THE SOCIAL IDENTITY OF THE CREW ABOARD THE NUESTRA
SEÑORA ROSARIO DEL SANTIAGO Y APÓSTOL

by
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# TABLE OF CONTENTS

IV

ACKNOWLEDGMENTS ........................................................................................................... iv

LIST OF TABLES .................................................................................................................... viii

LIST OF FIGURES ...................................................................................................................... ix

ABSTRACT ..................................................................................................................................... x

CHAPTER I. INTRODUCTION .......................................................................................................... 1
   A. Theoretical Approach .................................................................................................................. 1
   B. Methodology ............................................................................................................................. 2
   C. Archaeological Investigations of the Rosario ............................................................................. 3
   D. Historical Significance of the Rosario ...................................................................................... 6
   E. Archaeological Investigations at Presidio Santa María de Galve .............................................. 6
   F. Archaeological Investigations at El Nuevo Constante ............................................................... 9
   G. Discussion ............................................................................................................................... 11

CHAPTER II. HISTORIC CONTEXT ................................................................................................. 13
   A. History of the Armada de Barlovento ...................................................................................... 13
   B. History of the Rosario ............................................................................................................... 15
   C. Intertwined Histories ............................................................................................................... 16
   D. History of Presidio Santa María de Galve ............................................................................. 18
   E. Political and Economical Context .......................................................................................... 20
   F. Social Context .......................................................................................................................... 24
   G. Life at Sea ............................................................................................................................... 26
   H. Mariners Aboard the Rosario ................................................................................................. 32
   I. Discussion ............................................................................................................................... 35

CHAPTER III. THEORY AND METHODOLOGY ............................................................................. 37
   A. Theoretical Framework............................................................................................................... 37
   B. Material Culture and Social Identity ....................................................................................... 40
   C. Personal Possessions ............................................................................................................... 41
   D. Ceramic Assemblages .............................................................................................................. 42
   E. Discussion of Theoretical Approach ....................................................................................... 44
   F. Methodology ........................................................................................................................... 45
   G. Methodology Concerning the Personal Possessions ............................................................... 47
   H. Methodology Concerning the Ceramics ............................................................................... 48
CHAPTER IV. ARTIFACT DESCRIPTIONS AND CONTEXT ...............................................51
A. Clothing Group .................................................................................................51
   1. Buttons ...........................................................................................................52
   2. Shoe Fragments ..............................................................................................53
B. Personal Group ................................................................................................56
   1. Razor Blade Handle .......................................................................................56
   2. Beads ..............................................................................................................57
C. Activities Group ................................................................................................58
D. Tobacco Group ..................................................................................................60
E. Arms Group ........................................................................................................61
F. Kitchen Group ...................................................................................................62
G. Context of the Artifacts ....................................................................................63
   1. Site Formation Processes ..............................................................................63
   2. Spatial Distribution of Artifacts .....................................................................65
H. Discussion ..........................................................................................................67

CHAPTER V. RESULTS ..............................................................................................69
A. Buttons at Presidio Santa María de Galve and El Nuevo Constante ..............69
B. Shoes at Presidio Santa María de Galve and El Nuevo Constante .................70
C. Razor Comparison to Presidio Santa María de Galve and El Nuevo Constante
...............................................................................................................................70
D. Comparison of Beads to Presidio Santa María de Galve and El Nuevo
   Constante ...........................................................................................................70
E. Game Pieces from Presidio Santa María de Galve and El Nuevo Constante
...............................................................................................................................71
F. Pipe Stems in Presidio Santa María de Galve and El Nuevo Constante .........72
G. Barrel Bands at Presidio Santa María de Galve and El Nuevo Constante ...73
H. Diversity Analysis of Ceramics .......................................................................74
I. Functional Categories of Ceramics ..................................................................75
J. Discussion ..........................................................................................................78

CHAPTER VI. DISCUSSION AND CONCLUSION .....................................................79
A. Clothing Group ..................................................................................................79
   1. Buttons ...........................................................................................................79
   2. Shoe Fragments ..............................................................................................81
B. Personal Group ..................................................................................................82
   1. Razor Blade ...................................................................................................83
   2. Beads ..............................................................................................................86
C. Activities Group ................................................................................................89
D. Tobacco Group ..................................................................................................94
E. Arms Group .................................................................98
F. Discussion of the Ceramic Diversity of the Assemblages ..........98
G. Discussion of Ceramic Functional Categories ......................100
H. Conclusion ..................................................................104

REFERENCES ..................................................................108
LIST OF TABLES

1. Name, Rank, Age, and Literacy of Known Crew of the Rosario ........................................32
2. Presidio Santa María de Galve Feature List .............................................................................46
3. Rosario Ceramics.........................................................................................................................62
4. Material Type of Pipe Fragments in Activity Areas at Presidio Santa María de Galve ..........73
5. Comparisons of Diversity and Evenness ....................................................................................74
LIST OF FIGURES

1. Location of the *Rosario* and Presidio Santa María de Galve. (Image courtesy of the UWF Archaeology Institute.) .................................................................3

2. Site plan of the *Rosario*. (Image courtesy of the UWF Archaeology Institute.) .......5


4. Location of features and activity areas at Presidio Santa María de Galve. (Image courtesy of the UWF Archaeology Institute.) .................................................47

5. Distribution of personal possessions on the *Rosario*. (Image by author, 2012.) ....52

6. Domed wooden button foundation. (Image courtesy of the UWF Archaeology Institute.) ........................................................................................................53

7. Shoe fragments. (Image courtesy of the UWF Archaeology Institute.) ..............54

8. Razor blade handle. (Image courtesy of the UWF Archaeology Institute.) .......57

9. Wooden beads. (Image courtesy of the UWF Archaeology Institute.) ..............58

10. Dice. (Image courtesy of the UWF Archaeology Institute.) ............................59

11. Game piece with incision. (Photograph by author, 2012.) ...............................60

12. Barrel band. (Image courtesy of the UWF Archaeology Institute.) ..................61

13. Map showing the westward movement of Santa Rosa Island from 1698 to present. (Image courtesy of the UWF Archaeology Institute.) .......................65


15. Distribution of tablewares on the *Rosario*. (Illustration by author, 2012.) ....66


17. Ceramics distribution by function at the *Rosario*, *El Nuevo Constante*, and Presidio Santa María de Galve. (Illustration by author, 2012.) .................76
ABSTRACT

THE SOCIAL IDENTITY OF THE CREW ABOARD THE NUESTRA SEÑORA DEL ROSARIO Y SANTIAGO APÓSTPOL

Morgan Heather Wampler

Qualitative and quantitative data comparison of the personal possession and ceramic assemblages of the shipwreck Nuestra Señora del Rosario y Santiago Apóstol (Rosario) to the shipwreck El Nuevo Constante and Presidio Santa María de Galve provides information regarding the social identities of the sailors on the Rosario. Historical document research and comparative analysis of personal possessions from the Rosario demonstrate the performance of identities such as gender, ethnicity, occupation, social status, and Catholicism. The Shannon Weaver index and Peilou’s evenness indexes were utilized to derive information concerning the diversity of the ceramics at each shipwreck site and each activity area of the presidio. These indexes suggest that Spanish mariners aboard the Rosario and El Nuevo Constante utilized ceramics differently than did men at the presidio. The mariners relied more heavily on utilitarian ceramics, likely because living conditions at sea were different from and more confined than those of terrestrial presidios.
CHAPTER I
INTRODUCTION

This thesis examines the personal possession and ceramic assemblages of the *Nuestra Señora Rosario del Santiago y Apóstol* (Rosario) utilizing social identity theory in order to infer information concerning the role of mariners in the *Armada de Barlovento* or Windward Fleet in early-18th century Spanish society. To ascertain the role the mariners played in society, comparisons are made between the Rosario, Presidio Santa María de Galve in Pensacola, Florida, and *El Nuevo Constante*, which lies off the coast of Louisiana. These inter-site comparisons elucidate the similarities and/or differences in which various segments of colonial Spanish society manipulated their material culture in order to perform their social identities.

Theoretical Approach

Social identity is the interpretation of who people are and what their associations are within a society (Jenkins 1996:5), including an individual’s conception of self and associations, and reciprocally other people’s interpretation of another person or group’s associations. Thus, social identity is a dialectical process that is constantly being negotiated on the individual and group levels (Jenkins 1996:5). Goffman’s (1956) metaphor for this process is that of an actor performing a role for an audience in a theatre. A person uses props, speaks a specific script, and moves his body through a scene; the audience can then accept or reject the performance and the association.

Social identity theory states that people manipulate material culture in order to perform associations with various groups (Butler 1990; White 2005:5; Jenkins 2008). These associations may become a form of identity for a person or group. For instance, a form of identity is often associated with an occupation, such as the barber-surgeon. In order to be considered a barber-surgeon during the early 18th century, one had to receive the requisite training and possess the needed tools of the trade, such as razor blades. These tools were an important aspect of the identity performance process and are often visible in the archaeological record. This type of
identity is a good example of the performer-audience interaction because a person had to perform
the identity with the occupation, and the audience had to either accept the performance by
utilizing the services or to reject the performance and not patronize the person. A self-proclaimed
barber-surgeon with no clients or tools of the trade is merely interpreted as unemployed by the
outside observer. Consequently, material culture is very important in the performance of identity,
and information concerning identity can be inferred from the objects.

Methodology

This thesis makes direct comparisons between the personal possessions and the ceramic
assemblages from the *Rosario* (8ES1905), Presidio Santa María de Galve (8ES1354), and
*El Nuevo Constante* (16CM112). Because Spanish colonial life was so segregated by class,
comparing artifacts from the *Rosario* to the various activity areas of the presidio and associated
village can generate information concerning what segments of land-based society utilized
material culture in ways comparable to sailors on the *Rosario*. Further comparison of the two
shipwrecks will help determine if life at sea in the 18th century necessitated the utilization of
material culture in a way that is not comparable to terrestrial contexts.

Techniques used in this thesis include historic document research as well as qualitative
and quantitative analysis. Qualitative analysis was conducted on the personal possessions
consisting primarily of document and historical research. The ceramics required quantitative data
analysis, including ascertaining the diversity of ceramics from the different sites and in what
proportions utilitarian, tableware, utilitarian/tableware, and Native American ceramics were
present. All of this information was required to answer the overarching research question of how
the men aboard the *Rosario* fit into colonial Spanish society.

Although exploring the archaeological research of all late-17th- and early-18th-century
shipwrecks is beyond the scope of this research, the assemblage from the merchantman *El Nuevo
Constante*, which sank in 1766, is compared to the assemblage from *Rosario*, which sank in
1705 (Pearson and Hoffman 1995; Hunter 2001). *El Nuevo Constante* was selected because it
is the closest comparable shipwreck, both temporally and culturally, that has been investigated
archaeologically. Likewise, Presidio Santa María de Galve is a contemporaneous Spanish settlement on the northern shore of Pensacola Bay that was directly associated with the sailors aboard the Rosario, which was also documented archaeologically. The presidio was occupied from 1699 to 1719 (Clune 2003:23).

Archaeological Investigations of the Rosario

The Rosario lies 3 to 5 m underwater about 90 m off the northern coast of Santa Rosa Island in Pensacola Bay, Florida. The present-day nearest cultural landmark is Battery Worth on Gulf Islands National Seashore (Figure 1). The site is located 2.3 km west of Pensacola Pass and is roughly 2 km southeast of Presidio Santa Maria de Galve (Hunter 2001:60). The Rosario is located in Fort Pickens Aquatic Preserve approximately 90 m north of the shore of Santa Rosa Island (Hunter 2001: 60).

FIGURE 1. Location of the Rosario and Presidio Santa Maria de Galve. (Image courtesy of the UWF Archaeology Institute.)
A recreational diver initially discovered the *Rosario* in 1980, and it was designated site 8ES1905 by the Florida Bureau of Archaeological Research in 1992 (Spirek et al. 1993). Archaeologists from Southern Oceans Archaeological Research examined the site in 1995 and 1996 and noted Iberian construction techniques; however, the name of the vessel remained unknown. In 1998, the University of West Florida (UWF) summer field school conducted a partial survey of Pensacola Bay, relocated the site, and performed a pre-disturbance survey (Bratten 2003). The site was mapped using Direct Survey Methods, and four datum points were established around the site. Artifact collection and excavation were restricted to hand collection and hand fanning. Hand fanning was conducted in order to expose hull elements for mapping purposes. Some fragments of cannonballs were mapped and collected, and wood samples were taken for identification (Hunter 2001:67).

The site was partially excavated by UWF in 1999, 2001, and 2002. In 1999, students conducted a more thorough metal detector survey of the wreck prior to establishing an arbitrary grid over the wreck. Grid north corresponded to one degree off magnetic north. The grid consisted of 2 x 2 m units. Each unit was then again divided into four 1 m subunits and excavated one quadrant at a time designated by compass directions, such as northwest and southeast. A water induction dredge was utilized to remove sediments, which were then screened through a roughly 1/4 inch screen bag (Hunter 2001:69-71).

Excavations continued in 2001 and 2002, focusing on recording the extent of framing structure along the starboard side of the vessel. Researchers placed excavation units in order to determine the extent of the stern and port side preservation (Bratten 2003). A total of 68 units were placed throughout the site by the end of excavations.

The *Rosario* has deteriorated since its wrecking event; however, many important features remain (Figure 2). Much of the ship’s hull has been preserved. Remaining hull timbers include the stem, framing components, hull and ceiling planking, and longitudinal support timbers including the keelson and keel.
FIGURE 2. Site plan of the Rosario. (Image courtesy of the UWF Archaeology Institute.)

The port side of the vessel was better preserved than the starboard side, partially because the ship lies on a 55° to 40° incline. The hull may be intact to around the level of the original orlop deck on the port side. Also excavated was the vessel’s pump well, which was located abaft the main maststep on either side of the keelson (Hunter 2001:80-87).

Floor timbers were attached to the keel and keelson with iron fasteners. Multiple first futtocks were also recorded. The amidships and the bow were documented, but the stern of the vessel was missing. Although much of the ceiling planking had deteriorated, some ceiling planks, stringers, and breast hooks were documented in the bow and amidships area (Hunter 2001:80-102). For the most thorough discussion of the ship construction techniques, refer to James Hunter’s (2001) master’s thesis.

The primary goal of these excavations was to identify the vessel. Analysis of construction materials and techniques, ceramics dating, and historical review led to the identification of the vessel as the Nuestra Señora del Rosario y Santiago Apóstol. More than 2,300 artifacts were
collected, conserved, and cataloged by UWF, including numerous personal possessions, such as beads and buttons and numerous types of ceramics (Bratten 2003).

Historical Significance of the *Rosario*

The early 18th century was a time of great political and economic hardship in much of Spain and its colonies (Gómez-Tabenera 1966; Deagan 2002:30). Charles II’s death in 1700 signaled the end of the Hapsburg Dynasty and the beginning of the French Bourbon Dynasty in Spain, events which led to the War of the Spanish Succession. This and other wars overtaxed the already struggling Spanish economy, a situation which had far-reaching effects on the Spanish colonies.

Spain’s economic dependency on silver from mines in the New World led to the establishment of colonies along the Florida coast, including Presidio Santa María de Galve prior to the War of the Spanish Succession. This settlement was created in order to prevent encroachments by the English and French and their associated interferences in the silver trade (Roberts 2009:1).

In addition to the establishment of colonies to protect the silver trade, the Windward Fleet was created in order to escort trade vessels throughout the Gulf of Mexico (Hussey 1929:290; Lang 1994:576). Construction of the *Rosario* was completed by 4 August 1696. After escorting numerous trade vessels and performing various other functions in the Windward Fleet, she sank in Pensacola Bay on 5 September 1705. During her 10 years of action, this vessel played an important role in the fleet. Moreover, the *Rosario* is the only vessel of this fleet that has been discovered and excavated archaeologically, thus proffering a unique perspective concerning the identities of men employed in the fleet.

Archaeological Investigations at Presidio Santa María de Galve

The site of Presidio Santa María de Galve (Fort San Carlos de Austria and the associated village) is situated on the northern shore of Pensacola Bay approximately 2 km from the present-day location of the *Rosario* (Figure 1). Chad O’Braley, the first archaeologist to recover Spanish artifacts on the site in 1979 during a National Park Service survey, speculated that it
was the presidio (Roberts 2009). In 1986 the site was designated archaeological site 8ES1354. In December 1986, a preliminary archaeological assessment was conducted by UWF under the direction of Judith A. Bense, prior to the placement of utility lines (Bense and Wilson 2003:84). From 1995 through 1998, UWF conducted archaeological field schools in the area under the direction of Bense and Norma J. Harris. With the assistance of historic maps, several distinct activity areas were identified (Bense and Wilson 2003; Roberts 2009). These areas consisted of the barracks, church, warehouse, the hospital/warehouse within the fort, and the village outside the fort.

Inside the fort, barracks for officers, soldiers, and convicts were located along with their corresponding archaeological components. The officer’s barracks were situated in the southwestern corner, archaeologically corresponding with the labeled building on a map from 1719. In this area, six excavation units were placed: Trench A1, Block A1, and Test Units A1, A2, A4, and A5 (Bense and Wilson 2003:115).

Two trenches (Trenches B1 and B9) were placed along the west wall of the fort in the area where the soldier’s barracks were located. On a 1713 map, this area is labeled “soldier’s barracks,” and on a 1719 map the area is labeled “quarters.” Archaeological remains associated with the location of the barracks on the historic map suggest this area was the barracks for presidio soldiers (Bense and Wilson 2003:128).

Two additional trenches (Trench B2 and BTU 1, 2, and 4) were excavated along the north curtain wall in the area identified by Bense as the convict’s barracks. Cultural materials recovered from this area suggest a much lower socio-economic status of the inhabitants compared to those found in the aforementioned officer’s and soldier’s barracks (Bense and Wilson 2003:132). The 1713 map designates this area as “soldier’s barracks,” but low status items found here suggest that the forced laborers lived in this area (Bense and Wilson 2003:133). Historical documents indicate that the warehouse at the presidio burned repeatedly during the occupation of the fort and had to be rebuilt on four different occasions (Bense and Wilson 2003:134). The first warehouse, which was built in 1699, was the second structure the
Spanish erected at the site; however, it burned shortly after construction. A second warehouse was built but burned in a fire within the fort in 1704. The locations of both of these structures are unknown. In October 1705, construction of the third warehouse was completed; but by 1712, the warehouse had deteriorated and was torn down for the construction of yet another warehouse. When the warehouse was reconstructed is not known, but a 1719 map depicts a warehouse located in a building that had formerly functioned as the hospital. Test Unit A3 and Block A2 were placed in the warehouse area, indicated on the 1713 La Maire map (Bense and Wilson 2003:134-142). The excavation of this area produced the remains of a segment of the presidio cistern in addition to six postholes, a cellar pit, and refuse pits. All these features were immediately outside of the projected area of the warehouse, according to the 1713 map. This fact further supports the theory that this area was the location of the warehouse (Bense and Wilson 2003:134-135).

The 1713 La Maire map and a 1719 French map depict a structure just east of the soldiers’ barracks along the western wall of the fort that is labeled as a warehouse in 1713 but is shown as a hospital by 1719. Trench B10 was placed in this area (designated the Hospital/Warehouse Area) in an attempt to locate this structure, a strategy which proved successful (Bense and Wilson 2003:144-148). The area between the Hospital/Warehouse Area and the Warehouse was filled with refuse pits and postholes, features possibly associated with outbuildings such as drying racks and sheds. The length of this area measured approximately 7.62 m, indicating it was a significant social area within the fort, as space was limited inside the walled community. The multiple uses of space also prevents association of the materials found in the area with either the Hospital/Warehouse or the Warehouse (Bense and Wilson 2003: 148-150).

According to historical documents, the village was located east of the fort. The village experienced only two brief periods of occupation, the first from 1698-1707, during the first nine years of the presidio’s occupation. With the outbreak of the War of the Spanish Succession in 1700, England became an enemy of Spain, and English-allied Creek Indians began an eight-year siege against the presidio in 1707. This siege forced the inhabitants of the presidio to move
within the confines of the fort until 1715. The village was once again occupied from 1715 until 1719, after which France gained possession of the presidio and burned the village (Bense and Wilson 2003:160-161). Excavations of the village area occurred over the course of three field seasons, during which 164 shovel tests, 7 test units, 2 trenches, and 3 blocks were excavated. Three blocks were opened in the central village area (BE1-3); a narrow trench (ECT1) connected blocks EB3 and EB2. In the eastern area of the village, trench DT1 was excavated. Information regarding the village cemetery was collected by an unrelated project in which building foundation trenches were excavated. Finally, Area C of the village was excavated with three test units, but the context was disturbed by a 19th-century Spanish residence. Work in the village area yielded thin midden layers, structural remains of a post and sill building, and construction trenches, along with associated material culture from groups such as kitchen and personal items (Bense and Wilson 2003:161-163).

Archaeological Investigations at El Nuevo Constante

El Nuevo Constante is located in the Gulf of Mexico roughly 4 km southwest of Big Constance Bayou off the coast of Louisiana (Figure 3). The site of El Nuevo Constante (16CM112) was accidentally discovered during the winter of 1979 after copper ingots were ensnared in the nets of a shrimper. This discovery led to subsequent salvage attempts by Free Enterprise Salvage, Inc., in 1979. A dredge bucket was utilized, leading to the recovery of silver and gold ingots, but the context of many of the artifacts was lost. The presence of precious metals further intensified the destructive salvage efforts (Pearson and Hoffman 1995:12). These actions destroyed the context of the few personal possessions that were ultimately recovered (Charles Pearson 2011, elec. comm.) Fortunately, the Louisiana Department of Culture, Recreation, and Tourism was notified and began funding the archaeological research of the site by September 1980. Coastal Environments, Inc., carried out the supervised excavation of the site under the direction of Sherwood Gagliano and Charles Pearson (Pearson and Hoffman 1995:99-101).
Before formal excavations began, a remote sensing survey was conducted to delineate the extents of the site. Archaeologists determined that excavations were to take place only within the remaining portions of the ship. A baseline for the excavation grid was established along the keelson between the stem and sternpost, and imperial measurements were used. The grid was composed of 3.04 m² (10 ft²) units. A water induction dredge was used to gather sediments that were screened at the surface on the dive platform. Vertical measurements were taken using a surface controlled pneumatic depth gauge. The lower 0.91 to 1.21 m (3 to 4 ft.) of the ship’s hull were the only parts of the ship that remained. As previously mentioned, the keel, keelson, stem, and stern posts were present, along with many floor timbers, strakes, deadwood, and ceiling planking (Pearson and Hoffman 1995:89-115). Historical research—particularly records documenting salvage attempts by the Spanish government—along with ship construction techniques indicate that the site is the 1766 wreck of trade vessel *El Nuevo Constante* (Brandembrouche 1766; Echagoyen 1766; Pearson and Hoffman 1995:1).
El Nuevo Constante was a frigate merchantman in the Carrera de Indias (Pearson and Hoffman 1995:8-10). It followed the route of the Flota of New Spain and was part of a fleet that was supposed to sail from Spain to Vera Cruz in the spring every year, although the ships did not always sail. After selling their goods, the fleet wintered in the colonies. In March, the flota was scheduled to return to Havana and then to return to Spain with goods from America. In order to combat a failing economy, Spanish King Philip V, the first of the Bourbon dynasty, tried to improve and better regulate the flota; however, his actions proved unsuccessful. In fact, the fleet with which El Nuevo Constante sailed to the New World in 1765 with the directive to return to Spain in 1766 was only the third convoy to set sail since 1739 (Pearson and Hoffman 1995:10-14).

Discussion

Archaeological investigations at these sites allow comparison of the material assemblages, particularly the spatial distribution of artifacts. The thorough understanding of the activity areas at the presidio facilitates comparison of the personal possessions and ceramics with those of the Rosario, specifically, whether personal items found aboard the ship reflect similarities with personal items found at certain places in the presidio. Unfortunately, because salvors destroyed the context of the personal possessions of El Nuevo Constante, direct spatial comparison is not possible. However, the known presence or absence of these items can still be informative because water movement, erosion, and other taphonomic processes may have destroyed the original context of some of the items aboard the Rosario. Although the original contexts of items on the ships may be gone, their association with the vessels is still important. Qualitative, quantitative, and spatial analyses provide interesting data concerning the social identities of the crew of the Rosario.

The histories and associations of the ships and presidio make the comparisons all the more meaningful because the Rosario and Presidio Santa Maria de Galve are directly associated. The ship was docked at the presidio when the storm struck that sank the vessel. Moreover, the crew of ship were stranded at the fort until another ship could take them back to Vera Cruz,
forcing a social interaction. An indirect association also exists between the *Rosario* and *El Nuevo Constante* because the latter was a merchantman that was escorted by other ships of the Windward Fleet. Using social identity theory to ground interpretations regarding the artifacts recovered on the *Rosario* and comparing them to those found at the other sites reveals valuable information concerning the social identities of the crew.
CHAPTER II
HISTORIC CONTEXT

History of the Armada de Barlovento

In the 16th century, Spain and its colonies faced constant threat from buccaneers. The treasure fleets from the mines in the New World were essential to the Spanish economy, and their safe delivery to Spain was under constant threat from other European nations and pirates (Hussey 1929:290; Lang 1994:576). Several different fleets under different commands were created to protect the treasure fleets until the founding of the Armada de Barlovento.

The first fleet organized to protect Spanish vessels and colonies began in 1514 under Juan Ponce de Léon, who was sent to attack corsairs pillaging Spanish colonies. This solution was temporary, and the fleet soon dissolved. The next documented fleet was established in 1578; this small fleet consisted of two galleys and a sloop. Because of Drake and Hawkin’s raids in 1585 and 1586, the Spanish government realized the necessity of a bigger and more permanent flotilla to protect Spanish interests in the New World (Hussey 1929:292). Instead of increasing the size of the fleet, the Spanish government, under the instruction of engineer Juan Bautista Antoneli, planned better fortification of the major ports in the Caribbean. Two years later, the defeat of the Spanish Armada in 1588 almost completely destroyed the Spanish Navy, ended the naval prestige of the Spanish empire, and depleted most of the ships owned by Spain (Hussey 1929:190-293). Subsequent small fleets were formed to protect the New World colonies and treasure fleets in the area until 1635, when the Armada de Barlovento was formally commissioned (Hussey 1929:297; Lang 1994).

The Armada de Barlovento was to consist of 12 galleons. Much to the dismay of the supreme council, no fleet was created (Hussey 1929:297). Not until 1643 did the government again try to reinstate the fleet; this time eight ships were commissioned and sent to America for the Armada de Barlovento. As soon as these vessels arrived, seven were sent back to Spain to escort merchantmen, leaving one ship in the Caribbean. The ships’ return to the Caribbean
was delayed because the King ordered the infantrymen aboard be sent temporarily to Badajoz, Spain, because Portugal was rebelling. Though delayed, the ships eventually returned, but not permanently. In 1647, four of the Armada’s ships again returned to Spain, this time under different circumstances. The commanding officer declared that he and his men were not compensated for expenses incurred in the operation and staffing of the fleet in New Spain, so the men returned in order to be paid. In 1648, the Armada de Barlovento was disbanded in order to supplement the failing Oceanic fleet (Hussey 1929).

In 1665, the Armada de Barlovento was re-commissioned (Hussey 1929:297). The fleet was smaller, consisting of only eight vessels because of the failing Spanish economy. Four of the ships had been recently purchased from Holland specifically for the new fleet. Even though the ships were ready to be sent to the Caribbean in January, war in Portugal delayed their departure until September, and poor fiscal planning by the government caused all eight vessels to once again be absorbed by the Oceanic fleet. Thus, there was no Windward Fleet until 1667, when three ships were finally sent to America with two pataches, boats used for communicating between ships. On the ships’ arrival, more misfortune occurred when pirates captured the Almiranta and the pataches at Maracaibo. The remaining vessels were sent back to Spain to escort another treasure fleet, leaving the Caribbean once again unprotected.

Spain still needed protection, and again the Armada de Barlovento was reestablished in 1677, this time with three frigates and two ships. Another frigate and lesser ship were added once the initial vessels reached America. From this point on, the Windward Fleet struggled for survival until 1738, often facing financial and labor shortages (Ramírez 1981:283; Lang 1994:585-586).

The Windward Fleet could not adequately defend all of the Spanish territories in the Gulf of Mexico and Caribbean from all of Spain’s enemies, particularly privateers supported by Holland, England, and France (Weddle 1999; Hunter 2001; Clune et al. 2003), partly because of the small size of the fleet. Many times a Junta de Guerra stated that a royal navy presence was needed in the New World to protect Spanish interests, but Spain’s economy was failing and could
not afford to fund the fleet better or to support naval efforts in the area. Furthermore, because of the poor economy, the fleet often suffered from monetary and labor shortages (Weddle 1985; Lang 1994). Misappropriation of funds also contributed to the economic hardships of the fleet. In 1636, a tax was levied on the Merchant’s Guild to try to support the fleet, but the money was spent elsewhere, as evidenced by complaints sent to the King (Consejo de Indias 1636; Hussey 1929; Lang 1994:577). Consequently, the ships were in a constant state of disrepair, often leading to disastrous results (de Pez 1705; Rodríguez 1705; Dunn 1917).

History of the Rosario

Construction of the Nuestra Señora del Rosario y Santiago Apóstol was completed in the Rio de Alvarado (South of Veracruz) on 4 August 1696 (Clune et al. 2003). The Rosario was a frigate of approximately 450 tons and 44 guns. Initially, it was the third-largest ship in the Windward Fleet, or the gobierno of the fleet. However, because of poor funding of the fleet and ships falling into disrepair, by 1703 the Rosario had become the almiranta of the fleet, or the second largest vessel. During the career of the Rosario, it escorted numerous merchant vessels throughout the Caribbean. It even transported some trade goods throughout the area to help finance the expensive fleet operations (Lang 1994; Clune et al. 2003).

In May of 1705, the final voyage of the Rosario began after being careened and repaired in Veracruz (Ledezma 1706; Hunter 2001; Clune et al. 2003). A Junta de Guerra dictated that she was to escort supply ships bound for St. Augustine as far as the Bahama Channel. First, the Rosario accompanied four smaller frigates to Pensacola in order to bring supplies and the situado to the bedraggled presidio. They arrived on 1 June 1705 and unloaded the much-needed supplies to the presidio. A compliment of soldiers, mast cutters, and carpenters also disembarked at the presidio in order to prepare timber to be shipped to Veracruz on the Rosario’s return journey. The Rosario then departed for St. Joseph Bay to conduct reconnaissance on the mission San Luis de Talimali that had recently been attacked by English allied Native Americans (de Bilbao 1705; de Landeche 1705a; Hunter 2001; Clune et. al. 2003).
From there, the *Rosario* sailed to Cuba, arriving on 1 August. After making port and conducting deliveries to Havana, the ships departed for St. Augustine on 14 August in order to escort eight trade vessels of varying sizes to the settlement. The *Rosario* accompanied these vessels to the Bahama Channel then returned to Havana (de Landeche 1705a). While at Havana, the crew of the *Rosario* prepared for an unaccompanied trip back to Pensacola to load timber and finally return to Veracruz (de Landeche 1705a; de Landeche 1705b; Clune et al. 2003).

The crew aboard the *Rosario* arrived in Pensacola Bay on 3 September and was awaiting the load of cargo when a hurricane struck on 4 September (Pérez-Gómez 1705; Hunter 2001; Clune et al. 2003). Admiral Landeche did all he could to save the vessel, but as the storm continued to rage, it overcame the ship, and the *Rosario* sank in Pensacola Bay on 5 September 1705 (Rodríguez 1705; Hunter 2001; Clune et al. 2003). After the storm, the ship was completely wrecked but still lay partially above the waterline, allowing the crew to salvage their guns, food, and personal items. What parts of the ship that were above water were burned so that the crew could recover the iron fasteners for use at the presidio. However, because of the instability of the sands, not everything aboard was recovered (de Landeche 1705b; Clune et al. 2003). Shortly afterward, the crew of the *Rosario* was extracted and transported back to Mexico (Hunter 2001).

**Intertwined Histories**

The *Rosario*, *Armada de Barlovento*, and Presidio Santa María de Galve have intertwined histories. Colonies in Spanish America relied on each other for economic and physical survival, and connections between them were maintained through shipping (Weddle 1985). Much historical and archaeological research has examined the connections of various settlements in the Spanish colonies.

Regardless of its poor state, the Windward Fleet played an instrumental role in the settlement and provisioning of the Presidio Santa María de Galve. Louis XIV of France was aggressively pursuing land claims in New Spain, an agenda that was clear to the Spanish government (Dunn 1917; Gómez-Tabenera 1966). This pursuit put more pressure on the already financially stressed Spanish empire to protect its trade routes in the New World. The Spanish
government feared that if France gained a foothold in the Gulf area, the French would be in a good position to harass Spanish trade and treasure fleets, causing incredible damage to the already struggling economy.

The Windward Fleet obtained the first evidence of a French colony in the Gulf of Mexico. On 10 September 1685, the fleet captured a pirate ship, and a Frenchman by the name of Denis Thomas was arrested (Dunn 1917). He reported that he had sailed from France under the command of Captain Beaujeu in order to found a colony on the Mississippi. This voyage was Robert Cavelier de La Salle’s ill-fated colonization attempt in modern-day Texas. Rumors of La Salle’s colony in the Gulf instigated 11 exploratory missions by the Spanish throughout the Gulf Coast (Dunn 1917; Weddle 1985:377; Bense 2003). One important voyage was that of Juan Enríques Barroto and Antonio Romero in 1685 (Dunn 1917). During this mission, Pensacola Bay was rediscovered by Spain, and the positive attributes of the bay were extolled by the explorers. Juan Jordán, a member of the expedition, described Pensacola as having “the best bay I have ever seen in my life” (Dunn 1917:61). In July of 1687, the Viceroy of New Spain, the Count of Monclova, received a letter from the Spanish ambassador in London stating that La Salle’s colony had failed (Dunn 1917:78). Even though the French were unsuccessful in this settlement attempt, fears of foreign incursion into the Gulf persisted.

Another link the Windward Fleet has to the Presidio Santa María de Galve is the association of Andrés de Pez. In 1673, Pez began his career as a sailor in the fleet of Andalucía, where he served eight years (Dunn 1917:146). In 1681, he transferred to the Windward Fleet. His brave and daring acts in the fleet led to his quick promotion to the rank of captain. Stories of his bravery soon traveled to the ears of Viceroy Count of Monclova, who selected him to help in the searches for the French colony along the coast. After his voyage to San Bernardo Bay in 1688, he was selected to be a captain of the presidio companies at Veracruz, and shortly afterward he became the admiral of the Windward Fleet. From there he was promoted to general of the fleet to New Spain, then governor of the Council of the Indies, and later became one of the King’s confidential ministers.
History of Presidio Santa María de Galve

Pez played an instrumental role in founding Presidio Santa María de Galve. He persistently petitioned the Spanish government to abandon St. Augustine and occupy Pensacola Bay (Dunn 1917). He even managed to convince King Charles II that Pensacola would be an ideal place to create a new presidio. In 1693, Pez, the current admiral of the Windward Fleet, was placed in command of what is now termed the Pez-Sigüenza expedition that conducted a scientific survey of Pensacola Bay to determine the area’s strategic attributes. Sigüenza, a well-respected scholar, praised the bay as an ideal location for fortifications. Because of these glowing reviews of Pensacola Bay, a Junta de Guerra and Charles II decided to build a fort in Pensacola Bay. However, because of difficulties raising money to fund the project, construction of the presidio was delayed until 1698 (Dunn 1917:173).

Early in 1698, news reached Spain that Louis XIV was planning another settlement attempt in the Gulf of Mexico (Dunn 1917:173; Weddle 1985:376). Intelligence concerning the matter stated that the French were outfitting four vessels, and they were presumed to be heading for Pensacola Bay. Consequently, Charles II became determined to occupy the area first. On 19 April 1698, a royal cédula was issued that made establishing a presidio in Pensacola the most important issue in the whole empire. The expedition consisted of 3 ships, 12 cannon, 200 soldiers, 120 sailors, 9 artillerymen, 3 priests, 3 surgeons, 12 carpenters, 6 brick masons, 4 blacksmiths, and smith’s aids for a total of 357 people (Dunn 1917:179). Andrés de Arriola, a naval officer, was appointed the first governor of the new presidio, partly because he had visited the area in 1695. Francisco Martínez was made the sergeant major, or second in command. Also joining the journey was military engineer Jayme Francke to supervise the construction of the fortifications (Dunn 1917).

The remaining positions at the presidio proved more difficult to fill. A proclamation was issued mandating that all men who had served in the Windward Fleet were to enlist or else be punished as deserters (Dunn 1917:180). Beggars and convicts were also conscripted to serve at the new post. Once all of the preparations had been made, the vessels set sail from Veracruz on
15 October 1698. On 15 November of the same year, they arrived at Pensacola and met Captain Juan Jordán; Jordán had left Havana on 6 November and arrived at Pensacola on the 17th. Jordán was traveling with Martín de Aranguren Zaval, the commander in chief of a fleet of 2 vessels and 100 men, whose mission was to protect and ensure the safe arrival of galleons from Spain to South America. They were also responsible for bringing much of the needed treasure to finance the new presidio. After seeing to the safe arrival of the galleons, the fleet was to aid Arriola’s settlement (Dunn 1917).

Once at Pensacola Bay, Arriola and Jayme Francke began construction of the presidio. They selected the Barranca de Santo Tomé bluffs overlooking the entrance to the bay for the location of the fort. The fort was christened Fort San Carlos de Austria. Francke at once began construction of the fort, and within six days a battery consisting of 16 guns was erected. Pine was the primary building material because there was no local stone source. Francke constructed a four-sided fort with a bastion on each corner. Along the southern stockade was the battery, facing the bay to protect the area from foreign incursions. The main entrance was on the western stockade (Clune 2003). The church, governor’s house, soldier’s barracks, hospital, and warehouse were located within the fort. Outside of the fort, a village was constructed (Clune et al. 2003).

Social areas within this fort were concentric and segregated. The public domains were located in the center of the fort, and the center was kept free of obstructions. Public buildings surrounded the central plaza on three sides. These buildings were the hospital, the cistern, the church, a guardhouse, a government building, and the governor’s house. Some of the residential structures were on and near the curtain walls while others were located in the bastions. The high-status individuals had an unobstructed view of the plaza, and the lowest-status residences were between the public buildings and the curtain wall. Within the fort, the lower-class soldiers lived along the northern curtain, while higher-status officers and individuals lived along the southern curtain (Bense 2003:341). Both Arriola and Francke were very unhappy with the natural and living conditions of Pensacola, and this dissatisfaction with the natural environment and supply
shortages was constantly present throughout the entirety of Presidio Santa María de Galve’s occupation. The environment was much less hospitable than previous reports indicated. The wood of the fort constantly rotted, and the preferred foods of the Spanish were not available. To make matters worse, almost no local Native Americans were available to help support the troops (Dunn 1917; Clune 2003). Adding to the misery of the inhabitants, frequent fires consumed the wooden buildings and routinely depleted food stores. Moreover, epidemics and illnesses plagued the inhabitants, and medicine was in short supply (Coker 1999). Compounding all of these problems was the fact that interest in the new colony waned after the rushed settlement because of its location far from the silver mines in Central and South America and growing foreign incursions into the Caribbean (Clune 2003). The poor environment quickly caused the presidio to become an expensive endeavor that the crown could not afford to supply regularly. This situation gave Pensacola a notorious reputation of being the worst place in New Spain to be stationed or imprisoned (Clune 2003).

Political and Economical Context

During the entire 17th century, the Spanish empire was in a period of decline. Many researchers have explained the decline of the Spanish empire as the result of European politics (Lynch 1969). The failing economy also played an important role in the decline, and a major reason was hyperinflation caused by the influx of silver bullion from the New World (Fehrenbach 1995:247). The Spanish monarchs’ mismanagement of foreign policy combined with a failing economy led to an excessive reliance on the colonies to support the empire financially. Corruption in government, increased independence of the colonies, and excessive taxes placed on the colonies led to increased tax evasion and fraud, further contributing to the decline of the empire.

Three kings ruled Spain during the 17th century: Phillip III (1598-1621), Phillip IV (1621-1665), and Charles II (1665-1700) (Gómez-Tabenera 1966; Deagan 2002:30). Phillip III was a weak-willed king who was disinterested in government affairs. Consequently, the more ambitious Duke de Lema was put in charge of military affairs. Under de Lema’s control,
corruption proliferated, and large amounts of money were consumed for court entertainment. Spain was also involved in expensive wars during the 17th century, increasing the national debt, inflation, and taxation. The first war of the 17th century was the Thirty Years’ War, from 1618 to 1648.

Phillip IV’s reign (1621-1665) signaled the steady decline of the Hapsburg monarchy (Gómez-Tabenera 1966; Storrs 2006:1). Phillip IV was regarded as highly intelligent and a patron of the arts, but at his coronation he was only 16 years old. During the first part of his reign, his chief counsel, the Count-Duke Olivares, conducted most of duties of the King. Olivares tried to end corruption in the government, but his primary focus on imperialism led him to wage wars that Spain could not afford. For example, the wars of Dutch resistance, beginning in 1621, could have been avoided if Olivares had renewed the Twelve Years’ Peace Act. When the Archduke Albre died, the Netherlands returned to Spanish control, and the Dutch resisted. Instead of renewing the peace act, Olivares unsuccessfully tried to put down the resistance, and the war ended in 1630. This war bled much needed resources from Spain’s treasuries.

All war efforts were funded by increasing taxes on the peasants, inciting much displeasure, and in 1640 Catalonia revolted (Storrs 2006:1). Consequently, Olivares fell out of favor with the king in 1643, ending his political influence in Spain. The rebellion in Catalonia continued until 1659 despite the removal of Olivares when the Peace of the Pyrenees was signed, reducing the taxes in Catalonia. Seeing the weakness of Spain from the Thirty Years’ War and the revolt of Catalonia, in 1640 the Portuguese also revolted over heavy taxes imposed by Olivares. Finally, in 1648, the Thirty Years’ War ended with the Peace of Westphalia and Spain was forced to give up the Netherlands. In 1665 Spain also lost Portugal, which was supported financially by England, France, and Holland (Gómez-Tabenera 1966). It was this skirmish that led to the Windward Fleet being delayed in its departure to the colonies, leaving the Caribbean unprotected. All of the costly battles during Phillip IV’s reign contributed the repeated decommissioning of the Windward Fleet through declining economics and diversion of ships and resources.
Charles II (1665-1700) had many congenital birth defects and his court considered him inept; and despite efforts for peace, wars continued throughout his reign (Gómez-Tabenara 1966; Storrs 2006:1). By this time the treasury of Spain was in increasingly bad condition, and riots and strikes began to occur throughout Spain. In 1683, France attacked Spanish territory, and Spain was obligated to declare war against France. Unfortunately, Spain was unable to defend her territory, and with the treaty of Ratisbon in 1684, Spain lost control of Strasburg.

In 1700, Charles II died heirless, leading to the ascendancy of Prince Philip, of the French Bourbon dynasty, to the Spanish throne (Deagan 2002:30). This affair and others led to the War of the Spanish Succession, in which France and Spain were pitted against England. Presidio Santa María de Galve was greatly impacted when the asiento was awarded to the French Guinea trading company in 1702 because the Spanish and French were now allies in the war. This situation made it legal for the presidio to trade with French Mobile, even though the colonies traded regardless of the illegality. The war eventually ended in 1714 with a Spanish defeat, and the asiento was given to an English company, but privateers and English and French companies continued to trade illegally in the Spanish colonies (Gómez-Tabenera 1966).

The mismanagement of foreign affairs by the kings gave people who should not have been allowed to govern foreign policy, like Olivares and de Lema, the ability to engage in wars Spain could not afford. These wars had very negative effects on Spain economically and politically. Spain relied on taxes to fund the wars, but increased taxation led to more revolts and rebellions. However, the more revolts and rebellions that occurred, the more territory was lost. Taxes had to be increased, leading to additional dissatisfaction.

The mismanagement of foreign policy had dramatic impacts on life in the colonies because taxes and shipments from the colonies supported the entire Spanish empire. Spain relied on taxes from landless peasants, colonists, and merchants in Spanish and colonial ports (Chapman 1965). Spanish peasants had to pay rents to use land. Additionally, they were forced to pay millones, a tax on meat, wine, oil, vinegar, powder, lead, sulfur, red ochre, vermilion, sealing wax, and playing cards. There was also a state monopoly on goods such as salt, gold,
silver, and tobacco. Stamp taxes were also in place on all documents. Colonists paid many of these taxes.

The colonists also faced their own imperial taxes, such as taxes on the mercury that was needed to process silver. In 1627, Olivares called for more money from all provinces of Spain and determined that New Spain should provide 250,000 ducats a year for 15 years. Enacted under his Union of Arms, this tax was initially supposed to aid the trans-Atlantic trade, but after the 15 years ended, the tax was continued with no specified purpose. In 1620, Phillip III took one eighth of all registered treasure, and from 1629 to 1649 Phillip IV took just over 1 million ducats of registered treasure. These taxes and acts all increased the amount of fraud present in the colonies because merchants had to find a way to stay in business and compete with foreign merchants. This competition made it very difficult for Spanish and colonial merchants because foreign interlopers were exempt from harsh Spanish taxes and were illegally distributing their goods to Spanish settlements (Lynch 1969).

Another tax was the *almojarifazgo*, a customs duty charged at Spanish-American and Spanish ports on the merchandise of the fleets (Lynch 1969). Total customs on outbound traffic averaged about 15% of the cargo, and on eastbound fleets about 17.5% of the cargo. Some goods such as cochineal, a red dye created by crushing the bodies of cochineal insects, had additional taxes placed on them. In 1616, a new law was created that taxed cochineal at 50 ducats an *arroba*, leading merchants to turn their goods into contraband. The registration imports of cochineal represent the increased rates of contraband because registered imports fell from 7,673 arrobas in 1607 to only 837 arrobas in 1615 (Lynch 1969). This tax further contributed to the illegal trading in the colonies, and the more goods that were traded illegally, the less money Spain was able to extract from the colonies (Lynch 1969; Burkholder and Johnson 2000:130).

In order to get the goods from the American colonies, ships were sent in convoys (Burkholder and Johnson 2000:131). Because convoys were a costly enterprise, taxes were imposed on all of the goods sent to and from the colonies. The *averia*, a duty charged through the ship register, was used to pay the expenses needed to protect the fleets while in transit. This tax
was determined by calculating the value of the cargo and evaluating the costs defending cargo. The increased need for protecting Spanish goods is evident by observing the increases in the gross tonnage of warships used to protect the fleets. In the early 1600s, the tonnage of the fleet was increased from 20,128 tons to 30,362 (Lynch 1969). The increased size of the ships indicates that more guns were needed to protect the vessels and their cargo. From 1620 to 1630, tonnage of armed ships comprised 36% of the total tonnage of the entire fleet. Because of the excessive need for protection, the averia soon became overwhelming, and merchants soon turned to tax evasion and fraud in order to remain profitable (Lynch 1969).

Social Context

Late-17th-century Spanish and colonial Spanish society was strictly hierarchical in all aspects of life, from the government to quotidian life. Even in colonies in Florida, where there was not as much capital as in other more established settlements, differentiating status was very important (Bushnell 1991:375). Even mundane aspects of life, including family ties, were hierarchical. For instance, gentlemen, or hidalgos, were surrounded by more dependents who were subservient, including other male relatives such as nephews, cousins, and sons and female relatives who attended his wife (Bushnell 1991:376). Socially, he had to establish himself in a system of compadrazgo, a social network. Often there were stratified elements to this social network, and at the very bottom were free blacks and mulattos; these groups were supposed to associate themselves with a hidalgo and had to answer to him for any malign actions they committed; Native Americans, too, were supposed to associate with a hidalgo and make him godfather to their children. According to the system of compadrazgo, among social equals, hidalgos were expected to form close friendships and business partnerships (Bushnell 1991:375-377).

Race was another important aspect of colonial life (Katzew 2005). People born in Europe were considered the superior class, followed by individuals born to Europeans or criollos. After criollos were numerous castas, or castes of people of mixed ancestry often containing any mixture of European, Native American, and African descent. The more someone was
perceived to have European blood, the higher their social status. Native Americans were socially stigmatized, but they were still believed to be “new Christians,” and as such they received some protection under the government (Katzew 2005:39). Africans, however, were brought to the Spanish colonies as slaves and were considered to occupy the lowest position in the social and racial hierarchy. However, some degree of social mobility was offered to some individuals. For example, some enslaved black individuals were able to attain their freedom, and some even became overseers of Native American labor.

Despite racial mixing, prejudice still pervaded colonial life, and the colonial governments were very concerned with maintaining both social and racial control (Katzew 2005:40). For example, people of mixed descent were unable to hold government positions (Bushnell 1991; Katzew 2005). Residential areas were also segregated in the general population, the exception being slaves living in their owner’s house, but even then the living spaces were strictly segregated. In 1680, because of the increasing population of mixed-race individuals, many laws were passed to try to further restrict the rights of mixed-ancestry people (Katzew 2005:41). These laws encompassed all aspects of life from dress codes to friendships to marriage choices. Although the government’s efforts to completely regulate social life failed, they were certainly influential.

Native Spaniards and Creole people feared that people of mixed Native American and African ancestry might usurp the established power relations. Even Native Americans that completely adopted European lifeways were regarded with mistrust. This mistrust was not completely unfounded because revolts resulting from extreme discrimination occurred during the 17th century (Katzew 2005:41).

Access to occupations was often also dictated by social class. Creoles and mestizos were not allowed to improve their social standings by transitioning to the higher ranks in colonial government. All of the captain generals, viceroys, judges, high ecclesiastics, and most priests were sent from Spain. Gentlemen often disdained any type of mechanical work and lived lives of leisure because only two types of work were considered honorable (Bennassar 1975:120-
Ideally honor in work was gained by cultivating agriculture or by conquest. Spaniards generally considered manual labor a burden, and status was gained by not having to engage in lesser occupations. However, for the rest of the population, work was a necessity to survive, and jobs were generally inherited from parents. Inheritance was distributed equally among recognized children (Nader 2000:9). In large families, the tradition often created some problems about splitting wealth and there not being enough inheritance to provide for the different families started by siblings. To remedy this problem, some merchant families gave a son an advance of his inheritance of greater value than he deserved if he took a job in the military or other occupation so that the estate remained intact at the time of the parent’s death. Alternatively, some wills contained stipulations that the estate not be divided for a certain amount of time. Women could inherit property, but they also received their dowry as a liquid asset and form of inheritance. Unfortunately, some families did not equally distribute dowry among daughters to ensure marriage into a good family, and some women did not marry (Casey 1999:189-190). If an unequal dowry distribution occurred, or if women did not marry for some other reason, their options were to join a convent or to occupy themselves in a small range of jobs such as prostitute, servant, or seamstress. Sons could also join the Church, marry into an occupation, or join the military, and maybe through that route attain a government position to improve their status if their inheritance did not leave them socially situated (Bushnell 1991).

Life at Sea

There were many reasons that a man might become a career mariner in the 17th and 18th centuries. Some men went to sea because they were born to poor parents who could not afford to take care of them. Such a youth apprenticed to a seaman as a cabin boy and eventually gained the strength and skills to become a sailor. Some men could find no other employment on land. Some men saw going to sea as an opportunity to improve their fortune if they were not to inherit any property. Others just enjoyed the adventure, while yet others had been essentially purchased as orphans. In contrast, some men who were born to a higher status went to sea as part
of the military and worked toward promoting themselves to yet higher positions (Pérez-Mallainá 1998:23-29).

Social life at sea and in the Armada de Barlovento was also strictly hierarchical. Rank and discipline were critical in such dangerous endeavors as sea life. Men were forced to change their work hours, waking hours, and types of cooperative relationships with coworkers (Rediker 1987:206). Additionally, the mariner profession was one of the first forms of wage labor which created different types of relationships between workers and their superiors. Because of these new relationships, sea captains often adopted forms of paternalism in dealing with their sailors. The title “master” reflects the paternalistic relationships aboard sea vessels; documents reveal this relationship when ship captains refer to their crew as children (Rediker 1987:208). However, men in government-operated vessels were also beginning to be seen as wage laborers instead of investors in the voyage, and their worth was measurable in the quality of work they could do on the vessel (Rediker 1987; Pérez-Mallainá 1998: 191). This situation is very different from the 16th century, when common sailors had a vested monetary interest in the success of the voyage. This changing relationship colored the interactions and attitudes of captains and their crews.

The hierarchy of the ship was divided by rank and labor. The captain general was unquestionably the highest ranking, in that he controlled the actions of all the squadron (Rediker 1987:208; Pérez-Mallainá 1998:96). The captain general and captain’s leadership style could make living conditions more or less tolerable based on the personality of the captain and the crew (Rediker 1987:208). Some were mean and ruthless, while some were kind and generous; command styles fell everywhere between these extremes. The prestige of the captain general was reflected in his salary. He made the most of anyone on the ship, around 3,000 pesos during most of the 17th century (Ramírez 1981:306).

The second in command was the admiral. He had less power, a fact which also correlates with his smaller salary, around 1500 pesos a year in the 17th century (Ramírez 1981:306). Next in importance were the accountants of the fleet. These were not military men; instead, they managed all of the expenses of the vessel regarding supplies, provision, wages, and repairs.
(Pérez-Mallaina 1998:95). Accountants earned around 1,200 a year. Of similar duty but of less prominence was the proveedor, or the provider, who procured the necessary goods for the function of the ship (Ramírez 1981:306). They only earned 1,050 pesos a year. The Gobernador del tercio was another military officer who helped organize the soldiers; he made around 900 pesos annually. The doctor aboard the vessel also made 900 pesos a year and did not have power over the actions of other men but was a critical member of the crew (Ramírez 1981:306). Doctors during the 17th century were much different from doctors today. As in modern medicine, physicians of the day all held university degrees and were well educated in the contemporary sciences (Harkness 2007:60). Their main goal was to achieve overall health in patients by the use of ingested medicines; however, health during the 18th century was considered having “balanced humors” and did not rely on modern pathology.

The pagador, or paymaster, was another non-military man of importance on the vessel because he aided the accountant by administering the wages. His reduced importance is visible in his salary of 600 pesos a year as compared to the accountant’s 1,200 annual salary (Ramírez 1981:306). The captain of war and sea made 600 pesos annually and executed the orders of his superiors to his soldiers. Next was the sergeant major, who operated much like a field officer for soldiers (Elder 1998). He made approximately 525 pesos a year (Ramírez 1981:306). The pilot major made 420 pesos a year and was in charge of the common pilots in the fleet. The chaplain major, who looked after the common chaplains, received only 375 pesos a year. The artillery captain made the same amount and commanded the artillerymen aboard the vessels. The diver major made 300 pesos annually. The surgeon major was the barber-surgeon aboard the vessel. Different from physicians, barber-surgeons performed minor surgeries, administered external remedies such as ointments, set bones, and performed other such procedures (Harkness 2007:60). Some overlap occurred between the functions of physician and barber-surgeon. Barber-surgeons did not require formal education. Instead, they learned through apprenticeships, causing their field to be considered a much less prestigious position, as evident in their pay of only 300 pesos a year (Ramírez 1981:360; Harkness 2007:60).
The pilot, a pivotal person aboard any vessel, also made 300 pesos a year. This very experienced sailor was expected to remember the geography of bays and to possess thorough knowledge of the navigational devices and charts of the period (Ramírez 1981:84). The sergeant was in charge of the artillery and earned 225 pesos annually (Pérez-Mallaína 1998:79). An interesting note about this position is that it was often held by Germans, Flemings, and Italians in addition to Spaniards. The carpenter major made around 180 pesos a year. It was his duty to repair and construct all the wooden parts of the ship that might break or need replacement, and he often worked with the caulkers and the diver to keep the ship in operation (Ramírez 1981:360; Pérez-Mallaína 1998:79-80). The artillerymen made approximately 180 pesos annually, as this position required specialized training. In order to qualify for the position, men had to pay out of pocket for special course work and have proficiency both in uses of the guns and as a mariner (Pérez-Mallaína 1998:79-80).

The diver, who had to make repairs to the ship’s hull while at sea, made 150 pesos a year (Ramírez 1981:360; Pérez-Mallaína 1998:79-80). The scribe documented all the necessary records for 120 pesos a year. Often a sheriff was employed by the armada for 90 pesos annually in order to help maintain order. The steward was in charge of guarding the keys to the food storage area and consequently had power to punish any who tried to steal food; he made the same amount as the sheriff and drummer. The chaplains also made 90 pesos a year and were in charge of all of the religious duties aboard the ship, including supervising the daily prayers, confessions, and rites for the sick or dying. Common sailors only made 66 pesos a year and were exempt from any fighting. Fighting was the exclusive work of the soldiers, who made 45 pesos a year; when not engaged in skirmishes, they still had to help the sailors in the daily routine of sailing. Pages made a mere 33 pesos a year and were usually children between 8 and 10 years of age. They had to help any who asked and recited the daily prayers supervised by the chaplains. The lowest paid person on the ship was the cabin boy, who earned 16 pesos a year. It was his job to maintain the cabins of the officers (Ramírez 1981:360; Pérez-Mallaína 1998:79-80).
Living space at sea was cramped. A ship with a tonnage of approximately 550 tons was typically the capitana (flagship) or the almiranta, which the Rosario was at the end of her career. This designation meant that she had to carry not only the general staff but also one or two companies of soldiers, a situation which could add up to 150 men aboard. Since the ships often carried passengers, there was even less space per person (Pérez-Mallaina 1998:135). On average among the trans-Atlantic fleets, people had about 1.5 square meters of personal space (Pérez-Mallaina 1998:130).

In this limited space, the use of chairs was allowed only for crewmembers and passengers of high rank, meaning that the sea chest used for containing possessions was also used as a chair, table, and, if big enough, a bed (Pérez-Mallaina 1998:135). Almost every member of the crew had a sea chest, and it became an item around which most leisurely social interactions centered. Men sat on their own sea chests around a central chest acting as a table to play dice or card games. The chests also served as the seats for people to converse with others, as well as to eat their meals (Pérez-Mallaina 1998:135). Chests were stowed on the main deck, in a fashion to keep them out of the way of the operations needed to sail the ship.

Space aboard a vessel was even more limited at night when people wanted to lie down to sleep. During early Spanish exploration, sailors all slept on the top deck in order to avoid the pestilence and stench below deck, created by stagnant bilge water that was further fouled by the unsanitary habits of the sailors (Simmons 1997). However, after traveling extensively to the tropics of the New World, Europeans encountered hammocks and soon realized the utility of hammocks for both saving space on a ship and improving hygiene. Hammocks replaced vermin-infested bedding material, kept sailors cooler in the tropic heat, and also provided some relief from the constant pitching motion of the vessel, as the swaying of the hammock gave the sailor a stationary feeling during slumber (Simmons 1980).

Even with the incorporation of space-saving hammocks, bunk space on a vessel was hierarchically structured. On the upper deck, a superstructure was created in the stern, which made the main cabin. This cabin housed the captain of the vessel. However, he had to share the
cabin equally with any infantry captains if they were present. This area was their personal space where they slept and stowed all their personal belongings. However, if a superior ranking officer was aboard, then the captains were relegated to the quarterdeck, and the superior officer took the main cabin. The master of a warship like the Rosario would have slept near the entrance to the hold, on the first deck. The pilot would have slept in the camarote, the area above the main cabin, and he had to share the space if he had an assistant (Phillips 1986:152). The minor officers bunked with the rest of the mariners. The master gunner and the gunners slept in the Rancho de Santa Barbara, or the gunroom of the vessel (Pineda 1740:4; Phillips 1986:153). This room was located between the poop and the mizzenmast on the lower deck. This part of the lower deck was walled off, and the master gunner alone could allow men entrance to sleep. The chaplain of the vessel was allowed to bunk there if he desired, or he could also sleep in the quarterdeck between the main cabin and mainmast, which was generally covered. The surgeon of the vessel lodged near the opening of the lower deck hatch, near his supplies (Phillips 1986:153).

Sailors bunked in the foremost quarterdeck if one was present, or on the lower deck from the mainmast to the poop in whatever free space they could find. Apprentices slept with the sailors between the prow and the castle. Pages were often forced to sleep on the lower deck. Tradition was the most regulating factor to avoid disputes over bunk space. Most captains ordered the men not on watch to their bunks at night and enforced this rule with brute force if necessary (Phillips 1986:153).

Sleeping areas were not the only aspects of ship life that were highly regulated and rhythmic. The day was primarily divided by changes in watch and in religious chants. A dearth of literature prevents researchers from knowing exactly how many watches existed, but most scholars believe there were three. Each watch was monitored by a high-ranking officer. The captain’s watch was from four to midnight. The pilot’s watch was from midnight to eight in the morning, and the mast’s watch from eight to four in the afternoon. The sailors aboard worked two-four hour watches every day and rotated through the different watches (Phillips 1986:159).
Religion was omnipresent on sea craft, whether or not the sailors themselves were devout. An important duty of the pages was to turn the hourglass, and with each turn they recited a different religious chant throughout the day and night. The end of the eighth hourglass turn since the last watch marked the change of that watch. Diet was also regulated by the religious calendar, which determined on what days mariners were allowed a meat ration. In addition, holy days of the calendar required specific religious ceremonies (Phillips 1986).

Mariners Aboard the *Rosario*

Because no ship manifest has been located for the *Rosario*, it is impossible to know for certain all the names of the men aboard the vessel. However, analysis of documents concerning the investigation of the sinking of the ship has revealed some information about the demographics of the men aboard the ship, including the names, ranks, age, and literacy of the known men of the *Rosario* (Table 1; de Horrue 1705). The literacy of the individual was determined by their ability to sign their name to the document. The functional literacy of the individual may have been highly variable.

**TABLE 1**

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Age</th>
<th>Literate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sebastián Hernández</td>
<td>Boatswain</td>
<td>45</td>
<td>Y</td>
</tr>
<tr>
<td>Juan Rodríguez Cazcais</td>
<td>Apprentice Pilot</td>
<td>33</td>
<td>Y</td>
</tr>
<tr>
<td>Agustín Antonio</td>
<td>Master Carpenter</td>
<td>53</td>
<td>N</td>
</tr>
<tr>
<td>Ygnacio de Jauregui</td>
<td>Artilleryman</td>
<td>41</td>
<td>Y</td>
</tr>
<tr>
<td>Don Joseph de Viguesal</td>
<td>Chief of midshipmen</td>
<td>22</td>
<td>Y</td>
</tr>
<tr>
<td>Joseph Rodríguez</td>
<td>Soldier</td>
<td>45</td>
<td>N</td>
</tr>
<tr>
<td>Sebastián Moscoso</td>
<td>Sergeant Major</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Francisco López</td>
<td>Soldier</td>
<td>33</td>
<td>N</td>
</tr>
<tr>
<td>Bernavé Maquda</td>
<td>Artilleryman</td>
<td>33</td>
<td>N</td>
</tr>
<tr>
<td>Pedro Llanes Caveza</td>
<td>Artilleryman</td>
<td>29</td>
<td>N</td>
</tr>
<tr>
<td>Francisco Xaramillo</td>
<td>Steward</td>
<td>33</td>
<td>Y</td>
</tr>
<tr>
<td>Joseph de Sagastiberi</td>
<td>Artilleryman</td>
<td>42</td>
<td>Y</td>
</tr>
<tr>
<td>Sebastián de Campos</td>
<td>Artilleryman</td>
<td>31</td>
<td>Y</td>
</tr>
</tbody>
</table>

(Table 1 continues)
The high literacy rate of the *Rosario* was surprising. However, during the late 17th century, many children learned to read the Bible in grammar schools taught by friars (Bushnell 1991:374). Rarely, people learned to read from literate family members as well (Nalle 1989:74). According to this sample, it can be tentatively assumed that 68% of the crew was literate. Historians have analyzed Inquisition records and tax records and found that literacy was rising in the male population during the 17th century. In four Andalusian towns from 1595-1632, 70% of men from rural and urban areas were literate. In the Diocese of Cuenca from 1601-1666, 52% of the individuals from urban areas were literate, and 66% of the men from rural areas were literate. During 1635, in the city of Santiago, 52% of men from urban and rural areas were literate. In Madrid in 1650, 69% of men from rural and urban populations were literate. In Lorca in 1705, only 29% of men from urban and rural areas were literate (Nalle 1989:68). By comparing the *Rosario* sample to the vast majority of the areas and times, the literacy rate of the men of the *Rosario* is within a reasonable range. Moreover, studies of literacy in English vessels in the merchant shipping industry from 1700-1750 show that approximately 75% of mariners of various ranks were literate (Rediker 1987:307). The variation in literacy rates is likely because of regional differences, especially in the English examples because enlightenment ideals had more impact in England and its colonies than in Spain and its colonies. Additionally, because the

### Table 1 (continued)

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Age</th>
<th>Literate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alejandro de Belarde</td>
<td>Artilleryman</td>
<td>31</td>
<td>Y</td>
</tr>
<tr>
<td>Don Julián de Cendoya</td>
<td>Soldier</td>
<td>35</td>
<td>Y</td>
</tr>
<tr>
<td>Sebastián González</td>
<td>Soldier</td>
<td>23</td>
<td>Y</td>
</tr>
<tr>
<td>Joseph Vorges</td>
<td>Soldier</td>
<td>29</td>
<td>Y</td>
</tr>
<tr>
<td>Julián García</td>
<td>Soldier</td>
<td>17</td>
<td>Y</td>
</tr>
<tr>
<td>Joseph Nicolás Ximona</td>
<td>Soldier</td>
<td>26</td>
<td>Y</td>
</tr>
<tr>
<td>Francisco de los Reyes</td>
<td>Cabin Boy</td>
<td>28</td>
<td>N</td>
</tr>
<tr>
<td>Antonio de Landeche</td>
<td>Admiral</td>
<td>?</td>
<td>Y</td>
</tr>
<tr>
<td>Gerónimo Payares</td>
<td>Soldier?</td>
<td>24</td>
<td>Y</td>
</tr>
</tbody>
</table>
sample is so numerically small \((n = 22)\), the data may be skewed and may not represent the true literacy rate of the ship.

Since the 16th century, reading had been a popular pastime aboard sea craft. The crewmembers who were illiterate were still able to enjoy popular books because literate crew members would commonly read aloud (Guevara 1539; Pérez-Mallaina 1998:153). Many types of literary genres were popular with the men of the ships, particularly books with religious content such as histories of saints and popes, accounts of miracles, and various devotionals. Romance was a popular genre, especially epic tales of battles and heroism and picaros. Books of exotic travels and new lands were also very popular (Castillo 1982:351-511; Pérez-Mallaina 1998:153). Books were still possessed by men well into the 18th century, as evidenced by the inventory of artilleryman Miguel de San Román, who died at sea in 1745 and had a book worth 6 pesos listed among his final possessions (de Muñain 1745).

The mean age of the mariners aboard the Rosario was 29 years old. The age range was from 53 to 17 years old. The mode of the age of the seamen was 33 years old. For experienced sailors this age distribution is normal. The oldest from the sample was the carpenter, Agustín Antonio, who possibly possessed an advanced age on a ship because he was a master carpenter who did not engage in activities as dangerous as those of the sailors and soldiers. The youngest was soldier Julián García at only 17. An interesting deviation from the norm was Francisco de los Reyes, the cabin boy, who was 28 years old. This position was traditionally held by a young boy. Perhaps de los Reyes was new to sea life, or he may have suffered from some sort of mental disability that prevented him from ever being promoted from cabin boy. Without documentation, we are unable to know why the Rosario had such an old cabin boy.

Another interesting feature of this makeshift crew list is Don Joseph de Viguesal and Don Julián de Cendoya, aged 22 and 35 respectively. The title Don is given to the lowest rung of nobility in the Spanish empire. As previously mentioned, hidalgos were important men in colonial social life. However, not all hidalgos possessed great wealth or affluence because the title was generously given during the Crusades and the expulsion of the Moors.
After the Reconquista, the empire began to decline, and many *hidalgo* families became greatly impoverished, though they were still exempt from taxation. Most *hidalgos* remained in Spain, although some traveled to the New World and amassed some wealth. Others belonged to the impoverished class of *hidalgos*, as is likely the case with Cendoya and Viguesal because of their age and occupation. Even though the wealth was gone, many *hidalgos* who held the title still held themselves in higher esteem than their financial equals. This hypocrisy was often mocked by contemporaries such as Saavedra Fajardo, who wrote the following in 1640:

> The spirit of the nation is so haughty and vainglorious that even the common folk are not satisfied with their natural state. They long for ennoblement and scorn every occupation which seems to be contrary to their aspiration. (Defourneaux 1966:44)

This quote displays the scorn of the writer for people thinking that their title was more important than their economic situation in life. It is also a good example of how a performed identity may not be accepted by the public audience.

**Discussion**

Life in the Spanish colonies was hierarchically structured and tied to the social movements and political actions of Spain. In addition to this implanted social system, the social hierarchies that formed in the colonies further complicated life. Particularly, racial hierarchies formed in response to the racial admixture of the colonies. Spanish officials worked to continue their domination of the more numerous minorities, particularly Native Americans and Africans in the colonies. The officials did so by enacting racist policies that excluded people of mixed ancestry, criollos, Africans, and Native Americans from holding the most prestigious jobs in the colonies, the government positions. Consequentially, denying these people access to government roles prevented them from ever achieving the coveted position of nobility. It was in this climate that the *Rosario* and Presidio Santa María de Galve were created and the inhabitants of both operated.
These hierarchies were certainly present on the Rosario. By analyzing the salaries of the different ranking men aboard the ship, we can see part of the prestige and social structure of the ship first-hand. Moreover, by analyzing the names of the men aboard the crew, we can tell more information about the education and social status of the men in the crew.

The colonies in the New World were dependent on each other for support and survival, and the links to these colonies were the shipping lanes policed much of the time by the Windward Fleet. The presidio would not have been founded in its location if it had not been for information collected by the people employed in the Windward Fleet, and the presidio was also manned by former members of the Fleet. Moreover, the Rosario played an instrumental role in bringing much needed supplies to the presidio.

Consequently, comparing the Rosario and the presidio will provide interesting insight into how the crew manipulated their material culture to perform their identities despite the inherent difference in terrestrial and underwater site assemblages. Preservation of artifacts on terrestrial sites is very different from preservation on underwater shipwreck sites. One reason is the depositional practices of the inhabitants. The people living in the presidio buried or burned their garbage, leaving much more for archaeologists to recover, while sailors commonly threw their rubbish overboard. Such is certainly the case with the Rosario and Presidio Santa María de Galve. The collection from the presidio is much larger, as will be discussed in more detail later. Consequently, we can compare the remains from the ship and see if the materials are comparable to certain social areas of the presidio in order to ascertain if the residents would have used material culture in similar ways to perform their identities according to social identity theory.
CHAPTER III
THEORY AND METHODOLOGY

Theoretical Framework

Identity is a complicated concept (White 2005:2). It depends on cultural context, particularly its situation in time, society, and place. Moreover, the identity of a person may be paradoxical and/or multifaceted, a fact which only adds to its complexity (White 2005:2).

Identity allows people to understand how they fit into their social world, defines a person as an individual, associates a person with a faction (or not), and may differentiate larger groups (Jenkins 2008). Thus, identity works to establish the signification of similarities and differences between individuals and groups. Different qualities that a person possesses, such as skin color or gender, affect the way his identity is interpreted by others. Culture determines the significance of these different qualities, but individuals also may change and manipulate the meaning of the qualities or objects.

Different types of identity exist, and not all exert similar amounts of influence in the life of the individual. One type of identity that is formed early in life and may exert more influence than others during the course of an individual’s life is called primary identity (Jenkins 2008:41). Primary identities often include categories such as race, gender, and ethnicity (Jenkins 1996:65) and are less malleable and more enduring than other identities. However, because of life’s uncertainties and because the dialectic processes of identification are never closed, change is still possible (Jenkins 2008:41). Local history and circumstance of a society determine what categories of identity are primary. Some primary identities are performed regularly and leave material correlates that are available for study when the objects become deposited in the archaeological record. Conversely, secondary identities or those which are more malleable may be performed or reinforced often and leave material correlates in the archaeological record as well. Therefore, understanding the context in which an individual lived is essential.
Social identity, the focus of this research, should not be conflated with individual identity (Jenkins 1996). Individual identity is all of the associations an individual makes at one point in time. It is contingent on time because various factors influence people differentially throughout their lives, and no two individual identities are alike. However, individual identity is closely associated with social identity.

Jenkins (1996:5) asserts, “Social identity is our understanding of who we are and who other people are, and reciprocally, other people’s understanding of themselves and others (which includes us).” Social identity is negotiable and is the product of agreement and disagreement within individuals and with others; it is expressed by an individual and simultaneously imposed on that person by others (Jenkins 1996; White 2005:2; Jenkins 2008). Because of this dialectic, identity is not in a static state; rather, it is in a constant state of negotiation because internal and external forces constantly act upon it. Internal forces of identification are present when people have acts, gestures, material culture, and/or desires that they use to associate themselves with a particular group (White 2005:2). External forces such as family members, peer groups, and/or colleagues then must interpret these associations and act accordingly depending on whether they accept the performance or not.

Social (or collective) identity is a category that consists of content and contestation (Abdelal et al. 2009:18). Content is the significance of the social identity and may comprise any or all of four different types: constitutive norms, social purposes, relational comparisons, and cognitive models. Constitutive norms are the rules that dictate membership entrance and may be formal or informal. Social purposes are the shared goals of the group. Relational comparisons are how the group is similar to or different from other groups and how external collectives view the group. Finally, cognitive models are the worldviews, attitudes, and/or values that are held by the group and how they interpret their material conditions.

Contestation refers to the amount of consensus within a group (Abdelal et al. 2009:19). Levels of agreement in collective identities are not fixed and vary highly both within groups and between individuals. When contestation is present in an individual’s identity, it means that person
may possess identity categories that are contradictory or seemingly paradoxical or that are in tension.

Performance plays an important role in the identification and identity of an individual (Goffman 1956; Butler 1990). According to Judith Butler (1990), identity is not a person’s inborn trait that is awaiting discovery; instead, it is performed and produced by actions that represent the association with which the individual wants to be correlated. Identity must not be reified because it is a process that is constantly being performed and negotiated (Goffman 1956; Jenkins 2008). This continuing process occurs because a necessary dialectic exists between internal identification and external identification (Jenkins 2008:201).

According to Goffman (1956), a person performs his identity in a manner similar to the way an actor performs a role. In his analogy, Goffman states that the actor’s audience is important because the actor must convince them that he truly has the qualities of the role he wishes to portray. In other words, he must convincingly associate himself with traits associated with the role. If the actor does not adequately persuade the audience, they will not acknowledge him as having those qualities. The consequence of this poor performance is that the actor will have difficulty internalizing that identity because people (the audience) will not recognize the actor as portraying the role and will reject the role of the actor. The audience is a critical aspect because they can either reinforce or reject the performance, affecting the individual’s identification processes (White 2005:3). The audience can legitimize or reject the performance, with real consequences for the performer and his identity construction.

Society plays an important role as an audience in this process because others must interpret the performance, and these people determine what qualities are associated with specific groups. For example, society determines what qualities are associated with masculinity and femininity. Collective identities, groups of people who make a claim to some form of similarity, rely on symbolic construction concerning membership in the groups (Jenkins 2008:134). These symbols may be real or imagined, but they still have existent consequences. Thus, the community may imagine the similarities, but the consequences of people’s actions are real
because of belief in the symbols. An individual can utilize symbols to perform associations with a group; these symbols may be physically incarnated in many forms, such as fabrications made and sustained through physical appearances, personal possessions, and other discursive measures (Butler 1990). If an index like race is used, the audience may believe that a person possesses these qualities because they are inborn traits.

Observers must remember that people may or may not be aware that they are making these associations. Additionally, embodied habit or habitus plays a role in impromptu decision-making and in many performances in day-to-day life (Bourdieu 1977: 72; Jenkins 1996:70). Moreover, people may not have equal access to all goods that exist, as goods may be differentially available to certain groups based on identity categories such as age, gender, occupation, and class. Access to these goods may play an important role in performance. Habitus, when combined with unequal access to goods, potentially leaves identifiable patterns of material culture in the archaeological record. These patterns should be discernable in the material culture of both Presidio Santa María de Galve and the Rosario. Once understood, these patterns will contribute to understanding the social identity of the presidio’s residents and the ship’s crew.

Finally, boundaries are created, maintained, and crossed regularly in social interactions (Jenkins 2008:127). Identification processes are essentially boundary processes because they enforce similarities and differences. Some boundaries are embodied in humans, and these most commonly include identity categories of ethnicity, race, and gender. These boundaries are often malleable depending on cultural context, but they incorporate aspects of the body that are difficult to alter. Other boundaries are more permeable, such as social class or occupation, again depending on the historical context of the society. However, identities not embodied physically by individuals may be capable of more change.

Material Culture and Social Identity

People use different types of goods to perform different identities (Butler 1990; White 2005:5; Jenkins 2008:71). Symbols of social identity are often physical items used by individuals and can even be used to inscribe meaning on the body. Some of these various forms of material
culture are present in the archaeological record for study. The symbol forms analyzed in this study are personal possessions, ceramics, and faunal remains.

The surface of the body is the location where identification processes begin (White 2005:4). The act of bodily inscription can manifest in many forms, from tattooing to body mutilation or to the simple act of adorning the body. Conversely, the lack of inscription—plain nudity—on some occasions may be a form of identification. Inscription processes on the body are a form of internalization of an identity by incorporating external forces such as social ideals that are imposed on the body (Grosz 1995). These idealized symbols are often the constitutive norms of the content aspect of social identity.

Personal Possessions

Spanish colonies were social spheres in which bodily inscriptions and boundaries were very important (Loren 2010:8). The body was the focus of display in which sexual, racial, and cultural differences were exhibited. In this way, symbols could be displayed and interpreted concerning matters of comportment, economic and social status, and many other categories of identity and behavior.

Symbols are not only inscribed on the body; humans utilize many different types of material culture to perform their identities. One type of material culture is personal possessions, objects that people chose and used as individuals (Deagan 2002:4). This set of material culture is ideal for studying social identity because individuals personally owned most of the items which were displayed publicly or used to alter or reinforce appearances. Even if an item cannot be directly attributed to a specific individual, information can still be derived concerning consumer patterns (White 2005).

Colonial Spanish material culture, particularly personal possessions, reflects ethnicity, socioeconomic status, gender, religion, and superstitions (Deagan 2002:4). Colonists had various forms of amulets, religious items, and jewelry that reflected these categories of identity. The material culture from Spanish colonial sites in the Americas is unlike that of other European American colonies because of the long tenure of Spanish exploration and occupation from 1492
to the 1890s (Deagan 2002:5). Spanish colonial assemblages also include items manufactured all over Europe and the New World, not just in Spain. Another unusual feature is the Spanish American, Native American, and African syncretism. Castas are a prime example of how the Spanish men were more likely than their English counterparts to marry and cohabitate with native and African women (Deagan 2002:34). Despite the occurrence of intermarriage, however, racism and classism were still pertinent aspects of Spanish colonial life (Loren 2010:9).

Ceramic Assemblages

Ceramic assemblages demonstrate Spanish colonists’ syncretism in practice (Deagan 1983:234; Voss 2008:866; Van Buren 2010:157) by exhibiting high ratios of native ceramics to European ceramics. Spain, with its Moorish influences and depopulated forests, had a long history of ceramic production (Deagan 1983:233; Deagan 1987:25). Ceramic production in Spain was encouraged not only because of the cultural use of ceramics but also because of little wood available for common containers after years of deforestation. Ceramics filled the need for containers in an easy and economical fashion. When Spain initially colonized the New World, Spaniards immediately established means to control the already ceramic-producing natives through the repartimiento and encomienda systems (Deagan 1983:233). In Florida, European colonists often relied on native peoples to create ceramics; additionally, some native peoples incorporated elements of European pottery form into their own vessels (Deagan 1983:233). In Florida, even more incorporation of aboriginal forms by the Spaniards took place, partially because shipping hazards made obtaining goods from New Spain difficult and partially because the Florida colonies were isolated from the major economic centers of New Spain and the Caribbean.

Spanish colonists used varied strategies to manipulate their social identities to their advantage (Voss 2008:866). Archaeological research at Presidio Santa María de Galve and Isla Santa Rosa in Pensacola, Florida, shows an unusually high proportion of imported ceramics compared to indigenous ceramics because of the difficulty in maintaining a native population to support the Spanish settlements (Bense and Wilson 2003:348; Voss 2008:866). This strategy
is different from the one utilized by Spanish colonists in Mexico City. There, wealthy Spanish individuals are thought to have manipulated pre-existing power relationships to their advantage by displaying Aztec ceramics preferentially in some cases in order to ensure collaboration with local indigenous individuals (Rodriguez-Alegría 2005; Van Buren 2010:157). However, on a general scale, colonists who were ensured regular access to goods from Spain seemed to prefer Spanish goods (Voss 2008:866), indicating an ideal preference for Spanish goods in the colonies.

Researchers studying English colonies in North America have developed excellent methodologies for dating ceramics and for creating economic scales to derive information about the economic status of the individuals to which the ceramics belonged. One such archaeologist, George L. Miller (1991), developed the CC Index in order to ascertain economic scaling. Other Economic Means Indices that include multiple types of wealth have been developed for English colonies (Ackerman 1991). Unfortunately, for Spanish colonial sites, the economic implications of ceramic assemblages are poorly understood, and the ceramic typology that has been created is based largely on physical attributes of the pottery and not on historically documented patterns, costs, and dates of manufacture (Deagan 1987:3). However, Deagan has found that tin-glazed majolicas and porcelains are more associated with households of higher economic means (Deagan 1987).

Despite the lack of information regarding the economic status of individuals derived from ceramic assemblages, an important category of identification—ethnicity—may be derivable from ceramic analysis (Bowser 2000; Stark 2003; Halperin and Foias 2010). The willingness to absorb aspects of different cultures was not a uniquely Spanish trait; however, the degree to which the Spanish did absorb cultures was unique among New World colonial powers and differentiates Spanish from English nationality (Deagan 1983). Ceramic assemblages also demonstrate the differential access that communities had to trade goods (Deagan 1983). Moreover, the presence of very expensive ceramics like porcelain provides information concerning economic status, especially in colonial contexts where the prices of goods were artificially inflated.
Discussion of Theoretical Approach

Items of Spanish origin were not necessarily used by an ethnic Spaniard (Deagan 2002; White 2005; Loren 2010:10). Spanish colonies were multiethnic, and minority populations within these colonies would have been able to obtain some European goods and use them in different ways to perform their unique identities (Loren 2010). This fact is important to consider because documentary records also privilege certain classes (such as wealthy white males) in their representation. Spain adopted a mercantilist system, which kept the colonies dependent upon Spain for most of their manufactured goods (Lynch 1969). However, Spain was not able to meet all of the needs of its colonies, and many goods were imported from other European countries to ship through Seville to the New World (Lynch 1969). Moreover, there was frequent illegal trading and smuggling of goods in the Spanish colonies. These goods often included some personal possessions and ceramics.

A tension may exist between meanings created by the user and by the producer of an object, a relationship which often occurs because the meaning of an object for the producer is different from the meaning of the object for the user. For example, Spanish colonists often mixed different types of fashions that produced a unique identity for themselves (Loren 2010:29). Among the colonists of the Louisiana-Texas border in the 1700s, traders often mixed native and European fashions, sometimes out of necessity but also as political statements. Moreover, Spanish friars often encouraged natives to wear more European clothing in order to hide their naked bodies, which Spaniards considered unchristian and indecent. However, some Native Americans utilized European clothing in order to better facilitate their own upward social mobility. Minorities in the colonies were not mere bystanders; they, too, performed their own identities and worked to achieve desired associations by manipulating material culture (Loren 2010:30).

The performance of social identity occurs through many repetitive actions using many different substances, leaving material culture for archaeological study. This thesis uses social identity theory as a lens to interpret the personal possessions and ceramics of the Rosario. By
examining different types of assemblages from the *Rosario*, the many ways in which the crew of the *Rosario* manipulated their material culture to perform their social identities will be revealed. The audience is critical in these performances. Comparing the remains of the *Rosario* to the remains of different segments of the society at Presidio Santa María de Galve provides insight into how inhabitants of the presidio might have identified the crew of the ship.

**Methodology**

The overarching research question of this thesis is how did the crew of the *Rosario* fit into early 18th-century Spanish society? In order to answer this general question, more specific questions were asked. Particularly, what personal possessions were utilized in the performance of their social identities? What identities did these artifacts help actors portray in their social context? What information can be garnered from the ceramic types utilized by the inhabitants of all three sites? Finally, what kind of social identities may be indicated by ceramics?

In order to answer these questions, different types of analysis were utilized. The low number of personal possessions on the *Rosario* made any kind of reliable statistical analysis impossible. However, qualitative research was conducted on these items. Quantitative analysis was conducted on the ceramic assemblages of all three sites.

Quantitative analysis of the ceramics are conducted in order to compare the diversity of different ceramic types at all three sites and within the different activity areas of Presidio Santa María de Galve. All ceramics were analyzed collectively on the two shipwrecks; however, a sample of ceramics was analyzed from features in the presidio (Table 2). Refuse pit features were selected at the presidio from seven activity areas that met the statistical threshold of 25 ceramics in each (Figure 4; Table 2). Additionally, refuse features are sealed areas and are examples of area-specific activities because of the segregated nature of the presidio. The exception to this guideline is the public areas where access was permitted to all members of the community. The ability to observe the differences between public and private areas is important in this study because of the low privacy aboard seacraft of the period.
<table>
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</tr>
<tr>
<td>Officers' Barracks</td>
<td>F254</td>
</tr>
<tr>
<td>Officers' Barracks</td>
<td>F291</td>
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<tr>
<td>Hospital/Warehouse</td>
<td>F529</td>
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<td>Hospital/Warehouse</td>
<td>F529A</td>
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<td>Hospital/Warehouse</td>
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</tr>
<tr>
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<td>F486</td>
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<tr>
<td>Between Hospital/Warehouse and Barracks</td>
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Data for this thesis were gathered by developing queries in the UWF artifact databases for Presidio Santa María de Galve and the Rosario. Only one ceramic was retyped in this thesis: One item from the Rosario was designated a colonoware sherd, but it was actually a grit/grog-tempered fragment. Information regarding El Nuevo Constante was gathered from the publication *The Last Voyage of El Nuevo Constante: The Wreck and Recovery of an Eighteenth-Century Spanish Ship off the Coast of Louisiana* by Pearson and Hoffman (1995). Other publications were also referenced for various similar artifacts from other sites.

**Methodology Concerning the Personal Possessions**

This thesis utilized qualitative methods to analyze the personal possessions recovered from the Rosario. Qualitative analysis consisted of researching both historical and archaeological data. The historic documents that were used included inventories of the personal possessions of...
sailors who died at sea. If a man died at sea, often his goods were auctioned off among the other members of the crew, and the money earned was either used to pay off the deceased’s debts or sent to his next of kin. These records show a wealth of information concerning what types of items were typically owned by mariners, especially those not preserved in the archaeological record. Other various types of documents concerning the sinking of the vessel, such as sailors’ depositions, were referred to as well. Landeche was initially blamed for the sinking of the ship, but he was later proven to have done the best he could to save the vessel (Clune et al. 2003). Historic casta paintings were also valuable sources of information regarding racial categories and material culture of 18th-century Spain.

Archaeological sources used in this thesis included catalogues of items recovered from the Rosario, Presidio Santa María de Galve, and El Nuevo Constante. Items recovered from Presidio Santa María de Galve and El Nuevo Constante were compared directly to the various artifacts from the Rosario. Histories of the artifacts are provided, specifically how the artifacts related to the performance of various types of identities in the Spanish New World colonies.

Methodology Concerning the Ceramics

Diversity of an assemblage is divided among three different components: heterogeneity, richness, and evenness. Richness is the variety of types in an assemblage; the most direct measure of richness is a direct count of types. Evenness is the degree to which each type is represented in the collection (Bobrowsky and Ball 1989:6-7). Heterogeneity is a diversity measure that incorporates both richness and evenness. It is used to simplify the relationship between the frequency of a type and the quantity of types (Bobrowsky and Ball 1989:7). The heterogeneity measure utilized in this thesis is the Shannon Weaver Index:

\[ H' = -\sum_{i=1}^{s} p_i \ln p_i \]

Where:

- \( H' \) = Shannon Weaver Index
- \( p_i \) = proportion of the abundance of the ith category of the sample
- \( s \) = sum of the types in the assemblage
- \( \ln \) = natural logarithm (Bobrowsky and Ball 1989:7)
As this heterogeneity index does not directly indicate diversity, the number generated is relative to the other hereogeneity indexes with which it is compared. However, the higher the index, the more diverse and equal the sample, as opposed to a sample with the same number of types that has highly uneven artifact distributions according to types (Reitz and Wing 2008:111-112).

The higher the evenness of an assemblage, the more equal were the artifact types present in the sample. The lower the evenness, the more unequally the artifact types were distributed. High evenness is indicated by an index of .75 or higher, and low evenness is .74 or lower (Reitz and Wing 2008:105; Roberts 2009:98). This thesis used Pielou’s (1966) evenness index:

\[ J = \frac{H'}{H'_{\text{max}}} \]

Where:

\[ H' = \text{Shannon Weaver Index} \]

\[ H'_{\text{max}} = \text{natural log of the species or types in the assemblage} \]

In these diversity measures, ceramics were separated according to type when possible. Indeterminate ceramics were not included in the analysis. However, indeterminate types of majolicas and coarse earthenwares were included because a reasonable amount of certainty about their types existed and was present in all of the assemblages.

After the aforementioned diversity indexes were calculated, the proportions of the ceramics from the Rosario, El Nuevo Constante, and each activity area in Presidio Santa María de Galve were computed. The proportions were organized according to whether the different ceramic types were imported utilitarian ceramics, imported tableware ceramics, both utilitarian and tableware imported ceramics, or Native American ceramics. Kathleen Deagan’s (1987) work, *Artifacts of the Spanish Colonies of Florida and the Caribbean, 1500-1800, Volume 1: Ceramics, Glassware, and Beads*, was consulted to determine whether types of ceramics were defined as tableware or utilitarian. Additionally, the online digital historic period ceramic collections of the Florida Museum of Natural History was used to ascertain the functional use of ceramics. Ceramic sherds that were indeterminate were not included in this part of the analysis.
because their use or source of manufacture was unknown. Also excluded in this study were the Guadalajara Polychrome ceramics that were part of the cargo aboard *El Nuevo Constante*. The manifest of the cargo aboard *El Nuevo Constante* verifies that these ceramics were all part of the cargo (Pearson and Hoffman 1995). These cargo items were excluded because it was not likely for them to have belonged to members of the crew. In addition to the documentation stating that the Guadalajara Polychrome were trade items, the great number Guadalajara Polychrome sherds suggests that they were not likely possessions of the crew. Well over 200 intact ceramics and sherds of this pottery type were recovered, twice the number of all other ceramic types combined from the ship. The artifacts are discussed in detail in the following chapter.
CHAPTER IV
ARTIFACT DESCRIPTIONS AND CONTEXT

The personal possessions and ceramics analyzed in this thesis were organized in groups according to a modified version of the functional classification system developed by Stanley South (1977). The items analyzed were classified into the following groups: clothing, personal, activities, tobacco, arms, and kitchen. The clothing group consisted of materials utilized in the use and manufacturing of clothing such as buttons and shoes. The personal group was composed of items usually used by a single individual. Items in this group included a razor blade handle and rosary beads. The gaming piece and the dice were categorized under the toys class within the activities group. Items in this group were so defined because they reveal information regarding behavioral activities. Pipe stems were classified in the tobacco group. The tobacco group consisted only of items used for smoking tobacco. Artifacts that were used in the maintenance, repair, and use of armaments were categorized into the arms group. The barrel band belonged to this group. Finally, the kitchen group consisted of the ceramics found aboard the vessel. The kitchen group included items used in the storage, preparation, and serving of food and liquids.

South’s (1977) framework was useful because of the diverse nature of the personal possessions and ceramics. Generally, archaeologists analyze ceramics quantitatively and interpret personal possessions qualitatively with focus on ceramics for seriation studies, typology, and attribute analysis. Meanwhile, archaeologists analyze the function of personal possessions from the context in which the owner lived and the items’ technomic, sociotechnic, and idiotechnic spheres (Deagan 2002:25). Utilizing South’s classification system and analyzing these artifacts according to their functional group centered this study’s use of both quantitative and qualitative analysis on the uses of these diverse items and their roles in both the daily life and performance of identity of Spanish colonists and the crew of the Rosario.

Clothing Group

As previously mentioned, the clothing group consists of items related to the manufacture and use of clothing. The utility of the group classification is that by observing patterns in the
archaeological record related to clothing items, archaeologists can find a general baseline or expected norm. For example, when the frequencies are excessive on a terrestrial site or area, archaeologists can infer that the location may have been a tailor shop or, in the case of maritime vessels, that the objects may have been part of the cargo (South 1977:101).

**Buttons**

Three wooden button foundations and one possible leather button fragment were recovered from the wreckage of the *Rosario*. One wooden button (02SRI0253), recovered from unit 120N 420E, is a wooden disk with a single hole in the center (Figure 5). Its diameter is 1.59 cm, and its thickness is 0.51 cm. The second wooden button (02SRI0216), also from unit 120N 420E, is a wooden dome with a diameter of 1.75 cm and a thickness of 0.86 cm (Figure 6). The third wood button (01SRI0268) from unit 124N 416E was not available for direct study, but documentation shows that the diameter is 1.46 cm, and the thickness is 0.68 cm. This button is also domed. The possible leather button (01SRI0087) from 120N 412E has a diameter of 2.62 cm, is 0.36 cm thick, and is shaped like a flat disk.

![FIGURE 5. Distribution of personal possessions on the *Rosario*. (Image by author, 2012.)](Image)
Shoe Fragments

Artifact 99SRI0159, a leather heel recovered from unit 122N 420E, consists of three layers. The first layer is the top lift (the part of the heel that made physical contact with the ground). On this layer, the indentation of the channel used to sew the top lift to the welting and other layers of the heel still exists. The channel is 0.12 cm wide and runs around the edge of the round back of the heel. The treadsole is 5.42 cm long and 4.26 cm wide; it is 0.06 cm thick in the back and 0.13 cm thick in the front.

The second layer is the heel lift. Commonly made of scrap leather, heel lifts were common in 17th-century fashion for both aesthetic and practical purposes (Goubitz 2001). The heel lift was located between the top lift and the insole. It was not possible to visually inspect the heel lift without disassembling the piece, so it was not deconstructed because of its fragile nature. The heel lift is 5.42 cm long and 4.26 cm wide. It is 0.19 cm thick in back and 0.23 cm thick in the front.

The third layer is the heel section of the insole, the part of the shoe that made contact with the foot. The grain side of the leather made contact with the foot, and the flesh side made contact
with the heel lift. The grain side of the leather is the part of the skin which is covered with the animal’s hair; the flesh side is the opposite. Stitching holes are still present in the insole. The stitches are generally 0.32 cm long with some variation and are spaced 0.22 cm apart with some variation. The stitch marks indicate that the insole was sewn using a straight stitch (Goubitz 1987:22; Goubitz 2001:36). The length of the insole is 5.42 cm, and the width is 4.26 cm. It is 0.15 cm thick in front and 0.12 cm thick in back.

FIGURE 7. Shoe fragments. (Image courtesy of the UWF Archaeology Institute.)

This shoe fragment displays extensive use wear. The back of the heel (the first part of the foot to make contact with the ground in a normal stride) is much thinner than the front of the heel, which in a normal stride bears less weight. Consistent with a normal walking gait, the wear indicates that the owner did not have an abnormal stride (i.e., he did not shuffle or walk on his toes) (Waateringe 2001:383). Unfortunately, the foot on which the shoe was worn was indeterminable. Additionally, the grain was missing on most of the top lift, another indication of wear.

No marks from production or evidence of mending are present, although a puncture mark that permeates all three layers is visible. The fold of the leather indicates that whatever pierced the shoe entered from the treadsole and worked its way into the insole and would have made contact with the foot. The hole is in the middle of the sole right where the wearer’s heel would have been located. Whether the perforation was the product of a tack that was used in the
construction of the shoe or something the wearer stepped on was indeterminate. Regardless, the object would have rendered the shoe uncomfortable, and the hole was never mended. Thus, it is possible that for this reason, the shoe was discarded, or the offending object was removed and the shoe continued to be worn.

Artifact 02SRI0258 is a similar shoe heel fragment from unit 120N 420E. It is also made of three layers. The first layer, the top lift, does not display any grain on the side that made contact with the ground. This lack of grain may have been due to one or more of three explanations: (a) the grain was worn off; (b) the grain was obscured during its conservation in polyethylene glycol; or (c) the flesh side of the heel faced the ground. The top lift is 5.52 cm wide and 6.63 cm long. It is 0.05 cm thick in back and 0.32 cm thick in front. The channel is still present on the bottom of the top lift.

The heel lift is 5.52 cm wide and 6.63 cm long. The front is 0.24 cm thick in back and 0.23 cm thick in front. When the insole was removed from the heel lift, the lift displayed no production marks, but thread is still present in the stitching holes, and a straight stitch was used to construct this piece with no evidence of wooden pegs to attach the pieces.

The third layer is the insole. The insole that held the heelpiece is intact, but only fragments remain of the insole that covered part of the rest of the foot. The initial documentation of the shoes states that the insole was initially all connected but that it had disintegrated and separated from the rest of the insole and heel components during and after conservation treatments. The grain of the leather faced the foot of the wearer during contact. On the underside of the insole are two production marks, likely from either the impressions of shaping tools or incisions from skinning or fleshing cuts. The heel section of the insole is 5.52 cm wide and 6.63 cm long. The back is 0.01 cm thick, and the front is 0.32 cm. How the other pieces initially fit to the original heel is indeterminate. Also indeterminate is the length and width of the original insole, particularly because it is unclear if the sole is straight or not.

Wear marks do not indicate on which foot the shoe was primarily worn. However, the heel was much thicker in front than in back, suggesting that it was worn often during its lifetime.
and that it was not a new item when it was deposited. Therefore, it was unlikely that it was cargo; instead, a member of the crew or a passenger aboard the *Rosario* likely wore it.

Artifact 99SRI0297, recovered in unit 120N 420E, consists of just one piece of leather, the heel lift of another shoe. The grain side of the lift faced the ground, and stitch markings from a straight stitch remain in the artifact. Stitches were 0.01 cm long and spaced approximately 0.01 cm apart with very little variation. The piece is 4.95 cm wide and 5.57 cm long. It is 0.03 cm thick in back and 0.03 cm thick in front. The artifact is very warped, and wear marks are difficult to ascertain. Four production marks made from the skinning and fleshing cuts are visible on the underside of the lift.

**Personal Group**

The personal group consists of miscellaneous items that likely belonged to individual people (South 1977). Though the behaviors the items may have indicated are varied, they may reveal much information regarding identity such as gender, social status, or ethnicity of the owner. Consequently, both inter- and intra-site comparison of items in the personal group can inform archaeologists about the demographics of a site.

**Razor Blade Handle**

The razor blade handle 02SRI0235 from unit 120N 420E is made of wood, and no metal remains are present (Figure 8). This type of razor was used by barber-surgeons during the 17th and 18th centuries to shave customers’ faces. The handle is curved, 13.5 cm long, and 2 cm wide. The handle has a hole in the end from which the blade would have pivoted.
Beads

Several wooden beads were recovered from the *Rosario*. Four beads are listed in the Santa Rosa Island Shipwreck database under artifact number 02SRI0269 collected from unit 120N 420E. Upon inspection, however, three beads are present, along with fragments of what may have been a bead but were indeterminable in their current condition. These fragments may have been the fourth bead. Two of the beads are circular, according to Horace Beck’s (1973) classification guides. Though Beck’s work is intended for glass beads, the nomenclature was utilized in this study for clarity because of a dearth of information regarding wooden bead typology. One of these beads is 8.84 mm in diameter and 7.94 mm long. It is decorated with three stripes around the middle circumference of the bead, and it has four perforations in a rectangular cross. The other circular bead is plain with a diameter of 9.69 mm and a length of 9.39 mm. The third bead is conical with carved, symmetrical banding, which may have been created by lathe turning. The diameter of the large end is 8.38 mm, and the diameter of the small end is 5.58 mm. The length of the bead is 8.75 mm.

Artifact 02SRI0237 is also listed in the database as consisting of four wooden beads; however, upon closer inspection, one item turned out to be a seedpod (Figure 9). These beads were recovered from unit 120N 418E. Two of these beads are circular (Beck 1973). The larger of
these two is 6.66 mm in diameter and 6.10 mm long. The smaller has a diameter of 6.72 mm and is 4.75 mm long. The final bead is a circular truncated bicone disk with a diameter of 5.21 mm and a length of 3.56 mm. The final wooden bead is artifact 99SRI0147 from unit 120N 422E. It is circular and has a diameter of 8.0 mm and a length of 4.0 mm. No glass beads were recovered from the Rosario, with one possible exception: artifact 02SRI0089 from unit 124N 406E. This artifact is a fragment of translucent cobalt blue glass that may have been part of a bead. The original shape is unknown but consists of a single layer of glass; the measurement of the radius from the possible center hole is 7.88 mm, so if it were a bead it would have been rather large.

![Image of wooden beads]

FIGURE 9. Wooden beads. (Image courtesy of the UWF Archaeology Institute.)

Activities Group

Behavioral activities are inferable from items in the activities group. Like the personal group, the items in this group may be highly variable (South 1977:102). However, the items in the activities group in the Rosario assemblage all involve gaming. Two types of game pieces were recovered from the ship, dice and a counter or draught.
Four dice were recovered from the *Rosario* (Figure 10). Two of these dice (artifacts 02SRI0240 and 02SRI026) are right-handed parabolic-shaped, defined as Potter type 13 (Egan 1997:3; Deagan 2002:291). Artifact 02SRI0240 from unit 120N 418E is a 0.9 cm parabolic cube, and 02SRI0026 is a 0.7 cm parabolic cube, also from 120N 418E. Neither die is false, meaning that it is not weighted, nor does it have only high numbers on each face, as has been found on many archaeological sites (Egan 1997; Jay 2003:13-15).

The remaining two dice are both left-handed dice. Artifact 02SRI0242, Potter type 6 (Egan 1997:3; Deagan 2002:291), is a 0.7 cm cube and is not parabolic like the others. However, the edges are chipped, possibly indicating extensive use wear. This die was recovered from 120N 420E. Artifact 02SRI0241, defined as Potter type 4, is a parabolic 0.55 cm cube, also collected in unit 120N 420E. These two left-handed dice are not false.

The two game pieces found on the ship possibly belonged to a backgammon board or to a set of checkers (*damas*). Artifact 02SRI0236, found in unit 120N 420E, is made of wood and is 1.7 cm in diameter and 1 cm thick. This piece has a 1.6 cm incised line across it (Figure 11). A possible transverse line was present on this piece that could make the incisions a cross shape. However, it is very difficult to determine if the line was intentional or the result of the wood splitting. The second game piece is 99SRI0686 from unit 120N 424E. It is 2.6 cm in diameter and 0.8 cm thick, with no discernable inscriptions but some small tool marks around the edge.
These pieces are rather unusual because both are made of wood. Most gaming disks found archaeologically have been made of ceramic or bone, but gaming counters were made of many varieties of materials (Deagan 2002:295). Also, because of the better preservation of wood in underwater contexts, it is possible that more wood gaming disks were used but did not survive long after being discarded in terrestrial settings.

Tobacco Group

The tobacco group includes only items involved in the use of tobacco (South 1977). This group is separate from the activities group because of the artifacts' frequency in archaeological sites. The only items in this group found aboard the *Rosario* are pipe stems.

Three kaolin pipe stem fragments were recovered from the *Rosario*. The first, 99SRI00345 from 120N 406E, is 64 mm long with a bore diameter of 5/64 in. One end was the bit, which exhibits some rouletting around the circumference. The second, 01SRI0266 from unit124N 416E, is 36.74 mm long and has the original bit. The bit bore diameter is 5/64 in., and the other stem fragment end has a slightly larger bore diameter of 6/64 in. This pipe stem is decorated with spirals and rouletting. The final pipe stem fragment, 02SRI0135 from 124N 418E, is 27.30 mm long and has a bore diameter of 6/64 in. with no decoration.
Arms Group

Items used in the construction, repair, and maintenance of armaments and firearms are categorized in the arms group. These classes of artifacts may reveal information about military presence on a site. The only artifact analyzed in this group is a barrel band from a gun. The band was included because it may have belonged to an individual. Other arms-related items such as cannon and hand grenades were excluded because they were military issue and did not belong to a particular person.

A barrel band (01SRI0122), also known as a capucine, of a miquelet flintlock was recovered from the wreck in unit 122N 412E (Figure 12). Manufactured of brass, it has a diameter of 2.12 cm and is 0.17 cm thick. Initially, researchers believed that this item was a very large finger ring. However, comparison with a similar specimen from the 1715 Plate Fleet wrecks housed at the Museum of Florida History in Tallahassee, Florida, showed that the artifact is a barrel band. Barrel bands functioned to attach the stock of a gun to the barrel (Wilkinson 1971:76). A very similar specimen was also found aboard the Santo Antonio de Tanna, though the archaeologists identified the item only as a brass fitting (Piercy 1978:307).

FIGURE 12. Barrel band. (Image courtesy of the UWF Archaeology Institute.)
Kitchen Group

As stated above, the kitchen group relates to artifact classes involved in the storage, preparation, and serving of foods and liquids. Only ceramic items were considered in this thesis. Excluded were items such as glass stemware. These data were analyzed statistically and not enough items were present aboard the Rosario for meaningful analysis. Kathleen Deagan’s (1983) definitions of ceramic types were used in this thesis.

Excavation of the Rosario produced 406 ceramic sherds (Table 3). Vessel form was not analyzed nor given in this study. For more information regarding vessel form, see James Hunter’s (2001) thesis. The majolica category includes indeterminate tin-glazed fragments and indeterminate majolica pieces. Two subcategories of New World majolica are present, the Mexico City and Puebla varieties. San Luis Polychrome belongs to the Mexico City subtype, and the Puebla variety contains fragments of Puebla Polychrome, Puebla Blue on White, and Castillo Polychrome. Finally, French coarse earthenware ceramics were also recovered.

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</tr>
<tr>
<td>Indeterminate Majolica</td>
<td>16</td>
</tr>
<tr>
<td>Lead Glazed Coarse Earthenware Storage Jar</td>
<td>1</td>
</tr>
<tr>
<td>Mexican Red Painted Coarse Earthenware</td>
<td>2</td>
</tr>
<tr>
<td>Olive Jar Sherd</td>
<td>79</td>
</tr>
<tr>
<td>Puebla Blue and White Majolica</td>
<td>1</td>
</tr>
<tr>
<td>Puebla Polychrome</td>
<td>1</td>
</tr>
<tr>
<td>San Luis Polychrome</td>
<td>39</td>
</tr>
<tr>
<td>White-slipped Coarse Earthenware</td>
<td>69</td>
</tr>
<tr>
<td>Total Ceramics</td>
<td>409</td>
</tr>
</tbody>
</table>

Native American ceramics were also present aboard the Rosario. Aboriginal ceramics are categorized first by temper type and then by surface treatment. Sherds are further divided into established types (Harris 1999:90). The aboriginal ceramics aboard the Rosario included micaceous sand tempered, grit tempered, grit/grog tempered, and grog tempered wares. There are no surface treatments on any of these items; therefore, ascertaining what Native American group created them was difficult based on paste and surface treatment alone.

Context of the Artifacts

The artifacts aboard the Rosario were recovered in situ. However, the artifacts were out of their primary context. Forces that destroyed the artifacts’ primary context included natural and cultural factors.

Site Formation Processes

The Rosario rests on the coarse sandy bottom of Pensacola Bay. Its bow faces almost due west, on a slope of about 35° to 40°. The sedimentation of the site is predominately coarse-grained sand overburden. The bottom topography regularly shifts, and these shifts have possibly carried away any finer sediments. However, on top of the hull near the amidships frames and
in the bow is a layer of compacted gray sand, silt, and shell hash. A matrix of organic material including items such as roots and wood fragments is located just above the hull remains in the bow of the vessel, but no artifacts were present in this organic layer (Hunter 2001:60-63).

The bow of the vessel is more deeply buried than the amidships area. The amidships frames have often been exposed because of natural incidences of sediment deposition and removal caused by forces such as currents and storms. These actions have led to the degradation of the vessel’s wooden remains because of their exposure to marine organisms and sand abrasion (Hunter 2001:60-63).

In addition to the natural slope of the bottom, storms, currents, and channel dredging have undercut bottom sediments, causing artifacts and structural features such as ballast to shift down slope over time (Hunter 2001:60-63). Because the ship is oriented east to west, artifacts that may have been initially deposited on the starboard side of the vessel have possibly tumbled to the port side, or even off of the ship entirely. Similarly, items originally deposited on the port side of the vessel may have rolled off the site.

As previously mentioned, the sands in which the site is located are very dynamic. The east-to-west movement of sediments in the longshore currents of the northwest Florida gulf can deposit about 200,000 m³ of sand along Santa Rosa Island in a single year (Hunter 2001:62-63). This drastic deposition causes a constant movement westward of the tip of Santa Rosa Island (Figure 13). Also contributing to this western movement is the Escambia River system, which erodes the inland sediments of the northern side of the island. Thus, the relative location of this site has changed since the actual wreck event (Hunter 2001:62-63).

In addition to both natural site formation processes and channel dredging, cultural forces may have significantly affected the site and artifact distribution. Local informants state that the site has been looted (Hunter 2001). The manner in which divers have retrieved items is unknown; therefore, it was indeterminable how much these cultural actions have impacted the integrity of the site. Further, historic documents state that when the ship wrecked, the structure above
the waterline was burned after the goods aboard the ship were salvaged. These historic salvage activities also affected present site conditions and integrity.

**Spatial Distribution of Artifacts**

In this analysis, all items east of gridline 414E were considered to be in the bow of the ship, and the keelson was considered to be the dividing line for the starboard and port sides. Of the personal possessions, 23 items were located in the bow (Figure 5). These objects included three shoes, one razor blade handle, eight beads, four dice, two counter-style game pieces, three wooden buttons, and two pipe stem fragments. In the amidship area, three personal possessions were recovered. These items included one possible leather button, one pipe stem, and one barrel band.

Artifacts from the starboard side of the vessel included four dice, two game counters, one razor blade handle, two wooden buttons, one pipe stem, seven beads, and two shoe fragments. Items on the port side included one bead, one button, one possible leather button, one shoe fragment, two pipe stems, and one barrel band.

The utilitarian ceramics were concentrated along the starboard section of the ship (Figure 14). They were also distributed throughout the bow and midships. Meanwhile, the tablewares
were concentrated in the bow area (Figure 15). They were also distributed on both the port and
starboard sides. The Native American ceramics were recovered mostly on the port side of the
vessel towards the bow (Figure 16).

FIGURE 14. Distribution of the utilitarian ceramics. (Illustration by author, 2012.)

FIGURE 15. Distribution of tablewares on the Rosario. (Illustration by author, 2012.)
Although the Rosario exhibited moderate site integrity, the recovered artifacts likely were not in the context in which they were originally deposited. These artifacts were all recovered via dredge spoil; thus, any directly observable association they may have had was lost because of the lack of discrete stratigraphy. However, the constant sediment movement was likely the primary source for the mixing contexts. Additionally, because only the hull up to the orlop deck was preserved, the primary activity areas in which the sailors lived, such as the main deck, superstructures on the upper deck, the first deck, gun room, quarter deck, and lower deck, have all deteriorated. These spaces were the primary areas in which the men slept and stored their possessions. Moreover, slumpage from resting on a steep slope likely has also affected the location of artifacts since their initial deposition.

Discussion

Using South’s (1977) classification system of the artifacts was a useful method for classifying the personal possessions and ceramic assemblages. The classification system was
beneficial for this analysis because it created continuity between the seemingly disparate collections by focusing on the use of the artifacts by the crew. The uses of artifacts are important in understanding the mariners’ manipulation of their material culture in the performance of their social identities. Unfortunately, the taphonomic forces that have both preserved and degraded the Rosario likely eliminated the original spatial context of the artifacts. However, comparison of the artifacts with those of other archaeological sites provided valuable information about the social identity of the crew of the Rosario.
CHAPTER V
RESULTS

Carolyn White (2005) advocates that analyzing artifacts recovered from an archaeological site through the interpretive construct of social identity theory may reflect the social identity of an individual. By understanding the role that an artifact played in society, we can infer useful information regarding the identity of the owner. Discussed below are the artifacts of the Rosario and comparable artifacts found at Presidio Santa Maria de Galve and El Nuevo Consante.

Buttons at Presidio Santa Maria de Galve and El Nuevo Constante

Of the four total, buttons 01SRI0268 and 02SRI0216 of the Rosario are very similar to a button (4818-1) from Presidio Santa María de Galve recovered from the officers’ barracks. All three specimens are wooden dome-shaped button foundations with a single central hole, which was likely covered in thread or cloth. Two more buttons were recovered from the presidio that are similar to the flat wooden disk-shaped button from the Rosario (02SRI0253). Button 7768-42 from the presidio is particularly interesting because it is a fragment of a flat wooden disk-shaped foundation, and some of the original needle work was also preserved, indicating that passementerie-style buttons were utilized in the Spanish colonies during the late 17th and early 18th centuries. Passementerie buttons are button foundations covered with thread. This artifact was recovered from the common area between the hospital and barracks. A good example of the varying quality of these passementerie buttons is artifact 7358-10, which is covered with brocade fabric, and some of the metallic threads were preserved with this wooden button foundation, which was also shaped like a disk. This button was recovered from the hospital/warehouse area.

No wooden buttons were recovered from El Nuevo Constante, possibly because the mariners and passengers aboard the ship did not wear them. Alternatively, the buttons may have been lost during early salvage attempts or were not deposited within the vessel.
Shoes at Presidio Santa María de Galve and *El Nuevo Constante*

One shoe fragment was recovered from the presidio at Santa María de Galve. Artifact 1382-3 is the fragment of a heel with only the treadsole and insole. No heel lift remains on this artifact as on the *Rosario* specimens. The grain side is facing upwards on the insole and has been worn smooth. The thickness of the treadsole and insole are equal on the front and back, indicating that the shoe had minimal wear. Some stitching is present, 18 stitches total or roughly 4 stitches per centimeter, irregularly spaced with an average gap between stitches of 1.28 mm. This information suggests that the shoe was not well constructed and may have been of low quality. This item was recovered from the village outside the fort.

One leather shoe sole fragment was also recovered from *El Nuevo Constante* (Pearson and Hoffman 1995:184). Unfortunately, the fragment did not survive conservation and was therefore unavailable for this study. However, documentation states that 20 stitches lined the outer part of the heel, and a fragment of the leather reinforcement of the heel was still attached (Pearson and Hoffman 1995:184). Two pewter shoe buckles were recovered from the site as well. These are not elaborately decorated, and their material suggests a lower socio-economic status of the owner.

**Razor Comparison to Presidio Santa María de Galve and *El Nuevo Constante***

One razor blade handle was recovered from the *Rosario*, but no comparable razor blades or razor handles were recovered from Presidio Santa María de Galve or *El Nuevo Constante*. As previously mentioned, however, blade handles have been recovered from other sites, both terrestrial and submerged. The surgeons of vessels generally slept and kept their belongings near the hatch to the lower deck (Phillips 1986: 153). Because of the limited preservation of the *Rosario*’s structure, whether the razor was located in the area where surgeon’s slept and stored their goods is indeterminable.

**Comparison of Beads to Presidio Santa María de Galve and *El Nuevo Constante***

No definitive rosaries or wooden beads were found at Presidio Santa María de Galve or *El Nuevo Constante*. Moreover, no crucifixes, chain links, or beads were recovered that
definitively demonstrated that they belonged to a rosary. However, previous researchers of Presidio Santa María de Galve have interpreted clay beads as likely to have been part of a rosary; additionally, there were glass beads that may have also been on a rosary (Deagan 2002; Furlong 2008:89). Often, rosaries were made of cheaper materials such as wood or clay; therefore, the cheaper materials (clay beads) from the presidio are compared to those on the Rosario (Deagan 2002). In the southwest barracks (officers’ barracks), six clay beads were recovered, and in the north (convicts’ barracks), one clay bead was recovered. Excavation in the warehouse also resulted in one clay bead. Additionally, religious items of various types such as pendants and Jesuit rings were found in all activity areas of Presidio Santa María de Galve (Furlong 2008). All of the wooden beads found on the Rosario were located in the starboard bow area off the vessel. The possible glass bead was found in the port amidship area. However, the identification of this item is uncertain.

These artifacts reveal the pervasive power the Catholic Church exerted over the Spanish colonies. Additionally, an higa was recovered from one of the public areas of the presidio between the hospital and barracks. This item, though not a Catholic object, demonstrates belief in the Christian cosmology at the time and beliefs in supernatural intervention. The higa shows that the individual who owned it believed in, and was acting to circumvent, any potential malevolent forces such as the evil eye.

Game Pieces from Presidio Santa María de Galve and El Nuevo Constante

No draught-style game pieces were recovered from the presidio or El Nuevo Constante. However, four bone dice were recovered from the southwest barracks area of the presidio. On the Rosario, the dice and draught were located in the starboard bow section of the ship. The southwest barracks were the officers’ barracks, suggesting that only the wealthy individuals in the presidio could afford to gamble. However, research indicates that all social classes enjoyed gaming, and the starboard bow area of any vessel was primarily inhabited by common sailors, as the officers bunked in the stern area of the ship. However, as previously mentioned, ground-disturbing processes such as wave action, storms, and shifting sands could have affected the
distribution of the dice. Moreover, as the stern of the vessel is missing and the upper decks have deteriorated, the archaeological record of the *Rosario* is not complete. A possible explanation for the distribution of the dice at the presidio is that perhaps the officers had more disposable income available to them, so they could afford to lose dice, whereas less wealthy soldiers or convicts were less likely to lose or discard their gaming pieces. Meanwhile, on the *Rosario*, the type of person who possessed the dice and who played with that individual is indeterminable. Despite the seemingly contradictory distribution of the dice on the two sites, the artifacts offer unique insight into how the mariners of the *Rosario* broke rules and therefore performed furtive roles.

**Pipe Stems in Presidio Santa María de Galve and *El Nuevo Constante***

Kaolin pipe fragments were recovered from all activity areas at Presidio Santa María de Galve, demonstrating that tobacco use was part of the daily lives of the residents just as it probably was for the mariners aboard the *Rosario*. The number of pipe stems recovered from Presidio Santa María de Galve demonstrates the generally lower number of pipe stems present at Spanish sites than at English sites (Deagan 2002:310). The total number of pipe fragments from the presidio is 710, and 97.7% of these were kaolin pipes (Table 4). The total number of pipes in the artifact assemblage is small compared to English sites, especially considering two facts: (a) the length of time the presidio was inhabited and (b) the fact that a kaolin pipe was generally purchased and discarded within a period of two years. Moreover, the systems utilizing bore diameters for dating purposes are most accurate when the population of the sample is at least 932 (Hume 1969:296-300). This threshold is significantly higher than the number present at the entire presidio and the *Rosario*. Further, the pipe fragments on the *Rosario* were not distributed evenly throughout the ship. Two fragments were located in the port bow section, and one was found on the starboard amidships area.
### TABLE 4
MATERIAL TYPE OF PIPE FRAGMENTS IN ACTIVITY AREAS AT PRESIDIO SANTA MARÍA DE GALVE

<table>
<thead>
<tr>
<th>Area</th>
<th>Kaolin</th>
<th>Course Earthenware</th>
<th>Metal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>24</td>
<td>—</td>
<td>1</td>
<td>25</td>
</tr>
<tr>
<td>Church</td>
<td>33</td>
<td>—</td>
<td>—</td>
<td>33</td>
</tr>
<tr>
<td>Between Hospital/ Warehouse and Barracks</td>
<td>65</td>
<td>2</td>
<td>—</td>
<td>67</td>
</tr>
<tr>
<td>Hospital/Warehouse</td>
<td>29</td>
<td>—</td>
<td>—</td>
<td>29</td>
</tr>
<tr>
<td>Warehouse</td>
<td>118</td>
<td>2</td>
<td>—</td>
<td>120</td>
</tr>
<tr>
<td>Officers Barracks</td>
<td>393</td>
<td>6</td>
<td>—</td>
<td>399</td>
</tr>
<tr>
<td>Soldiers Barracks</td>
<td>30</td>
<td>5</td>
<td>—</td>
<td>35</td>
</tr>
<tr>
<td>Convicts Barracks</td>
<td>2</td>
<td>—</td>
<td>—</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>694</td>
<td>15</td>
<td>1</td>
<td>710</td>
</tr>
</tbody>
</table>

Source: Bense 2003:376-408.

One kaolin pipe stem fragment was recovered from El Nuevo Constante. One reason for this lack of representation is that pipe smoking was not common aboard the vessel, and excavations missed the few pipe fragments that were present. Moreover, an east-to-west current that moves across the shipwreck site may have scattered lighter artifacts as the ship deteriorated. Because no units were opened outside the vessel this theory may explain the absence of pipe fragments and other various artifacts from the shipwreck (Pearson and Hoffman 1995:198).

Barrel Bands at Presidio Santa María de Galve and El Nuevo Constante

No barrel bands from firearms were located at the presidio in a Spanish context. However, lead shot and gunflints were recovered from all activity areas in the presidio. Although no barrel bands were found in the presidio, other armaments that may have been individually owned were recovered from various activity areas in the presidio. Two rapier hiltts were found in the northwest bastion, and one was found in the officers’ barracks. A butt plate also was recovered in the officers’ barracks. Finally, a trigger guard was found in the village outside the fort.
Barrel bands were not recovered from *El Nuevo Constante* either. However, two lead musket balls were recovered from the stern of the vessel. These balls are 0.72 in. in diameter and would have been fired from a *fusile*, a Spanish musket. Historic documents stipulate that 36 muskets were aboard the ship to protect her cargo from pirates. Also recovered were two gunflints; one has no provenience, but the other came from the stern of the vessel as well (Pearson and Hoffman 1995:158).

**Diversity Analysis of Ceramics**

The *Rosario*’s Shannon Weaver Index was 2.33, and its evenness index was 0.77 (Table 5). The high level of evenness means that the ceramic types on the ship occurred in rather equal frequencies. The *Rosario* had a much higher diversity and evenness than *El Nuevo Constante*. According to the indexes, the ceramics in the *El Nuevo Constante* assemblage were less diverse and had a low evenness (Table 5). No areas in the presidio were identical in diversity and evenness to the *Rosario*. However, the most similar area in both diversity and evenness was the warehouse area, a public area. Despite these two areas being similar, the warehouse was more diverse and even than the ship. The diversity closest to the *Rosario* was the convicts’ barracks; however, it was less diverse than the ship’s assemblage and much more even. The areas with the most similar degree of evenness were the warehouse and hospital/warehouse areas, both of which had a high evenness of 0.78. Both the warehouse and the hospital/warehouse area were more even than the *Rosario*, but all three areas had high evenness. Both of these areas were more diverse than the *Rosario*, but the hospital/warehouse was the most diverse of all three assemblages.

**TABLE 5**

**COMPARISONS OF DIVERSITY AND EVENNESS**

<table>
<thead>
<tr>
<th>Location</th>
<th>Shannon Weaver Index</th>
<th>Pielou’s Evenness Index</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Rosario</em></td>
<td>2.33</td>
<td>0.77</td>
</tr>
<tr>
<td>Inside Fort</td>
<td>2.96</td>
<td>0.72</td>
</tr>
<tr>
<td>Village (outside fort)</td>
<td>2.82</td>
<td>0.79</td>
</tr>
</tbody>
</table>

(Table 5 continues)
Table 5 (continued)

<table>
<thead>
<tr>
<th>Location</th>
<th>Shannon Weaver Index</th>
<th>Pielou’s Evenness Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Barracks</td>
<td>2.24</td>
<td>0.85</td>
</tr>
<tr>
<td>West Barracks</td>
<td>2.63</td>
<td>0.79</td>
</tr>
<tr>
<td>Southwest Barracks</td>
<td>2.94</td>
<td>0.87</td>
</tr>
<tr>
<td>Hospital/Warehouse</td>
<td>2.82</td>
<td>0.78</td>
</tr>
<tr>
<td>Warehouse</td>
<td>2.47</td>
<td>0.78</td>
</tr>
<tr>
<td>Between Hospital and Barracks</td>
<td>2.75</td>
<td>0.79</td>
</tr>
<tr>
<td><em>El Nuevo Constante</em></td>
<td>1.32</td>
<td>0.64</td>
</tr>
</tbody>
</table>

Functional Categories of Ceramics

Imported ceramics can be categorized by their functionality, specifically if they are utilitarian or tableware. Utilitarian ceramics are so defined because they are used for storing, transporting, cooking, and washing, whereas tableware is utilized for serving food (Deagan 1987:30). Some imported ceramics could have been used for both tableware and utilitarian purposes. Native American ceramics, when fragmented, cannot be as easily distinguished by their usage, so for the purposes of this thesis, Native American ceramics were considered their own category.

There is a diverse array of ceramic types at the three sites. Analyzing the uses of the different types of ceramics is informative relative to the activities of a particular area, and the analysis may in turn reflect the identities of those using the space. On the *Rosario*, 66% of the ceramics present were utilitarian (*n* = 270; Figure 17). Tableware consisted of 17% of the assemblage (*n* = 58). Native American ceramics comprised a mere 7% (*n* = 12) of the assemblage. The smallest proportion was from the imported ceramics that may have been utilitarian or tableware <1% (*n* = 1).
The ceramics from *El Nuevo Constante* (Figure 17) are dominated by utilitarian ceramic, 94% of the assemblage (n = 189). The remaining ceramics were all tableware, 6% of the collection (n = 12). No Native American ceramics were present, nor were imported ceramics that may have been either utilitarian or tableware.

At the presidio, the proportion of different ceramics was dominated by utilitarian ceramics, 39% of the collection (n = 514), immediately followed by Native American ceramics at 32% (n = 422) and tableware at 27% (n = 359). The smallest category was ceramics that functioned as both tablewares and utilitarian ceramics, at .05% (n = 6).

FIGURE 17. Ceramics distribution by function at the *Rosario, El Nuevo Constante*, and Presidio Santa María de Galve. (Illustration by author, 2012.)
Within the presidio, the proportion of different categories of ceramics in the area between the hospital and barracks (Figure 17) was dominated by utilitarian ceramics at 60% \((n = 82)\). The second most numerous category was Native American ceramics at 25% \((n = 34)\), followed by tableware at 15% \((n = 21)\). Ceramics that could be both utilitarian and tableware were absent in this sample area.

The largest category of ceramics present at the convicts’ barracks (Figure 17) was Native American ceramics at 46% \((n = 23)\). Utilitarian ceramics consisted of 44% of the assemblage \((n = 22)\). Finally, tableware was the smallest category present in the sample at 10% \((n = 5)\).

In the village area (Figure 17), Native American ceramics was again the single largest category present at 40% \((n = 82)\). Utilitarian ceramics was the next largest at 36% \((n = 75)\). Tableware comprised 24% of the sample \((n = 49)\). Finally, there was a single ceramic that could be both utilitarian and tableware.

In the officers’ barracks, 44% of the sample was Native American ceramics \((n = 57)\), and 28% was utilitarian \((n = 36)\). Tableware was 25% of the sample \((n = 32)\). Finally, 3% of the sample was ceramics that could be both utilitarian and tableware \((n = 4)\).

The warehouse area was 51% tableware \((n = 111)\). Utilitarian ceramics comprised 36% of the assemblage \((n = 77)\). Native American ceramics made only 13% of the sample \((n = 29)\). No ceramics were present that could be both utilitarian and tableware.

Utilitarian ceramics composed the largest category at the hospital/warehouse area at 37% \((n = 112)\). Native American ceramics was the next largest at 33% \((n = 99)\). Tableware was 30% of the sample \((n = 92)\). Finally, a single ceramic that could have been either utilitarian or tableware represented <1% of the sample.

The soldiers’ barracks ceramic assemblage was primarily utilitarian at 43% \((n = 110)\). However, Native American ceramics was the second highest in the assemblage at 38% \((n = 98)\). Finally, tableware comprised 19% of the assemblage \((n = 49)\). No ceramics were present that may have been either utilitarian or tableware.
Discussion

Comparing the personal possessions from the *Rosario* to similar items from other sites and quantitatively analyzing the ceramic types facilitated the analysis of the artifacts according to social identity theory. Although directly comparable personal possessions are not present at all the sites, understanding the role of the item in its cultural milieu is informative. The ceramics assemblage of the *Rosario* is much more diverse and even than that of *El Nuevo Constante*; however, the *Rosario* assemblage is much less diverse than that of all activity areas in Presidio Santa María de Galve except for the convicts’ barracks. The evenness of the ceramic assemblage of the *Rosario* is higher than that of the fort as a whole, but less even than the individual activities areas of the presidio, and more even than that of *El Nuevo Constante*. The diversity and evenness of the ceramic assemblage of the *Rosario* is most similar to the warehouse area of the presidio. Regarding the proportions of the functional groups of the ceramics, the *Rosario* is most similar to *El Nuevo Constante*. These different strategies of manipulating material culture has important implications regarding the social identity of the individuals.
CHAPTER VI
DISCUSSION AND CONCLUSION

The material culture of a society does not exist in a cultural vacuum. Items have symbolic meaning and are manipulated in ways to convey intentional or unintentional associations (Loren 2010). Such is the case with the artifacts recovered from the Rosario. By understanding the cultural setting of the time and the purpose those artifacts served and by comparing them to those found at other sites, we can better understand what kind of associations the sailors were making by utilizing those items in order to understand their social identities. This chapter presents a discussion of the personal possessions organized by functional group and an examination of the quantitative analysis of ceramics (South 1977).

Clothing Group

Adorning the body in colonial America was a very costly and complex endeavor (Ewing 1984:19; Loren 2010). Clothing was very expensive, and its production was labor intensive because mass production did not exist at this point, and all spinning, weaving, patterning, and stitching was done by hand. Dress remained immensely important in performing identities during the 18th century despite these excessive expenses (Earle 2001:175). Dress could indicate important aspects of identity such as social status, religious affiliation, and occupation. Wealthy citizens were always very concerned not only with their own appearances, but also with the dress of those they outranked. Many sumptuary laws were passed to try to prevent people of lower status from dressing like nobility. High-status citizens in New Spain expressed outrage when wives of tailors dressed more elegantly than did noble women (Earle 2001:177). This outrage indicates that sumptuary laws were largely ignored and provides evidence that people tried to manipulate their external appearances to influence the interpretation of their identities.

Buttons

Two wooden button backs and one possible leather button fragment were recovered from the wreckage of the Rosario. In the 16th and 17th centuries, buttons, both functional and
decorative, were primarily associated with the military or with wealthy individuals (Deagan 2002:165). However, in the beginning of the 18th century, French fashion including French-style buttons became much more common in all social classes. One of the most common button forms of the entire 18th century was the flat bone disk button back with a single central hole, which was covered in cloth to match the outfit of the individual (Deagan 2002; White 2005:52-68). In the entry entitled “Tailor of Suits and Tailor of Bodices,” Diderot’s Encyclopedia (1771) displays how button molds with a single central hole were covered in order to match the outfit. Other examples of surviving clothing from the 16th and 17th centuries show how wooden button molds were covered in thread by sewing through the central hole and using decorative stitching to cover the button to match the outfit. This style is called passementerie (Arnold 1985:26-57; White 2005:52-68). Diderot’s Encyclopedia (1771) also demonstrates how wooden button molds were covered with thread to create custom designs on button blanks similar to those found on the Rosario.

Unfortunately, no fabric was recovered from the buttons or from the Rosario itself. Therefore, without knowing how the button was covered or what the item was to which it was attached, we cannot accurately understand the original quality of the buttons that were on the ship (White 2005:69-71). French influence on fashion became more prominent during the 18th century, and the buttons could have been covered with expensive silk or silk thread or with cheaper linen thread (White 2005:69-71). The presence of this wood button type is an excellent example of how French fashion became prominent in Spanish wardrobes during the War of the Spanish Succession, early in the 18th century. Thus, these button types are also an example of the European identity to which those aboard the Rosario were ascribing.

Two of the buttons from the Presidio Santa María de Galve were recovered from areas that were accessible to all inhabitants of the presidio, but one was directly associated with the higher-status citizens. However, the thread on the buttons indicates that different quality of threads covered the buttons, indicating that the cost of the buttons may have been variable. Thus, the presence of the button foundation without its decoration is not a reliable indicator of the
true status of the owner. However, the absence of these button types in the soldiers’ or convicts’ barracks may indicate that the buttons were generally higher-status items. Unfortunately, so little wood was preserved from the presidio that this explanation is tentative because of preservation bias.

During the 17th and 18th centuries, European fashion dictated that buttons were utilized primarily on men’s clothing, so the buttons recovered from the *Rosario* indicate that the men were wearing highly gendered clothing (White 2005:73). Performing a masculine identity was important to sailors during the period. Buttons were used both decoratively and functionally on men’s coats, waistcoats, and breeches during the 17th and 18th centuries. This style is in contrast to women’s clothing, which predominately used hook-and-eye fasteners and laces as the primary form of attachment (White 2005:73).

*Shoe Fragments*

Two of the shoe fragments from the *Rosario* were found in the same unit in the starboard bow, but their direct association is undeterminable. The third shoe fragment was found in the center of the bow; its original association with the other shoes is also unknown. Regardless of this uncertainty, shoes and shoe remains are often found on shipwrecks (Goubitz 2001:88). Other roughly contemporaneous wrecks have produced shoes for archaeological study, including *La Belle*, the Wadden Sea Shipwreck, the *Mary Rose*, and the *Machault* (Davis 1997; Richards 1997; Goubitz 2001:88).

Only the heel remains of shoes have been recovered from the *Rosario*, so much information is not obtainable concerning the overall style or function of the shoe, which the shoe’s upper could elucidate. Heels began to be common features of footwear in 1600. Some researchers, such as Goubitz (2001:81), think that heels evolved out of flat shoes onto which additional repair patches were attached preemptively to prevent rapid deterioration of the insole. Other researchers such as Gall think that heels initially operated to prevent riders’ feet from slipping through stirrups (Goubitz 2001:91). Regardless of the reason behind their development, heels were common in most footwear (Goubitz 2001:81). In paintings from the 17th century,
high heels are depicted being worn along with flat shoes regardless of the social status or gender of the wearer (Wright 1679; Swann 1982:17; Goubitz 2001). During the late 1600s, the height of fashion was red high-heeled shoes with square toes for both men and women (Swann 1982:16-17). The shoes found aboard the Rosario were not high enough to be considered fashionable, nor is there any indication that they were red. Thus, the shoes might have belonged to a sailor whose main concern might not have been fashion but rather a shoe that was durable and functional. Additionally, high heels would not have been easy to walk in on board ship, nor would a common sailor have been able to afford wearing a fashionable high heel while on shore.

Moreover, in multicultural Spanish colonies during the late 17th and early 18th centuries, certain shoes would have served to display a European social identity. People of Native American and African ancestry also wore European-style shoes during this period, demonstrating that they were not only ascribing to certain European norms but also incorporating different fashions in order to mediate their place in the colonial world (Loren 2010:73). Documents and portraits provide numerous examples of Native American utilizing meanings to the maker and wearer. Individuals of mixed European, Native, and/or African ancestry operated in an unclear place within the imperial hierarchy during the colonial period. Once people of mixed ancestry began to grow in number, a new way was developed to organize the racial hierarchy put into place by the Spanish colonists. Casta regulations were passed in an attempt to structure colonial society. Consequently, individuals of varied ancestry navigated their position in the colonial world through their manner of dress and incorporated European materials in ways which were not only permitted but also self-promoting (Loren 2010:73). However, people often did not follow the government-imposed sumptuary laws.

Personal Group

As mentioned in Chapter 4, South (1977) defined the personal group as items that likely belonged to a single individual who did not qualify for other groups; consequently, the group may have disparate types of artifacts classified together. Though the items in the personal group
may seem to have little in common, they can offer valuable information concerning the social identity of the individual to whom they belonged.

*Razor Blade*

The presence of the razor blade handle, which was located in the starboard bow area, has some interesting implications for the social identity of members of the crew of the *Rosario* when considered in the context of the period. During the latter half of the 17th century and the first half of the 18th century, beards were out of fashion (Andrews 1969:56; Corson 1977:261; Krumholz 1987:8). However, moustaches were very common in Latin countries, and examples are illustrated in numerous *Casta* paintings. Moreover, wigs were incredibly popular, and men often shaved their heads so that the wigs were more comfortable in warm weather. This clean-shaven, manicured look was the fashion throughout Europe and the New World colonies. Wigs became synonymous with western identity and were so pervasive that in cultures which traditionally favored beards, such as Russia, strict taxes were imposed on those who continued to maintain their facial hair. Peter the Great of Russia wanted to westernize Russia, so in 1705, he taxed beards, the costs ranging from 3 pence for peasants to 100 rubles for noblemen, a substantial sum (Peterkin 2001:33-34).

Though some individuals may have shaved themselves, most men went to barbers (Cooley 1970:75; Peterkin 2001:60-71; Withey and Evans 2011), partly because of the skill required to use the razors (Peterkin 2001:60). Razors in the early 18th century were still made of iron and were susceptible to rusting and dulling. Shaving was often a painful process as cuts and infections were likely to be endured. The wealthy purchased their own razors and shaving bowls for the barbers to utilize (Jones 1916:7-8; Krumholz 1987:8). This tradition may have operated as a status signal and as a method to prevent conditions such as barber’s rash, skin infections caused from bacteria on improperly sanitized razor blades used on multiple men. Not until later in the century, around 1750, did most men shave at home instead of at the barbershop, in part because of the influence of the Enlightenment and the increasing concern of the middle class in appearance (Withey and Evans 2011:2). In 1769, a French cutler, Jean-Jacques Perret, wrote
Pogonotomy, or the Art of Learning to Shave Oneself, which is the first instructional document about proper shaving techniques for the public (Krumholz 1987:8-9). Moreover, advances in razor technology later in the 18th century made shaving at home safer. Innovations in cast steel, developed in 1740, were adopted by cutlers involved in razor production, making blades cheaper, sharper, less rusty, and safer (Peterkin 2001:65). Also, the shaving brush, invented in 1748 and made of badger pelt, served to soften the whiskers, enhancing the efficiency and comfort of the shave.

Barbers during the beginning of the 18th century also performed bloodletting, tooth extractions, sutures, and other minor skin operations and treatments. Barber-surgeons were not formally trained scholars, as surgeons are in modern times, but rather were trained in apprenticeships (Harkness 2007:60). They played important roles on large seafaring vessels because they had to maintain the health of the crew in very unsanitary conditions (Rediker 1987:86; Pérez-Mallaín 1998:80). The living quarters of one barber-surgeon was discovered on the English warship Mary Rose (Rule 1982:189). In his work chest along with medicine containers, eight straight razor blades and handles were recovered, along with other items, including a shaving bowl, a bleeding bowl, and ointment jars (Rule 1982:189). The Mary Rose sank in 1545, but barber-surgeons performed the same role until 1745, when barbers were legally prohibited from performing dentistry and other surgeries. However, this law was initially largely ignored, and some barbers even continued to perform their traditional roles up until the early 20th century (Krumholz 1987:8).

The custom of shaving was familiar to Native Americans when Christopher Columbus landed in the New World (MacCurdy 1900:421; Peterkin 2001:65). Though Native Americans do not grow beards as thick as most Europeans did, the Aztecs believed that only nobility, religious men, and warriors could wear a full head of hair; the rest of the male population had to shave their heads with the exception of a tuft of hair near the crown. Thus, the act of shaving was critical to the social identity of Aztec males and to those peoples conquered by the Aztecs (MacCurdy 1900:421; Peterkin 2001:65). Native American groups in southeastern North
America were also familiar with shaving. Groups such as the Creeks and the Chitimacha shaved their heads (Brightman 2004:645; Walker 2004:380). Other groups such as the Chickasaw removed hair with clamshell tweezers (Brightman and Wallace 2004:484).

The razor from the Rosario may have belonged to a sailor or officer aboard the ship. It is unlikely that the razor was part of the cargo because the ship was salvaged after running aground, and trade goods would have been a priority to recover (Hunter 2001). By owning a razor, this individual was ascribing to the fashions of the day by keeping his face manicured. Regardless of whether he shaved every day, he took efforts to present himself in a way that was fashionable, and he ascribed to a European or Colonial identity whether he was born in Mexico and was of mixed descent or not.

Another possibility is that the razor may have belonged to the barber-surgeon aboard the vessel because it was unusual for most men to shave themselves at this point (Cooley 1970:75; Peterkin 2001:60-71; Withey and Evans 2011). Examination of inventories of sailors who died at sea also indicates that most men did not own their own straight razor (Medando 1676; Arocena 1718; Sustaeta 1732; Bustamante 1745). These inventories are extensive lists which include the smallest scraps of cloth to the most expensive items such as firearms. Interestingly, the inventories did not include straight razors. Further, documentary evidence exists from the barber-surgeon aboard the Nuestra Señora de Atocha in 1681 concerning the payment of services rendered for bloodletting and shaving a crewmember during the voyage (Lorenço 1681). Consequently, we know that men were shaved by a barber-surgeon while aboard the vessel and that it was uncommon for men to have their own razors. Thus, the Rosario razor likely belonged to the barber-surgeon.

The barber-surgeon in the Armada de Barlovento performed different duties than did other men aboard the ship. He also made more money than common sailors; as mentioned previously, barber-surgeons in the Windward Fleet made 300 pesos annually (Ramírez 1981:306). Barber-surgeons made more money than sailors (66 pesos annually), soldiers (45 pesos annually), and artillerymen (180 pesos annually); these groups made up the bulk of the
crew (Ramírez 1981:306). This pay disparity signifies the importance of the barber-surgeon’s role on the vessel, as he would have treated many wounds suffered by crewmembers during work duties as well as in skirmishes. Barnaby Slush (1709), an English sailor in the Royal Navy during the early 1700s, describes the role of barbers as that of an elevated status; however, barbers may have been respected or hated depending on their honesty and competency. This condition is likely similar to what barbers in the Spanish Armadas experienced. A barber who did not fulfill his duties properly because of either incompetence or overcharging would have fostered discontent with the rest of the crew. Therefore, his role was, in part, determined by his ability to perform his role as barber, an occupation associated with his identity aboard the vessel.

Whether the owner of the razor was a professional barber-surgeon, a European, Native American, or any person of mixed descent, his possession of the razor was a means for him to embody the identity of a man ascribing to the fashions of the period. Men used the razor to manipulate their appearance in order to ascribe to European-introduced fashions and to participate in the social milieu of the period.

Beads

The wooden beads were all found in the general vicinity of the starboard bow area. Because of the wooden beads’ context aboard an armada vessel, they likely once were part of a rosary. Spanish men’s jewelry fashions during this period did not include beaded items (Evans 1970; Muller 1972; Dubin 1987). Instead, men wore mostly chain necklaces, finger rings, hatbands, and belt buckles. On these items, the decoration contained real or paste gemstones and/or pearls and decorative settings. Women’s jewelry fashion at this period was similar in style but also focused on fanciful settings with faux, precious, or semi-precious stones and enamel decorations. However, wood was a popular material for inexpensive rosary beads (Deagan 2002).

Spanish vessels were crewed completely by men and were highly gendered spaces. European men of this period did not wear as many beads or amulets as did women; however, as men engaged in highly risky work at sea and war, they were more likely than most to possess and use spiritual items and amulets for safety (Hildburgh 1951: 246). Documents suggest that sailors
were not generally strict adherents to all Catholic doctrine, as they often blasphemed, cursed, and engaged in various forms of illicit sexual intercourse; nonetheless, they also engaged in highly ritualized prayers at certain times of day and prayed during storms with much more zeal that they survive the tempest (Pérez-Mallaina 1998).

These men of the sea were very superstitious and believed in divine intervention on hierarchical levels (Campagne 2002). Examination of theological philosophers of the period explain how rosaries and amulets were used to seek the help of supernatural powers to intervene in their lives or to afford sailors and soldiers extra protection. Catholic cosmology of the time proposed three ranges of possible magical interaction. The first order was action by Yahweh in the form of a true miracle, such as the act of creation (Suárez 1620). Only God could perform these supernatural actions. The second order was the actions of creatures of free will, which could be conducted by angels and demons; however, very strict limits applied to the possible actions these divine creatures could take with humans. Finally, the third order was the natural order, which was different from the two previous orders because it concerned inanimate objects. Catholics believed that certain objects had properties that could influence daily lives even though humans did not understand the interaction, such as the effect of the evil eye and the protection offered by red coral. Coral amulets were believed to possess the ability to absorb maleficent powers and to protect the wearer because they had inherent protective properties because of the color red, which was associated with blood and life forces (Hildburgh 1906, 1914, 1915, 1951; Campagne 2002; Deagan 2002).

The three orders overlapped, and debate occured concerning what magical events were categorized under which order (Campagne 2002). However, these magical occurrences were accepted as legitimate and often had medical and legal consequences (Campagne 2002; Broedel 2003; Mackay 2006; Lewis 2007). Legal documents of the late 17th century even consider cases in which people were carried through the air by demons (Lewis 2007).

The use of rosary beads may have overlapped the second and third orders of the Christian cosmology as well. Rosaries may have been used to call upon saints (including the Virgin Mary,
after whom the ship is named) in order to deliver sailors safely from storms or battles. Rosaries made of jet and coral may have been used in the third order because of the believed power of the stones. Little indication exists that wooden beads, such as those found aboard the Rosario, were used as amulets; other materials such as amber, agate, jet, or coral would have been more amenable for amulets because of their perceived inherent protective qualities. However, wooden rosaries were much less expensive, and acquiring a rosary not only for religious use but also for protection would have been important to a sailor in the Spanish armada. Incorporating superstitions for protection with Catholic practices was popular as well (Mackay 2006: 414). For instance, the *Malleus Maleficarum*, a historic book about how to deal with witches, suggests reciting prayers and throwing hailstones into a fire in order to stop a hailstorm. Thus it is possible that possessing a rosary may have been considered favorable in order to ensure good luck on a voyage.

Consequently, these rosary beads tell us much about the social identity of the sailors on the ship, revealing information concerning both the content and contestation of social identity (Abdelal et al. 2009). The beads also reveal information regarding the cognitive models of the group. In tandem with documents and testimony from the period, the beads indicate that these sailors adhered to the Catholic cosmology of the period. This aspect of identity is important because the understanding of the universe in the Catholic cosmology affected the ways in which sailors made sense of their religious, social, racial, and political conditions (Abdelal et al. 2009:25).

These beads, in consort with period documents, suggest that different amounts of contestation were present in the sailors’ identity formation concerning Catholic beliefs than would have been present in other segments of society. Different amounts of contestation were present in the sailors’ lives because the sailors often blasphemed, which was an action not taken as often by people in cities during the period of the Spanish Inquisition. This action could be brought to trial with much more ease for people on land. Moreover, because these sailors lived on the periphery of society, many may not have believed that their blasphemies were as
potentially detrimental to society (Pérez-Mallainà 1998: 245). Additionally, because formal Masses were not conducted on board, the Church imposed a weaker force on their lives than it did for people living sedentary lives.

Another form of content that the beads reveal are the constitutive norms of Spanish lives in the colonies. As Catholicism was the national religion of Spain, all Spaniards were expected to practice as Catholics, including the use of rosaries. Rosaries, a Catholic devotional item, were intended to help practitioners count prayers as they verbally prayed and meditated on spiritual matters (Dubin 1987:84). Religious items of various sorts were found in all of the activity areas in the presidio, a fact which also attests to the pervasive nature of Catholicism in Spanish communities.

While the wooden beads may have belonged to an individual of Native American or mixed ancestry, Native Americans in general preferred colored glass beads, stone beads, or shell beads instead of wood (Dubin 1987). However, wooden beads have historically been more prevalent in African contexts, so the beads may have belonged to a person of African or mixed African ancestry. Wooden beads were shipped en masse to the New World for rosary construction in the colonies, so these beads likely are the remains of a broken rosary (Deagan 2002). Also, because common costume mimicked high fashion, lower-status colonists would likely have worn similar appearing jewelry that rich Europeans in the colonies wore, a fashion which did not include beadwork. Moreover, people of lower social classes in the colonies were able to afford nicer clothing and would have been able to dress fashionably (Earle 2001).

Activities Group

The six gaming items were located along the starboard bow area of the ship, but their associations with each other are unclear because they were found in the dredge spoil and over the course of different field seasons. The dice recovered from the Rosario are particularly interesting because three of them are parabolic. Until this site was excavated, the earliest parabolic dice found archaeologically were on the 1725 Tolosa shipwreck (Apestegui, Leon, and Borrell 1996:115; Deagan 2002: 294). Many parabolic dice have been found on later Spanish context
sites ranging from 1750 to 1800, such as Spanish St. Augustine (Deagan 2002:294). The Rosario
dice are more similar in size to those found at St. Augustine, which range from 0.6 to 0.7 cm on
a side, as opposed to those found on the Tolosa, which have 1 cm sides. These other sites also
have a mixture of both left-and right-handed dice.

The presence of dice aboard the ship demonstrates that the sailors engaged in recreational
and gambling activities during their down time. Moreover, the dice were in direct violation of
rules restricting all games on Armada de Barlovento vessels (Ramírez 1981:283). Despite these
prohibitions, sailors actively gambled because gaming was a prominent feature in colonial life.
Gaming, and especially dice, has a long history in Spain and Europe. Though the exact origins
of dice are unknown, dice games were played by the ancient Egyptians (Jay 2003:17). Dice
games were popular during the Roman Empire, and later in the 13th century, King Alphonso X
wrote one of the first treatises on game rules and strategies in a book called Tratado de Ajedrez,
Dados y Tablas (Schwartz 2006; Deagan 2002). Spaniards and Europeans of all social classes
loved forms of gambling, including dice games (Cotton 1970:9; Bennassar 1975:166; Deagan
2002:291). One of the most popular European gambling games of the 17th and 18th century was
whist, a game played with dice (Schwartz 2006). Backgammon, another popular game, required
the use of both game pieces and dice. Contemporary paintings featured backgammon boards,
and boards and pieces have been found aboard roughly contemporaneous shipwrecks such as the
Vasa and the Mary Rose (Bennassar 1975; Rule 1982).

As the popularity of gaming grew, Spanish authorities tried to outlaw gambling because
it was considered immoral because of the poverty that it sometimes caused (Lopez 1992:303-
314; Deagan 2002:291). Moreover, some arbitristas (authors concerned with the decline of
the Spanish Empire) and moralists tried to convince the general Spanish public of the evils
of gambling and of being idle and gaming by attributing a feminizing influence to gambling
(Lehfeldt 2008). Casta paintings of the period also portray gambling as a domestic activity,
further giving gaming a feminine role (Museo Nacional de Arte y História [1780]; Deagan
2002:293). Moralists and arbitristas were concerned about the declining state of the Spanish
empire and believed that laziness was a large contributing factor to that decline. Thus, these social commentators tried to bring back the ideal of the chivalrous knight or nobleman, although they were unsuccessful. Other authors of the period mocked the attempt to bring back outdated ideals (Lehfeldt 2008). In his work *Don Quixote*, Cervantes openly mocks these ideas by showing the ridiculousness of outdated ideals in their 17th century world.

In contrast to the moralists and arbitristas, the lives of famous Spaniards served as models for some. One example is of a famous sailor of the period, Lope de Vega, who earned a fortune by sailing to the Americas and gambling (Bennassar 1975:11). Many other famous Spaniards such as Cervantes led adventurous lives that generally followed the mode of being born of modest means and charming their way to good fortune through numerous adventures involving women, gambling, and defending their honor. Consequently, despite the numerous types of literature stating the dangers of gambling, it was still a romanticized and popular activity. Regardless of this favorable perception, however, gaming could certainly have negative impacts on sailors, and cases are documented of sailors losing all of their wages and, quite literally, the shirts off their backs (Pérez-Mallaina 1998:153-157).

However, despite the efforts of these moralists, gaming continued to be extremely popular in Spanish society. Historians such as Claudio Sánchez Albornoz and Bartolemé Bennassar (1975:123-132) believe the history of the Spanish empire contributed to the popularity of gaming despite government and moral stances taken against it. The two principles that were most ingrained and important to Spaniards were faith in the Catholic church and honor. Much honor was gained by having the means to display wealth and charity. Throughout Spanish history, from the Reconquest to the 17th century, Spaniards gained wealth by means other than labor, primarily by conquest. When they expelled the Moors, the Spaniards took over the property and land. They operated similarly when they expelled the Jews. Again, conquest filled the pockets of Spaniards when they began defeating the people of the Americas (Bennassar 1975:127). The Church, maritime positions, and royal service became the primary methods by which to obtain wealth and, consequently, honor in 17th-and 18th-century Spain. Thus, repetitive manual labor was
often scorned, and gambling was a way to accumulate wealth without being burdened or socially stigmatized by enduring manual labor to earn profit.

While not explicitly performing a Spanish identity by playing dice games, the sailors performed a European identity that was a contrast to Native Americans and Africans who did not use cubic dice prior to contact with Europeans. Native Americans prior to European contact were familiar with the concept of dice in their game, called by some Native American groups, *patolli* (beans) (Bell 1960; Bell 1979:15). In this game, players cast five beans; on each bean, one side was inscribed with a single pip (Bell 1960:6). On his turn, a player would cast his beans, and the number of beans that landed with the pip facing up determined the number of moves the player could take with his game pieces on the playing board. By the early 18th century Native Americans aboard the ship and in the colonies likely played traditionally European games through years of contact and exposure with friars and Europeans in addition to the conceptual familiarity. Thus, these cubic dice are a potential example of the fluid nature of the period of ethnic identity and the associated material culture. Daily practice on ship occurred during the performance of chores and of recreational activities in leisure hours; this practice may have been reinterpreted for the social order aboard the vessel (Sahlins 1990; Lightfoot, Martinez, and Schiff 1998:201). This social order is also depicted in the *Casta* painting showing people of mixed descent playing dice games (Museo Nacional de Arte y História [1780]; Deagan 2002:293). The implications differ depending on who used the dice. A Spanish male during this period was possibly rejecting the idea that playing dice made him more feminine because he enjoyed the participation, distraction, and the potential for winning. In contrast, for a Native American, adopting European practices was not only a matter of personal preference, but also a display to others that he accepted civilizing practices, therefore ascribing to himself a more European social identity. As simple diversions, games such as backgammon or gambling could have served a secondary function to increase crew solidarity and form friendships or animosity among players and alleviate boredom.
The presence of dice aboard the *Rosario* indicates that these men did not adhere to strict legal or moral prescriptions of the period. At least some aboard the vessel rejected the notion of gaming as a feminine practice and tried to supplement their income in a way that avoided the stigma of manual labor; avoiding that stigma was important to a Spanish masculine identity. Additionally, the games were a form of entertainment. While the men were gambling illegally, they were gambling fairly on face value because the dice were not rigged. However, Charles Cotton’s treatise (1970), describes ways of cheating during dice play that did not require false dice. Cheating instead occurs by secretly holding the dice in such a fashion during the cast that they fall in predictable ways. Moreover, during the 17th century, dicing was synonymous with cheating, and numerous books and articles were published to protect the innocent from street hustlers (Cotton 1970; Jay 2003:23-27; Schwartz 2006). Cheating without physical evidence, such as loaded dice, may have been more advantageous in a shipboard setting because it would be more difficult to be discovered and consequently punished.

The two game pieces from the *Rosario* have interesting implications concerning the mariners as well. Table games were common items during this period and aboard historic ships. Backgammon pieces and boards have been found on other shipwrecks and have been drawn in contemporaneous paintings (Deagan 2002). Draught sets and boards have also been depicted in paintings of the period. Similar to gambling, participation in games requiring pieces and boards served as both an amusement and as a practice of European identity. Long hours aboard a ship with no access to outside amusements made participating in games essential to eliminate boredom.

As previously mentioned, Native Americans had games which required the use of game boards, though these were usually made of straw mats with painted designs (Bell 1960:6). The pieces associated with these games were colored stones. Consequently, the use of European materials, such as wooden pieces and dice, would have been a different practice outside of the Native American identity which they incorporated. Similarly, African individuals were more familiar with mancala-type games (Bell 1979:12). Mancala is another type of game that requires
a board and game pieces; however, different cultures in Africa played different variations of mancala and referred to it by different names. As with Native Americans, repetitive culture contact over many years introduced different types of games with different material cultures that Africans may have incorporated into their lifestyles. Individuals who worked, interacted, or traveled in pluralistic groups such as mariners were introduced to people of varied backgrounds and to their associated material culture.

Tobacco Group

Two of the pipe stems from the *Rosario* were recovered from the port bow area. The third was located in the starboard amidships area. Direct association is unlikely because of the space between them and because they were found in different field seasons.

The bore diameters fit within J. C. Harrington’s (1954) system for dating pipe stems in the time period 1680-1710, which correlates with the career of the *Rosario* (Binford 1962; Hume 1969:298). Artifact 01SRI0266, which exhibits two different bore diameters, still fits within the correct time period predicted. Differing measurements at the stem end and the bit end have been recorded at other sites, such as the Buck Site in Maryland, which dates to 1664 (Alexander 1983:236-243). At this site, pipe stem fragments were recovered with varying bore diameters, and in all cases the bit end was smaller than the stem end of the fragment. Because of the small sample size of *Rosario* pipe stems, they do not represent a reliable dating device for the site (Binford 1962; Alexander 1983; Deagan 2002). However, because of their context on a Spanish site, they do reveal important information concerning the social identity of the people aboard the *Rosario*.

Spaniards were the first Europeans to encounter and document Native Americans’ use of tobacco (Norton 2008: 1; Gately 2001:20-23; Deagan 2002:310). Upon Columbus’s arrival, Native Americans offered leaves of tobacco and other goods in exchange for two red hats which Columbus had brought because he thought Asians preferred red hats as gifts (Gately 2001:22). Initially, the Spaniards did not understand the purpose of the tobacco leaves; however, through
continued contact, they soon learned that the natives smoked the tobacco often, as it was an important aspect of their culture (Norton 2008).

Tobacco use was rampant through South, Central, and North America. Tobacco was deeply embedded in every Native American culture through thousands of years of culture contact (Gately 2001). The plant’s center of origin is in the Peruvian and Ecuadorian Andes, and botanists believe its initial cultivation range was from 5000-3000 BCE (Gately 2001:3). From the Andes, tobacco spread to the farthest reaches of the continents.

Native Americans ingested tobacco by many different methods. Smoking was generally the most common way, using pipes made of clay or long reeds. However, Native Americans, especially in Central America, also smoked by rolling cigars using maize husks as rolling papers. This method was the preferred one in the area where Columbus first landed, a fact which may explain Spaniards’ preference for cigars over pipes (Deagan 2002:310; Norton 2008). Tobacco was also often pulverized and mixed with lime in a one-to-one mixture and then ingested (snuffed) or applied topically (Norton 2008:20). This alkali mixture enhanced the potency of the nicotine.

Because of years of culture contact, tobacco was associated with three deeply important and common beliefs among all of the Native American groups in Mesoamerica (Norton 2008:18). It served as a painkiller and was very important to the shaman and healers in the various societies. Tobacco use was also a sign of hospitality and diplomacy (Norton 2008:50). Finally, tobacco was considered a link to the gods. Natives believed that by smoking, they could experience similar sensations as their gods, and smoking also enabled them to commune with their gods and look into their futures (Norton 2008).

Consequently, smoking was initially a critical aspect of Native American identities and remained so. Regardless of the Spaniards’ general disdain for Native culture, their difficulties in adapting to the New World required them to form productive relationships with Native Americans, including the smoking of tobacco. As a result, the first Europeans became addicted to tobacco products. Mariners were among the first to bring tobacco back to Europe and use it
habitually, but it did not quickly become adopted by mainland Europeans, and most were initially repulsed by the smell (Norton 2008).

However, tobacco use did quickly become a part of the burgeoning Creole and Mestizo identities. Peninsular Spaniards believed these groups were inferior to those Spaniards born and raised in Spain, and this attitude angered the Creoles and Mestizos (Norton 2008). Their use of tobacco was, to the Peninsulares, an example of their inferiority because it was a sign of their “going native.” However, Nicolas Monardes, a successful physician, merchant, and author, extolled the virtues of the curative properties of tobacco as a pain killer and a panacea for most ailments. He stated that the proper use of tobacco was a gift from God, and its use should be incorporated into Spanish medicinal therapy.

Slowly in the 16th century but rapidly in the 17th century, tobacco use became popular with all Spanish and European social classes (Deagan 2002:310; Norton 2008:141). This development is an interesting syncretism of Spanish and Native American customs because Europeans adopted the meanings of tobacco as well as the methods of use. It remained a social device to help facilitate comraderie; it was used to ease pain and calm nerves, and it remained associated with divinity. Tobacco retained its divine status by being a medicinal gift from God but could be diabolical in its misuse. Not only did Europeans and Native Americans use it regularly, but Africans and those of African descent in New Spain and the Caribbean also partook in similar ways with similar meanings.

A market was developed over time in Spain by several different means. One way was through Creoles returning to Spain but still retaining their addiction to the leaf (Norton 2008:146). As Creoles married into upper-class society, they spread tobacco use to upper classes. Another way was through mariners, who were becoming an increasingly large and consequential part of society. Phillip II gave them access to upward mobility in order to populate the ships needed to make trips to the New World to bring back precious metals. When these sailors returned to Spain, they lived in specific neighborhoods with other mariners, and tobacco offered a good excuse to socialize in the local taverns. This practice further spread the use of tobacco
in the lower classes of Spain. Medical use was yet another method by which tobacco permeated Spanish society (Norton 2008:146).

Meanwhile, the English independently developed a taste for tobacco and began to illicitly trade for tobacco in the Eastern Caribbean, prompting the Spanish government in 1620 to monopolize the production of tobacco. This development led to its becoming a very large commodity for the Spanish Crown during the 17th century (Norton 2008). The upper echelons of Spanish society considered the abuse of tobacco horribly offensive for many reasons. Many felt that the association of tobacco use with the mariner subculture made it a depraved activity and that it associated the user with idolatrous Native American traits (Norton 2008:184). However, the mariners enjoyed the physical side effects of tobacco use as well as the social atmosphere in which they partook while smoking, a trait they learned from Native Americans (Norton 2008:184).

Consequently, the pipe stems found aboard the Rosario are indicative of the sailors and soldiers performing a role designated with their mariner subculture as well as with other identities with which they may have associated. If the sailors were Native American, mestizo, or of African ancestry, they also performed associations with these identities. They likely smoked cigars and used snuff as well, but no paraphernalia associated with these types of tobacco use were located, and the actual cigars and snuff would not have preserved well in an underwater context. Additionally, individuals carried cigars loosely on their persons until the 19th century, when personal cases were introduced (Scott and Scott 1996:29).

Smoking is unlike many of the other material cultures discussed here because it is an example of how Europeans fully adopted a Native American practice. Thus, smoking is an excellent example of the truly fluid state of identities in the colonial setting during the 16th and 17th centuries. Native Americans and Africans brought to the Spanish colonies were not helpless bystanders. Rather, they made a mark in shaping both the colonial world and their identities along with those of others.
Arms Group

The barrel band was recovered in the port side amidships area. No other items belonging to a single individual were found in that unit. This barrel band may have belonged to a gun with a miquelet firing mechanism.

The miquelet lock is believed to have been developed initially in Spain by 1580; however, its exact origins are unknown (Held 1957). The miquelet lock was preferred by Spaniards and the Spanish military because of the snap lock design. Unlike the contemporaneous snaphaunce, however, the battery of the miquelet was connected to the flatpan cover in one L-shaped piece hinged at the toe. The vertical section of the battery was struck by the flint, and the horizontal section created the flashpan cover. This design enabled the gun to be carried halfcocked and ready to fire, helped to prevent accidental discharge. Because these were the most common firing locks used by the Spanish military, the barrel band may be from this type of gun. Different types of guns used by the Spanish included muskets, carbines, and pistols. The stocks of these guns were traditionally attached with bands instead of pins (Brinkerhoff and Chamberlain 1972).

Barrel bands are present on nearly all Eastern and African guns (Stone 1934). Their shapes and decorations generally indicate their production origin. For instance, Turkish and Balkan guns have barrel bands with the widest part of the decoration on the top, while Arab barrel bands have the widest part of the decoration underneath the stock. Afghan barrel bands had a narrow band around the stock with a wide decorative part over the barrel that was often engraved, embossed, or pierced (Stone 1934). Unfortunately, no barrel or additional gun parts were recovered, so no clearly identifying features of the gun were present. Consequently, making an accurate interpretation of where the gun originated is not possible, although the band exhibits these decorative designs.

Discussion of the Ceramic Diversity of the Assemblages

A major explanation for the higher diversity of the presidio assemblage compared to the shipwreck assemblages is the higher occurrence of different types of Native American ceramics
in the presidio (Figure 17). However, the presence of more Native American ceramics in the presidio collection has important implications for the social identity of the *Rosario* crew. If one assumes that Native American ceramics indicate the presence of Native Americans or men of mixed heritage, then the data indicate that men aboard the *Rosario* were primarily of European ethnicity, and the men aboard this ship may have been more racially homogenous. Thus, the presence of Native American ceramics aboard the ship may be indicative of a minority of racially mixed individuals because there were only 12 Native American ceramics, and a total of 329 imported ceramics of European influence. Any minorities present on the vessel most likely were not of full Native American descent. This situation is unlike the presidio, where periodic influxes of Native American refugees mixed the demographics of the site. However, if one does not consider the presence or absence of Native American ceramics as evidence of Native American presence, then the argument stands that performing a Native American-influenced identity through the manipulation of Native ceramics was not important to the men aboard the *Rosario*.

As mentioned, the area in the presidio most similar to the *Rosario* was the warehouse area. Thus, the diversity of the shipwreck is most similar to a public area in the presidio. A tentative explanation for the reason the two are similar is that shipboard life was so cramped with people from all social stations that the shipwreck assemblage best reflects areas on land to which the general population had access. Moreover, because these areas are more diverse than the *Rosario*, they may reflect the more diverse demographics of the presidio.

The differences in diversity and in evenness of the two shipwrecks is striking. This fact may represent the differences in the *Rosario* being a government ship and *El Nuevo Constante* being a privately owned merchantman. Or the differences may reflect the social changes that occurred in the Spanish colonies later in the century because of the Bourbon reforms. Incorporating data on the different functional classifications of ceramics aboard the ships provides more insight into how the ceramics were utilized aboard the two ships, especially regarding how the ceramics may have been manipulated to perform social identity.
Discussion of Ceramic Functional Categories

The two shipwrecks are the most similar in their general composition of the ceramics’ functional use (Figure 17). The Rosario had only 12 ceramics of Native American manufacture while El Nuevo Constante did not contain any Native American ceramics. Both sites also contained mostly utilitarian ceramics instead of tableware. This distribution seems logical because food storage was extremely important for survival while at sea. Moreover, crewmen often ate from wooden bowls or a common trencher. Daily food rations in the Windward Fleet for 4 days of the week consisted of 23 ounces of biscuit, 8 ounces of cod, 1 ounce of beans and chickpeas, 11.5 pints of oil, 1/5 pint of vinegar, 3 liters of water, and 1 pint of wine. The remaining 3 days varied depending on the ship’s location but may have included beans, cod, chickpeas, 8 ounces of pork fat, 1.5 ounces of rice, and an unspecified amount of cheese (Ramírez 1981:292). Thus, other than frying fish and cooking stews, much less food preparation occurred aboard a ship than on land. Formal tableware was reserved for high-ranking officers and high-status passengers (Pearson and Hoffman 1995:178). Because of this fact, tablewares were present on both ships, although they were less abundant than storage vessels. Consequently, shipwrecks may show unique patterns of ceramic categories compared to terrestrial sites of the same social and temporal contexts.

The assemblage from the Rosario is most similar to that from the area between the hospital and the barracks at Presidio Santa María de Galve. In both of these assemblages, the proportion of utilitarian wares are relatively the highest of the sample (Figure 17), with the Rosario at 79% and the area between the hospital and barracks at 60%. The tableware of the Rosario is 17% of the assemblage, while the percentage of tableware in the area between the hospital and barracks at Presidio Santa María de Galve is 15%. The major difference between these two assemblages is that the proportion of Native American ceramics is much higher (25%) in the presidio than it is on the Rosario (4%). The higher quantity of Native American ceramics at the presidio may have been present for several reasons. One is that the presidio did not have reliably steady access to regular trade with other Spanish colonies. Therefore, the settlement may
have depended more on local Native Americans for ceramic production. However, the proportion of tableware in the officers’ barracks is much higher than on the *Rosario*, but the total count of tableware on the ship \((n = 58)\) was more than that of the officers’ barracks \((n = 32)\). Moreover, five types of tableware were present on the *Rosario*, and six different types of tableware were recovered from the officer’s barracks. Therefore, access does not seem to determine the pattern in the archaeological record at these sites.

The similarities of the *Rosario* to the area between the hospital and barracks may be due to the relatively public nature of both spaces. While a ship did not offer equal access to everyone aboard, high-ranking officers could access whatever part of the ship they desired, even though the same was not true for lower ranking crew. Additionally, because meals were generally prepared in the bow of the ship, tableware would have been utilized in the bow and moved to the stern in the officers’ quarters (Pearson and Hoffman 1995). This fact is reflected in the archaeological deposits of tableware on the *Rosario* (Figure 17). It is likely that the hearth was in the bow of the *Rosario* because brick fragments and a skillet were also located in the bow area, indicating that meals were prepared in that vicinity. Moreover, tableware would have been used by a minority of the crew, the officers, so less was needed on a ship. Additionally, when it sank in the hurricane, the ship probably broke and scattered ceramic fragments. Further contributing to the distribution of ceramic sherds is the site formation processes and over 300 years’ exposure to storms and strong currents. Similarly, all parts of the presidio society could utilize the space between the hospital and barracks to some degree. Both this area in the presidio and the *Rosario* may have proportionately more utilitarian ceramics, which may be because these were not areas where tableware was commonly utilized. Storage vessels could have broken while transporting them in this area. However, because the ceramics from the presidio utilized in this study were from trash pits, refuse in this area likely came from places nearby where tablewares were utilized in addition to utilitarian ceramics, in this case the soldiers’ barracks and the hospital. In both of these areas, the utilitarian ceramic assemblages were proportionately the highest of the sample,
with 37% of the assemblage at the hospital/warehouse and 43% at the soldiers’ barracks (Figure 17).

The next most similar area of the presidio is the warehouse area, which is another public space. The diversity of the sample from the warehouse is similar to the diversity of the *Rosario*; however, the warehouse sample contains mostly tablewares, and the *Rosario* sample contains mostly utilitarian ceramics. Bense theorized that because none of the ceramics displayed any use wear, feature 559 was a refuse pit from a box containing all tablewares that was dropped and soon after disposed of collectively (Bense and Wilson 2003:140-141). Despite this high number of tablewares, the area is very similar to the *Rosario* because the Native American ceramics are the smallest category in the sample, although this fact suggests only that the ceramics of the *Rosario* reflect public spheres, considering that the pattern in other public areas bolsters the argument that the *Rosario* assemblage reflects public areas more than private spaces.

The hospital/warehouse area is also comparable because it has a predominance of the utilitarian category and a smaller number of Native American ceramics compared to other areas in the presidio. Although one cannot be completely confident that these patterns reflect the true nature of what was happening, the patterns do suggest that the functional categories of ceramics of the *Rosario* best reflect an area that was open to the public. Historical documents correlate that ships were spaces with much cross-class interaction because of the lack of space (Pérez-Mallaina 1998:129).

Though Native American ceramics may be the largest single category in some of the activity areas of the presidio, they in no way outnumber the imported ceramics that indicate a European style of manufacture. However, the presence of Native American ceramics suggests important aspects of Native American identity within the Spanish colonies. Moreover, the presence of Native American ceramics aboard the *Rosario* is interesting because it denotes that the men aboard the ship may have been of Native American or mixed Native American descent or performing Native American associations, whether intentionally or not, by utilizing the ceramics. Or they may have been performing a *criollo* or *mestizo* identity by utilizing Native
American ceramics, as it was common for colonists to utilize a variety of goods that were of both European and Native American influence (Loren 2007:33). Conversely, Native American ceramics on the *Rosario* may have been the result of opportunistic need for ceramics by the men on the ship.

In most colonies in Spanish Florida, women were never present in large numbers (Deagan 1985:304; McEwan 1991:34), a fact that was also the case at Presidio Santa María de Galve (Sims 2001). However, with the influx of Native Americans from the Apalachee missions, native women were most certainly among the refugees. Therefore, the relative abundance of native ceramics in the private areas of the fort, namely the officers’, soldiers’, and convicts’ barracks, may represent Native American women’s influence in the private lives of the men living there. Cynthia Sims (2001:213) argues that the presence of various beads, porcelains, and other items in the officers’ barracks indicates the presence of Mexican and possibly Spanish women because of the relative abundance of higher status personal items and tablewares. The presence of women in the convicts’ barracks seems to indicate that women of Native American ethnicity were there, but their numbers may have been fewer than at the officers’ barracks. The soldiers’ barracks assemblage also indicates that women of Native American or mixed heritage were working or residing there (Sims 2001:213-218).

Many researchers such as Deagan (1985) and McEwan (1991) state that the social structure that Spanish colonists implemented in the Floridian colonies was one in which women’s primary social influence was the household. Ideally, Spanish women were to preserve Spanish culture in the colonies by ensuring that Spanish was spoken and that meals and chores were conducted in a European fashion. Spanish women were the preferred marriage partner as they contributed to a higher social status and were a status marker because they wore more expensive European clothing, and utilized more expensive Spanish goods in the house (McEwan 1991:34). Men were also encouraged to marry Native American women as well. The Spanish government encouraged these unions because it was politically advantageous in creating positive relationships with native groups. Also, it was seen as a positive way to encourage conversion
to Christianity (Deagan 1985:304; McEwan 1991:35-38). The Native American women who married Spanish men inherited the duties of Spanish women but also played different important economic roles in the communities. For example, Native American women provided important foodstuffs to the colonial community (McEwan 1991:38). These Native American women certainly integrated the ceramic types with which they were familiar into their households.

Therefore, the relative lack of Native American ceramics aboard the *Rosario* was likely due to the space being predominately male. The few Native American ceramics may have been due to a variety of reasons, such as the presence of criollo men. Thus, these relatively few ceramics may represent a mixed heritage or criollo identity, an important part of the identity in the colonial Americas. Conversely, the relatively few ceramics may merely have been because of the need for ceramics when only Native American ceramics were available.

Conclusion

This research focused on personal items used by the crew of the *Rosario* to perform various types of social identity. These items included buttons, shoes, a razor, rosary beads, game pieces, pipes, a gun, and ceramics. More items were used on board of course, but these artifacts are the only ones preserved in the archaeological record of the *Rosario*. These items were used to perform a variety of social identities by the men on the ship. One of these primary identities was gender, and the artifacts that indicated masculinity were the buttons, shoes, and razor. Ships were manned by all-male crews, a fact which is reflected in the personal possessions found aboard the *Rosario*. The composition of the ceramics aboard, particularly the relative dearth of Native American ceramics, may also indicate that a significant number of women were not on the ship. Thus, the high proportion of Native American ceramics present in the barracks area versus the public areas or the ships may be the result of the gender differences on land versus at sea during the 18th century.

The men aboard the *Rosario* also performed a predominately European-influenced social identity. The shoes, buttons, razor, pipes, gun, game pieces, utilitarian ceramics, and tablewares all are European-influenced. However, the Native American ceramics may be indicative of
men making Native American associations which were possibly because of their mixed racial heritage.

Occupations were also indicated by the personal possessions found on the ship. The razor blade likely belonged to the barber-surgeon on the vessel, who held a unique position aboard the vessel. The barrel band possibly belonged to an artilleryman aboard the vessel. Rank and duty were very important identities aboard ships because they determined day-to-day activities and interactions with other crewmen.

Social status was also reflected in the personal possessions found on the vessel. Ships were hierarchical social areas. Men of various social standings were aboard, ranging from high status, such as the Admiral, to very low status, such as the cabin boy. The buttons may have belonged to a man of medium to high social standing based on comparisons of similar items found in the officers’ barracks at the presidio. The barber-surgeon did not occupy the lowest social position aboard the vessel, nor was he the highest ranking either. The barrel band of the gun possibly belonged to a person of relatively high social status and income because guns were so cost prohibitive during this period. Conversely, the barrel band could have belonged to an artilleryman, who was also within the middle range of social status.

Religion, a very important form of social identity in the Spanish colonies, was also reflected in the archaeological record. The rosary beads indicate that men were at least observing Catholic rituals whether or not their faith was devout. The use of these beads is a good example of the men manipulating their material culture to perform an association with a particular social identity.

The game pieces are particularly interesting because gaming was formally prohibited in the Windward Fleet. However, these items offer direct evidence of the men disobeying rules. Superficially, these men performed all of the socially acceptable proscriptions by performing identities largely associated with masculinity, Catholicism, and being European. The amount to which the men may have truly adhered to these associations in their private lives is suspect (Scott 1990). Scott advocates that hegemony was often resisted, but done so privately. Resistance was
A relatively private affair because open opposition may have been met with forms of punishment such as exactions, labor, and humiliation (Scott 1990:86). To Scott, the rosary beads, imported ceramics, and clothing items may have been part of an “official transcript” or a form of identity with which the men outwardly seemed to ascribe, but only in order to make their lives easier and to avoid negative consequences. Because these official transcripts often used material goods, they are more likely to be present in the archaeological record. Consequently, the fact that official transcripts often using goods that are more likely to be preserved in the archaeological record could serve to hide acts of resistance to archaeologists because the acts would not be visible in the archeological record. However, these dice and game pieces are material evidence that the men aboard the ship were actively resisting some imposed regulations. Unfortunately, how strictly the anti-gaming rules were implemented is impossible to know. Gaming may have been a very discrete activity, or everyone aboard the ship may have taken part in gaming. In the trans-Atlantic crossings, constables of the armada commonly ignored gambling aboard the ship (Pérez-Mallaina 1998). Therefore, it is possible that the Windward Fleet officers may have turned a blind eye towards, or even participated in, gaming.

The ceramics indicate that people aboard ships used ceramics in very different ways than did people in the presidio. However, the assemblages from the ships best resemble the diversity and functional uses of the assemblages from public areas on the land site. This fact likely reflects the confined living conditions aboard seacraft and the different needs concerning ceramic containers and tableware. Spatial segregation, though significant on vessels like the Rosario, was highly permeable. High status individuals such as the captain could access any part of the ship. Although lower status men such as common sailors could not access the store room or captain’s quarters, cabin boys had access to all of the officers’ quarters. Thus the ceramics would be predominantly utilitarian in function, and the few tablewares that would be present for use by the few high-status individuals could be unevenly distributed throughout the vessel. Moreover, utilitarian ceramics would be distributed more evenly throughout the vessel (Figure
14). Additionally, the wrecking event and subsequent degradation of the vessel may have acted to mix the original context of the artifacts.

The Spanish sailors in the Windward Fleet were probably like most sailors of the period. When at sea, they lived in predominately male social spheres dominated by European goods, an environment which was very different from the very mixed social settings of terrestrial settlements. However, the sailors were still an essential component of colonial Spanish life and engaged in recreational activities such as reading, gaming, and smoking like their terrestrial counterparts. Because the shipwreck ceramic assemblages best resembled public spaces and warehouses on land, more research needs to be conducted in special areas of towns that were inhabited predominately by sailors. More research incorporating more terrestrial sites and contemporaneous shipwrecks would also be beneficial for determining how mariners fit into early 18th-century Spanish colonial society.
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