elbow Cay, near Abaco (Craton 1962: 42-43; Weddle 1985: 41) 18 July 1513: Sand Cay and Memory Rock, western edge of the Little Bahamas Bank (Craton 1962: 43) "They navigated up to some islands that were in the banks of the Lucayos more to the west" wrote Herrera, "and anchored in them the 18 th , of July, where they watered, and they put the name of La Vieja, for an old Indian woman, without any other person, that they found, and they are in 28°." Herrera quoted in Craton (1962: 43) Visited the northern shores of Grand Bahama Island and encounters Diego Mireulo (Craton 1962: 44; Weddle 1985:) 6 August 1513: returned to La Vieja (Craton 1962: 44) 6? August-October 15?, 1513: visited Abaco, northern Eleuthera, the Berry Island, and Andros (Craton 1962: 44). Returns to Puerto Rico on 15 October 1513.
1513	Diego Miruelo	Ponce de León encounters Diego Miruelo on a slaving or spying expedition while reconnoitering Grand Bahama Island (Weddle 1985: 46)
1513-1514	Antón de Alaminos Juan Perez de Ortubia	Ortubia and Alaminos remain behind to explore the Bahamas for several months (Craton 1962: 44). Bimini discovered (Weddle 1985: 47).
1514-1517	Francisco Gordillo	Slaving operations centered on Andros Island; where they "had round-

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	Toribio de Villafranco	ed up as many as nine hundred Indians, over half of whom died in pens in the Bahamas while awaiting supplies and ships so that they could be taken to Española for sale (P. Hoffman 1990: 5)."
1515?	Lucas Vázquez de Allyón	Slaving operations in the Bahamas with two ships; failed to find any (Craton 1962: 45)
1515-1516	Diego Velázquez	Slave raids in the Lucayos (Weddle (1985: 55)
1520?	Las Casas	"when some pious persons embarked to visit these isles after the ravage the Spaniards had made in them, they found but eleven people left there" Las Casas quoted in Craton (1962: 39)
1521	Francisco Gordillo	Slaving operations in the Bahamas; met up with de Quejo at the Yucayeulos keys near Andros Islands (P. Hoffman 1990: 6-7). Cleared Great Abaco Island (Yucayoneque) on 15 June 1521 (P. Hoffman 1990: 7).
1521	Pedro de Quejo	Slaving operations in the Bahamas; met up with Gordillo at the Yucayeulos keys near Andros Island (Hoffman 1990: 5-7). Cleared Great Abaco Island (Yucayoneque) on 15 June 1521 (P. Hoffman 1990: 7).
1521	Alonso Fernandez Sotil	Slaving operations in the Bahamas. See Gordillo and de Quejo above (P. Hoffman 1990: 6-7)
1500-1520		"Actual details are scanty, but it is certain that between 1500 and 1520 the entire population of the Bahamas, probably about 20,000 Lucayans, were carried off (Craton 1962: 39)
1526	Lucas Vázquez de Allyón	One of his ships landed on Anegada, Bahamas (P. Hoffman (1990: 79).
c. 1550		"The Lucayans endured slavery no better than the Hispaniola natives; by the middle of the sixteenth century, the island chain was depopulated (Weddle 1985: 23)."
1595		"Spanish fleet of 17 ships was wrecked off Abaco (Craton 1962: 46)"

Table III: Spanish Artifacts Traded/Exchanged in Columbus's *Diario*.

Spanish Artifact Type	Bahamas Location	Date	Historical Source
Red Caps	San Salvador (<i>Guanahani</i>)	12 October 1492	Dunn and Kelley (1989: 65)
Strings of Glass Beads	San Salvador	12 October 1492	Dunn and Kelley (1989: 65)
Hawk's Bells	San Salvador	12 October 1492	Dunn and Kelley (1989: 65)
Other Things of Small Value	San Salvador	12 October 1492	Dunn and Kelley (1989: 65)
Pieces of Bowls	San Salvador	13 October 1492	Dunn and Kelley (1989: 71)
Broken Glass Cups	San Salvador	13 October 1492	Dunn and Kelley (1989: 71)
Portuguese <i>çeotis</i> (Spanish <i>blancas</i>)	San Salvador	13 October 1492	Dunn and Kelley (1989: 71)
Red Bonnet	Santa Maria de la Concepción	15 October 1492	Dunn and Kelley (1989: 81)
String of Small Green Glass Beads	Santa Maria de la Concepción	15 October 1492	Dunn and Kelley (1989: 81)
Hawk's Bells	Santa Maria de la Concepción	15 October 1492	Dunn and Kelley (1989: 81)
String of Glass Beads	Enroute to Fernandina (at sea)	15 October 1492	Dunn and Kelley (1989: 85)
Spanish <i>blancas</i>	Enroute to Fernandina (at sea)	15 October 1492	Dunn and Kelley (1989: 85)
Strings of 10-12 Little Glass Beads	Fernandina	16 October 1492	Dunn and Kelley (1989: 87)
Brass Jingles	Fernandina	16 October 1492	Dunn and Kelley (1989: 87)
Metal Lace-ends	Fernandina	16 October 1492	Dunn and Kelley (1989: 87)
Pieces of Broken Pottery	Fernandina	17 October 1492	Dunn and Kelley (1989: 93)
Pieces of Broken Glass	Fernandina	17 October 1492	Dunn and Kelley (1989: 93)
Strings of Glass Beads	Cabo del Isleo	21 October 1492	Dunn and Kelley (1989: 107)
Hawk's Bells	Cabo del Isleo	21 October 1492	Dunn and Kelley (1989: 107)
Strings of Glass Beads	Cabo del Isleo	22 October 1492	Dunn and Kelley (1989: 109)
Hawk's Bells	Cabo del Isleo	22 October 1492	Dunn and Kelley (1989: 109)
Pieces of Broken Glass Cups	Cabo del Isleo	22 October 1492	Dunn and Kelley (1989: 109)
Pieces of Clay Bowls	Cabo del Isleo	22 October 1492	Dunn and Kelley (1989: 109)

Table IV: Spanish Contact Period Artifacts Recovered on San Salvador Island and on Other Islands.

Spanish Artifact Type	Number	San Salvador, Etc., Sites	Reference
Amber Glass Bead	1	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Whole Green Glass Beads	6	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Fragments of Green Glass Beads	3	Long Bay Site (SS9)	C. Hoffman (1987: 241)
<i>Melado</i> Sherds	38	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Undecorated <i>Majolica</i> Sherds	2	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Planking Nails (or Spikes)	10	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Metal Hooks (or Bent Planking Nails)	2	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Metal Knife (Blade) Fragments	4	Long Bay Site (SS9)	C. Hoffman (1987: 241)
Bronze D-Ring	1	Long Bay Site (SS9)	C. Hoffman (1987: 242)
Bronze Buckle	1	Long Bay Site (SS9)	C. Hoffman (1987: 242)
Copper <i>Blanca</i> of Henry IV	1	Long Bay Site (SS9)	C. Hoffman (1987: 242)
Copper Grommet	1	Long Bay Site (SS9)	C. Hoffman (1987: 242)
Metal Button, Plain	1	Long Bay Site (SS9)	C. Hoffman (1987: 242)
Many Fragments of Flat Metal	---	Long Bay Site (SS9)	C. Hoffman (1987: 242)
Many Fragments of Green Glass	---	Long Bay Site (SS9)	C. Hoffman (1987: 242)
<i>Arquebus</i> Ball	1	Three Dog Site (SS21)	Gnivecki (1995: 212)
Many Fragments of Flat Metal	---	Three Dog Site (SS21)	Berman and Gnivecki (n.d.)
Earthenware Sherd(s)	---	Conception Island	Keegan (1992: 202)
Earthenware Sherd(s)	---	Long Island	Keegan (1992: 202)
Earthenware Sherd(s)	---	Little Exuma	Keegan (1992: 202)
Earthenware Sherd(s)	---	Acklins Island	Keegan (1992: 202)
Earthenware Sherd(s)	---	Samana Cay	Keegan (1992: 202)
Brass Nose Ornament	1	MC-6, Middle Caicos	Keegan (1992: 202); Sullivan (1981)
Total	73+		

Note: Incomplete listing of Spanish Artifacts from SS9.

Table V: Functional Spanish Artifacts Types: Textual and Archaeological Contexts

Spanish Artifact Type	Trade and Exchange	Domestic	Personal	Ship Hardware	Arms	Textual Context	Archaeological Context
Red Caps (or Bonnets)	XXX					XXX	
Strings of Glass Beads	XXX					XXX	SS9
Hawk's Bells	XXX					XXX	
Spanish <i>Blancas</i>	XXX					XXX	SS9
Brass Jingles	XXX					XXX	
Other Things of Small Value	XXX					XXX	
Pieces of Bowls		XXX				XXX	SS9
Broken Glass (or Cups)		XXX				XXX	SS9
Earthenware Sherds		XXX					
Metal Lace-Ends (or Grommets)			XXX			XXX	SS9
Metal Button			XXX				SS9
Bronze D-Ring			XXX				SS9
Bronze Buckle			XXX				SS9
Knife (Blade?) Fragments			XXX		XXX?		SS9
Brass Nose Ornament			XXX				MC6
Planking Nails (or Spikes)				XXX			SS9
Metal Hooks (or Bent Planking Nails)				XXX			
Flat Metal Fragments				XXX			SS9, SS21
<i>Arquebus</i> Ball					XXX	XXX	SS21

Note: See Tables III and IV for References.

Table VI: Spanish Artifact Source Processes for the Bahamas Archipelago*.

Source Process Types	Direct Contact Exchange	Indirect Contact Exchange	Accidental Loss	Deliberate Discard
Exploration	X	X	X	X
Slaving Expeditions	X	X	X	X
Ship Careening/Repair	X	X	X	X
Shipwrecks	X	X	X	X
Marooned Individuals	X	X	X	X
Provisioning	X	X	X	X
Sexual Encounters	X	X	X	X
Through-Faring	X	X	X	X

* Keegan (1992: 202-203) suggests three mechanisms to account for the recovery of Spanish artifacts on Lucayan sites: first, direct Spanish-Lucayan exchange; second, Lucayan-Lucayan exchange of Spanish artifacts; and, third, post-Lucayan Spanish deposition of artifacts on abandoned Lucayan sites.

The ultimate sources of Spanish artifacts was perhaps more complex as this table indicates. Exploration might result in shipwrecks and being marooned. In addition, exploration might also involve periodic ship careening and repair, provisioning (e.g., food, water), sexual encounters with the indigenous populations, and slaving. All the above might result in direct/indirect exchanges, accidental loss, or deliberate discard of European artifacts. Wright (1981: 42) estimates that as many as 10,000 or more Europeans (e.g., Spanish, English, French, and Dutch) were shipwrecked in Florida. Living and/or dead, these individuals could have functioned as sources of European artifacts, diseases, and genes.