The Archaeological Site of Port Dauphin (1MB61): Its Role in the French Colony on Mobile Bay

George W. Shorter

Louisiana State University and Agricultural and Mechanical College

Follow this and additional works at: https://repository.lsu.edu/gradschool_disstheses

Recommended Citation
https://repository.lsu.edu/gradschool_disstheses/8354

This Thesis is brought to you for free and open access by the Graduate School at LSU Scholarly Repository. It has been accepted for inclusion in LSU Historical Dissertations and Theses by an authorized administrator of LSU Scholarly Repository. For more information, please contact gradetd@lsu.edu.
THE ARCHAEOLOGICAL SITE
OF PORT DAUPHIN (1MB61): ITS ROLE IN
THE FRENCH COLONY ON MOBILE BAY

A Thesis

Submitted to the Graduate Faculty of the
Louisiana State University and
Agricultural and Mechanical College
in partial fulfillment of the
requirements for the degree of
Master of Arts

in

The Department of Geography and Anthropology

by

George W. Shorter, Jr.
B.S., Louisiana State University, 1967
August 1995
MANUSCRIPT THESES

Unpublished theses submitted for the Master's and Doctor's Degrees and deposited in the Louisiana State University Libraries are available for inspection. Use of any thesis is limited by the rights of the author. Bibliographical references may be noted, but passages may not be copied unless the author has given permission. Credit must be given in subsequent written or published work.

A library which borrows this thesis for use by its clientele is expected to make sure that the borrower is aware of the above restrictions.

LOUISIANA STATE UNIVERSITY LIBRARIES
ACKNOWLEDGMENTS

I have been pleasantly surprised and encouraged by the openness and eagerness to help displayed by virtually everyone who was approached for assistance in this research. Many who listened, asked questions, and appeared genuinely interested may not be specifically listed here, but you are remembered and appreciated.

Foremost, I wish to thank Dr. John Cottier of Auburn University. After first infecting me with his enthusiasm for archaeology he encouraged me to "go back to school." He supported my research as my sponsor with the Alabama Historical Commission, with his advice and guidance, and with his labor. He offered the facilities of Auburn University for curation of artifacts. I am fortunate to have had him as mentor and friend. "Not enough time in this lifetime," for me, will always describe John Cottier.

I am also indebted to Dr. Christine White of the Alabama School of Math and Science. She and her students served as excavation crew and worked long hours to wash and label artifacts. Sarah Walker and Stacy Green deserve special thanks for supervising and organizing the cleaning and labeling at the school. They spent many individual hours in this effort and their work was excellent. I also want to thank Dr. Benton White for his labor and for assisting with the planning and supervision of students during the week we worked on site in the spring of 1993.
Also, thanks to the Sea Lab at Dauphin Island for providing lodging and food for the students. A special thanks to Amy White, the White’s cute and well behaved daughter who was our mascot. And to the crew, it was a privilege to work with you. Without your efforts this research would not have been possible.

Field Crew
Alabama School of Math and Science

Sarah Walker  Stacy Green
William Moore  Brandon Downox
Amy K. Bischoff  Jennifer Taro
Katie McClearly  Ryan Mahus
Sarah Neilans  Matt Adcock
Anna Gardberg  Jenane Hardin
Rhonda M. Perdue  Sedjenane Hardin
Eugene Garrettson  Jeff Lowley
Kim Powell  Darcell Washington
Josh Warren  Micheal Cassidy
Keisha Williamson  Max Crowe
Karen Faison  Gina Carman
Shane Estes  Karen Rader
Peter Chien

Dr. Paul Farnsworth and Dr. Laurie Wilkie, Louisiana State University, visited the site on two occasions to advise and to assist with the excavations. Special thanks to Dr. Paul Farnsworth, my major professor, for his patience in reviewing this document, and for his counsel and direction. I also appreciate the time and interest dedicated to reviewing and commenting on this research by the other two members of my committee, Dr. Jay D. Edwards and Dr. William V. Davidson.

Noel Read Stowe, University of South Alabama, met with me on two occasions to discuss his research. Dr. Greg
Waselkov, University of South Alabama, was also most helpful in allowing me to use his personal library of reference materials on the French Colonial Period. He also was open in allowing me access to artifacts and data from his excavations and research at Old Mobile. His personal communications were also invaluable. Also, thanks to Diane Mueller and Catherine Potter, staff archaeologists at the Center for Archaeological Studies at South Alabama, for their advice and assistance.

The financial assistance provided by the William Haag Award from the Department of Geography and Anthropology, and the Graduate Student Research Award from the Center for French and Francophone Studies were both appreciated. Not only did they provide financial assistance, but their recognition of the value of the research provided welcomed moral support.

This research owes a special thanks to the owners of Lot 91, Otto E. Simon and Katherine Simon, who allowed us to excavate on their land. The local residents of Dauphin Island who happened by our work were curious, friendly and supportive. Thanks to C. M. Roberts, Dauphin Island Park and Beach Board, for his assistance and to Mike Henderson, Director, who was most helpful in land owner contact and in project security. Freda Roberts also assisted by providing land ownership information.
Lastly, a heart-felt thanks to my wife Laurie and to my children for their patience and encouragement. I know they tired of hearing about the French and Dauphin Island, but they listened anyway. Especially I thank George, my oldest son, who insisted that I come to Auburn as a volunteer in the archaeology field school at Fusihatche. There I met John Cottier, and there I discovered the exciting challenge of archaeology.
TABLE OF CONTENTS

ACKNOWLEDGMENTS............................................................................................................. ii
LIST OF TABLES....................................................................................................................... viii
LIST OF FIGURES....................................................................................................................... ix
ABSTRACT................................................................................................................................. xii

CHAPTER

1 INTRODUCTION....................................................................................................................... 1

Related Archaeological Research in the Region...................................................................... 2
Dauphin Island: The Archaeological Site - 1MB61............................................................... 6
Previous Archaeological Investigations at 1MB61............................................................... 9
Current State of Knowledge................................................................................................. 11
Research Goals....................................................................................................................... 13

2 HISTORICAL CONTEXT......................................................................................................... 17

A New Initiative................................................................................................................... 19
Fort Maurepas: The First Settlement .................................................................................... 21
Occupying Mobile Bay........................................................................................................... 25
The Loss of Iberville............................................................................................................ 29
Massacre Island: The First Decade (1701-1711) .................................................................. 30
Colony Growth: Trends and Attitudes (1701-1711)............................................................. 33
Shortages: The Continual Problem......................................................................................... 35
A Change of Base.................................................................................................................... 36
Antoine Crozat: The First Proprietary Charter.................................................................... 37
John Law and the Company of the Indies............................................................................. 39
Dauphin Island: The Second Decade (1712-1722).............................................................. 41
War with Spain....................................................................................................................... 42
Relations with Spanish Pensacola.......................................................................................... 44
Dauphin Island: The Quiet Years.......................................................................................... 47

3 ARCHAEOLOGICAL DATA COLLECTION AT 1MB61.................................................... 51
Preliminary Text Excavations............................................................................................... 51
Additional Test Excavations.................................................................................................. 57
Primary Data Collection....................................................................................................... 57

4 CHRONOLOGY AT 1MB61..................................................................................................... 63
Establishing Chronology....................................................................................................... 65
Brick...................................................................................................................................... 66
Tobacco Pipes........................................................................................................................ 72
Conclusions Regarding Chronology.................................................................................... 91

vi
LIST OF TABLES

4.1 Factors that differentiate the first two decades of French occupation on Mobile Bay......63
4.2 Brick dimensions from 1MB61...............................67
4.3 Dimensional comparison of bricks from 1MB61 with other French sites on Mobile Bay...........69
4.4 Decoration of tobacco pipe bowl rim fragments at 1MB61...............................................77
4.5 Tobacco pipe bowl decoration at 1MB61 and at Old Mobile.............................................77
4.6 Tobacco pipe stem decoration at 1MB61 and at Old Mobile................................................81
4.7 Tobacco stem dates for 1MB61 and Old Mobile...........90
5.1 Legend for the 1717-1720 map of Dauphin Island.....99
5.2 Proposed legend for the 1718 map of Dauphin Island.......................................................100
5.3 Artifact frequencies at 1MB61.............................114
5.4 Artifact patterning implications at 1MB61..............117
5.5 Activity ratios for military, domestic, and frontier sites compared to ratios at 1MB61......118
6.1 European ceramics from 1992-1993 excavations at 1MB61..................................................144
7.1 Indian pottery type and frequency at 1MB61..........166
7.2 Ceramic traditions represented by historic Indian pottery at 1MB61.................................168
### LIST OF FIGURES

1.1 Regional map of related research sites..................4

1.2 *Veue de l'Isle Dauphine* map of 1717-1720 of Dauphin Island..........................7

1.3 Map of the eastern end of Dauphin Island.............8

1.4 Dauphin Island subdivision map..........................10

2.1 Mobile Bay area map......................................28

2.2 Town plan of Old Mobile, 1702..........................29

2.3 Population growth in the early French colony.........34

2.4 View of New Biloxi, 1720.................................43

3.1 Area of 1MB61 damaged by "treasure hunters"..........51

3.2 Shovel testing during assessment of spring 1992 by Auburn University..........................53

3.3 Profile of Auburn University test unit.................55

3.4 Shovel test map of European artifacts, Lot 91........59

3.5 Shovel test map of Indian artifacts, Lot 91.........60

3.6 Shovel test map of brick artifacts, Lot 91...........61

4.1 Plan of level one (0-10cm), 1992-1993 excavations........................................71

4.2 Kaolin tobacco pipe bowls form 1MB61................74

4.3 Types of rim decoration on tobacco pipe bowls at 1MB61........................................76

4.4 Tobacco pipe stem rouletting position relative to pipe bowl....................................78

4.5 Tobacco pipe stem decoration at 1MB61................79

4.6 Twisted tobacco pipe stem fragment from 1MB61......80

4.7 Maker's marks from tobacco pipe spurs at 1MB61.....82

4.8 "RT" tobacco bowl maker's marks from 1MB61..........84
4.9 Miscellaneous marked tobacco pipe artifacts from 1MB61

4.10 Chart showing variations in stem bore diameter of clay tobacco pipes relative to dates of production

5.1 1712 map of Dauphin Island

5.2 Detail of 1717 map of Dauphin Island

5.3 Detail of 1718 map of Dauphin Island

5.4 Detail of 1717-1720 map of Dauphin Island

5.5 Outline drawing of Dauphin Island from the 1718 map

5.6 Outline drawing of the 1718 map superimposed over the current U.S.G.S. map of Dauphin Island

5.7 Detail of the stockade (fort) of the outline drawing superimposed over a current subdivision map

5.8 Detail of hut at New Biloxi, 1720

5.9 Residential structures and other buildings at New Biloxi, 1720

5.10 Details of construction from the De La Point/Krebs house

5.11 General map of Stowe's excavations, 1973-1974

5.12 Detail plan of Stowe's excavation unit 1MB61-2 on Lot 110

5.13 Profile of south side of 1992-1993 excavation units

5.14 Plan of units excavated by Auburn University, spring 1992, and Level two of test excavations, fall 1992

5.15 Level two (10-20cm) plan of 1992-1993 excavation unit

5.16 Structural features at level two (10-20cm), 1992-1993 excavation unit
6.1 Ceramics from 1992-1993 excavations at 1MB61......145
6.2 Spanish olive jar rim, middle style, from 1MB61...146
6.3 Greenware rim styles at 1MB61......................147
7.1 Colono-Indian sherds from 1MB61....................164
8.1 De Soto Landing condominium Master Plan with
     location of archaeological sites identified
     by Stowe and Lumpkin, 1993.........................190
8.2 Village drawing from the 1718 map superimposed
     over the final plan of the De Soto Landing
     condominium development............................191
ABSTRACT

The French colony in Louisiana resulted from the competition between France, Spain, and England for control of the region. France's interest, that began with the expedition of La Salle in 1682, resulted in the founding of the first French permanent colony on the Gulf coast by Iberville in 1699, Fort Maurepas. The colony was moved in 1702 to Mobile Bay. Mobile, the capital, was located 39 miles upriver for access to the Indian nations of the interior. Dauphin Island served as port. After two decades the colony was refocused on the Mississippi River, but the first 20 years of French Colonial occupation on Mobile Bay are critical to an understanding of the later periods in Louisiana.

The archaeological site (1MB61) on Dauphin Island is the focus of this research. 1MB61 is the only French Colonial site on the island to have been investigated. However, the chronology and function remain unclear.

Data indicates that the primary occupation period for 1MB61 was from 1711 to 1722. It was a military stockade site occupied by soldiers and other related individuals. Soldiers had the lowest socio-economic status in the colony. Their lack of affluence is demonstrated in the archaeological data. Interpersonal relationships developed with Indian women as wives, servants, and slaves. Acculturation is examined in this context.
The accumulation of personal wealth was the goal of most individuals in the colony. Trade provided one avenue. The impact of official trade restrictions on the soldiers at 1MB61 is examined.

All archaeological sites on Dauphin Island are threatened by development. A final aim of this research is to demonstrate the value of these cultural resources so that they may be preserved or investigated prior to loss.
Chapter 1
INTRODUCTION

Dauphin Island occupies an unusual position in early eighteenth century French colonial efforts along the Gulf Coast. Its function is unique compared to most other colonial settlements in that it served as a support facility to the main colony upriver, Mobile. The historian, Du Pratz referred to Mobile as the birthplace of the French colony in Louisiana and to Dauphin Island as its cradle. In a practical sense the two functioned as one (Hamilton 1976:165).

A primary goal of the French during this period was to block English expansion into the region. French and Spanish Colonial strategy differed from that of England. On the Gulf Coast in the early eighteenth century, both the French and the Spanish were small in number and poorly supported with material goods. Both depended on the support of the indigenous people of the region (Hamilton 1976; Higgenbotham 1968); however, the French were more successful than the Spanish in building alliances with local Indians.

The first two decades of French Colonial occupation on Mobile Bay are critical to an understanding of the later development of French culture in Louisiana. French-Indian relations evolved as Iberville and Bienville worked to make friends, military allies and trading partners of the
Indians. On a more interpersonal level, Indians served as slaves, "servants," and wives. The study of acculturation between the French and the Indians is dependent upon understanding the interactions of these people during the early years of contact.

The French colonists, though small in numbers, were a diverse group including soldiers, artisans, Canadians, and government officials. The accumulation of personal wealth was the goal of most and trade provided the avenue to satisfy this aspiration. Trade was active between the Indians, the French and the Spanish. Official policy evolved from openness in the first decade to restrictive mercantile sanctions during the second. The effects of official policy on the inhabitants of the colony are revealed in the archaeological record.

Dauphin Island was occupied by the French by late 1701. Although the island was inhabited after 1722, the number of inhabitants was small after that date as New Orleans and the Mississippi River became the primary focus of activity. The period from 1722 to 1763 represents this later French Colonial era on Mobile Bay.

Related Archaeological Research in the Region

The focus of this research is on the first two decades of the eighteenth century (1701-1722) when Mobile Bay was the center of activity. This summary of related research in the Gulf region has been limited to the few examples
from this period. Archaeological sites fall into two general categories: Indian and French.

Auburn University has conducted excavations at two historic Indian village sites near Fort Toulouse (Figure 1.1): Hickory Ground and Fusihatche. European artifacts have been recovered of French, English and Spanish origin (Cottier 1992:personal communication). Both of these sites were occupied throughout the eighteenth century. As they are near Fort Toulouse, they had easy access to this trading opportunity. The origin of artifacts recovered at these sites indicates that they traded with all the colonial powers, in spite of their close connections to the French.

More distant from Mobile Bay, on the Mississippi River, is the Fatherland site, the Grand Village of the Natchez Indians. Excavations in 1930 and 1965 also revealed European artifacts. The village was occupied from 1682-1729 (Neitzel 1965).

In the late 1960s a "pot hunter" dug a large amount of material from a historic Tunica Indian village in West Feliciana Parish, Louisiana, south of the Fatherland site (Figure 1.1). The "Tunica Treasure" as it has become known, represents an amazing collection of European material from an Indian site circa 1731-1764, even though the exact provenance and context have been lost (Brain 1979). The large amount of European artifacts from this site in
Figure 1.1 Regional map of related research sites.

Comparison to Hickory Ground, Fusihatche, and the Grand Village of the Natchez indicates that the French were better supplied with prestige goods such as ceramics after 1730, and that they traded actively with the Tunica. Comparison between artifacts from Dauphin Island and these historic Indian village sites is useful for assessing acculturation and cultural change.

Excavations at French town sites are represented by extensive work at Old Mobile circa 1702-1711 (Waselkov 1991) and limited work at Mobile (after 1711).
Port Dauphin (1MB61) circa 1701-1763 is the only component of Dauphin Island to have been investigated (Stowe n.d.). Many of the components of Dauphin Island relate directly to Old Mobile (1702-1711) and Mobile (after 1711) as the French occupation on the island is contemporaneous with these sites. The previous work at 1MB61 by Stowe (n.d.) is particularly important as it concentrated on the specific component of Dauphin Island that is the focus of this research.

Excavations at Fort Toulouse (1717) (Waselkov 1984), Fort Tombecbe (1736) (Parker 1982), and Fort Conde (1711) (Harris and Nielsen 1972), examine military occupations of the period (Figure 1.1). Fort Conde (after 1711) at Mobile is significant as a military occupation of the period. French influence in the central Alabama area began after 1717 with the establishment of Fort Toulouse. The more distant sites (approximately 200 miles) of Fort Toulouse and Fort Tombecbe date after the primary period of Port Dauphin. However, comparisons of Dauphin Island with these sites is useful in understanding trends within the region.

Individual domestic sites have also been studied in the Mobile Bay area. The De La Pointe/Krebs house (circa 1726) (Padgett 1980; Poesch 1972:6-21) and the Bon Secour house site (undated) (White 1965) represent individual residential occupations (Figure 1.1). Chronology and
function of the site at the Bon Secour house are unclear; however, the De La Pointe/Krebs house (dated after 1718) is useful as a representation of a standing structure using building techniques of the period.

Dauphin Island: The Archaeological Site - 1MB61

*Veue de l’Isle Dauphine* (Figure 1.2), a pictorial map dated shortly after 1717, provides a comprehensive portrait of Dauphin Island at a time when its development had reached a peak. The historian, Peter J. Hamilton (1976:167-168) gives the following word-picture using this map:

In a clearing on the south side of the island rises from the beach the settlement, in two divisions. To the west, facing the open sea, high on the shores we see the bastioned, palisaded fort, in whose barracks lodge the troops. About it are sundry one-story houses, of which one within a fence is the powder-house, and behind a little embankment by the water’s edge are cannon to defend the outer harbor.

Further east, beyond the fatal bar which in 1717 closed up the entrance and joined Spanish (Pelican) Island to Isle Dauphine, is the town (*bourg*). This is on a little cove and overlooks the inner harbor, where ride, with full sail, the two masted *Paon* and the *Paix*, under the mouths of cannon mounted on the strand. This settlement is a straight line of some eighteen houses, almost all one-story, and generally in square, picketed lots. The commandant’s house is there, facing the cove, and has a sentry-box in front. Two long houses are *magasins* of the company, and adjoining is the guard-house (*corps de garde*), while near the inner end of the line is the *magasin* of the king. There is also a second but shorter row of buildings behind, among which is the house which serves for a church, --one of the few with two doors shown on this plan.
The archaeological site (1MB61) is located on the eastern end of Dauphin Island in Mobile County, Alabama (Figure 1.3). The site was first officially reported by C. B. Curren in 1971. He submitted a site record form to the State of Alabama (Mobile Area File: Alabama Historical Commission) and the designation 1MB61 was assigned to the archaeological site.

The name Port Dauphin has commonly been used to refer to 1MB61, the only recorded French Colonial archaeological site on Dauphin Island. However, 1MB61 will be used herein to designate the archaeological site because it is only one component of the settlement on the island. The name "Port Dauphin" technically refers to the port and
possibly to the main village site adjacent to the roadstead. Massacre Island (the name prior to 1710) refers to the entire settlement, as does Dauphine Island, the name from 1710. Current usage is Dauphin Island. "Dauphin Island"
will be used herein to refer to all French components of the island.

Curren (1971) indicated on the site form that cannon balls and historic pottery were recovered at 1MB61 from the French Colonial period; however, the function of this component of the settlement must have been unclear. He indicated that the site might be the main village and that the adjacent swamp might be the remnants of the harbor. No map was submitted and the extent of the site was not mentioned. Obviously, very little information was available to Curren; however, his recognition of the significance of the site was a first step in identifying its value as a cultural resource.

The components of the French occupation on Dauphin Island include the main village as well as various fortifications and other residential or related structures. The specific study area (Figure 1.3) for this research is central to the island, northwest of the main village site.

The area has been subdivided into residential lots (Figure 1:4). Several houses have been constructed adjacent to, or within, the study area. Most streets are paved. Sewer and water connections are now available to all lots.

**Previous Archaeological Investigations at 1MB61**

N. Read Stowe (n.d.:2) reports that the University of South Alabama first conducted archaeological excavations at
1MB61 in the fall of 1973. At that time the owner of Lot 82 (now designated Lot 110) contacted the university when clearing operations for a planned residence uncovered Indian and European artifacts. During 1973 and 1974, under the direction of Professor Stowe, areas of Lot 110 were excavated as well as portions of Lot 91, Lot 92, Lot 98, and Lot 99. A preliminary report was produced in 1977 but not formally published. The report is on file at the
University of South Alabama Archaeological Laboratory. Subsequently, the owner of Lot 110 did not build, and the lot remains vacant today.

During the spring and summer of 1991, a residence was constructed on Lot 119 (Figure 1.4), directly north of Lot 110. Site clearing and construction revealed cultural material, particularly within the southeastern corner.

In the late summer of 1991 "treasure hunters" cleared portions of the site with a box blade and removed artifacts. The State of Alabama was notified and officials of Dauphin Island stopped this activity. Damage extends over all of Lot 91, into the east side of Lot 110, and into the southern half of Lot 120 (Figure 1.4). Surface material was stripped from this area and piled in the middle of Lot 91 along with the associated underbrush and small trees.

In March of 1992, Dr. John Cottier from Auburn University brought several of his students to the site to assess the damage to the cultural resource.

Current State of Knowledge

Archaeologists and historians have worked to understand the culture and history of the early French occupation on Mobile Bay (Giraud 1953, Hamilton 1976, Higginbotham 1977, Le Page Du Pratz 1774). Some have even concentrated directly on Dauphin Island (Holmes 1967, McWilliams 1954). Numerous primary documents have been published such as the translations of official French
documents by Rowland and Sanders (1927-32) as well as journals and official accounts (Escoffier and Higginbotham 1974, McWilliams 1953). Archaeological investigations have focused on various other components of the period within the region (Sheldon and Cottier 1983, Stowe n.d., Waselkov 1984, 1991).

Stowe's earlier work represents a recognition of the significance of historical French archaeology in the region. However, following the production of a preliminary report, Stowe moved to other research. Although some information was gathered after Stowe's work, no archaeologist devoted significant time to a major research effort on the French Colonial period around Mobile Bay until Dr. Gregory A. Waselkov of the University of South Alabama began work at Old Mobile. *Archaeology at the French Colonial Site of Old Mobile, (Phase 1, 1989-1991)* (Waselkov 1991) represents a major effort directed toward the archaeology of the early French period in the region. Three additional years of research have been completed and the Phase II report is in press.

Archaeological work on 1MB61 by Stowe in 1973 and 1974, and the testing by Cottier in 1992, provide the only physical record of French Colonial occupation on Dauphin Island. Stowe concluded that his excavations were in the vicinity of the fort (stockade), warehouse and blacksmith shop of the early eighteenth century French Colonial
occupation (Stowe n.d.). Waselkov (1989) has questioned these conclusions and suggested that this component represents an outlying domestic occupation of Dauphin Island.

**Research Goals**

Historical data from primary and secondary sources were studied and correlated with archaeological data, specifically as related to Dauphin Island and the site of 1MB61. The French occupation on Mobile Bay was most active during the period 1701-1722, after which the colony was refocused on the Mississippi River and the capital was moved to New Orleans. The first two decades of occupation differ in several ways: politically, economically and in regard to relations with other colonial powers in the region. The historical framework of the first and second decades are used as a means of organizing the events and analyzing data within a historical context.

An initial goal of this research is to establish the chronology and function of 1MB61 of Dauphin Island. To accomplish this, historical information, maps of the period, and archaeological data from previous excavations (Cottier 1992; Stowe n.d.), were used. In addition, excavations were conducted in 1992-1993 to gather primary data directed toward this research.

Artifacts and cultural features are the products of human activity. As archaeological data they represent the
result of human behavior driven in some cases by cultural determinants. Cultural materials tend to change over time. Stylistic evolution and technical innovations may be analyzed to gain a better understanding of this process. Some artifacts such as ceramics and kaolin tobacco pipes, are particularly sensitive in helping to understand cultural change and to pinpoint chronology. The study of these materials from primary historical information and from closed context sites of known date has allowed archaeologists to use this data for this purpose. At 1MB61, ceramics are used to address cultural questions while bricks and kaolin tobacco pipes are used to access chronology.

Bricks are used primarily in establishing a relative chronology for 1MB61 by comparing these artifacts to those recovered at Old Mobile and other archaeological sites of known date. Imported kaolin tobacco pipes offer many clues that are chronologically sensitive. Attributes such as stem bore diameter, decoration, and specific maker's marks help to establish chronology as well as origin. Tobacco pipes from 1MB61 are compared with those recovered at Old Mobile.

Human activities may be reconstructed from the frequency or patterning of specific artifact groups (South 1977) as well as the recovery of individual artifacts and features that relate directly to site function. At 1MB61
frequencies and patterning are used to examine the hypothesis that the site served a military function rather than a civilian colonization.

A clearer understanding of the lives of the French and Indian individuals who occupied 1MB61 is another goal of this research. The French were dependent upon local Indians for food and security, yet they also kept Indian "servants" who may have functioned as concubines to single male colonists (Rowland and Sanders 1929:31). Indian slaves were also an accepted part of the colony. A diverse Indian ceramic assemblage, as well as Colono-Indian wares, are used to examine the cultural implications of these relationships.

If soldiers were the primary occupants of 1MB61, how did their socio-economic status affect their lives as compared to others in the colony? Common soldiers were the lowest socio-economic class within the colony. They lacked the freedom of movement that others had. As such, their access to trade opportunities was limited. As a result of low and infrequent pay, and lack of food, disease and desertion rates were high. Yet some soldiers married Indian women and raised children in the colony. Pressure for cultural change resulted. Acculturation within both the French and Indians populations, as well as cultural change is examined.
Trade was the engine that drove the colony. Trade with other colonial powers provided the means for acquiring European goods as these goods were not dependably supplied from home. Exploitation of natural resources and trade with Indians for pelts and food provided the commodities for exchange that fueled this process. Survival was at stake, but trade provided an avenue for the personal accumulation of wealth - the primary goal of most French colonists in the New World. Official restrictive mercantile policies are reviewed and their effectiveness examined.

Finally, all components of Dauphin Island are threatened. Serious efforts toward collecting archaeological data must be made before the sites are destroyed. This information would prove invaluable in understanding the formative years of the French period in Louisiana. The final goal of this thesis is to demonstrate the significance of the sites at Dauphin Island to spur efforts to preserve or excavate them before they are lost.
France, Spain, and England were the dominant colonial powers in North America during the late seventeenth and early eighteenth centuries. Although France and Spain experienced periods of mutual cooperation, competition and conflict between the colonial powers for control of the region was typical of the period.

France began its exploration of the region surrounding the Mississippi River and the Gulf Coast not from the river's mouth, but from its source, the Great Lakes area. This approach provided the connection to French strongholds in the New World in Canada gained during the seventeenth century. In 1682 Robert Cavelier de La Salle descended the Mississippi River to the Gulf of Mexico and, on April 2 of that year, claimed the entire valley for King Louis XIV (Hamilton 1976:39-41). The expedition of La Salle marked the beginning of the confrontation for the control of central North America among the colonial powers of France, Spain, and England. Trade with the Indians and access to the natural resources of the interior was at stake (Grant 1992:7).

La Salle realized that France needed to control the Mississippi valley to prevent the advance of "the foreigners," England and Spain, into the region. He saw the fall of the St. Lawrence colony as a result. England
was already pressing in on Canada from her position on the Atlantic coast and from Hudson’s Bay. The effective force of the large English population in the English Atlantic colonies justified La Salle’s concern (Giraud 1953:11-13).

In 1684 La Salle convinced Louis XIV to support him on an expedition to establish a colony on the Mississippi River (Hamilton 1976:41; Hoffman 1986:16). Spain controlled the waters of the Gulf of Mexico during this period and had attacked a French frigate in 1679. Louis XIV, in addition to curbing Spanish and English influence, wanted to exploit the region’s mines and other resources. He also had ambitions to gain control of Havana, Cuba and Cartagena, Columbia (Higginbotham 1968:11-12).

Unfortunately, La Salle’s small fleet of ships missed the Mississippi River mouth. This was probably the result of a two degree error in latitude La Salle had made on his original expedition in 1682. The fleet landed in Matagora Bay in present day Texas (Hamilton 1976:41-43; Hoffman 1986:14-16). La Salle was confused by the appearance of the area around Matagora Bay as it did not conform to his memory of the Mississippi River coast. Nevertheless, he dismissed the captain of the fleet and allowed the transport ships to return to France (Hoffman 1986:16-17).

La Salle began to explore the region around the settlement in an effort to locate the Mississippi River. During one of these trips he was killed by his own men.
Without La Salle or support ships, the settlement was doomed. They managed to survive until late 1688, but ultimately Indian attack, disease, and lack of food combined to bring a tragic end to the first efforts of France to establish a colony on the Gulf Coast (Hamilton 1976:41-43; Hoffman 1986:17).

A New Initiative

Despite the failure of La Salle, interest remained in France in establishing a settlement along the Gulf Coast, particularly among influential members of the French court such as Count Pontchartrain, Minister of the Navy. However, the War of the League of Augsburg (1686-1697) hampered the financial ability of France to support a new expedition (Hoffman 1986:19-20).

England and Spain were aware of French plans for a new effort. They were contemplating their own expeditions to establish settlements within the region. Publications in England in 1697 urged the British government to take possession of the territory of the Mississippi (Giraud 1953:15) and stimulated private investors to take an interest in the region (Hoffman 1986:20). English traders descended the Alabama River to its juncture with the Tombigbee River in 1698 making contact with the villages of the Mobile and the Toome Indians (Giraud 1953:12).

As a response to the French threat to occupy the Gulf Coast, Spain sent a garrison to hold Pensacola (Giraud
Previous explorations of the Gulf Coast by Spanish ships in 1686 and 1688 had revealed Pensacola as the most valuable harbor in the region (Giraud 1953:25).

In addition to political and economic interests, religious orders in France were interested in missionary work in the New World. Curiosity about the region and its people was at a peak among scholars of the period. Scientific, religious, economic and patriotic aims all added to the growing perception that France had to move decisively to protect her claims by occupying the region (Giraud 1953:19-20). Count Pontchartrain may represent the force in the French Court that finally brought Iberville's mission to reality in 1698 (Hoffman 1986:21).

Pontchartrain, had been interested in expanding France's influence in the New World for some time. Pierre Lemoyne d'Iberville had gained prominence with his military success against the British in Canada. Pontchartrain saw in Iberville a leader that might be able to make the venture a success. In 1698 secret preparation for the expedition began in earnest. Iberville was allotted the necessary funds and placed in charge (Giraud 1974:20-24). On October 24, 1698, three small ships set sail for the New World (Hamilton 1976:44).
Fort Maurepas: The First Settlement

In late January of 1699, the fleet arrived at Pensacola and found a fort already occupied by the Spanish. Although outnumbered, the Spanish commander refused to allow Iberville to enter the harbor. Without specific instruction from France, Iberville had no choice but to move on westward, and anchored off Mobile Bay (Hamilton 1976:44; Higginbotham 1968:15-16). On February 1, bad weather hampered Iberville's attempts to sound the harbor at Dauphin Island. On February 2, the weather did not improve, but Iberville dispatched small boats to explore the area around the island and Mobile Bay. A dense fog required his party to spend the night on the island (McWilliams 1981:36-37). These difficult conditions resulted in the failure of the party to locate the safe harbor at Dauphin Island. During this first visit, Iberville discovered a "mountain" of human bones prompting him to name the island "Massacre" (Higginbotham 1977:441; McWilliams 1953:3, 11).

Moving westward, Iberville found safe anchorage for his ships north of Ship Island. From this base he was able to explore westward in small boats. After some difficulty, he entered the mouth of the Mississippi River (Higginbotham 1968:17-21).

Locating the colony on the Mississippi River had been ruled out due to several perceived difficulties. These
included 1) uncertainty regarding the location of the river mouth, 2) concern about the navigation of the river, 3) lack of elevated sites, and 4) scarcity of timber. All of these concerns would later be dispelled or overcome; however, locating the colony on the Mississippi River was not considered practical by Iberville at that time.

With supplies running low, Iberville continued to explore the coast between the Mississippi River and Mobile Bay for a suitable site. Almost by accident, just north of his base at Ship Island, he discovered a channel deep enough for a shallow draft traversier. The channel led to a small, elevated peninsula with a protected harbor. Iberville decided to build his colony at this site. On April 8, 1699, he began to build Fort Maurepas (Higginbotham 1968:21-24).

The fort consisted of four bastions connected by palisades. Twelve guns were mounted for defense. Though small, the fort was well made and proved adequate for the inhabitants (Higginbotham 1968:23-27). The French immediately made contact with local Indians, as they would have to depend upon them for food and security. They found the Indians cooperative and were able to trade mirrors, combs, beads, guns, hats, shirts and other assorted goods for their needs. Iberville also had other plans for the Indians, as allies in combating English incursions into the region (Higginbotham 1968:33-39).
Fort Maurepas, indeed the colony, depended on food supplies from several sources: shipments from France and the Indies, agricultural crops grown by the inhabitants, and Indian trade. Food supplies always seemed critically short for the garrison of 126 men (Higginbotham 1968:65-67). Life in the fort was hard. The French planted gardens, but by June the heat and drought had ruined most of the plants. Snakes and insects were a constant menace. Poor water caused health problems. During the hot summer months, boredom began to possess the inhabitants and drunkenness spread among them. Spoiled supplies arrived from Santo Domingo (Higginbotham 1968:40-47). Meanwhile, Iberville had returned to France to seek support for the colony leaving Sauvole, a young senior officer in charge. Le Moyne de Bienville, Iberville's younger brother, was second in command. Though only 21 years of age (Higginbotham 1977:36), fate was soon to place Bienville in a position of authority and responsibility within the colony that he would maintain for several decades.

In France, Iberville was disappointed by the attitude he found. His vision of a thriving colony in Louisiana was not shared by King Louis XIV. Iberville returned to the colony with instructions to discover the mines which were thought to exist on the Mississippi River. But the elusive mines were not to be found, so in May of 1700, Iberville
again returned to France to plead for the colony (Higginbotham 1968:48-57).

During this period Bienville explored the region. He began the construction of Fort Boulaye to control access to the Mississippi River. He also extended his travels up river and established friendly alliances with the local Indians (Higginbotham 1968:48-64).

A number of Canadians arrived in the colony during this period. Though unruly, their experiences in frontier life added significantly to the security of the settlement. The Canadian trappers (coureurs de bois) wanted to explore the interior in search of opportunity and riches (Higginbotham 1968:48-64), and they did not hesitate to trade with the English (Giraud 1953:81). Iberville realized this danger as well as the advantage their frontier experience provided to the colony. The Canadians were valuable due to their competence with Indian languages, their skills at exploring, and their ability to supplement the military force of the colony (Giraud 1953:147). In Bienville's opinion the Canadians were the colony's most valuable asset (Higginbotham 1977:271). He may also have viewed them as allies in helping him to fulfill his own personal economic ambitions.

In France, Pontchartrain and Iberville determined to move the settlement to Mobile Bay (Hoffman 1986:26). Iberville had recommended the move as early as 1700. The
discovery of the harbor at Massacre Island was an important factor in the decision (Higginbotham 1977:24).

The early years of French occupation had been difficult particularly due to a lack of knowledge and understanding about the geography of the region and the Indian nations that lived within it (Giraud 1953:31-41). In Iberville's absence and unaware of events in France, Bienville and Sauvole explored the Mississippi River. They located a suitable elevated site for a settlement, however events in France would direct the colony to locate elsewhere. The site they discovered would later become New Orleans (Higginbotham 1968:68-73).

In December of 1701 when Iberville reached Pensacola returning from his third trip to France, he learned that disease had broken out at Fort Maurepas. Sauvole, the commander of the fort, had succumbed, and the young Bienville was now in command (Higginbotham 1968:65-67). News of these difficulties prompted Iberville to issue his final order to abandon Fort Maurepas and move to Mobile Bay. Eighty men were dispatched to Massacre Island to build a warehouse (Giraud 1953:44). Fort Maurepas was abandoned, but the problems that plagued the early years of the colony were to continue during the next decade.

**Occupying Mobile Bay**

Penicaut, a ship's carpenter, was a member of the scouting trip to determine the extent of the roadstead at
Massacre Island. The party found good anchorage for 30 ships on the east end of the island (McWilliams 1953:56). Others set the port's capacity smaller at 15 ships (Higginbotham 1977:442). In any case, the roadstead at Massacre Island was considered excellent with a bottom depth of 21 feet at low tide (Higginbotham 1977:36). A small "rowboat lagoon" adjacent to the main harbor was protected from the sea by a narrow peninsula. Small boats could unload ships in the roadstead and enter this lagoon for safe unloading on shore (Higginbotham 1977:36).

The protection and storage of the king's goods was always a primary concern for the survival of the colony. With the decision to move to Mobile Bay, the first order of business was to dispatch all the officers along with laborers and craftsmen under the direction of Bienville to Massacre Island in December of 1701 to build a warehouse (Higginbotham 1977:29-30, 34). The actual move began on January 4, 1702. Three exceptionally large tents were erected on the island to store the colony's goods while the warehouse was being completed (Higginbotham 1977:33).

Among the goods delivered and stored in the warehouse were 13 barrels of wine, 4 casks of flour, and 1 large barrel of lard. Molasses, wheat, barley, and sugar were also among the goods. Items intended for trade with the Indians included cooking pots, axes, guns, butcher knives, red stockings, hand bells, and glass beads. Various tools
such as hammers, planes, chisels, pliers, punches, saws, and sledge hammers were also among the goods unloaded and stored at Massacre Island (Higginbotham 1977:37-38).

However, the main reason Iberville supported the move to Mobile Bay was that the vast river systems feeding into it offered a more advantageous position from which to strengthen relations with the Indian nations of the interior. This provided a means of blocking English expansion into the region (Giraud 1953:41-42). Massacre Island did not further this goal. Therefore, the main settlement had to be located on the mainland. Being near the main Mobilian Indian village must have been considered by Iberville as more advantageous than being close to Massacre Island when he chose the location for main settlement, which was called Mobile (Higginbotham 1977:46).

Massacre Island and the first site of Mobile, now called Old Mobile, on the Mobile River at Twenty-seven Mile Bluff (Figure 2.1) were distantly separated (39 miles). Though their functions differed, each depended upon the other for support. Massacre Island served as port and Old Mobile was the body of the colony and point of contact with the Indians of the interior. Shallow draft boats were loaded from the ships in the harbor or from the warehouse at the southeast end of Massacre Island for the trip to Old Mobile (Giraud 1974:172). At least two days were required to transport goods from the port at Massacre Island to Old
Mobile. Another warehouse was constructed near the midpoint in this journey on Dog River (Figure 2.1) near the north end of Mobile Bay (Higginbotham 1977:50, 60).

Figure 2.1 Mobile Bay area map.

Old Mobile had a typical French fort town plan (Gould 1988:4-5). The town was laid out on a formal grid with Fort Louis, the colony's military headquarters, at its center (Figure 2.2). At most, Old Mobile covered 120 acres and contained 80 to 100 structures with approximately 300 inhabitants (Waselkov 1991:1-2).
The Loss of Iberville

On July 8, 1706 Louisiana lost its "principal guiding force" (Giraud 1953:108-109). Iberville died of a fever contracted while in the harbor at Havana, Cuba, aggravated by an abscess in his side (Higginbotham 1977:284). Without Iberville to represent the needs of the colony at the French court, the survival of the venture in Louisiana was in doubt.

Even though Iberville's tenure over the colony was brief, he had managed to accomplish several important goals. His first trip in 1699 had resulted in the building of a
temporary fort at Maurepas and the establishment of a small garrison. On his second trip he managed to enlarge the fort and gather additional information on the geography of the region and its peoples. On his third trip he ordered the move to Mobile Bay which resulted in the permanent settlements at Massacre Island and Old Mobile (Higginbotham 1977:85). With Iberville's death, Bienville became the dominant leadership figure in the colony.

Massacre Island: The First Decade (1701-1711)

In 1774 Massacre Island was described by the early historian, Le Page du Praz (1774:17):

This island is very flat, and all a white sand, as are all the others, and the coast in like manner. Its length is about seven leagues from east to west; its breadth a short league from south to north, especially to the east, where the settlement was made, on account of the harbor which was at the south end of the island, and choked up by a high sea, a little before our arrival; thus east and runs to a point. It is tolerably well forested with pine; but so dry and parched, on account of its crystal sand, as that no greens or pulse can grow therein, and beasts are pinched and hard put to it for sustenance.

Indeed, the location and character of the island were factors that influenced its function and development throughout the period. It was difficult to reach from the mainland and saw little trade with local Indians. Crops were hard to grow in its poor, sandy soil and few animals lived within the small wooded areas of the island. Fish and crustaceans offered the main sources of food. Storms and hurricanes were a constant threat (Higginbotham
1977:441). During the early years the primary function of the island was as port, and in this capacity Massacre Island was indispensable. Access to the goods of the colony and possibilities for trade with passing ships and Pensacola provided the attractive incentive that finally lured settlers to the island late in the first decade.

Following the initial flurry of activity and building at Massacre Island in 1701-1702, little happened on the island. By 1704 only a few small, crudely built cabins and a small warehouse existed in the little village (Higginbotham 1977:161-177).

Toward the end of the first decade, a number of settlers moved to Massacre Island to be closer to the shipping lanes and to Pensacola (Holmes 1967:51). The settlers, mostly Canadians and their families, moved in the spring of 1708, many with Indian wives (Higginbotham 1977:365). Graveline, a French merchant, relocated to the island from Old Mobile in 1709. On a return trip from La Rochelle, he stopped in Havana and purchased cattle and a bull, allowing him to build a cattle herd on the island. Graveline owned two buildings in the village, but he lived in a large house on the north side of the island about two miles northwest of the village. Renaud, another Canadian, also moved with his family to the north side of the island where he raised vegetables and maintained a small herd of cattle (Higginbotham 1977:442-443).
The first baptism at Massacre Island was recorded in 1709 (Hamilton 1976:167). La Vente, the parish priest, reported 20 houses in the village at that time (McWilliams 1954:9). By early 1710 the small settlement was showing surprising growth and appeared to be prospering. Sixteen settlers and their families lived in the village at Massacre Island by the late summer of that year (Higginbotham 1977:442-445). A church was constructed in 1711 and a separate parish from Mobile was established (Giraud 1953:190). Several taverns were also built on Massacre Island during the same period (Giraud 1953:161).

On September 9, 1710, an English corsair from Jamaica tricked several prominent settlers at Massacre Island onto his ship by posing as a French brigantine. The settlers were taken hostage and the island was ransacked. Goods from the warehouse were taken along with everything of value in the settlement. Before leaving, the English pirates set fire to all the buildings including the warehouse. Only Graveline's cattle were saved (Higginbotham 1977:445-448).

The English attack on Massacre Island demonstrated the weakness of the port. Lack of a fort or a sizeable military garrison had allowed the island to be successfully raided by a small force (Giraud 1953:211-212). After the attack the inhabitants rebuilt their houses quickly and a "better" settlement began to form near the port (Giraud 1953:243).
At the end of the first decade, Bienville had reason to feel optimistic regarding the future of the settlement. At Massacre Island the inhabitants had completely rebuilt their settlement following the English raid. Fortifications were planned that would make the harbor impregnable and the island could boast of several industrious inhabitants (Higginbotham 1977:466).

**Colonel Growth: Trends and Attitudes (1701-1711)**

The original settlement in 1699 at Maurepas had been small, numbering only about 80 men. In addition to the officers, approximately 18 Canadians, a slightly smaller number of soldiers, some 10 artisans, a few cabin boys, and several freebooters made up the lot (Giraud 1953:91). The arrival in 1700 of a new contingent of Canadians boosted the garrison to about 120 persons (Giraud 1953). When Mobile was founded, other than the military and the Canadians, Iberville had only four families and some single artisans at his disposal. By 1702, the population of the colony was still small, numbering only about 140 persons (Giraud 1953:96-97). By October of 1708, the entire French population in lower Louisiana numbered about 345 (Higginbotham 1977:364), nearly double the number present in 1704, but still precariously small.

Proposals to increase the size of the colony by granting concessions of land were rejected by Pontchartrain. He did not favor large settlements (Giraud 1953:97).
Difficulty in supplying a large population dependent upon support from a distant homeland was probably a major factor in Pontchartrain's decision. However, the cost of supporting a large colony must have also been a concern.

Attitudes among French people during the period was also a factor that limited the growth of the colony. The wealthy refused to leave France for the colony, and the poor only saw Louisiana as a means to amass wealth for a return home. Monetary gain was the ultimate goal of most

Figure 2.3 Population growth in the early French colony.
of the settlers, as well as the government. In contrast, although monetary gain may have also been the goal of the English settlers, the English government invested its profits in its New World possessions and encouraged permanent immigration (Giraud 1953:98).

**Shortages: The Continual Problem**

The irregular arrival of support ships from France was a persistent problem for the colony. During 1703 and 1704, supplies arrived regularly, but no ships appeared in 1705. A fleet arrived in 1706, but another did not land in the colony until 1708. Three years passed without support until the *La Renommee* arrived in 1711. During this entire period, supplies were mediocre in quality and in quantity, partially due to the weak financial situation of the French government, the scarcity of food in France, and the small tonnage of supply ships (Giraud 1953:110). As a practical matter, Louisiana was of little economic value to France during this early period, but Pontchartrain realized the strategic value of Mobile as a deterrent to the English (Giraud 1953:129).

Personal profit, legal and illegal, by officers and others also restricted the amount of goods transported to support the colony. In 1706 flour and dry vegetables were removed from the cargo hold of the *L'Aigle* to make room for "large barrels of merchandise" belonging to the officers.
These goods were brought to the New World to be sold for personal profit (Giraud 1953:111).

A Change of Base

The relocation of Mobile is the major event marking the beginning of the second decade of French occupation of Mobile Bay. The economic base supporting the colony also changed to the commercial proprietorship of Antoine Crozat during this time. This event probably represents the most significant economic factor during the period as it represented a change in the attitude of the French government toward the colony and offered the promise of growth. During the second decade the port at Dauphin Island was devastated by hurricanes. Relations with Spain, and therefore with Pensacola, also declined, culminating in war by the end of the second decade. The Company of the Indies finally brought active growth to the colony, but at the expense of the settlements on Mobile Bay. The Company moved the focus of the colony to the Mississippi River and the capital to New Orleans.

Near the end of the first decade, conditions at Old Mobile were at a low ebb. Supplies from France had not arrived for three years (Higginbotham 1977:448). In contrast, at Massacre Island conditions were improving. Pontchartrain had even given permission in 1707 for Old Mobile to be moved to Dauphin Island (McWilliams 1954:5), and the proposed move was still being considered when
Cadillac arrived in 1713 (McWilliams 1954:5) even though Old Mobile had been abandoned and the capital of the colony had been moved to its new location.

Mobile was moved in 1711 from its original location up-river to the head of Mobile Bay for several reasons, the two most important being the propensity of the original site to flood and the need to reduce the travel distance between the main settlement and the port at Dauphin Island. The new site was judged to be higher and less likely to flood. By reducing the distance required to transport goods from Dauphin Island, Bienville hoped to reduce "looting" (McWilliams 1954:5).

In a effort to enhance the image of the island, Bienville agreed with his advisors in October of 1711 to change the name of the island from "Ile Massacre" to "Ile Dauphine" and to give the port the name Port Dauphin (Higginbotham 1977:465; McWilliams 1953:7; Rowland and Sanders 1932:159). The move of Mobile and the change in name for the island signaled the beginning of a new decade of reorganization for the French colony on Mobile Bay.

Antoine Crozat: The First Proprietary Charter

By 1712, a decade had passed since the colony moved to Mobile Bay. The inhabitants had survived under difficult conditions with minimal support from France and managed to explore much of the region of the river system feeding Mobile Bay, as well as the Mississippi and the Red Rivers.
However, in real terms, the colony was still quite small, with the total population in all the vast territories numbering about 400 (McWilliams 1953). The lack of support from Louis XIV was a reflection of the attitude he displayed toward the colony almost from the beginning. While he wished to curb Spanish and English interest in the New World, he also wished to exploit the colony for profits from the mines and other riches he imagined it could offer. While the colony had managed to survive and had served to curb other interest in the region, the effort had been costly for the crown (Hamilton 1976:93-95).

The king wished to grant a monopoly of Louisiana's commerce to Antoine Crozat because of his wealth and experience. LaMothe Cadillac was given the task of persuading Crozat to accept the offer. Cadillac painted an alluring picture of the mining potential and other resources of the region. When Crozat agreed to the venture, Cadillac was appointed governor. Pontchartrain believed Crozat would free the monarchy from its obligations to the colony which he had experienced difficulty in fulfilling. Pontchartrain also hoped Crozat would increase the commerce and the population in the colony (Giraud 1953:249-255).

Under terms of the agreement with Crozat, the king provided some military support and technically represented the government of the colony. Crozat had the authority to set prices on all goods and to control trade. In return for
a set lease fee to the king, Crozat was free to exploit the region for profit. In 1713 Crozat replaced Bienville with Cadillac as governor (Hamilton 1976:93-95).

The dream of "mines in the interior" and rich agricultural lands surrounding them could not be realized, primarily because there were no mines and no labor force to work large agricultural tracts. Cadillac complained constantly about the people and circumstances of the colony. His failure to produce revenues for Crozat finally resulted in his replacement in 1717. However, the new governor, L'Epinay, was also unable to produce any return. In that same year Crozat surrendered his interest in the colony, but a pattern of private, commercial exploitation had been established that was to continue with John Law (Hamilton 1976:95-98).

John Law and the Company of the Indies

John Law was possibly the first great promoter of modern times. An outlaw to the English, a French banker, a Scottish gambler, Law was considered a master of finance. He went from banker to promoter, selling shares in his company to the general public. He painted a picture of the riches to be gained in Louisiana. Law received a 25 year charter for his Company of the Indies (Hamilton 1976:99). Bienville backed the company as he must have seen in it the support which had always been lacking from the
French crown or from Crozat. He envisioned an investment of capital and an increase in population that would, finally, provide the necessary support to develop the colony. Law determined that the Mississippi River was the key to developing Louisiana, and he found an enthusiastic partner in Bienville who had favored this move for some time. In 1718 Bienville returned to the site on the Mississippi River which he had discovered years earlier with Sauvole, and selected it as the site for the new capital, New Orleans (Hamilton 1976:99-100). The final move of the colony to New Orleans began in May of 1722 and by early 1723 it was complete (Hoffman 1986:54). The active period for the French on Mobile Bay was over.

Law's tenure in Louisiana had been and continued to be productive for the colony. He encouraged immigrants of every class and granted concessions of land which were to be developed by the owners (Hamilton 1976:100-101). Indeed, under the direction of the Company, Louisiana grew as never before. The population increased from a few hundred to several thousand in a short time. Company profits were realized through duties on goods, as all trade was restricted to company vessels. In June of 1721, financial crisis in France brought collapse to Law's bank, but the company was able to continue to control Louisiana for ten more years (Hamilton 1976:104-105).
In typical scathing rhetoric, Lamothe Cadillac made the following report to Pontchartrain in October of 1713 concerning conditions at Dauphin Island (Rowland and Sanders 1929:163):

Dauphin Island, hitherto Massacre, is six leagues long. It is wooded with pines for about one league. It is scarcely one quarter of a league in width. For five leagues to the west it is simply nothing but a sandbank and white and shifting sand. To the north the said island has a border of woods of various sorts.

There are sixteen settlers both married and unmarried. The houses are situated on sand that the wind carries along like dust. Four vessels can lie at anchor in the port or harbor. I should not like to swear that it will not some day be overwhelmed by some hurricane that might over-run the islet or the sandbanks that form it...

Despite Cadillac's criticism of conditions on the island, he did make improvements and supported others throughout his tenure. Shortly after his arrival he had several houses built to accommodate the numerous settlers moving to the island (McWilliams 1953:157).

Typical houses on Dauphin Island were small and surrounded by fenced gardens. The enclosed areas were too small to raise livestock (Giraud 1953:284) although settlers may have kept chickens and other animals. Cattle were raised on the larger concessions of Graveline and Arnaud on the north side of the island. Cadillac reported in October of 1713 that there was a "fairly passable church" on Dauphin Island (Rowland and Sanders 1929:182) probably
located in the village. Seventeen to twenty-five houses existed on Dauphin Island by 1717 (McWilliams 1954:9).

Cadillac's gloomy predictions materialized in 1716 and again in late August of 1717 when hurricanes struck Port Dauphin, blocking the harbor and temporarily stranding two ships, the *Paon* and the *Paix*. Livestock drowned and the island was devastated (McWilliams 1953:9, 207).

With the blocking of the harbor and the decision to refocus the colony on the Mississippi River, most of the settlers moved to New Biloxi near the original site of Fort Maurepas. A large warehouse was constructed and numerous other structures were built in the new settlement by 1720 (Figure 2.4). The civilian and military population began to dwindle on Dauphin Island, but one final event was to bring a last flurry of activity.

**War with Spain**

In 1719, war with Spain resulted in French attacks on Pensacola and a Spanish counterattack on Dauphin Island (Hamilton 1976:167). The French received the news of war with Spain first and launched a surprise attack from Dauphin Island on Pensacola. The Spanish promptly surrendered. Fifteen hundred Spanish prisoners were transported to Havana on French ships. In a dishonorable move, the Spanish seized the two French vessels and returned to Pensacola with a large force to confront the 300 Frenchmen defending the fort. After a minor skirmish, the French
surrendered. Victorious in retaking their fort, the Spanish turned to Dauphin Island. The French were prepared with 114 soldiers and 200 Indians, as well as the inhabitants of the island and several colonists awaiting transfer to other areas. Spanish attacks continued for two weeks, ending with the chance arrival of a French fleet of five ships. The French then launched a new attack on Pensacola. After the attack on Dauphin Island by the Spanish, the merchandise and provisions on the island were removed to Mobile and Biloxi (Rowland and Sanders 1932:264).
After another minor skirmish, the Spanish again surrendered. However, on this occasion the French allowed their Indian allies to pillage the fort. With the signing of peace in Europe, Pensacola was returned to the Spanish in 1722 (McWilliams 1954:15-16).

Relations with Spanish Pensacola

The Spanish viewed the founding of a French colony as a direct threat to their settlements in Mexico and to the security of the route of their galleons (Giraud 1953:87). Spain adopted an antagonistic attitude toward the French colony from the beginning. However, Spain was unable to effectively oppose the French settlements as they lacked a strong force in the region (Giraud 1953:87). Indeed, during the first decade, Pensacola was in a weaker position than Mobile, constantly short of material supplies and continuously harassed by the English.

As instructed by Pontchartrain, Iberville maintained courteous relations with the governor of Pensacola during the first decade. Although a spirit of cooperation and assistance existed outwardly between the two settlements, incidents often occurred which demonstrated the underlying conflict between the French and Spanish, such as the refusal of the Spanish in Veracruz to furnish the French with cattle (Giraud 1953:89). The Spanish governor, despite his weak position and frequent dependance upon Mobile for supplies, constantly reminded Iberville and
Bienville that they were "trespassing" on Spanish territory in Mobile Bay, particularly on the eastern shore (Higginbotham 1977:215-216). As a practical matter, the French ignored these claims.

The Spanish at Pensacola withstood numerous attacks during the first decade of the eighteenth century by the English and their Indian allies. During this period, Pensacola was also poorly provisioned by the Spanish government. They faced a more difficult existence than the French as they were often unable to leave the relative safety of the fort to hunt or to tend their gardens due to the danger of being captured or killed. The Spanish depended upon support by the French during this period. Bienville was helpful with supplies and manpower, even though the French colony itself was in short supply. Bienville realized that he might at some time become dependent upon the support of the Spanish when his supplies ran short or when the colony was attacked by the English (Higginbotham 1977:215).

In 1704, when the long overdue ship had not arrived from France, Bienville dispatched a small ship to Veracruz, a Spanish outpost in Mexico. The mission was partially successful and limited provisions were brought to the colony (Higginbotham 1977:159-160). During the period from 1707 to 1710 when ships from France did not arrive, the Spanish frequently sent vital supplies (Holmes 1967:49).
During the early years, relations between the Spanish at Pensacola and the French at Mobile Bay had been mutually supportive, but then relations began to "cool" (Higginbotham 1977:422-440). In 1705, a small French privateer wrecked on Mobile Point, due east from Massacre Island on the east side of Mobile Bay. This event brought the academic debate between the two settlements into focus. The French on Massacre Island quickly began to salvage the goods off the ship, which included 72,000 piastres in gold and silver. Upon learning of the wreck, the Spanish governor at Pensacola sailed to the site to lay claim to the goods as, in his mind, they rested upon Spanish territory. The French reminded the Spanish contingent that they claimed both banks of Mobile Bay. With Pensacola possibly at her lowest ebb, the governor and his small force had no choice but to grudgingly withdraw (Higginbotham 1977:217-218).

Bienville's distrust of the governor of Pensacola was again demonstrated by the events of 1707 when he ordered that Massacre Island be placed on alert as a result of rumors of imminent war with Spain (Giraud 1953:199). Another incident occurred in the summer of 1709, when the governor at Pensacola became highly irritated by the French refusal to lend him a ship for a trip to Veracruz for supplies. When Pensacola did receive the supplies, they refused to lend any to the French (Higginbotham 1977:429).
Personnel and policy began to change in Pensacola and in Mexico by 1710 (Higginbotham 1977:432-433). Spanish ports were officially closed to France in 1710 (Giraud 1953:173). In spite of the official sanction, Bienville dispatched a ship to Veracruz in the spring of 1711 with merchandise and currency to trade for supplies. Officials at Veracruz confiscated the merchandise and sent the ship back to Mobile with minimal supplies of foodstuffs (Higginbotham 1977:434-435).

**Dauphin Island: The Quiet Years**

Toward the end of 1719 Penicaut reported that several families had left Dauphin Island to settle at New Biloxi and New Orleans (McWilliams 1953:235-236). However, in that same year permission was granted for the operation of a canteen on the island (Rowland and Sanders 1932:258-259). In January of 1720 the Council of Commerce, which governed the colony, decided to remove the troops from Dauphin Island due to lack of provisions. They also noted that the "creek" into which the boats entered was closed (Rowland and Sanders 1932:281). The "creek" referenced is probably the narrow pass between the main island and Spanish Island to the south. Some houses and warehouse were abandoned and the best of the other houses were to be transported to Biloxi. Marginal notes indicate that both these proposals were approved (Rowland and Sanders 1932:281).
In July of 1720 Jean-Bertet de la Clue, a French seaman, reported his stay on Dauphin Island in his journal (Escoffier and Higginbotham 1974:62):

...we took one of the prettiest houses to be found there and we could choose because the inhabitants of Dauphine [sic] Island had gone to establish another colony and had left their houses, although it would have been possible to transport them as they are made of wood. There remained on Dauphine [sic] Island only one officer with about twenty soldiers and two inhabitants who had gardens where they had some vegetables...

With the move of the capital from Mobile to New Orleans and the end of the conflict with Spain in 1722, Dauphin Island and Mobile experienced a period of calm. Baptismal records, marriage records, and other official documents indicate that the island was always occupied by the French, even if the contingent was occasionally quite small (Hamilton 1976:169). In 1721 a census of Dauphine Island indicated 28 settlers and seven to eight Negro and Indian slaves. Military personnel were not included (Maduell 1972:27). A sergeant and ten men remained on the island in 1722 to serve as a lookout post (Holmes 1967:62-63). In June 1724 the Council of Commerce granted rations to the officer in command at Dauphin Island (Rowland and Sanders 1932:403). The roadstead at Port Dauphin was reported in bad condition in December of 1724. Only pitch and tobacco were stored in the warehouses (Rowland and Sanders 1932:461).
In February of 1725 the Superior Council of Louisiana, in response to a directive from the Company of the Indies to abandon Dauphin Island and Biloxi, recommended that a small number of troops be left at each outpost to prevent the Spaniards or the English from taking possession of them. Arnaud was the one remaining Frenchman on Dauphin Island at that time. The buildings on the island were not considered worth demolishing and no one could be found willing to purchase them (Rowland and Sanders 1929:410).

By 1726 the port at Dauphin Island was obstructed and the post was reported abandoned (Holmes 1967:62-63), however Bienville decided to leave an ensign or sergeant with six soldiers to inform him regarding activities in the sea around the island (Rowland and Sanders 1932:511). The census reports of 1726 indicated only two French residents on Dauphine Island, Jean Arnaud and his son. Seven Negro and two Indian slaves were also listed (Maduell 1972:62).

In October of 1729 the officers and garrison at Dauphin Island were ordered to New Orleans, leaving the island vacant of military (Rowland and Sanders 1978:23); however, records indicate that as of November of 1731, some soldiers were still present (Rowland and Sanders 1978:81). In May of 1737, six soldiers are reported as still occupying Dauphin Island (Rowland and Sanders 1927:342), and in October of that same year the garrison reported an
English ship passing in front of the island (Rowland and Sanders 1978:144).

Documents suggest occupation went beyond the 1730s. A hurricane killed 300 cattle in 1740. "A four-pounder cannon was lying on the sand in front of the Guardhouse on Dauphine Island..." (Rowland and Sanders 1978:173). In 1742, officers and soldiers reported the drowning of a private in the lagoon (Hamilton 1976:169).

Even as late as 1762, the garrison at Dauphin Island is mentioned regarding the baptism of a soldier's child at the post (Hamilton 1976:169). At the conclusion of the Seven Years' War in 1763, Dauphin Island passed to England along with all French territory east of the Mississippi River (McWilliams 1954:16) and the French Colonial period in Louisiana came to a close.
Chapter 3

ARCHAEOLOGICAL DATA COLLECTION AT 1MB61

Preliminary Test Excavations

In March of 1992, Dr. John Cottier, three students, and the author spent three days at 1MB61 surveying the damage to the site by "treasure hunters" (Figure 3.1) and testing the area to determine its suitability as a research site for future study. To best utilize limited time, several goals were set: 1) establish a ground-based grid system, 2) conduct surface collections from the damaged area, 3) perform limited shovel testing, and 4) complete test excavation of at least one two-meter unit.

Figure 3.1 Area of 1MB61 damaged by "treasure hunters."
The first task was to institute a grid, in meters, for the purpose of establishing permanent horizontal ground control. An existing iron survey pin was located at the southeast corner of Lot 119. Survey corners were also located at the southwest corner of Lot 119 and the northeast corner of Lot 91. From these we established an east-west line that corresponded with the surveyed lot line for these lots (Figure 3.1).

The iron survey pin at the southeast corner of Lot 119 was assigned an arbitrary grid coordinate (176.8N, 160.35E) such that the zero east and south lines would fall well beyond the anticipated limits of 1MB61. All points with the site will be referenced to this grid system.

Surface collections were then conducted on Lot 91. The base portion of a Colono-Indian vessel was probably the most significant artifact recovered in the northeast quadrant of the lot. Glass, kaolin tobacco pipe, brick, Indian-made ceramics, and European wares were collected. Artifacts were also collected from the pile of dirt and debris placed in the center of Lot 91 by the "treasure hunters" (Figure 3.1). An assumed provenience of Lot 91 was assigned to this material.

Shovel testing was conducted at three meter intervals along the established east-west property line from the northwest corner of Lot 110 to the northeast corner of Lot 91. The goal of this testing was to determine the depth of
the cultural deposit to sterile subsoil, and to evaluate the nature, extent, and distribution of artifacts across the site (Figure 3.2).

Figure 3.2 Shovel testing during assessment of spring 1992 by Auburn University.

A location for an initial two meter square test unit was selected. This was along the eastern border in the 10 foot walkway easement between Lot 91 and Lot 110, in an area that had been severely disturbed by the digging of "treasure hunters" and within the area cleared with a tractor and box blade. Several shallow holes had been left
open and low piles of dirt were present along the sides of the unit. Artifacts such as kaolin tobacco pipes and various ceramics were evident on the surface. Excavation was performed with square point shovel and hand trowel. Material was dry screened through 1/4 inch hardware cloth.

In the center of the unit, a dark disturbed area was discovered and designated Feature 1. Numerous shovel holes were evident around and within the feature. European and Indian artifacts were recovered in the screen. The general excavation of the unit was carried to about 20cm. A drawing was made at the bottom of the excavation unit. Material from the feature was assigned a Field Specimen (F.S.) number differing from the number assigned to the material from the general excavation of the unit. Excavation of the feature was carried to a depth of approximately 30cm below the surface level. Artifact quantities, soil color, and the general nature of the deposit all confirmed to excavators at the completion of the unit that Feature 1 was cultural, although it had been so severely disturbed as to make specific determinations difficult.

The disturbed nature of the area around the first unit made the determination of soil profiles difficult. The cultural layer in the unit was shallow, approximately 20cm. It was also noted that the sandy nature of the soil tended to "blur" the edges of features as well as profiles.
Maintaining profiles at edges of units was difficult, but the sandy material screened easily.

A second two meter test unit was located adjacent to and south of the first unit. This would build on the information from Unit 1. The area of test Unit 2 was less disturbed. The possibility existed that a clearer understanding of the depth of the cultural deposit would be revealed in the profiles at the edges of the unit.

Excavation revealed a feature that appeared to be a wall "trench" running north-south. Artifacts similar to those recovered in Unit 1 were recovered. Profiles were clearer and less disturbed than for Unit 1.

A third unit was excavated adjacent to and south of Unit 2. The goal of this unit was to further clarify the depth of cultural layers. The profile of the area (Figure 3.3) indicated a depth of cultural material in the test unit of approximately 20cm.

Figure 3.3 Profile of Auburn University test unit.
Surface collections and test excavations from the Auburn University assessment of March 1992 indicated a diverse European and Indian artifact assemblage in the area damaged by treasure hunters on Lot 91. Structural features were also revealed by the Auburn excavations. Wider excavations in specific areas were proposed with the goal of exposing additional features and recovering artifacts to assist in answering the research questions of this study. Chronologically sensitive artifacts such as kaolin pipes were sought, as well as culturally sensitive materials such as ceramics. Artifact distribution, along with structure type assessment, was considered valuable to establish the function of 1MB61 and to provide information concerning cultural change. In this study, data from Stowe's excavations on Lot 110 and Lot 91 will also be considered, using information provided in his report and from the actual collection, curated at the University of South Alabama.

Surveys and test excavations by Auburn University and a review of Stowe's excavations indicated that the cultural material and structural features necessary to address the research questions existed on Lot 91. Unfortunately, permission to excavate on adjacent Lot 110 was denied. Access, as well as time and labor, are the factors which limited the scope of the research. Primary data collection was, therefore, restricted to Lot 91.
Additional Test Excavations

In the fall of 1992, the author excavated an additional two-meter area southwest of Unit 3. This unit was chosen to test proposed excavation methods to be used for additional excavations for this research.

A two meter square was established and divided into four one-meter units. These units were excavated in 10cm arbitrary levels with trowel and sifted through 1/8" hardware cloth. Line levels were used for elevation control. The surface of the units was mapped, as was the bottom of each level. Munsell colors were recorded. Material screened from each level was assigned an individual F.S. number, as was material from various features. A number of large post holes were located. In general, the two meter square was rather complicated. The excavation system worked well and the nature of the unit proved to be a good test of the proposed system of excavation.

Primary Data Collection

During the fall of 1992 and the spring of 1993, material from the pile left in the middle of Lot 91 by "treasure hunters" was screened. Due to the disturbed provenience of this material and the large amount of roots and debris in the soil, 1/4" hardware cloth was used. Numerous artifacts, including small objects such as glass beads, were recovered in this effort.
In the spring of 1993, the major excavation for this research took place. The work included: 1) shovel testing a major portion of Lot 91 to determine the nature and extent of cultural deposits sufficient to address research questions, followed by 2) a horizontal excavation aimed at recovering primary archaeological data to be used in the analysis of 1MB61.

A grid marked at four meter intervals was extended over the study area, Lot 91, using the grid system established during testing. Shovel tests (30 cm square) were excavated over the study area at four meter intervals. Tests were continued to sterile subgrade. Material was screened through 1/4" mesh. No features were encountered during this testing. Field specimen numbers were individually assigned to shovel tests which yielded artifacts. A temporary bench mark was established near the southeast corner of Lot 91 on the cast iron top of a sanitary sewer junction box. An arbitrary elevation of 100.0 meters was assigned.

Artifacts from shovel tests were divided into European, Indian, and brick. The results were plotted onto a site map with the goal of determining the distribution of cultural deposits in the study area in order to identify an area suitable for excavation. Figure 3.4 plots the results of the shovel tests using European artifacts. Testing
revealed a concentration of European artifacts along the western side and in the northeast corner of the test area.

Figure 3.4 Shovel test map of European artifacts, Lot 91.

Indian artifacts were also plotted (Figure 3.5). Testing revealed a high concentration of Indian artifacts in the northeast corner of the test area. Concentrations
were also located along the west side of the lot and in the southwest quadrant of the test area.

Figure 3.5 Shovel test map of Indian artifacts, Lot 91.

Brick artifacts were plotted separately from European and Indian artifacts (Figure 3.6). Tests revealed a high concentration of bricks along the western property line.
Figure 3.6 Shovel test map of brick artifacts, Lot 91.

In comparing the shovel test plots, two areas were considered for further excavation; the northeast quadrant of the test area and the area along the western property line. Both contained similar overlapping concentrations of European and Indian artifacts, however the area adjacent
to the western property line contained a high concentration of bricks. The location of structural features was a goal of the excavation in answering functional questions. Therefore, the final determination was made, primarily based upon the higher amounts of building materials (brick) recovered in the western area.

Thirty-six one meter square units were excavated along the western property line of Lot 91 and in the easement between Lot 91 and Lot 110. Excavations were performed with trowels using arbitrary 10cm levels. Material from these units was screened through 1/8" hardware cloth, with each square and level receiving an individual F.S. number. Features were assigned individual feature numbers. Unit excavations were extended below the bottom of the cultural layer. Flotation samples were collected in features where recovery of small faunal and floral materials might be possible.

All artifacts were cleaned and conserved as necessary. They were classified by material and recorded by unit/level or feature. Each category of artifacts received addition analysis in an effort to understand the formational processes of the site, the function of excavated areas and features, and their significance in answering various research questions, or in identifying new questions.
Chapter 4
CHRONOLOGY AT 1MB61

The chronology of 1MB61 is important in understanding its historical relationship to the events in the region and to other components in the colony, especially Old Mobile (1702-1711) and Mobile (after 1711). Chronology defines the context in which the data from the archaeological record must be viewed. The chronological position of 1MB61 is important, since the first decade of French occupation on Mobile Bay is differentiated from the second decade by several factors in the historical record (Table 4.1).

Table 4.1 Factors that differentiate the first two decades of French occupation on Mobile Bay.

<table>
<thead>
<tr>
<th>FIRST DECADE (1701-1711)</th>
<th>SECOND DECADE (1712-1722)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Relatively open trade with Spanish.</td>
<td>2. Official sanctions on trade set by Spanish.</td>
</tr>
<tr>
<td>3. Small population, growth of colony.</td>
<td>3. Improved colony growth, particularly toward end of decade.</td>
</tr>
<tr>
<td>4. Few settlers at Dauphin Island during first part of decade. Trend toward growth by 1708.</td>
<td>4. Settlement at Dauphin Island stable and even prosperous as compared with Mobile.</td>
</tr>
</tbody>
</table>

(table con’t.)

63
5. Military numbers small although they represent significant proportion of population of colony.

6. Hardships for military include sporadic pay and material support resulting in desertion near end of decade.

7. Little military presence on Dauphin Island. Only minor efforts to improve island's defensive structures.

8. Mobile distantly separated from Dauphin Island resulting in poor communication between key elements of the colony.

9. Dauphin Island functions primarily as port/receiving center for the colony until late in decade.

The changes that occurred in the colony over the first and second decade were gradual, yet punctuated by specific events such as the move of Mobile in 1711 and the change in the economic direction of the colony in 1712. At Dauphin Island an influx of settlers in 1708 helped to bring about the change during the second decade in the complexity of the function of the island.

Understanding the chronological position of 1MB61 is important as this component of Dauphin Island did not function in isolation from the other elements of the colony.
As the function of the island became more complex and evolved in the second decade, its importance to the colony changed. Dauphin Island and Mobile became more equal in status and importance. Both satellites of the colony on Mobile Bay had a significant function to perform, and both depended upon the success of the other.

**Establishing Chronology**

Most materials recovered in the archaeological record are to some extent chronologically sensitive. Artifacts and features represent cultural decision and trends that change over time. While most expressions of culture "evolve" and change over time, understanding and specifically pinpointing this change relative to time may be difficult. Features and artifacts represent the technological and cultural evolution of humans. Specific artifacts such as kaolin tobacco pipes or ceramics are particularly useful in establishing chronology and assessing culture change.

Setting a "tight" date for 1MB61 has limited utility, however, given the well documented history of occupation. Understanding the position of 1MB61 relative to other elements of the colony is more valuable for comparisons of archaeological data with other components of known historical context. Using the closed context site of Old Mobile (1702-1711) as a "bench mark," artifacts and features at 1MB61 may be compared for relative dating.
Some artifact groups offer an opportunity for further narrowing of the date range than do others. For the analysis of chronology at 1MB61, two categories of artifacts have been chosen: locally manufactured bricks and imported tobacco pipes.

**Brick**

At 1MB61 the site selected for excavations was chosen, in part, due to the presence of a large number of bricks revealed by the shovel testing. The presence of brick offered the possibility of recovering structural features which might assist in the determination of site function as well as answer other questions significant to this study. While the bricks did not lead to the discovery of in situ architectural features, they have revealed clues as to the chronology of 1MB61, and raised interesting questions concerning their origin and deposition.

Bricks at 1MB61 were produced in wood molds. Mold marks are visible on the bottom surface of many specimens. The upper surfaces exhibit longitudinal striations where the clay was "struck" from the top of the mold. Upper surfaces also tend to be slightly concave. Manufacturing techniques are similar to those of bricks recovered at Old Mobile (Waselkov 1991:61).

Numerous brick fragments recovered during excavations differed in size, color and hardness. Three brick types are represented at 1MB61 on the basis of color: orange, red,
and buff. Brick color may be affected by different clay materials and by firing conditions (Noel Hume 1972:81). Red bricks recovered at 1MB61 are hard. Orange bricks are less hard than red, followed by buff examples which are the softest. If the different colors resulted from differential firing, these bricks may have been manufactured concurrently.

This possibility is negated by the dimensional variations of the types (Table 4.2). Orange and red bricks may be associated based on dimensional similarities, however buff bricks differ significantly. Larger molds were used. The color of the buff bricks may be the result of different clay materials. Mobile and Baldwin Counties have deposits of orange, red, and yellow clays. Buff bricks may have been made at a site where yellow clay was abundant.

Table 4.2 Brick dimensions from 1MB61.

<table>
<thead>
<tr>
<th></th>
<th>ORANGE</th>
<th></th>
<th>RED</th>
<th></th>
<th>BUFF</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Thick.</td>
<td>Width</td>
<td>Thick.</td>
<td>Width</td>
<td>Thick.</td>
</tr>
<tr>
<td>Minimum</td>
<td>3.7cm</td>
<td>8.9cm</td>
<td>3.8cm</td>
<td>8.8cm</td>
<td>4.0cm</td>
</tr>
<tr>
<td>Maximum</td>
<td>4.3cm</td>
<td>*9.4cm</td>
<td>4.2cm</td>
<td>9.4cm</td>
<td>5.1cm</td>
</tr>
<tr>
<td>Mean</td>
<td>3.94</td>
<td>9.17</td>
<td>3.98</td>
<td>9.08</td>
<td>4.39</td>
</tr>
<tr>
<td>N of Type</td>
<td>122</td>
<td>34</td>
<td>36</td>
<td>9</td>
<td>34</td>
</tr>
</tbody>
</table>

* One orange brick deviated significantly in width (10.6cm). It was eliminated from the comparison.
At 1MB61 orange and red brick are similar in size (Table 4.2). A visual comparison is difficult as the softer orange bricks are more worn and do not exhibit the clear mold marks of the red bricks. Colors do not tend to "range" evenly from orange to red although some predominantly red specimens contain areas of orange clay. Generally the colors are uniform, particularly in the larger specimens.

Noel Hume (1972:81) reports that by the eighteenth century brick measured about 22cm long, 10cm wide, and 6.7cm thick. Hume's research, however has concentrated on English colonial sites on the Atlantic coast. Waselkov (1991:61) notes that French bricks tend to be thinner than English bricks.

Dauphin Island and other early French colonial sites differ from the English norm, mostly with respect to thickness. Thicknesses varies from a minimum at Old Mobile (3.19cm) to Dauphin Island (3.7cm) to and Mobile (3.82cm) (Table 4.3). Less variation is apparent in width. However one anomaly is present. Red and orange bricks at 1MB61 are smaller in width at an average of 9.15cm than Old Mobile bricks at 9.68cm on average. Bricks from other sites (Table 4.3) tend to be over 10.0cm in width.

Dimensionally, buff bricks at 1MB61 are thicker than orange or red brick (Figure 4.2). In New England buff bricks are generally confined to seventeenth century sites and are known as Dutch or Flemish bricks. They tend to be
smaller (18cm x 8.3cm x 3.5cm) as compared to red building bricks (Noel Hume 1969:83). Buff bricks at 1MB61 do not conform to this pattern.

Table 4.3 Dimensional comparison of Bricks from 1MB61 with other French sites on Mobile Bay.

<table>
<thead>
<tr>
<th>SITE</th>
<th>THICKNESS cm</th>
<th>WIDTH cm</th>
<th>LENGTH cm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fort Toulouse</td>
<td>5.24</td>
<td>10.45</td>
<td>21.20</td>
</tr>
<tr>
<td>(after 1718)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobile</td>
<td>3.82</td>
<td>10.11</td>
<td>-</td>
</tr>
<tr>
<td>(after 1711)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fort Conde</td>
<td>3.81</td>
<td>12.70</td>
<td>24.76</td>
</tr>
<tr>
<td>(after 1711)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1MB61</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Red &amp; Orange</td>
<td>3.95</td>
<td>9.15</td>
<td>-</td>
</tr>
<tr>
<td>Buff</td>
<td>4.39</td>
<td>10.10</td>
<td>-</td>
</tr>
<tr>
<td>Old Mobile</td>
<td>3.19</td>
<td>9.68</td>
<td>18.75</td>
</tr>
<tr>
<td>(1701-1711)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(Sources as quoted in Waselkov 1991:64; Waselkov, Wood and Herbert 1982:133; Sheldon and Cottier 1981:77; Harris and Nielsen 1972:32)

The red and orange types are quite similar in both dimensions. This fact tends to support a hypothesis that the buff bricks were manufactured with different molds than the orange or red varieties.

Thickness of bricks on French components on Mobile Bay tends to increase over time (Table 4.3). Width does increase with later components; however, this trend is less evident, particularly when the width of the specimens recovered at 1MB61 is considered (Table 4.3). When
thickness alone is considered, red and orange brick from 1MB61, as well as the buff bricks, tend to suggest a date for the deposit later than Old Mobile and more in line with the later site of Mobile. Even more confusing is the increase in size of the buff bricks. Based on these considerations, the larger size of the buff brick indicates that they were manufactured later than the red and orange specimens. Factors that point to the salvage nature of this brick deposit at 1MB61 may offer the best explanation for this anomaly.

At Old Mobile, bricks were isolated in their distribution, indicating that they were probably used only for fireplace construction (Waselkov 1991:61). The numbers and concentration of bricks recovered at 1MB61 indicate a similar usage (Figure 4.1). However, the variety of types as compared to Old Mobile is unexplained. No bricks were recovered from primary contexts at 1MB61, therefore no specific function can be determined, however a significant trait shared by all specimens may lend a clue.

Only partial bricks were recovered. No specimens with a longitudinal dimension are represented. The deposit of bricks at 1MB61 may, therefore, represent the remains of salvage operations, which resulted in all complete bricks being removed, while partial bricks were discarded. Salvage may also explain why no bricks were located in
Figure 4.1 Plan of level one (0-10cm), 1992-1993 excavations.
primary context. The existence of two or three types is more perplexing. However, on the basis of dimensional traits, the bricks recovered at 1MB61 suggest a relative date later than Old Mobile, and, therefore, after 1711.

**Tobacco Pipes**

As with other types of artifacts, stylistic and technological changes in tobacco pipes occurred over time that prove valuable in dating individual deposits and in comparing the chronological order of various sites. Imported kaolin tobacco pipes are valuable clues on European colonial sites as they were manufactured, imported, smoked, and discarded, all within one or two years (Hume 1969:296). Changes over time in the materials, manufacturing, dimensions, and decoration are particularly useful in chronological evaluation and determination of origin for kaolin tobacco pipes. Makers marks further assist in this process.

Several methods of analysis might be useful in determining the origin and dating of the pipes from 1MB61. Material analysis is an obvious possibility. Does English clay differ from Dutch clay? Unfortunately, this approach is complicated by the fact that quality kaolin clay was not known in Holland. Therefore, English clay was imported to Holland and occasionally mixed with German clay as a cost saving measure. Thickened stems (some to 11mm in diameter) resulted from the use of this inferior mixture.
(Duco 1981:374). On the basis of this trait, analysis of the outside stem diameter of pipe stems might be useful to determine origin. A detailed materials analysis might also indicate the presence of German clay. However, all Dutch pipes do not contain German clay, making this approach less useful.

Method of manufacture might provide another route to determine origin. The manufacture of clay pipes had its roots in England at the beginning of the 17th century, but pipes were being produced in Holland by 1607, introduced by English immigrants (Duco 1981:371-373). So, while regional changes certainly occurred over time, many of the manufacturing techniques were used by English craftspeople in Holland and passed along to their Dutch apprentices.

Other attributes are perhaps more useful or more practical than clay analysis or method of manufacture in determining country of origin. These include bowl shape and treatment, decoration of stems and bowls, presence/absence of spurs, and maker's marks.

Bowl shape, size, and height changed over time (Hume 1969:296) as the relative angle between the bowl and stem decreased (Noel Hume 1972:303). As the industry evolved, Dutch pipe bowls began to exhibit a distinctive shape. Bowl capacity increased as the cost and strength of tobacco decreased (Duco 1981:373). Bowl shape evolved, primarily as a result of the influence of Gouda pipe-makers. Bowls
became more slender in the mid seventeenth century (Duco 1981:374) and Gouda became known for producing funnel shaped bowls (Duco 1981:425).

At 1MB61 only two largely intact pipe bowls were recovered. One (Figure 4.2, A) has a funnel shape similar to Dutch bowls, while the other (Figure 4.2, B) has a shape more like English examples. The angle between the bowl and stem is greater in specimen "A" indicating a possible pre-1710 date of manufacture, while specimen "B" exhibits an angle more similar to pipes manufactured after 1710 (Noel Hume 1972:303).

---

Figure 4.2 Kaolin tobacco pipe bowls from 1MB61.
Burnishing began early as a finishing technique for clay pipes. Burnishing lines may be visible running longitudinally along the bowl and stem. This practice began in Gouda in 1635 to produce better quality pipes (Duco 1981:373-374). Rough (groffe) pipes were lower quality and not burnished. Fine (porceleine) pipes were quality pipes, burnished and expensive (Duco 1981:375).

Quality and form must be considered together when using bowl shape to establish chronology. Molds of new forms were used to produce better quality pipes. Older molds were used to produce lower quality pipes. Therefore, bowl shape is a more accurate dating tool when using better quality pipes than when lower quality specimens are utilized (Duco 1981:374).

Only a few examples from 1MB61 appear to exhibit burnishing. At Old Mobile burnishing was not evident on pipe bowls or stems (Curruth 1991:82). The generally poor material condition of these artifacts may be a contributing factor, however, of the limited specimens in relatively good condition, few show any signs of burnishing. Lower quality pipes of low cost probably comprise the majority of the specimens recovered at both sites. Bowl shape may, therefore, be a less specific chronological indicator in this case.

Bowl decoration in the form of various rim treatments and the addition of maker's marks became more common by the
mid-seventeenth century. Rim treatment evolved from simple trimmings to improve roundness, to the addition of an undecorated groove which was sometimes milled (Duco 1981:373). As trends in stem decoration increased, chevron rouletting and dashes were added to rim decoration (Duco 1981:288; Hamilton & Lunn 1984). Several types of rim decorations were recovered at 1MB61 (Figure 4.3).

Figure 4.3 Types of rim decoration on tobacco pipe bowls at 1MB61.

Bowl rim decoration consists of lines of dashes and dots parallel to and just below the rim. Chevron and rim decoration is also represented. Simple milled rims are also present in significant numbers (Table 4.3). About two-thirds of the rims are decorated in the assemblage.
Table 4.3 Decoration on tobacco pipe bowl rim fragments at 1MB61.

<table>
<thead>
<tr>
<th>Decorated *</th>
<th>n=</th>
<th>% of tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square (A)</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>Dash (B)</td>
<td>12</td>
<td>31.6</td>
</tr>
<tr>
<td>Chevron (C)</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Dot (D)</td>
<td>2</td>
<td>5.3</td>
</tr>
<tr>
<td>Line (E)</td>
<td>1</td>
<td>2.6</td>
</tr>
<tr>
<td>Milled (F)</td>
<td>7</td>
<td>18.4</td>
</tr>
<tr>
<td>Total Decorated</td>
<td>25</td>
<td>65.8</td>
</tr>
<tr>
<td>Total Undecorated</td>
<td>13</td>
<td>34.2</td>
</tr>
</tbody>
</table>

* See Figure 5.4 for graphic examples of types.

The percentage of decoration on bowls is significantly higher at 1MB61 than at Old Mobile (Table 4.4). This again points to a later date for 1MB61 than for Old Mobile.

Table 4.4 Tobacco pipe bowl decoration at 1MB61 and Old Mobile.

<table>
<thead>
<tr>
<th></th>
<th>1MB61</th>
<th></th>
<th>OLD MOBILE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=</td>
<td>% of tot.</td>
<td>n=</td>
</tr>
<tr>
<td>Decorated Rims</td>
<td>25</td>
<td>17.0</td>
<td>12</td>
</tr>
<tr>
<td>Maker's Marks</td>
<td>7</td>
<td>4.8</td>
<td>4</td>
</tr>
<tr>
<td>Undecorated</td>
<td>115</td>
<td>78.2</td>
<td>213</td>
</tr>
<tr>
<td>Totals</td>
<td>147</td>
<td></td>
<td>229</td>
</tr>
</tbody>
</table>

Source of data on Old Mobile (Curruth 1991:78, 83).
By the mid seventeenth century, band rouletting became popular as a decoration on pipe stems. It was usually placed at the center of gravity, about 1/3 down the stem from the bowl (Duco 1981:378), however two specimens from 1MB61 (Figure 4.4) have chevron rouletting near the base of the bowl.

Figure 4.4 Tobacco pipe stem rouletting position relative to pipe bowl.

Stem rouletting is generally attributed to pipes of Dutch manufacture. Circle or "O"s were manufactured later than chevrons (Duco 1981:288; Hamilton & Lunn 1989). Rouletting was possibly copied by the Dutch from early English designs by Livellin Evans (1661-1688) and William Evanges (1660-1697), both firms from Bristol, England. In Dutch copies the rouletting is not as bold as the earlier English patterns (Alexander 1978:23-25). "O" with chevron
rouletting has been found in several contexts: Louisburg (1716-1749/50) (McM. Larrabee 1971:88); Anglica Knoll site, Maryland (1649-1650) (Alexander 1978:23-25); St. Francis Xavier IV site Canada (1696-1710) (Alexander 1978:23-25); and Pusey House (1700-1725) (Alexander 1978:23-25). Friederich (1975:66) cites 29 archaeological sites in Holland with similar "0" and chevron rouletting. All but one date prior to 1730.

Decorated stem fragments have been recovered at both 1MB61 and at Old Mobile. Chevron (Figure 4.5, A) and "O" (Figure 4.5, B) rouletting examples are present at 1MB61.

---

Figure 4.5 Tobacco pipe stem decoration at 1MB61.
One unusual twisted stem fragment was recovered from 1MB61 (Figure 4.6). Twisted stems are rare as they were handmade. They were occasionally presented to merchants as gifts with the purchase of a gross of pipes (Schrire et al. 1990:228). A similar twisted stem fragment was also recovered from Old Mobile (Curruth 1991:82).

Figure 4.6 Twisted tobacco pipe stem fragment from 1MB61.

Only a small percentage of the stem fragments recovered at 1MB61 and at Old Mobile are decorated. Both sites show similar proportions of chevron decoration relative to "O" rouletting (Table 4.6). However, a larger percentage of the stems were decorated at 1MB61 as compared to Old Mobile, again suggesting a relative later date for 1MB61. The rouletting patterns found at both sites suggest that some portion of the assemblage is of Dutch origin; however, the percentage remains in question. Curruth (1991:83) concludes that "... the bulk of the collection (from Old Mobile) evidently is English in origin." The question remains as to what proportion.
Table 4.5 Tobacco pipe stem decoration at 1MB61 and at Old Mobile.

<table>
<thead>
<tr>
<th>ROULETTING PATTERN</th>
<th>1MB61 n=</th>
<th>% of tot.</th>
<th>OLD MOBILE n=</th>
<th>% of tot.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chevron</td>
<td>19</td>
<td>5.7</td>
<td>8</td>
<td>.8</td>
</tr>
<tr>
<td>&quot;O&quot;</td>
<td>17</td>
<td>5.1</td>
<td>6</td>
<td>.6</td>
</tr>
<tr>
<td>Milled</td>
<td>0</td>
<td>-</td>
<td>2</td>
<td>.2</td>
</tr>
<tr>
<td>Dot-twist</td>
<td>1</td>
<td>.3</td>
<td>1</td>
<td>.1</td>
</tr>
<tr>
<td>Unidentified</td>
<td>3</td>
<td>.9</td>
<td>8</td>
<td>.8</td>
</tr>
<tr>
<td>Decorated</td>
<td>40</td>
<td>12.0</td>
<td>25</td>
<td>2.5</td>
</tr>
<tr>
<td>Undecorated</td>
<td>294</td>
<td>88.0</td>
<td>932</td>
<td>97.5</td>
</tr>
<tr>
<td>Totals</td>
<td>334</td>
<td>98.0</td>
<td>957</td>
<td>99.0</td>
</tr>
</tbody>
</table>

Source of data on Old Mobile (Curruth 1991:83).

Small protruding spurs were placed at the base of pipe bowls, particularly prior to 1700. By 1690, Bristol pipemakers were producing pipes without heels or spurs for export to the American colonies (Hume 1979:305). English pipe bowls without spurs of the style recovered at 1MB61 (Figure 4.3, B) date from about 1720 to 1820. English bowls with spurs similar to those from 1MB61 (Figure 4.2, A) date from about 1700 to 1770 (Walker 1977:1549-1550) spanning the known primary period of occupation for Dauphin Island. The presence/absence of spurs may therefore also be a chronological indicator.

At Old Mobile all bowl bases recovered show the presence of spurs (Curruth 1991:82); however, at 1MB61, of the eleven bowl base fragments recovered, seven had spurs.
and four did not. Again, based on the presence/absence of spurs, 1MB61 apparently has a date later than Old Mobile.

Maker's marks are also useful tools in dating and establishing origin of manufacture. Spurs and bowls were occasionally stamped with a maker's mark. Plain bowls however, remained most numerous during the period from 1690-1730 (Noel Hume 1979:305). Only four specimens with maker's marks were recovered from Old Mobile (Curruth 1991:78). Numerous examples of maker's marks were recovered in the current excavation at 1MB61 and by Stowe (n.d.:105-106) (Figure 4.7). Only four marked spurs were recovered from Old Mobile (Curruth 1991:78) and only one (Figure 4.7, B) resembles any of those from 1MB61.

---

Figure 4.7 Maker's marks from tobacco pipe spurs at 1MB61.
An "IC" mark was recovered at 1MB61 (Figure 4.7, A). This mark is similar to one attributed to Isaac Cary (1670) of York, England, or to John Chapman (1670) of Hull, England (Oswald 1960:51). Of the four marked spurs recovered at Old Mobile, two have been attributed to England and one other is considered of Dutch origin (Curruth 1991:78). The remaining mark (Figure 4.7, B) found at both sites has not been identified. The crown and animal mark (Figure 4.7, C) has been attributed to the Gouda pipe-makers of Holland (Raphael 1991:173). The three pointed crown has also been attributed to Gouda pipe-makers (Duco 1981:377). The "E" mark (Figure 4.7) is similar to one representing a trumpeter attributed to Holland (Larrabee 1971:109). None of the other examples in Figure 4.7 have been identified. However, the presence of a significant percentage of Dutch stems at 1MB61 is evident in the maker’s marks that have been identified.

Several examples of "RT" marks on bowl fragments were recovered at 1MB61 (Figure 4.8). None were reported recovered from Old Mobile (Curruth 1991:78-83). "RT" was the mark of the Robert Tippet family who produced English pipes from 1646 until the mid-eighteenth century (Walker 1977:664-665). The Tippet family produced pipes for three generations: Robert I (1660-1680), Robert II (1660-1713? [1720]) and Robert III (1692-?) (Walker 1977:1396).
Pipes with "RT" on the back of the bowl are dated between 1700 and 1730 (Drovin 1990:129).

The "RT" mark has been found in French contexts as late as 1751-1755. In Nova Scotia it appears from the late seventeenth century to 1751. It was also reported at Louisbourg, Nova Scotia 1700-1749 (MacLean 1971:24-25, 66) and the Mohawk Indian "Castle," Canada (1667-1693) (MacLean 1971:140-141). Walker (1977:1732-1739) diagrams a progression of the "RT" mark as related to bowl style over the complete time of production from 1660-1750. However, his progression is not specifically dated. Twenty-six style changes are noted. The "RT" specimens recovered at 1MB61 (Figure 4.9) most resemble the examples at the mid-point in this progression, perhaps suggesting a date about 1705.

Three other tobacco pipes from the current excavations at 1MB61 were marked. Two (Figure 4.9, A) have a small
circular cartouche on the side of the bowls consisting of a small figure, possibly a goblet, enclosed by a circle of dots. This mark was not identified. One pipe stem (Figure 4.10, B) has a series of letters encircling the stem. Similar examples were produced in Holland marked "Gouda," however, the example referenced is dated 1745-1800 (Friederich 1975:66).

Figure 4.9 Miscellaneous marked tobacco pipe artifacts from 1MB61.

Stem length increased from an average of 3-1/2" in the late sixteenth century to an average of 13-1/2" by the first half of the eighteenth century (Noel Hume 1969:296). As stem length increased, bore diameter decreased. Holes were manually bored through the "green" clay stems during the manufacturing process while the pipe was still in the mold. Makers found that thick wires had a tendency to break through the side wall of the stem, particularly as
stem length increased. Smaller diameter wires were employed as a solution to this problem (Noel Hume 1969:297).

J. C. Harrington realized that the evolution of bore diameters could be a useful dating tool. He studied bore diameters on predominately English sites and in 1954 published a chart (Figure 4.10) based upon the results of his work. The chart outlined the progression of bore diameters through time (Noel Hume 1969:297-298).

Figure 4.10 Chart showing variations in stem bore diameters of clay tobacco pipes relative to dates of production. (Source: Chart drawn from Noel Hume (1969:298) based upon data from J. C. Harrington.)
In 1962, Lewis Binford produced a straight line regression formula based on Harrington's data. Binford's formula is: \( Y = 1931.85 - 38.26X \) (Noel Hume 1969:298-299). Y is the resultant mean date for a group of stems being studied; 1931.85 is the date when the bore diameter would reduce to zero; 38.26 is the number of years between each period on Harrington's chart (Figure 4.10); and X is the mean hole diameter for the group being studied in 64ths of an inch (Noel Hume 1969:298-299).

Additional efforts have been made to refine Harrington's and Binford's work, but they tend to represent "picky" revisions to a concept which is not meant to be overly precise (Walker 1977:10). Noel Hume (1969:301) used Binford's formula to calculate a date for fourteen sites in colonial Virginia. Formula dates for these sites tended to be five to ten years early for the first half of the seventeenth century. Formula dates in the first half of the eighteenth century tended to be correct while dates on later sites tended to be incorrect. Based on this finding, the pipe stem calculations at Old Mobile and 1MB61 should be reasonably accurate. However, both Harrington and Noel Hume based their research predominantly on English pipe stems.

In looking at stems from contexts of known date at Williamsburg, Noel Hume (1969:300) also pointed out that small samples could give false data. However, as the size
of the sample increased, the Binford formula date began to stabilize and little change in result was noticed when sample sizes were increased. Accurate dates for known sites were produced with as few as 17 stems in some examples, while others required as many as 932. In some examples the complete assemblage did not produce an accurate date (Noel Hume 1969:300-301). Noel Hume (1991:20-29) also noted that the Binford formula was not too accurate at Martin's Hundred. Dates produced were ten to fifteen years off. However about 25% of the pipes at Martin's Hundred were Dutch. These examples point to the fallacy of relying on pipe stems for specific dating; however, its value in relative dating is not diminished.

Harrington realized that Dutch pipe stem diameters tend to be smaller than English examples. Therefore, the Binford formula yields later dates when significant portions of a sample are Dutch (Larrabee 1971:88; Walker 1977:9). Harrington suggested that Dutch pipe stems were about 0.3mm smaller in bore diameter than their English counterparts (Schrire, et. al 1990:277-278). Based on the Binford formula, a 0.3mm smaller bore diameter would result in a calculated date 28.9 years younger than English examples. Harrington viewed pipe stem diameter analysis as a valuable tool in establishing relative chronologies, not in providing specific dates (Schrire, et.al 1990:277-278).
Studies to determine the validity of using Dutch clay pipe analysis to establish site chronology have been undertaken. One such study (Schrire, et.al 1990) utilized a Dutch military occupation in South Africa, Outpost I (1669-1732), for this purpose. Over 99% of the pipes were Dutch in origin. Several observations resulted from this study: (1) chevron rouletting is older than 'O' rouletting, (2) chevron stems have a larger bore diameter, and (3) maker's marks confirm Duco's chart on bowl shape dating. The conclusions of the researchers were: (1) Relative dating with Dutch bowls is valid, (2) Bore diameters do decrease over time, as stem lengths increase, (3) length of stem is inversely correlated with bore diameter (Schrire, et. al 1990:269-300).

The question of English or Dutch origin becomes significant when considering stem diameter as a chronological indicator. If a significant number of pipes at 1MB61 or from Old Mobile are Dutch, stem dating will be skewed to a later date relative to the proportion of Dutch to English stems.

In the spring of 1994, bore diameters were measured on pipe stems from Structure 1 and Structure 5, Old Mobile, at the Archaeological Laboratory, University of South Alabama, using drill bits graduated in 64ths of an inch. This data is compared in Table 4.7 with the measurements for stems recovered during 1992-1993 excavations at 1MB61.
Table 4.7 Tobacco stem dates for 1MB61 and Old Mobile.

<table>
<thead>
<tr>
<th>BORE DIAMETER</th>
<th>OLD MOBILE</th>
<th>1MB61</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Struct. 1</td>
<td>Struct. 5</td>
</tr>
<tr>
<td>7/64 &quot;</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>6/64 &quot;</td>
<td>345</td>
<td>198</td>
</tr>
<tr>
<td>5/64 &quot;</td>
<td>266</td>
<td>352</td>
</tr>
<tr>
<td>Totals</td>
<td>618</td>
<td>565</td>
</tr>
<tr>
<td>Binford Formula Date</td>
<td>1718.32</td>
<td>1725.09</td>
</tr>
</tbody>
</table>

The Binford dating formula again suggests a slightly later date for 1MB61 than for Old Mobile. In considering the relative dates of the two sites, the information is useful. The presence of some percentage of Dutch pipe stems in the sample has skewed the calculated date for each site. This factor could further compound the error for 1MB61 if a larger percentage of the stems from the site are Dutch as compared to the percentage of Dutch stems at Old Mobile.

The pipe stem date for Old Mobile of 1721.57 is incorrect as the site was first occupied in early 1702 and abandoned in 1711. If the 1721.57 date is corrected to the median date for the occupation of Old Mobile of 1706.5, and the 1MB61 date is reduced by the same number of years, an adjusted date for 1MB61 is 1719.52.
Conclusions Regarding Chronology

Analysis of bricks and tobacco pipes indicate that the assemblage from Old Mobile predates 1MB61. Tobacco pipe analysis suggests that this particular component of Dauphin Island was primarily occupied during the second decade of the French Colonial period on Mobile Bay (1712-1722) after which it was abandoned. In comparisons of the two sites, 1MB61 must, therefore, be considered in its historical context of the second decade. Questions regarding colony growth, economic trends, military conditions, socio-economic status of individuals, as well as regional relationships with other colonial powers and the local Indians, represent valid areas of study during this decade.
Chapter 5

SITE FUNCTION

The interpretation of site function relies on the analysis of several factors including historical documents and archaeological data derived from artifacts and features. Historical records and maps may be used to suggest a particular site function and archaeological data may be analyzed to test this hypothesis.

Historical maps are valuable as graphic representations of an area at a specific time. They indicate geographic features that can be correlated with modern maps and they may suggest specific site functions in their depictions and legends. Historical documents may further aid in this process. Once the chronology of a site has been established from archaeological data and a hypothesis regarding site function has been formulated, historical records may contribute additional information for the analysis.

Archaeological data used to evaluate site function takes several forms. The presence of one specific diagnostic artifact might strongly point to site function. For instance, the presence of large quantities of slag may strongly suggest metal working - a forge - a blacksmith shop. However, this determination must be corroborated by other artifact patterns and structural features to form a convincing argument.
The analysis of chronology has determined that the primary period of activity at 1MB61 was the second decade of the eighteenth century. Historical maps of this period suggest a military function for the site, specifically, a wooden stockade along with other related structures of a military and domestic nature. This hypothesis is corroborated by the historic record. Artifact patterning is used to support this hypothesis along with the analysis of structural features revealed in 1992-1993 excavations.

**Historical Maps**

Historical maps of the period are a primary data source for use in historical archaeological research. In some ways they may prove more useful than written reports and records. Certainly, maps may be vague, fanciful, or even incorrect, yet they are graphic representations as opposed to word pictures. They simply present a representation of what the mapmaker saw - the geographical features and cultural elements of interest. When they are dated, they represent a specific time. While they may offer planimetric or oblique views of their subjects, they are all essentially depictions of the real world.

Historical maps of Dauphin Island are valuable in understanding the disposition and function of components of the island as well as their sequence of construction. Some maps even point to specific locations for components. Map
legends offer valuable clues to the depictions and even suggest events relative to the map.

The earliest map available after the beginning of the French occupation of Dauphin Island (Figure 5.1) is dated 1712 (Stowe n.d.:43). Various geographical features of Mobile Bay and the Gulf of Mexico are indicated. Eleven structures are depicted on the island, but the map is basically diagrammatic. The 1712 map is typical of the early maps produced of that region.

---

**Plan de Fort Dauphin et de la Riviere de la Mobile**  
(Sketch of Port Dauphin and of the Mobile River)

Cartographer: Unknown  
Date: 1712  
Scale: *Lieues Francoise* (French leagues; scale located on map.)  

Figure 5.1 1712 map of Dauphin Island (Stowe n.d.:43-44).
A 1717 map (Figure 5.2) is also somewhat diagrammatic; however, it does provide a planimetric, detailed view of Dauphin Island at a scale that reveals the disposition of buildings and other features. A stockade (fort) is shown with four bastions north of the dunes in the interior of the island. Six structures are indicated around the stockade. Numerous structures are shown in the village and several are indicated elsewhere on the island. No legend is provided.

*Isle Dauphine dans la Province de la Louisiane*
(Dauphine Island from the province of Louisiana)

---

Cartographer: Unknown
Date: 1717
Scale: Unknown
Present location of original map: Unknown

Figure 5.2 Detail of 1717 map of Dauphin Island (Stowe n.d.:50-51).
A 1718 map (Figure 5.3) is possibly the most valuable map of Dauphin Island produced during the period. The similarity of the coastline and geographic landmarks to...
modern U. S. Geological Survey maps of the island is startling. The cartographer, Broutin the Younger, was a surveyor. This may account for the accuracy of the map. Geographical features are indicated on the 1718 map as well as buildings, roads, gun batteries, and a stockade (fort). Although the legend is missing, the map labels several important features which prove invaluable in correlating this map to a current U.S.G.S. map of Dauphin Island. The houses and compounds of Graveline and Renaud are labeled on the north side and letters are placed in other areas as keys to the now missing legend. A 1717-1720 map (Figure 5.4) is useful for providing possible explanations for the missing legend on the 1718 map.

The 1717-1720 map (Figure 5.4) offers an oblique view of Dauphin Island. Thirty houses are shown in the village and seven are indicated inland, north of the beach. Houses are shown with hipped roofs and the map contains other details such as a sentry box in front of the commandant's quarters. A stockade (fort) with four bastions is indicated inland. Four rectangular buildings are arranged around a square inside the stockade enclosure, and generally oriented north-south-east-west. The entrance to the stockade is shown on the south side. Table 5.1 is the legend reported by Stowe (n.d.:54-56) for this map together with his translation.
Figure 5.4 Detail of 1717-1720 map of Dauphin Island (Stowe n.d.:54-57).
Table 5.1 Legend for the 1717-1720 map of Dauphin Island.

1. *le fort ou legent les troup*  
   (Fort where the soldiers are lodged)

2. *Batteries qu' on avoit faites Po'dessendre l'entre-port*  
   (Batteries to defend the entrance of the port)

3. *Maison eu l'on aueit decharge les Poudres on*  
   (House where the powder has been sheltered)

4. *l'entree Duport qui s'est bouchee en 1717*  
   (Entrance of the port which has been obstructed in 1717)

5. *l'Islet al'Espagnel qui s'est joint a l'Isles*  
   (Island of the Spanish now joining the southern shore of Dauphin Island)

6. *le Ludlow Dan's la Rade*  
   (The "ship" Ludlow in the anchorage)

7 and 8. *le Paon et al Paix prest a sertir du Port*  
   (The ships Paon and Paix ready to get out of the harbor)

9. *Legement Du Commandant Des troup*  
   (Lodging of the commandant)

10. *Magazine De la Compagnie*  
    (Storehouses of the Crozat Company)

11. *Corps de garde Du Bourg*  
    (Guardhouse)

12. *Maison qui servoit D'Eglise*  
    (House used as a church)

13. *Magazin du Roi*  
    (Storehouse of the King)

14. *Conons montes sur leurs assvts*  
    (Guns on their carriages)
The 1717 and 1717-1720 maps (Figures 5.2 and 5.4) were used to identify corresponding features indicated on the 1718 map (Figure 5.3). The legend from the 1717-1720 map (Table 5.1) was then transposed to the corresponding letters for the missing legend of the 1718 map where appropriate. Letters on the 1718 map that are not represented by the legend on the 1717-1720 map were also tentatively identified. A proposed legend for the 1718 map was then produced (Table 5.2).

Table 5.2 Proposed legend for 1718 map, Dauphin Island.

<table>
<thead>
<tr>
<th>Letter</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>(Main village; Cross may indicate church)</td>
</tr>
<tr>
<td>B.</td>
<td>Storehouses of the Crozat Company [10]</td>
</tr>
<tr>
<td>(as above)</td>
<td>Storehouse of the King [13]</td>
</tr>
<tr>
<td>B.</td>
<td>Guns on their carriages [14]</td>
</tr>
<tr>
<td>C.</td>
<td>House used as a church [12]</td>
</tr>
<tr>
<td>D.</td>
<td>(Road to beach)</td>
</tr>
<tr>
<td>E.</td>
<td>(Lake)</td>
</tr>
<tr>
<td>F.</td>
<td>Fort where the soldiers are lodged [1]</td>
</tr>
<tr>
<td>G.</td>
<td>House where the powder has been sheltered [3]</td>
</tr>
<tr>
<td>H.</td>
<td>Batteries to defend the entrance to the port [2]</td>
</tr>
<tr>
<td>I.</td>
<td>(Missing from map)</td>
</tr>
<tr>
<td>J.</td>
<td>(Concession of Renaud)</td>
</tr>
<tr>
<td>K.</td>
<td>(Rowboat Lagoon)</td>
</tr>
<tr>
<td>L.</td>
<td>Entrance of the port which has been obstructed in 1717 [4]</td>
</tr>
<tr>
<td>M.</td>
<td>(Roadstead; main harbor; shown blocked)</td>
</tr>
<tr>
<td>N.</td>
<td>(Outer harbor west of Spanish Island)</td>
</tr>
<tr>
<td>O.</td>
<td>(Pass to Rowboat Lagoon; shown blocked)</td>
</tr>
</tbody>
</table>

Note: [1] refers to corresponding numbers from legend on the 1717-1720 map. Others are inferred and tentative. Three "B" notations represent three warehouses, two of Crozat and one belonging to the king.
Because the original is somewhat difficult to read, an outline drawing (Figure 5.5) was produced from the 1718 map (Figure 5.3) using the same letters and keys for the legend (Table 5.2). The map was then superimposed over the modern U.S.G.S. map (Figure 5.6).

Figure 5.5  Outline drawing of Dauphin Island from the 1718 map.
Several of the main geographical features were used in transferring the map to a scale which best matches the current a U.S.G.S. map. Most valuable in this effort was Teste de Mort (Death Head), a large shellmound which is still present on the north side of the island; Pointe a Guillory (Guillory Point) at the eastern end of the island; and the primary dune line which is indicated north of the

Figure 5.6 Outline drawing from the 1718 map superimposed over the current U.S.G.S. map of Dauphin Island.
main village as a dark line extending to the beach. The general angle of Isle a Guillery (now Little Dauphin Island), the location of Pass aux huîtres (now Pass Drury), and the general shape of the bay and marsh north of the island were also helpful in establishing proper scale and alignment of the two maps. The result suggests the location for various components of Dauphin Island depicted on the 1718 map.

The area of the stockade (fort, G on the legend) was enlarged and superimposed over a current subdivision map of the area (Figure 5.7). The stockade (fort) and various other structures fall in the general vicinity of Lot 110, the lot excavated by Stowe, and Lot 91, the location of excavations conducted for this research in 1992 and 1993. The stockade scale may be inaccurate as the result of the extreme enlargement. The enclosed area of the stockade was probably about 100 feet square based upon the size of other French fortifications of the period such as Ft. Maurepas (Higginbotham 1968:Illustrations), Ft. Louis at Old Mobile (Higginbotham 1977:Illustrations), and Ft. Toulouse (Waselkov 1984:6). The entire stockade, or a large part thereof, could be encompassed within the confines of a single lot. Equally, given the uncertainties in superimposing the maps, the fort could be 100 feet or more in any direction from the location shown in Figure 5.7.
Figure 5.7 Detail of the stockade (fort) area of the outline drawing of the 1718 map superimposed over a current subdivision map.

Historical maps suggest that a stockade and related structures were present at 1MB61 during the second decade of the eighteenth century. Historical records may support or negate this hypothesis, as well as reveal other specifics about activities on the site.
The "Fort" at Dauphin Island

Dauphin Island was the most strategic location for the French on the Gulf Coast and remained so for the first two decades of the eighteenth century (Higginbotham 1977:38). Cannon were positioned in 1702 at two water batteries to protect the harbor. Bienville later increased the number of cannon at these positions by twelve pieces (Higginbotham 1977:361). Even La Salle, the frugal king's accountant at Old Mobile, recognized the need for fortifications to protect the vital harbor at Massacre Island, however Bienville had other priorities (Higginbotham 1977:39).

Bienville did advise Pontchartrain in September of 1704 that "...a fort must be built of stone on Massacre to protect the harbor..." (Rowland and Sanders 1932:27-28). In June of 1707, King Louis XIV replied that "if absolutely necessary," work could begin on the proposed fort at Massacre Island (Rowland and Sanders 1932:57). Subsequent to this communication from the king, historical evidence does not suggest that construction of any fortification occurred at Massacre Island prior to 1709 (McWilliams 1953:128). Bienville reported to Pontchartrain in October of 1708 that "we have nothing at Massacre any longer" (Rowland and Sanders 1929:38-39). He was obviously speaking of a military presence, as several settlers had relocated to the island during the period. During the same period, Bienville reports detaching twelve soldiers and one
officer to guard the port and to keep watch over the settlers. He mentions "...holding a fort at the port of Massacre Island" (Rowland and Sanders 1929:38-39). In March of 1708, La Vente, a Catholic priest at Mobile wrote concerning "...a fort to be built at Massacre Island" (Higginbotham 1977:352). This reference indicates that in La Vente's mind no structure fitting the description of "fort" had yet been constructed on Massacre Island prior to March of 1708. As a cost-saving measure, La Salle proposed in 1708 that guards be stationed on Massacre Island only during times when ships were being unloaded or when goods remained in the warehouse (Higginbotham 1977:337).

Bienville was occupied during the summer and early fall of 1708 with strengthening the fortifications at Old Mobile against an anticipated attack by the English and their Indian allies (Higginbotham 1977:357-361). In a report to France in August of 1709, Bienville states "... that it is absolutely necessary to fortify the port of Massacre Island and to increase this garrison with two companies ..." (Higginbotham 1977:368). Some contingent of soldiers must have been present at Massacre Island, probably much less than two companies, but by 1710 a fort remained unbuilt and the port was defenseless as permanent batteries were not in place to protect the harbor when the English corsair sacked the island (Higginbotham 1977:445).
By 1710 military equipment was in short supply. A supply ship had not arrived from France for almost three years. Not enough swords, cartridge boxes, or guns were available to outfit every soldier and power was often not available (Giraud 1953:119-220). Commenting to Pontchartrain in February of 1710, D'Artaguet mentions "...if there were a fort to guard this post..." (Rowland and Sanders 1929:54) and again in June of that year (Rowland and Sanders 1929:58) with the following recommendation: "It is indispensably necessary to build a fort at Massacre [Island]."

In a report to Pontchartrain in October of 1711, Bienville asserts that "...the post of Port Dauphin is key to the seacoast country..." and "...must be fortified" (Rowland and Sanders 1932:163), a repetition of his point from the 1709 communication. However, Bienville was occupied with problems regarding the main settlement at Old Mobile. Though he conceded that plans to fortify Massacre Island should proceed as soon as possible, he postponed any action pending the arrival of the next ship from France (Higginbotham 1977:454-455, 465).

Penicaut, an artisan in the colony, recounts in his journal the arrival at "Isle Dauphine" of La Vigne Voisin, a captain from St. Malo. Voisin received permission to have a fort built to secure the harbor. At the fort, Voisin had "...embrasures constructed to contain cannon"
Penicaut places this event in 1709, the date he also assigns to the relocation of Mobile (McWilliams 1953:128). However, Mobile was relocated in 1711. If Penicaut can be presumed to have connected these two major events correctly, the "fort" on Dauphin Island was also built in 1711, not in 1709. He also refers to the island as "Isle Dauphine", a name which was not adopted until 1710. Penicaut wrote his narrative in the late summer of 1723 (McWilliams 1953:xiii) after returning to France. His recollection of facts and dates may be somewhat confused.

Penicaut also recounts in the same year, 1709 [1711], improving the new fort "we were building on the seashore." They also constructed two batteries outside the fort facing the sea during that same year (McWilliams 1953:131).

When Penicaut and others speak of a "fort," what is their meaning? In correspondence to Pontchartrain in October of 1713, Cadillac seems to clarify the matter (Rowland and Sanders 1929:165):

There is already a little fort of poor cedar piles with four little bastions. It is not sheathed and has no scaffolding, the cannons are at the water's edge; in a word it could not be in a worse condition. It is surrounded by woods, by stumps and houses of private persons who are at a great distance from each other and separated by vast gardens enclosed with stockades so that it is a hotch-potch in which one can understand nothing. There are nineteen families and several unmarried men in the settlement...
In October of 1713 Duclos sent an extensive "memoir" of over 100 pages concerning the "Province of Louisiana" to Pontchartrain (Rowland and Sanders 1929:79-143). He discussed the need for "...the construction of another fort on Dauphine Island" (Rowland and Sanders 1929:112). Cadillac also reported in October of 1713 (Rowland and Sanders 1929:194-195):

It is my opinion that in order to complete and put in good order the fort on Dauphin Island, building it of stone with lodgings for the governor, the staff, the barracks for the officers and soldiers, a powder-magazine, the chapel, guard-house, and the other magazines, it is necessary [to have] sixty thousand livres.

When Duclos and Cadillac speak of "replacing" or "putting in order," they are probably referring to the stockade built around 1711 mentioned by Penicaut and confirmed by Cadillac in 1713. The historian, Giraud (1953:218-219), however, reports that Dauphin Island remained unfortified as of 1714. He states that the island's only defenses consisted of a battery of ten cannon. He possibly did not consider the wooden stockade a significant "fortification."

Dauphin Island was never to receive permanent fortifications constructed of brick or stone. In 1715 Artus, an assistant engineer was sent to the port. He prepared elaborate plans for a pentagonal stone fort but the problem of obtaining materials made the task difficult (Holmes 1967:47). Clay for brick was not available on the
Artus reported that brick was manufactured at some distance to the north and that it was of poor quality due to the lack of a kiln (Giraud 1953:286). He was probably misinformed, as a kiln for firing bricks was reported to be in operation at Old Mobile as early as 1704 (Rowland and Sanders 1929:19). Surely a kiln was in operation at Mobile in 1715, as fired brick from Mobile and 1MB61 would attest. As a practical matter, funds for the construction of a stone or brick fort at Dauphin Island were needed for other projects in the colony.

Cadillac, was again prompted in 1716 to report on the need for permanent fortification of Port Dauphin (Giraud 1953:352). However, the cost of a stone fort caused the engineers to adopt an alternate plan. Hubert, the commissary at Mobile, recommended to the Council in 1717 that a stockade fort be built on Dauphin Island to be guarded by a garrison of one hundred soldiers. He also suggested that a battery of large cannons would be capable of defending the island from attack until assistance could arrive from Mobile (Rowland and Sanders 1929:229) thus negating the need for a permanent fort. In late 1717 or early 1718, a "pine-stake" stockade was constructed (Holmes 1967:47). However, in this same reference, Holmes (1967:47) reports that by the latter part of that year the stockade was in decay and rotting. In reviewing the two sources he used (Giraud 1953:107; Hamilton 1976:149 [166]),
Holmes appears to be confusing two stockades built at different times. Stockade I (1711) was probably the one "in decay and rotting," while Stockade II (1717) probably represents a new structure. Even in the conditions of Dauphin Island, wood did not rot in less than one year.

Penicaut also reports that a fort was built on Dauphin Island in 1717 "...two musket shots from the seashore,..." for the protection of the warehouse and to "...prevent any landings in that direction" (McWilliams 1953:205). Hamilton (1976:166) refers to the same structure, stating that in 1717, another fort was built "...at half a gunshot from the sea." Penicaut may be mistaken regarding the "two musket shots" distance from the seashore. That distance would place the structure on the far north side of the island at best. Hamilton has the distance as "half a gunshot" which conceivably places the structure at a similar distance as the 1711 structure originally mentioned by Penicaut.

Determining the specifics of fortifications at Dauphin Island, even from primary historical sources can be difficult. The data may generalize over an extended period of months or years. The specific meaning or intention of the original writer may be clouded. Knowing the purpose, the underlying motive, for the writer's communication is difficult. The writer's understanding or definition of "fort" seems to have had at least three different meanings:
1) a defensive fortification such as a gun battery, 2) a stockade, a less permanent enclosure built of wood, and 3) a permanent fort, made of stone or brick and containing all the formal elements and support structures. In short, we are "out of context." The specific meaning of a "fort" at Dauphin Island is just such a case.

Numerous references are available from the primary historic data. As many as could be located are included or referenced herein. When all are compiled and considered in the context of other events, a plausible picture of the evolution of military defenses at Dauphin Island can be proposed. The first wooden structure (Stockade I) was built no earlier than 1709, probably in 1711. A second structure (Stockade II) replaced it in 1717.

Artifact Analysis

Specific artifacts have been recovered at 1MB61 that suggest or support specific functions for the site. Curren (1971) reported in his original site form that "cannon balls" were recovered. Stowe (n.d.:124) recovered a cannon ball and a four-pound ball was found during the 1992-1993 excavations. The presence of a cannon ball might be used to support a military function for a site, however cannon balls are not cannons. Waselkov (1993: personal communication) reports that single cannon balls have been recovered at several of the 12 house sites excavated at Old Mobile. The presence, however, of at least three
cannon balls at 1MB61 more strongly suggest military activity.

Artifact patterns may also suggest site function. Stanley South (1977) proposed the use of artifact patterning to address abstract questions regarding site function and past human behavior. He saw the value of using archaeological, historical, archival, and ethnographic data to evaluate human behavior and cultural evolution (South 1977:2). Pattern recognition is key to understanding cultural process which results from the activities of humans. These patterns may be used to evaluate site function and to raise further questions as to why such patterns exist (South 1977:31).

Table 5.3 is a list of various categories of artifacts recovered in 1992-1993 excavations at 1MB61. Brick comprises the largest group of artifacts at 53.3%. The large number (4322) of brick fragments recovered within the excavation indicates the localized area of activity associated with the deposit of artifacts. The bricks were probably originally used for the construction of a fireplace or other small part of a structure, and the fragments were discarded at a later time when the brick were being salvaged for reuse elsewhere.

A large number of nails and spikes were also recovered indicating their importance in construction, as well as their availability. Indeed, nails were not in short supply.
Table 5.3  Artifact frequencies at 1MB61.

<table>
<thead>
<tr>
<th>Categories</th>
<th>n</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>European ceramics</td>
<td>463</td>
<td>5.7</td>
</tr>
<tr>
<td>Historic Indian pottery</td>
<td>1690</td>
<td>20.8</td>
</tr>
<tr>
<td>Prehistoric Indian pottery</td>
<td>67</td>
<td>0.8</td>
</tr>
<tr>
<td>Glass</td>
<td>100</td>
<td>1.2</td>
</tr>
<tr>
<td>Nails and spikes</td>
<td>743</td>
<td>9.1</td>
</tr>
<tr>
<td>Lead shot</td>
<td>135</td>
<td>1.7</td>
</tr>
<tr>
<td>Lead musket balls</td>
<td>4</td>
<td>0.1</td>
</tr>
<tr>
<td>Miscellaneous lead</td>
<td>29</td>
<td>0.4</td>
</tr>
<tr>
<td>Gunflints</td>
<td>34</td>
<td>0.4</td>
</tr>
<tr>
<td>Buttons</td>
<td>15</td>
<td>0.2</td>
</tr>
<tr>
<td>Glass beads</td>
<td>34</td>
<td>0.4</td>
</tr>
<tr>
<td>Kaolin tobacco pipes</td>
<td>481</td>
<td>5.9</td>
</tr>
<tr>
<td>Brick</td>
<td>4322</td>
<td>53.1</td>
</tr>
<tr>
<td>Other</td>
<td>25</td>
<td>0.3</td>
</tr>
</tbody>
</table>

Total 8142

Two thousand pounds of iron rod were imported into the colony that could have been used to make nails and other building hardware. Thousands of pounds of nails were also imported, suggesting that joinery may not have been prevalent in the construction techniques employed in the colony (Oszuscik 1991:181-182).

Historic Indian pottery comprises 20.8% of the assemblage. Indian pottery was used to supplement scarce European ceramics (Mueller 1994: personal communication). Indeed, historic Indian pottery outnumbers European ceramics by 3.65 to 1.

Only small amounts of glass were recovered (1.2%). Glass and European ceramics appear to have been scarce at
On the other hand, a significant amount of imported tobacco pipes were present (4.8%) indicating that tobacco smoking was a fundamental activity of the occupants on the site.

A significant number of lead shot (135) were recovered, but only four lead musket balls were found. The lack of musket balls, along with other metal artifacts such as brass items and coins, may be the result of "treasure hunting" with metal detectors on the site in 1991 or earlier. A meaningful number of gun flints were recovered (34). Most were "honey" colored and only five of the nine primarily intact specimens show any signs of reuse. Twelve were blade type and seven were spall type. Stowe (n.d.:123-127) removed 80 gunflints during his excavations.

Fifteen buttons were recovered. Nine were small (64-86mm diameter) with drilled shanks. One large convex drill-shank button (133mm diameter) had been reused. When the shank broke, two holes were driven through the face of the button with a square nail so it could be resown to a garment. One pewter button was recovered. Stowe (n.d.:123-127) recovered 20 buttons. He also recovered a number of other metal artifacts including brass buckles, sword hangers and guards, and silver coins.

Glass trade beads (34) were recovered. Most are plain white seed and small wound beads. Some have stripes and a few other types are represented.
While generalized observations can be useful regarding artifact frequencies, they become more meaningful when compared with other sites or components so that the pattern between groups can be evaluated within a larger context. South (1977:83-139) has used artifact patterns to propose a pattern for British colonial sites in the North Carolina region. He proposes that generalized activities will result in a regular pattern of artifacts that will be reflected at sites of the same period occupied by a particular people, and that specialized behavioral activities will be revealed from patterns that differ from this norm. Using this process South has differentiated several specialized patterns from the norm. The Carolina Pattern represents British colonial domestic sites of the eighteenth century and the Frontier Pattern portrays the military outposts of Fort Moultrie and Signal Hill (South 1977:141-164).

Artifacts reflect specific human activities. They may, therefore, be grouped into specific activity groups for the purpose of analysis. Table 5.4 compares 1MB61 to South's patterns.

Obviously, patterning would be expected to differ between British and French sites as functional roles vary and considerations such as availability of goods are considered (South 1977:125). Differences in British and French cultural determinants may also play a part. However, similar activities performed in similar ways using similar
Table 5.4 Artifact patterning implications at 1MB61.

<table>
<thead>
<tr>
<th>Activity Group</th>
<th>1MB61 n=</th>
<th>mean%</th>
<th>Carolina Pattern</th>
<th>Frontier Pattern</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kitchen Group</td>
<td>557</td>
<td>27.6</td>
<td>63.1</td>
<td>27.6</td>
</tr>
<tr>
<td>Architectural Group</td>
<td>749</td>
<td>37.1</td>
<td>25.5</td>
<td>52.0</td>
</tr>
<tr>
<td>Furniture Group</td>
<td>2</td>
<td>0.1</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Arms Group</td>
<td>173</td>
<td>8.6</td>
<td>0.5</td>
<td>5.4</td>
</tr>
<tr>
<td>Clothing Group</td>
<td>52</td>
<td>2.6</td>
<td>3.0</td>
<td>1.7</td>
</tr>
<tr>
<td>Personal Group</td>
<td>0</td>
<td>-</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Tobacco Pipe Group</td>
<td>481</td>
<td>23.8</td>
<td>5.8</td>
<td>9.1</td>
</tr>
<tr>
<td>Activities Group</td>
<td>4</td>
<td>0.2</td>
<td>1.7</td>
<td>3.7</td>
</tr>
</tbody>
</table>

Source: Carolina Pattern (South 1977:119); Frontier Pattern (South 1977:145).

Technology can be expected to show similar patterning in the way they deposit material in the archaeological record.

The Frontier Pattern (Table 5.4) bears more similarity to artifact patterns at 1MB61 than does the Carolina Pattern. This is particularly evident in the Kitchen and the Architectural Groups. The high Tobacco Pipe Group is also indicative of the frontier and even more pronounced at 1MB61. While certainly not conclusive, this comparison does suggest more similarities for 1MB61 with the Frontier Pattern (derived primarily from military outposts) than for the Carolina Pattern (derived primarily from domestic sites).

South (1977:141-151) has also derived patterns between artifact activity groups using cluster analysis. He found
that ceramic ratios for domestic sites were much higher than for military sites while wine bottle ratios were stable. Nails were more prevalent on military sites. Table 5.5 compares the ratios between artifact categories for the patterns derived by South and 1MB61.

Table 5.5 Activity ratios for military, domestic and frontier sites compared to ratios at 1MB61. (Source: for South's ratios (South 1977:151).

<table>
<thead>
<tr>
<th>Activity</th>
<th>Military</th>
<th>Domestic</th>
<th>Frontier</th>
<th>1MB61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nails/Ceramics</td>
<td>1/1</td>
<td>1/2</td>
<td>3/1</td>
<td>1.5/1</td>
</tr>
<tr>
<td>Wine bottle/Nails</td>
<td>2.2/1</td>
<td>1/2</td>
<td>1/4</td>
<td>1/27</td>
</tr>
<tr>
<td>Wine bottle/Ceramics</td>
<td>2/1</td>
<td>1/4</td>
<td>1/1.7</td>
<td>1/18</td>
</tr>
</tbody>
</table>

While in many cases the ratios are strikingly greater at 1MB61 than in South's analysis, a few observations are apparent. In this comparison only nail to ceramics ratios are similar to that of military sites. On domestic sites the ceramic to nail ratios are the reverse of 1MB61. In the domestic comparison, the other two variables are not reversed, however, the ratios are much exaggerated at 1MB61. Only for the frontier comparison do all ratios fall into the same alignment. Regional differences between French and British may tend to skew these ratios, mostly due to
the small number of wine bottles at 1MB61. Therefore, if only the ceramic to nail ratios are considered, 1MB61 conforms to the military and frontier pattern, but does not conform to the domestic pattern.

Artifact patterning verifies the military function of 1MB61. This conclusion is also supported by the high frequencies in certain artifact categories such as buttons and tobacco pipes, as well as the presence of specific artifacts such as cannon balls. The military function of 1MB61 suggested by historical documents and indicated by the historical map analysis is therefore, confirmed.

Building Construction Techniques in the Colony

Specific structural features revealed during excavation may also suggest site function. Buildings of the period were constructed using traditional French construction techniques. They tend to be one room in depth and one to three rooms wide (Oszuscik 1991:171).

Archaeological evidence at Old Mobile (Waselkov 1991) suggests that most buildings were constructed on wooden sills placed directly on the ground, though some evidence of posts placed directly into the soil is present.

Structures such as a wooden stockade will appear differently in the archaeological record. For instance, though the original stockade at Fort Toulouse has eroded into the river, a later structure (1751) had a distinctive
archaeological footprint. Charred triangular timbers that formed the palisade were placed in a trench to a depth of two feet nine inches. Repair and reinforcement posts were placed at various other depths and positions (Waselkov 1984). An understanding of building construction techniques and trends of the period is essential to the interpretation of the structural archaeological features.

At Dauphin Island and Mobile, houses were usually surrounded by galleries consisting of a space beyond the walls which was sheltered by the roof overhang (Rowland and Sanders 1929:19). Others were built of superimposed planks without galleries, with walls directly joined to the roof. The most elementary shelters were "huts" constructed of stakes set into the ground with reed covered roofs and without any foundation. The huts built by the soldiers at 1MB61, mentioned by Cadillac (Rowland and Sanders 1929:155), were probably constructed in this manner similar to those depicted in a sketch of New Biloxi dated 1720 (Figure 5.8).

Cedar and pine were the predominant woods used, and bricks were used only for the fireplace and occasionally for foundations. Chimneys were constructed of wattling cemented with mud. The buildings on Dauphin Island resembled "half-timbered houses" in France (Giraud 1953:285).
Father Le Mair served in Louisiana from about 1706 or 1707 until sometime after 1719. He was pastor of the Dauphin Island settlers around 1712 (Delanglez 1985:124-128). In a letter dated January 15, 1714, he described the structures on Dauphin Island (Delanglez 1985:150):
All the houses are frame and one story high; there is only one house which has two stories. The dwellings are comfortable enough. The walls are made of mud and white-washed outside and inside. The lime is made of oysters and other shells. Some of these houses have a solid brick foundation; all are two or three feet above the ground to protect the timber from dampness; most have a gallery all around, and those which haven't are covered from top to bottom with lattices. The chimneys are suitable enough. Until now the fireplace only has been made of bricks.

Residential structures and other buildings were constructed in much the same manner to that the settlers had learned in France or in Canada. Most structures consisted of posts set upright in the ground with notched or nailed timbers between a framework (Figure 5.9). The space between the framework was filled with a makeshift mortar composed of clay, sand and oyster shells. Stone and brick were seldom employed (Higginbotham 1977:89). Buildings at Fort Maurepas were constructed with *piece-sur-piece* (piece upon piece) bastions with high-pitched hipped roofs (Giraud 1974; Higginbotham 1977 in Oszuscik 1991:171).

Archaeological evidence at Old Mobile suggests that creolization of building forms occurred from the beginning of the settlement. The first structures were *poteaux-sur-sole* (posts-on-sill). When sills rotted a *poteaux-en-terre* (post-in-ground) form was occasionally installed as a replacement. Flooding and rot combined to influence the raising of buildings, a trait which evolved at Old Mobile and persisted with the relocation of the town to a new site.
in 1711, and continued with the move of the colony to New Orleans over a decade later (Oszuscik 1991:179-181).

Figure 5.9 Residential structures and other buildings at New Biloxi, 1720. (Source: Newberry Library, Chicago.)

A fallen *bousillage* (mud daubing) wall was discovered at 1MB61 by Stowe west of the current excavation unit. Fragments of tabby (shell cement) were also recovered in the vicinity of the brick concentrations during the current excavation at 1MB61. *Briquette-entre-poteaux* (brick-between-posts) wall construction is a possibility, however, the limited quantities of brick recovered suggest that they were used primarily in fireplace construction.

The De La Pointe/Krebs house exhibits many French construction techniques (Figure 5.10). The date of the
Figure 5.10 Details of construction from the De La Point/Krebs house; (A and B) Exterior details. (C) Post and beam detail. (D) Bousillage wall.
standing structure and the sequence of construction are in question, but the structure provides an excellent opportunity to study French construction techniques.

Analysis of Structural Features at 1MB61

The bulk of Stowe's excavations, designated 1MB61, were in the northern portion of Lot 110. A trench (1MB61-2) extended eastward onto Lot 91 (Figure 5.11).

---


Figure 5.11 General map of Stowe's excavations, 1973-1974.
Nine features are indicated within the main excavation unit (Figure 5.12) on Lot 110 (Stowe n.d.:14). Features included portions of collapsed *bousillage* wall approximately 9.5 inches thick. Associated with this wall were brick fragments and iron spikes. Charred timbers were also encountered (Stowe n.d.:10-12). Stowe does not report the presence of wall trenches, posts, or other structural features. His general excavation depth was 0.4 foot arbitrary levels (Stowe n.d.:9). Based on test excavations, Stowe determined that "...the majority of features and artifacts were located in the upper six inches of the site." (Stowe n.d.:8). Stowe (n.d.:10) further notes that all features and artifacts were located in the upper two levels (0.8 feet/9.6 inches).

Figure 5.12 Detail plan of Stowe's excavation unit 1MB61-2 on Lot 110 (Stowe n.d:14).
On Lot 91 Cottier (1992:personal communication) estimated that 10-15cm of material had been removed and piled in the middle of the lot by "treasure hunters." Two levels (three in some units) of 10cm each were required during 1993 excavations to reveal features such as post holes and wall trenches (Figure 5.13).

The depth of the cultural layer on Lot 91 is estimated to have been 30-35cm (11.8 to 13.8 inches). Stowe did not report finding any structural features of this nature, although he did report other features such as pits or middens (Features 5, 6, 7, and 8) (Stowe n.d.:10-12). Three possible explanations exist: 1) no structural features existed within the excavated area, 2) structural features were not detected by the excavators, or 3)
excavations were not carried down to sufficient depth. Current excavations beyond the 20cm depth of level two of current excavations at 1MB61 revealed a number of features, some of structural nature.

Features 1 through 4 (Figure 5.14) were excavated as part of test excavations by Auburn University in the spring of 1992. Disturbance within the first unit excavated made analysis difficult, however the conclusion of excavators was that Feature 1 was cultural in nature.

Feature 2 (Figure 5.14), revealed in the second unit, was a narrow, linear trench running north-south. Feature 2 was complicated at the north end by a possible animal burrow which intersected the feature on the east side. Toward the south end of the unit, the feature was reasonably well defined and less disturbed. Excavators agreed that Feature 2 was a building wall trench. The feature seemed to terminate at the south end. This break could represent a door opening.

In the southeast corner of the third unit an amorphous deposit of dark material (Feature 3) was discovered (Figure 5.14). Although Feature 3 contained some cultural material, it was poorly defined and appeared to have been the remnant of a small depression (pit) or tree stump hole. Toward the center of the unit excavations revealed a well-defined wall trench, Feature 4, running in an east-west direction. A small post hole was located within the trench, possibly the
Figure 5.14 Plan of units excavated by Auburn University, spring 1992, and test excavations, fall 1992.
result of a repair operation. A large post hole was discovered at the southeast edge of Feature 4.

The excavations by Auburn University were not only useful in accessing site damage, they revealed features of interest to this research. In Features 1, 2, and 4, the excavations revealed what appears to be the end of a structure which extends beyond the west side of the units. The large post hole remains unexplained.

Four one-meter units were excavated to test procedures designed for this research in November 1992 (Figure 5.14). Some shovel disturbance was encountered throughout the units, mostly toward the northwest corner of the excavation. A series of posts ranging in diameter from 18cm to 30cm were discovered. One post, in the southeast corner of the excavation, had a square mold at the bottom, an indication that the round timber post had been sharpened prior to placement. The post holes were excavated and screened separately, but artifacts were few and not diagnostic.

In the spring of 1993, thirty-seven one-meter units were excavated to the east of the Auburn units (Figure 5.15). Five additional features were identified at Level 2 (10-20cm depth), generally at the south end of the excavated area.

Feature 5 appeared as a dark stain at the southeast corner of Unit 154N, 166E (Units are identified by their southeast grid coordinate). A fragment of white
Figure 5.15 Level two (10-20cm) plan of 1992-1993 excavation unit.
faience cup and an intact neck from a Spanish olive jar were discovered in Level 1 and Level 2 of the unit, however few artifacts were encountered below 20cm in depth. A stained area, designated Feature 8, extended to the northwest of Feature 5. Excavation of Feature 5 was extended six levels (60cm). No artifacts were recovered below Level 3. Feature 5 was determined to be the remains of a tree and Feature 8 was a stained area which radiated from this zone.

Features 6, 7, and 9 (Figure 5.15) were depressions associated with small post holes (10cm diameter). Three clustered posts were located at the center of Feature 6, the largest and deepest of these features. Brick and other artifacts were recovered in the small depression which extended toward the post holes and terminated at a depth of 35cm. Feature 7 was similar, but smaller, and terminated at a depth of 25cm. Feature 9 appeared to have an associated post, yet it was poorly defined. Its exact outline was not determined. Several other possible posts were located in the northern area of the excavation, but these may have been modern shovel hole disturbances. Minor discolorations were observed throughout the central part of the excavation, but these appear to be the result of the natural process of organic leaching through the sandy soil and not cultural features.
The structural implications within the current excavations are summarized in Figure 5.16. Features 1, 2, and 4, form the end of a structure 3.4 meters wide which extends to the west with a general east-west orientation. An alignment of posts, extending to the southwest, is indicated by the large posts in the Auburn University excavations.

Figure 5.16 Structural features at Level Two (10-20cm), 1992-1993 excavation unit.
The spacing and alignment of the post in relation to the structure is puzzling. Their large size (to 30cm) and the tight spacing (75cm) do not conform to conventional building techniques found elsewhere in the colony. A double-row is also indicated. Replacement posts as part of a repair operation are often placed adjacent to rotted posts; however, the posts could be vertical supports for horizontal members of a structure. The unconventional nature of the posts suggests that they are not part of a standard building. Additionally, the large size of the posts suggest that they were not part of a small, incidental structure such as a fence.

The alignment of the posts with the corner of the conventional building does not appear to be random. If associated, the two structures may be part of the "pine-stake" stockade at 1MB61, possibly the end of a bastion, hence the unusual angle of the posts as related to the building. At Old Mobile, buildings formed part of the enclosure for the fort (Higginbotham 1977:Illustrations) and this may have been the case with the stockade at 1MB61.

Warehouses on Dauphin Island

One final question concerning site function at 1MB61 needs to be resolved: the possibility of warehouses at the stockaded fort site. The notion has persisted among archaeologists and historians, possibly growing out of the original misinterpretation by Curren, that the warehouses
were located with the stockaded walls in one of the four buildings indicated on the 1717-1720 map of the island. However, no mention of a warehousing function relative to the stockade can be found in historical documents. Stowe considered the possibility that his primary excavation on Lot 110 was in the vicinity of a warehouse.

The warehouse was one of the most important structures to the colony. It functioned to protect the supplies and items of trade from the elements and helped to control their distribution. Loss of the food, powder, trade material and other items stored in the warehouse might result in failure of the colony and possible death for most of the inhabitants. Therefore it is understandable why the construction and location of the warehouse was a high priority both at Dauphin Island and at Old Mobile. At Old Mobile, security and control were primary considerations. The king’s warehouse was located within the protection of the fort walls (Higginbotham 1977:Illustrations). Perhaps the assumption has been that this pattern was continued at Dauphin Island.

The English privateer’s raid on Dauphin Island in 1710 resulted in a complete ransacking of the island and loss of all goods in the warehouse. Presumably, the warehouse was burned at that time along with other buildings on the island. The stockade was built in 1711, shortly after this event. The possibility that the warehouse was relocated to
the safety of the stockade at this time seems a reasonable presumption. However, practical considerations, as well as historical documents, do not support this hypothesis.

At Dauphin Island, supplies from the holds of the ships in the harbor were off-loaded into small boats for transport to shore. In this precarious operation, small boats landed within the protection of the rowboat lagoon. Once safely landed on the beach, supplies were carried to the warehouse. Locating the warehouse in close proximity to the unloading point of the rowboats would have been advantageous.

Historic records address the location of the warehouse on Dauphin Island. On the transfer from Maurepas to Massacre, all goods were stored in tents on the shore near the site where the craftsmen and laborers were building the first warehouse of the king (Higginbotham 1977:38). The first warehouse at Massacre Island was constructed just north of the "rowboat lagoon" and just south of the large sand dunes in the village.

This warehouse on Massacre Island was over fifty feet long and approximately twenty-five feet wide. It stood twelve feet high. Two sheds were constructed at either end (Higginbotham 1977:38). Penicaut reports that barracks were also built in 1702 for the soldiers guarding the warehouses (McWilliams 1953:62-63). By July, the settlement at Massacre Island consisted of a few crudely
built cabins, and a small warehouse on the sandy shore to the north of the "rowboat" lagoon (Higginbotham 1977:161-177).

By the spring of 1706, five years after its construction, the warehouse at Massacre Island was in decay. The building was showing a decided lean and was nearly dilapidated (Higginbotham 1977:244,264). In February of 1707, Bienville reported that a large warehouse with shingles had been completed on Massacre Island (Rowland and Sanders 1932:37). By early 1708 only a few buildings were present on the island (Higginbotham 1977:441). The stockade had not yet been built. The second warehouse was constructed at Massacre Island about 1707-1708, presumably in the same location as the first, in the small village north of the rowboat lagoon.

After this time, the historic record is more vague concerning the construction of additional warehouses at Dauphin Island, another factor which may have led to conjecture. The historian, Giraud (1953:190) reports that the warehouse at Port Dauphin in 1711 was "laid out in a good position to receive arrivals from France" and Penicaut recalls that in 1712 a great deal of merchandise, food and supplies arrived and had to be stored in the warehouses at Old Mobile and at Dauphin Island (McWilliams 1953:143-144). The second warehouse would have been four to five years old at this time and presumably in decay.
In October of 1717, houses were purchased on Dauphin Island to increase the king's warehouses (Rowland and Sanders 1929:246). The map from 1717-1720 (Figure 5.4, pg. 96) clearly shows the warehouses belonging to the king by the rowboat lagoon in the village. A warehouse was still functioning in November of 1719 on Dauphin Island, as a new keeper was appointed (Rowland and Sanders 1932:278).

What sort of evidence would be required to support an interpretation of a warehouse function? Structural analysis of features might reveal a large building, however other large buildings with a different function were also present. Artifact patterns might provide a clue. It can not be assumed, however, that significant amounts of the goods stored in the warehouse would make their way into the archaeological record, as they would not have easily been lost or discarded. The activities associated with a warehouse function would be helpful in this determination. For instance, if goods were being unpacked for distribution, lead bale seals used to secure merchandise during shipment would be discarded. Barrel hoops from opened and discarded barrels is another possibility. No such evidence was found in the archaeological record for 1MB61.

Neither historic documents nor the archaeological evidence suggests a warehouse function at 1MB61. In fact, the 1717-1720 map indicates that warehouses (plural) of the Company of Crozat and the king still existed along the
northeast side of the rowboat lagoon. Therefore, unless additional evidence surfaces, the conclusion must be made that the warehouses at Dauphin Island throughout the period remained near the site of their original construction, north of the rowboat lagoon in the main village.
Chapter 6

TRADE: SURVIVAL AND THE ACCUMULATION OF PERSONAL WEALTH

The inhabitants of the French colony on Mobile Bay were forced to become self-sufficient due to the shortages of the first decade (1701-1711) which resulted from the infrequent arrival of support ships from France. They relied on France for items that were difficult to obtain locally such as wheat flour, salt meat, and wine (Giraud 1953:142). When these items were not regularly sent from France, a supply strategy developed that proved effective for many individuals. Indians provided the key to this strategy.

Indian alliances helped to maintain security for the colony, but food was the most pressing problem for its survival. Local Indians produced abundant corn and venison. They were willing to exchange these food resources, along with other items such as deer skins and furs, for European goods such as mirrors, combs, firearms, axes, knives and glass beads (Higginbotham 1968:33-39; Waselkov 1994B:3). The surplus food supplies, deer skins, and furs were the commodities that could be traded to European interests.

The French preferred wheat, beef, pork, and wine to corn and venison. In light of the lack of supply from France, trade with passing ships and with the Spanish at ports in Mexico and the Caribbean were the primary avenues for obtaining these goods (Waselkov 1994:3). Records
indicate that vessels anchored thirty-eight times at Massacre Island between 1701 and 1711 with goods for the colony. The ships were from Veracruz (11), Pensacola (8), Havana (7), France (5), Cap-francais on Saint-domique (4), and Martinique (3) (Waselkov 1994:3). Penicaut even reported the landing of an English ship at Port Dauphin in 1717 to take on water and wood (McWilliams 1953:205-206).

Deer skins, furs, surplus food, and resources exploited from the environs such as wood for planks and ships' masts provided the medium of exchange for the desired goods. In this process, profits from trade, both with Indians and other Europeans, provided the opportunity for the accumulation of personal wealth for those with access to this trade network.

During the first decade, the War of Spanish Succession (1702-1713) resulted in a political alliance between France and Spain that opened Spanish Colonial ports to French vessels. Regular trade, particularly between Dauphin Island and Pensacola, occurred during the period. The French supplied Pensacola with corn, vegetables, milk, planks, and pelts in exchange for specie (Giraud 1953:174, Higginbotham 1977:142). As a result of commerce, the inhabitants obtained specie which simplified trade among themselves and with others. Access to a portable currency provided a vehicle for accumulating personal wealth. A complex interactive system developed involving most members of the community at some phase: contact with Indians, care
for goods in the warehouses; transport of supplies between Dauphin Island and Mobile; individual and official trade with Pensacola; expeditions to Veracruz and other ports; contact with passing ships; and arrivals from France.

By 1710 however, Spanish ports were officially closed to the French (Giraud 1953:173). During the second decade Crozat established restrictive mercantile policies aimed at maintaining control over all trade. To preserve this monopoly on trade, Cadillac worked to stop private commerce with Pensacola and other ports, and to limit the sources of European goods entering the colony. By restricting individual access to trade, profit from all commerce could be retained by the Company of Crozat. The company had the power to set prices on the European goods they brought into the colony and to control prices on the raw material provided as payment for these goods. Profit for the Company was therefore assured on both incoming goods sold to the colony and outgoing materials sold to France. These policies were continued by the Company of the Indies.

The historical record is not clear as to the success of these policies in controlling trade during the second decade. When ships "accidentally" arrived at Port Dauphin, a technical infringement on the companies monopoly, the inhabitants were always eager to trade for contraband cargos of wheat flour and brandy (Giraud 1953:315).
The French and Spanish governments may have officially restricted commerce, however, Pensacola was only a day’s trip from the Dauphin Island. Trade between individuals at the two settlements certainly continued during the period. Spanish and French officials also ignored commercial restrictions set forth by their governments. Both Spanish and French officers profited from this arrangement (Holmes 1967:51).

Patterns of Trade Revealed in the Archaeological Record

The archaeological record does not reflect the circumstances by which an article is obtained, but it can in many cases determine its place of origin, and thereby infer colonial trade connections. Waselkov (1994:7-10) points to the pattern of diversity in the origin of European materials demonstrated by the archaeological record at the English colonial sites of Raleigh and Jamestown, the Dutch site at Fort Orange on St Eustatius, the Spanish sites at St. Augustine and Pensacola, as well as other French sites such as Fort Pentaguet and Fortress Louisbourg. Although trade was officially prohibited by government policy, commerce proceeded and even occurred between parties whose governments were outwardly hostile. The archaeological record thus demonstrates the porous nature of colonial boundaries (Waselkov 1994:10) and the ineffectiveness of official trade policy.
Current excavations at 1MB61 include a diverse range of European ceramics. French, Hispanic Colonial, Dutch, and German sources are represented (Table 6.1). No Chinese ceramics were recovered during the present excavations or by Stowe in 1973-1974.

Table 6.1 European ceramics from 1992-1993 excavations at 1MB61.

<table>
<thead>
<tr>
<th></th>
<th>Artifacts</th>
<th>n=Vessels</th>
<th>Vessels</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean %</td>
<td>(estimated)</td>
<td>mean %</td>
</tr>
<tr>
<td>French</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earthenware</td>
<td>48.2%</td>
<td>12</td>
<td>54.6%</td>
</tr>
<tr>
<td>Faience</td>
<td>9.8%</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td>Hispanic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olive Jars</td>
<td>32.6%</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td>Majolica</td>
<td>.7%</td>
<td>1</td>
<td>4.5%</td>
</tr>
<tr>
<td>Earthenware</td>
<td>2.5%</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td>Dutch</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Delft</td>
<td>2.3%</td>
<td>1</td>
<td>4.5%</td>
</tr>
<tr>
<td>German</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stoneware</td>
<td>3.9%</td>
<td>2</td>
<td>9.1%</td>
</tr>
<tr>
<td>Chinese</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Porcelain</td>
<td>-</td>
<td>0</td>
<td>-</td>
</tr>
</tbody>
</table>

Total 22 vessels

Coarse earthenwares at 1MB61 are represented by three classes: olive jars, greenware, and redware. Olive jars were the storage containers of the period. Forms typically were round upright jars with constricted mouths. Paste is coarse and most examples at 1MB61 exhibit green lead glaze applied on the inside of vessels. Cylindrical ridges resulting from manufacture encircle the vessels. At 1Mb61 a minimum of two vessels are represented (Figure 6.1, A). Based on the number of artifacts (143) of this type, more
Figure 6.1 Ceramics from 1992-1993 excavations at 1MB61; (A) Olive Jar, (B) Greenware, (C) Redware, (D) Stoneware, (E) Majolica, (F) Faience, (G) Dutch Delft.
vessels are probably present, as olive jars represent 32.6% of all European ceramics. Glaze color was the primary attribute used to identify vessels and only two distinct groups could be identified using this criteria. One intact rim sherd (Figure 6.2) was recovered. It is of the middle style which spanned a long period from 1580 to 1800 (Deagan 1987:30-35).

![Figure 6.2 Spanish olive jar rim, middle style, from 1MB61.](image)

At 1MB61, greenwares (Figure 6.1, B) represent a variety of utilitarian vessels including plates, platters, pitchers, jars and bowls (Potter 1991:143-169). Paste is considerably finer when compared to olive jars. Numerous glaze colors are present ranging from green to gray. In most cases, glaze is applied only to the inside of the vessels although it usually extends over the rim. Walls are typically thinner than olive jars and the finish is smooth. Numerous rim styles are present (Figure 6.3).
Based on rim style and glaze color, a minimum of 12 vessels is represented. Greenware represents 48.2% of the European ceramic artifacts recovered during current excavations.

Figure 6.3 Greenware rim styles at 1MB61.

At 1MB61, two redware vessels have been identified (Figure 6.1, C) on the basis of paste color, texture, and finish. Redware is similar to greenwares in its forms and appearance, however it generally occurs without glaze.

A minimum of two stoneware vessels are present at 1MB61 (Figure 6.1, D). Forms are typically bottles or mugs (Potter 1991:143-169). The specimens from 1MB61 have an orange glaze applied to the outside of the vessels over a fine, hard, gray paste.
Fine tin-glazed wares are also present at 1MB61. Vessel forms represented in these wares are plates, platters, bowls, cups, and jars. Vessels typically exhibit a hard white glaze decorated in colors of blue, green, and black. Glaze is present on all sides of the vessel. Paste tends to be soft, buff to orange in color (Potter 1991:143-169). One majolica vessel of Puebla polychrome is represented (Figure 6.1, E). Puebla polychrome dates from 1650 to 1725 and the green form found at 1MB61 is considered rare (Deagan 1987:81-82), although similar specimens have been recovered at Old Mobile (Potter 1991:158). French faience is also represented by at least two vessels (Figure 6.1, F). Both are probably cups, with white glaze and no decoration, although the second specimen has a tan interior. Dutch delft is also represented by one vessel (Figure 6.1, G), most likely a plate with blue on white decoration.

The origin of European ceramics at 1MB61 is diverse. Olive jars are of Spanish origin (Deagan 1987:30-31). Greenware vessels were manufactured in the Saintonge Region of France. Redwares may be attributed to French as well as Spanish origins (Potter 1991:143-152, Waselkov 1994:6). Tin glaze wares are from Hispanic Colonial, French, and Dutch origins. Stonewares are of German manufacture, but may have been imported through English or Dutch sources, because Germans were not directly exporting goods during the first three-quarters of the eighteenth century (Noel
Hume 1972:283). Moreover, stoneware may have also been channeled through French merchants (Waselkov 1994:6).

Waselkov (1994:11) considered the dominance of European ceramics of French origin (90%) in the artifacts recovered by Stowe as compared to Old Mobile (less than 40%) as demonstrating the reduction in intercolonial trade during the second decade at 1MB61. However data from current excavations at 1MB61 indicate that European ceramics of French origin are 58% of the assemblage.

At Old Mobile, the quantity of European ceramics recovered is greater; however, the differences in diversity are marginal. The difference in quantity may be the result of the area excavated, as well as differences in the functions of the components, or the socio-economic status of the people who occupied them.

Waselkov (1994:10) has suggested that the disparity of silver coins recovered at 1MB61 as compared with Old Mobile (46) also reflects the abrupt decline in access to Spanish ports experienced by the French colony in the second decade. While coins may have been more scarce during the second decade as a result of the reduction in contact, other factors may also contribute to this difference. For example, the function of 1MB61 or the socio-economic status of the inhabitants may be relevant factors.

At Structure 1, Old Mobile, 12 Spanish silver cobs were recovered. However only one silver French coin was
recovered at Structure 2 (Potter 1991:98-101). Certainly the variation in coin frequencies between Structure 1 and the contemporaneous Structure 2 at Old Mobile is not the result of official trade policy. It resulted from the particular economic and social situation of the individuals that occupied these structures or from the difference in the activities at each (i.e. function).

The socio-economic status of the soldiers that occupied 1MB61 and their ability to access the trade network are factors that must be considered in this analysis. The depressed economic status of the soldiers and/or their lack of access to profitable trade opportunities may be responsible for the disparity between Old Mobile and 1MB61.

The Socio-economic Status of Soldiers in the Colony

In a letter to Pontchartrain in October of 1713, Lamothe Cadillac describes the plight of the soldier in the colony (Rowland and Sanders 1929:168-169):

...the soldiers are poorly disciplined, and after all how can it be accomplished? They are reduced to the utmost wretchedness. In that condition can one perform one's service in an unhealthy country, without bread, without wine, without meat and without clothes? They are given at present the ration of flour but without meat. One cannot live on dry bread and do guard duty night and day, that is what wears these young men out and causes so much disease among them.
The distance of the garrison on Dauphin Island from Old Mobile made supplying meat difficult (Holmes 1967:48). Soldiers were always "on the verge of dying of hunger," on Dauphin Island, as sufficient game was not present on the island and Indians seldom went there (Giraud 1953:293-294).

During the latter years of the first decade, the infrequent arrival of ships from France resulted in a shortage of cash to pay the soldiers. Ships arriving in 1708 and 1711 did not bring the overdue pay. Bienville himself was not paid for seven years during that period (Giraud 1953:144).

As a result of bad food and lack of pay, desertion became so acute by the summer of 1716 that Bienville issued new orders to the troops camped on Dauphin Island in an attempt to deal with the problem. Huts were to be built in rows of four. The camp was to be enclosed with pickets at 100 paces from the huts. A guard house with two rooms was to be built, one room to house the officers and the other to serve as a prison. Leaving the enclosure without permission was to be punishable by death (Roland and Sanders 1929:214-217).

Attached to the communication of Duclos to Pontchartrain in October of 1713 is an extensive accounting of the costs for the salaries of the military personnel, as well as the supplies and other items necessary for their maintenance. In this document, Duclos details the salaries
of individuals from Bienville (150 livres per month) and officers (captains at 90 livres per month, ensigns at 40 livres per month) to common soldiers (16 livres, 10 sous per month); carpenters (50 livres per month); and midwives (400 livres per year). The list also details the cost of supplies from flour (10 livres per 100 pounds) to salt pork (15 livres per 100 pounds); gunflints (80 livres per 100 pounds); and powder (10 sous per pound). Building materials and other items are mentioned such as nails (18 livres per 100 pounds); padlocks (20 sous each); report paper (6 livres per ream) and Dutch pens (40 sous per 100). Items intended specifically for trade with the Indians are vermilion (6 livres per pound) and white beads (30 sous per pound) (Rowland and Sanders 1929:143-157).

The common soldier was at the low end of the economic scale of the colony. Even though soldiers received material support from the king's supplies, the costs were deducted from their pay and these materials were not always available for distribution. Funds in the amount of 7 livres, 10 sous per month were allotted for the common soldier's provisions and clothing. These funds were "retained on account." Soldiers even paid six livres per year for their barracks (Rowland and Sanders 1929:125, 146). Assuming these amounts were actually expended on each soldier, total pay including benefits amounted to 16 livres 10 sous per month; less than half the income of
ensigns or the average artisan. The common soldier's net pay was nine livres. Net pay for corporals was 13 livres, 10 sous per month and for sergeants 19 livres, 10 sous per month. Both were also poorly paid.

The activities of the common soldier were restricted as compared to the other colonists. Restrictions on movement were imposed to reduce desertion. Soldiers also had assigned duties, again reducing their ability to act in a manner that allowed them maximum opportunity for trade and thereby economic gain. Soldiers were the primary occupants of 1MB61, and, therefore, the site was inhabited by those persons with the lowest socio-economic status of any in the colony. Indeed, this lack of affluence at 1MB61 is generally verified in the archaeological record.

Other Implications of the Archaeological Record

Significant amounts of historic Indian pottery in both traditional and Colono forms is evident at both 1MB61 and at Old Mobile. The difficulty in obtaining European ceramics in the colony, from any source, is probably reflected in the high proportions of Indian pottery recovered at both sites (Waselkov 1994:11). At 1MB61, when European ceramics and historic Indian pottery are combined, Indian pottery comprises 73.1% of the assemblage.

Indian pottery functioned in a manner similar to European ceramics at 1MB61. Similar distribution patterns of Indian pottery and European ceramics support this
hypothesis. Individual colonists supplemented their inventory of ceramics with Indian pottery when European ceramics were not available (Mueller 1994:personal communication).

A small number of prestige vessels is present at 1MB61 represented by French faience, Spanish majolica, and Dutch delft. However the majority of European vessels (58%) are utilitarian coarse eathenwares.

At Old Mobile, many of the structures were occupied by French artisans, Canadians, officers, and others of higher rank than common soldiers. If, as proposed here, 1MB61 was occupied mostly by the common soldiers, the ceramic wares are a direct reflection of their affluence and economic status. Waselkov's conclusion (1994:13) in comparing the two site assemblages that "...the slightly later site of Port Dauphin (1MB61) indicates far less affluence" is correct based on the current evidence, but this pattern also supports the hypothesis that the site was occupied by common soldiers and cannot be compared to the Old Mobile data to test Waselkov's trade restriction hypothesis.

To thoroughly test the hypothesis concerning changes in trade over time, data from components similar in function and socio-economic status must be compared at Dauphin Island and Old Mobile. The village component at Port Dauphin north of the Rowboat Lagoon, would offer answers to this question. Stowe tested the village site
in 1993 and located at least three structures. A diverse European ceramic assemblage was revealed (Stowe 1994: personal communication; Stowe and Lumpkin 1993).

The porous nature of colonial boundaries is well-supported by the archaeological evidence at numerous sites, and particularly at Old Mobile. A number of colonists moved from Old Mobile to Massacre Island in the later part of the first decade. Access to trade opportunities must have been a primary factor in their decision to relocate. But did access to trade change significantly with the restrictive mercantile policies of the second decade?

The "free-wheeling" days of the early colony had certainly changed. But was Cadillac able to enforce the company's mercantile policy on a population that was experienced in trade, familiar with the environs of the colony, its inhabitants, and willing, as well as capable, of exploiting the system for personal gain? The diverse nature of artifacts in the archaeological record at 1MB61 indicates that he was not. While he may have been able to slow trade, he was ineffective at stopping it completely.

The diversity of non-French European ceramics at 1MB61 suggests continuity of trade. The lack of prestige goods and the high percentage of Indian pottery confirms the low socio-economic status (lack of wealth) of the soldiers that occupied 1MB61. Restricted access and reduced opportunities to trade may account for much of the
difference between 1MB61 and Old Mobile. Preliminary data from the village site (Stowe and Lumpkin 1993) also strongly suggests that official policy had little impact on the second decade.
Chapter 7

INDIAN AND FRENCH INTERPERSONAL RELATIONSHIPS: CULTURAL IMPLICATIONS

The French pursued a policy in their relations with the Indians that was unique among the three colonial powers. The Spanish gave the native populations a role as servants in a peasant class, a policy of dominance and oppression. The English, though they made some alliances with the Indians, pushed the native population off their lands. French policy made allies and trading partners, as well as slaves and servants, of the Indians, a strategy that was necessitated by the small French population in the Louisiana colony more than any other factor. Too few to dominate or push the Indians from their lands, and unable to subsist on their own, the French were forced to adopt this strategy to survive.

From the beginning, at the founding of Fort Maurepas, a main criteria for the location of the settlement was proximity to a friendly native population (Higginbotham 1968:17). The inhabitants were dispersed on several occasions to live with the Indians during difficult times when food was critically short (Hamilton 1976:84; McWilliams 1953:80; Rowland and Sanders 1929:75). An Indian village occupied the first site of Mobile and Indian support was considered essential to survival of the colony.

In contrast, Dauphin Island seems not to have had any permanent Indian inhabitants when first settled by the
French. The large proportion (20.8%) of historic Indian pottery recovered in current excavations at 1MB61 demonstrates the importance of these items in the lives of the soldiers that occupied the site. Subsistence and security for the French colony may have been the primary function of the relationship between the Indians and the French, however the French sought to use the Indians in two other ways. The first and most obvious was to provide commodities for trade that could be acquired cheaply and sold for a profit. The second was as "servants," or more correctly slaves. As cheap labor, commercial property, or diplomatic pawns, Indian slavery was sanctioned and manipulated by and for the benefit of the French.

Conflict between groups of Indians and the taking of slaves had been common prior to contact, but Europeans further complicated the problem. Whenever possible, the English attempted to influence the Indians to side with them against the French and the Spanish. French and English competition for the allegiance of the Indians continued throughout the period. Indians that sided with one or the other were likely to be attacked by neighboring tribes friendly to the opposite side. This system bred, as a natural consequence, hostilities and insecurity. Mobile depended upon friendly neighboring Indian villages for protection, as a warning system, and as allies in defensive and offensive operations (Hamilton 1976:106-117).
Bienville even resorted to devious means to gain Indian allies. D'Artaguette reported that Bienville enticed one tribe to attack another with gifts of guns and powder and rewarded them for the delivery to him of captives. These captives were then returned to their homes by Bienville as a sign of good will. In the process he gained a new Indian group's allegiance and trust (Rowland and Sanders 1929:126-127).

France could not offer the Indians as many economic advantages as could England. The distribution of presents became a tactic employed by the French to gain favor over the English (Giraud 1953:85-86). When Cadillac was recalled in the spring of 1717, the chiefs of twenty-four nations went to Dauphin Island to welcome his successor. Tribes sang and danced for three days each (McWilliams 1954:14) and the calumet-smoking ceremony lasted for two months (Hamilton 1976:98, 166). Presents were distributed to the chiefs during these ceremonies. The Council of Commerce, meeting on Dauphin Island in September of 1719, authorized a large amount of trade goods to be given to two chiefs of the Illinois and the Kaskaskiaiies. They had come to the island to meet with the council and to smoke the calumets of peace (Rowland and Sanders 1932:260-261).

**Indian Slaves**

The English traders that penetrated the region during the first part of the seventeenth century openly traded in
Indian slaves. Iberville had a policy of discouraging the established practice of slavery that had long existed among the tribes and had been widely accepted by the English. He instructed his officers to seize Indian slaves or even purchase them if necessary. They were to be returned to their homes. This policy was congruent with his strategy of making allies of the Indians. In this way, Iberville hoped to gain the good will of the families and nations of those repatriated (Higginbotham 1977:83). In truth, small numbers of Indians, as well as African slaves had been a part of the colony since its beginning. Sauvole reported that four Indian slaves were part of the colony in 1701 (Rowland and Sanders 1929:11). By 1708 Indian slaves comprised almost 25% of the population of the colony (Rowland and Sanders 1929:32).

**Indian "Servants" and Wives**

With the passing years after the death of Iberville in 1706, official attitudes toward Indian slaves were relaxed in the colony. In a communication to Pontchartrain in October of 1713, Lamothe Cadillac made the following comment (Rowland and Sanders 1929:167):

> According to the proverb 'Bad country, bad people' one can say that they are a heap of the dregs of Canada, jail-birds without subordination for religion and for government, addicted to vice principally with the Indian women whom they prefer to French women...
Cadillac also made the following observation in this same communication to Pontchartrain (Rowland and Sanders 1929:169):

The Canadians and the soldiers who are not married have female Indian slaves and insist that they cannot dispense with having them to do their washing and to do their cooking or to make their sagamity and keep their cabins.

The shortage of women in the population of the colony prompted single males to begin the practice of acquiring Indian women as domestic "servants" (slaves) in their homes. The officers of the garrison may be responsible for starting this practice, but it soon spread to the other inhabitants, particularly the Canadians (Giraud 1953:179). By 1707 the children of these unions between the French and the Indian "servants" were being baptized (Higginbotham 1977:301). In 1708 La Vente, the Catholic curate of Mobile, proposed an ordinance to prohibit the settlers from owning Indian slaves (Rowland and Sanders 1929:31), but it was ignored. By 1710, female "servants" were living within the households of numerous single male colonists, including common soldiers, a fact which received loud protest from La Vente (Higginbotham 1977:402). Several Indian slaves belonging to Frenchmen were christened on Dauphin Island in the summer of 1710 (Higginbotham 1977:412-413).

Although, La Vente disapproved of the presence of Indian women "servants" living in the houses with single
French men, as a practical matter he sanctioned the marriages between the two (Higginbotham 1977:403). The French view of Indian marriage was expressed by D'Artaguette in a letter to Pontchartrain in June of 1710 (Rowland and Sanders 1929:58).

In regard to the proposal that he (La Vente) may also make to marry Indian women to Frenchmen I shall not share the opinion at all, although there are two or three examples here which we see that has not caused any great change at all in these Indians but only that these Frenchmen would lead with these wives a life as nomadic as before...

La Vente, in 1714, proposed to the governing council a plan to populate the colony by permitting French and Indian marriage, however his personal attitudes are revealed in his suggestions (Rowland and Sanders 1929:218-219):

...marriages between Frenchmen and Catholic Indian women and to prefer those of the north who are the Arkansas, Tunicas, Chickasaws, Chacchoumas, Kaskaskias, Tamaroas, Illinois and all those of the Missouri because the women of these nations are whiter, more laborious, cleverer, neater in the household work and more docile than those of the south...

La Vente also reported that his superiors did not object to these marriages, however Cadillac and Duclos still expressed fear of:

...mingling by these marriages good blood with bad and of producing in the colony only children of a hard and idle character.

Duclos was against these marriages (Rowland and Sanders 1929:218) because "... the Indian women are accustomed to a loose life..." and "...their husbands have become almost Indians..." He further noted:
Besides the children that come from these marriages are extremely dark-skinned and by this means the colony would be populated with half-breeds who are by nature idle, loose and even more rouges such as those of the Spanish colonies.

Also in 1716, speaking about the soldiers on Dauphin Island (Rowland and Sanders 1929:211) Cadillac reported:

They (the clergy, La Vente) do not wish to apply to officers of the Council (military officers) because they are no better than the others who almost all except Sieur Blondel (an officer) and the newcomers (new recruits from France) have Indian women as slaves who are always with child and nursing.

By 1716, possession of Indian women slaves, with or without marriage, was a pervasive practice among the soldiers and officers at Dauphin Island, and therefore at 1MB61.

Cultural Implications of the Archaeological Record

At 1MB61, Indians were an integral part of the settlement. Many officers certainly had Indian women as their "servants," as did some common soldiers. In this context, pressure for cultural change or acculturation for French as well as Indians was present.

Acculturation reflects adaptations that incorporate features of another culture in a non-traditional manner. In the material culture of the archaeological record, acculturation appears as artifacts from outside a specific culture shown to serve a non-traditional function. Objects from outside a culture which are used in traditional cultural practices do not represent acculturation as they do not portray changes in behavior (Farnsworth 1992:25).
"Pottery is a vehicle for the expression of cultural patterning" (David and Henning 1977:1, in Mueller 1991:131). Acculturation may be seen in the Indian made pottery recovered at 1MB61 and at Old Mobile.

Colono-Indian pottery has been recovered at 1MB61. These artifacts were produced by Indian women using traditional pottery technology within their individual cultural traditions, however, they incorporate features not typical of their culture. These traits may include foot ring bases, large loop handles, and exterior red or brown filming (Mueller 1991:124). These are European traits. Two examples of Colono-Indian pottery with these traits were recovered during excavations in 1992-1993 (Figure 7.1).

![Figure 7.1 Colono-Indian sherds from 1MB61.](image)

One (Figure 7.1, A) has a foot ring base and may be part of a cup or pitcher. The other (Figure 7.1, B) has an atypical flat base that may be a fragment of a plate.
Indian forms such as cups, pitchers and plates may also be represented in the Colono-Indian vessels that have been recovered at Old Mobile (Mueller 1991:124). At Fusihatche, a Creek Indian village site near Fort Toulouse, numerous Colono-Indian vessels have been recovered (Cottier 1994:personal communication). The non-traditional forms demonstrate that acculturation was taking place within the Indian population at Old Mobile (1702-1711), at 1MB61 (1711-1722), and even within the Indian village of Fusihatche (after 1717).

The French were using traditional Indian vessels such as cazuelas that adequately substituted for traditional French forms; cazuelas replaced bowls. At Structure 2, Old Mobile, the traditional Indian brimmed bowls apparently provided an acceptable substitute for European brimmed plates (Mueller 1991:124).

A few hard, thin walled, atypical sherds of Indian pottery have been recovered by the current excavations at 1MB61 and by Stowe (n.d.:233). These examples have red and brown filming not characteristic of this region. All these traits combine to imitate hard paste, thin walled, color glazed, European ceramics (Muller 1991:124). They, therefore, may be considered Colono-Indian as well.

At Old Mobile, individual residential structures appear to be filling an inventory, or a "cupboard," of
required vessels (Mueller 1994: personal communication).

When European vessel forms were not available, traditional Indian vessels were substituted without modification where appropriate, or altered with handles and foot rings when necessary. Occasionally, as with cups, complete vessel forms not traditional to Indian pottery were created. Therefore, altered and new forms may be considered in this context as Colono-Indian as their production and function has been influenced by French cultural traditions.

Pre-historic and historic Indian pottery has been recovered at 1MB61 (Table 7.1). A significant number (67) of the sherds may be identified as McLeod Deptford Check Stamped or Wakulla Check Stamped. McLeod dates to the middle Woodland period and has a geographical center on the Tombigbee River in Clarke County north of Mobile. Wakulla is pottery grouped under the Weeden Island Period and dated to early Mississippian or late transitional Woodland. It has a geographical range from western Florida to Clarke County, Alabama (Wimberly 1960:126-135, 147-151).

<table>
<thead>
<tr>
<th></th>
<th>Pre-historic</th>
<th></th>
<th>Historic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n= mean%</td>
<td></td>
<td>n= mean%</td>
</tr>
<tr>
<td>Decorated</td>
<td>67 3.8</td>
<td></td>
<td>65 3.7</td>
</tr>
<tr>
<td>Undecorated</td>
<td>-</td>
<td></td>
<td>1625 92.5</td>
</tr>
</tbody>
</table>
Therefore, 1MB61 has a pre-historic component, dating between 800 and 1100, not related to the historical French period.

Numerous historic period pottery traditions are represented at 1MB61 (Table 7.2). These types were classified using only the decorated sherds. A diverse group of ceramic traditions are present at 1MB61. These ceramic traditions belong to various Indian groups living within the region, although the horizon of the pottery traditions may extend over a larger area. Richard Fuller (1991:personal communication; in Mueller 1991:131) concludes that the assemblage from Old Mobile represents the slightly modified product of emigrants from the lower Mississippi Region, or the ware of local Indians such as the Mobilians or Tomehs. Speaking about the historic Indian pottery of Dauphin Island, Vernon Knight (1976:66) shares a similar conclusion. He considers the historic Indian pottery he recovered at the shell mound (1MB72) on Dauphin Island in 1975 to belong to the Caddoan and Natchez traditions of the lower Mississippi Valley.

The diversity of historic Indian pottery at 1MB61 recovered in current excavations represents the production of numerous potters, all producing wares within their local traditions. Numerous questions are raised by this finding. First, since no clay is present on the Dauphin Island, was this pottery produced on the island with imported clay?
Table 7.2 Ceramic traditions represented by Historic Indian pottery at 1MB61.

<table>
<thead>
<tr>
<th>Ceramic Tradition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Dauphin Incised</td>
</tr>
<tr>
<td>D'Olive Incised</td>
</tr>
<tr>
<td>Doctor's Lake Incised</td>
</tr>
<tr>
<td>Bell Plain var. Gillory</td>
</tr>
<tr>
<td>Bell Plain var. Gradline</td>
</tr>
<tr>
<td>Moundville Incised var. Douglas</td>
</tr>
<tr>
<td>Mound Place Incised var. Walton's Camp</td>
</tr>
<tr>
<td>Mississippian Plain var. Gillory</td>
</tr>
<tr>
<td>Mississippian Plain var. Massacre</td>
</tr>
</tbody>
</table>

Clay deposits are near the island on both the eastern and western shores of Mobile Bay. This pottery may have also reached Dauphin Island through another route, local trade. Mueller (1994B) found similar diversities in historic Indian pottery at the individual house sites at Old Mobile. This suggests that Indian pottery was being produced as part of a "household or workshop industry" for local trade among the inhabitants of the colony rather than being produced by each individual households. Despite the lack of affluence of the soldiers at 1MB61, local trade may be represented by the diversity of Indian pottery. More detailed comparisons between the Indian pottery from 1MB61 and Old Mobile may shed light on this question. The diversity of Indian pottery within local households has cultural ramifications.
Indian women were present at 1MB61 as wives and servants of the officers and soldiers. They were also present in significant numbers at Old Mobile. Indian women traditionally produced pottery for use within their households following specific cultural determinants that dictated form, style, and decoration. Acculturation among the Indian women in the colony is therefore demonstrated by their acceptance of other pottery types in much the same way that they adopted European ceramics within their households. The presence of Colono-Indian forms and the diversity of pottery types within one household suggests that the Indian women modified their cultural traditions when these conflicted with their French counterparts. Indeed, Indians made or accepted the vessel forms that were new to them and that not had been represented in their cultures. Although French men must have altered their cultural traditions as a result of their relationships with Indians, this is not apparent in the archaeological record at 1MB61.

Conclusions

In the opinion of French leaders in the colony such as Cadillac, D’Artaguette, and La Vente, French men and therefore French culture was threatened by their relationships with Indian women. However, their opinions primarily exhibit their prejudice in their beliefs and attitudes regarding Indians. Little evidence is present in
historical documents that Frenchmen actually became "nomadic" or heeded of the warnings of La Vente or any of their superiors regarding the character of their Indian companions or of their children. The archaeological record does not indicate that the French soldiers at Dauphin Island experienced any appreciable cultural change. They sought their traditional foods and used Indian pottery only when necessary, preferring a diversity of European ceramics when available. Indian ceramic technology and tradition was altered to produce Colono vessels as imitations of European counterparts. Many other aspects of the colony were also distinctly French or European: architecture (though creolized), town planning, dress, and attitude toward indigenous people and their lands.

On the other hand, Indian lives were severely impacted, particularly those of the slaves and "servants" that lived in the colony. They lived in French buildings and married French men. They bore children and saw them baptized in French religion. They prepared food to French preferences with European and Colono-Indian ceramics. Undoubtedly the Indians introduced some of their foodways and traditions within marriage and motherhood, but their influences are not readily apparent in the archaeological evidence at 1MB61. Indians in the context of the French colony experienced cultural change in a much more profound manner than did the French.
Chapter 8

SUMMARY AND CONCLUSIONS

The French colony in Louisiana owes its existence to the competition between France, Spain, and England for control of the region. France's interest in the Gulf territory began with the expedition of La Salle in 1682 when he claimed the entire Mississippi River Valley for Louis XIV. Though La Salle's effort to establish a colony failed in 1684, he succeeded in focusing the attention of France on the Gulf Coast. As a response to French plans, Spain sent a garrison to occupy Pensacola.

Iberville arrived in late January 1699 at Pensacola and found it occupied by the Spanish. Moving westward he failed, probably due to bad weather, to find the harbor at Dauphin Island. Further westward, just north of Ship Island, he built the first settlement, Fort Maurepas.

The colony depended upon food and supplies from France, crops grown by the inhabitants, and trade with Indians. Food seemed always critically short. During these early years Iberville made several trips to France to plead for support; however, he was disappointed by the lack of interest he encountered. During the period a number of Canadians arrived in the colony, and though unruly, their frontier experience was invaluable to the settlement. The early years were difficult for the colony, due to lack of knowledge about the geography of the region and the
Indian nations that lived within it. However, during Iberville's absence, his younger brother, Bienville, explored east and west of Fort Maurepas and became increasingly familiar with the territory.

In December of 1701, upon returning from his third trip to France, Iberville issued the order to move the colony to Mobile Bay. Work crews were dispatched to Dauphin Island to build a warehouse north of the roadstead. The main settlement, Mobile, was located north of the island (16 leagues, 39 miles) as this position offered an advantageous location from which to strengthen relations with the Indians of the interior.

On July 8, 1706 Iberville died. As leader of the colony, Iberville had been responsible for the gains of the early years. Now the task fell to Bienville.

At the beginning of the first decade of French occupation on Mobile Bay (1701-1711), Dauphin Island grew slowly. By 1704 only a few small cabins and several settlers occupied the island. However, toward the end of the first decade, a number of settlers moved to the island to be closer to the shipping lanes and to Pensacola. By the end of the decade, Dauphin Island appeared to be prospering.

In September of 1710 an English corsair from Jamaica ransacked the island, stealing everything of value and
burning most of the buildings. The English attack demonstrated the military weakness of the port.

During the first decade the colony had increased slowly in population from the original settlement in 1699 at Fort Maurepas, which numbered only about 80 men, to about 345 by 1708. Indeed, slow population growth hampered the colony during most of its existence on Mobile Bay. Shortages were also a continual problem. Supply ships arrived infrequently during the period. Mobile was relocated downriver in 1711 partially due to flooding of the original site and to be closer to Dauphin Island.

Louis XIV wished to exploit the region for profit, but he had not provided the financial support necessary for the colony’s growth. In a move to ease the financial burden on the crown, the first proprietary charter was granted to Antoine Crozat in 1712. Under the terms of the agreement, the king provided military support and Crozat had a monopoly on trade and could set prices on all goods. However, when Crozat realized that he could not profit from the arrangement, he requested to be replaced. In 1717 the Company of the Indies promoted by John Law was granted the charter. Law’s tenure in Louisiana was productive. He encouraged immigration and granted land concessions. Unfortunately for the colony on Mobile Bay, he saw the Mississippi River as key to the success of the settlement. Most of the settlers at Dauphin Island began to move to New
Biloxi near the original settlement of Fort Maurepas in 1717 after hurricanes blocked the harbor at Port Dauphin.

Dauphin Island was to see one last flurry of activity. The Spanish had always viewed the colony on Mobile Bay as a direct threat to their settlements in Mexico. Despite courteous relations during the first decade when both settlements depended upon one another for support, suspicions remained. Personnel and policy began to change in Pensacola and in Mexico by 1710, and by 1714 Spanish ports were officially closed to the French. War between Spain and France brought an influx of military to Dauphin Island in 1719. Hostilities continued until 1722. Though Dauphin Island was always occupied by a few settlers and a small military contingent, it served only as an observation post and little activity took place. In 1763 the territory was ceded to England, and the French period on Dauphin Island was at an end.

Dauphin Island occupies an unusual position in early eighteenth century French colonial efforts along the Gulf Coast. As port for the colony, it functioned as the receiving point for support ships and a contact point for trade. The first two decades of French Colonial occupation on Mobile Bay are critical to an understanding of the later periods in Louisiana.

This research has focused on the first two decades of the eighteenth century (1701-1722) when Mobile Bay was the
center of activity. Both historians and archaeologists have worked to understand the history and culture of the French in the region. Historians have concentrated on a wealth of historical documents and have produced a significant number of works (Giraud 1953, Hamilton 1910, Higginbotham 1977, Du Pratz 1774). However, archaeological work has been limited.

Dr. Gregory A. Waselkov of the University of South Alabama was the first archaeologist to devote significant time to a major research effort of the French Colonial period on Mobile Bay. His work at the original site of Mobile represents a major effort directed toward the archaeology of the early French period in the region.

The archaeological site (1MB61) located on the eastern end of Dauphin Island, was first reported by C.B. Curren in 1971. It is the only French Colonial site to have been identified in state files on Dauphin Island. N. Read Stowe, a professor at the University of South Alabama, is the only researcher to have conducted excavations on Dauphin Island focused on the French Colonial occupation. However, the chronology and function of 1MB61 have remained unclear.

Curren confused 1MB61 with the main village site. Stowe concluded that his excavations were in the vicinity of the fort, warehouse, and blacksmith shop; and Waselkov has suggested that 1MB61 may be an outlying domestic site of the settlement. Primary goals of this research included establishing the chronology for 1MB61 and identifying its
function. Understanding how the inhabitants of the site fit within the greater context of the colony and how they may have been affected by their interpersonal relationships, particularly with Indians, were other goals. A final aim was to demonstrate the importance of 1MB61 and other components on Dauphin Island toward understanding the development of early French culture in Louisiana.

Preliminary test excavations in March of 1992 revealed artifacts and features which were considered of value in addressing research questions. During these excavations numerous European and Indian artifacts were recovered and structural features were discovered. The excavation revealed the end of a French building as well as a large post hole.

In the fall of 1992 the author excavated an additional two-meter unit to test data-collection procedures. This excavation yielded additional artifacts and revealed a series of large post holes. During the spring of 1993, primary data collection excavations were conducted based upon the results of shovel testing.

Chronology

The chronology of 1MB61 is meaningful in understanding its historical context, its relationship to events within the colony at other components, especially Old Mobile (1702-1711) and Mobile (after 1711). During the first decade (1701-1711) the colony was dependent upon economic
support form France. During the second decade (1712-1722) under Crozat and the Company of the Indies, the colony was less dependent upon French support. Trade with Spain was relatively open during the first decade, but was officially closed by 1714. The population of the colony grew slowly during the first decade and improved during the second, particularly after 1717 with encouragement of immigration by the Company of the Indies. During the first decade few settlers or soldiers lived at Dauphin Island, however by 1708 Canadians began to move to the island, and by 1711 military activity increased. Soldiers experienced hardships throughout the period. Little effort was expended to defend Dauphin Island during the first decade, however a stockade was built about 1711. Mobile moved downriver in 1711, partly to be nearer Dauphin Island. The function of the island became more complex during the second decade as it made the transition from a simple port function to a trading hub, military stronghold, and government center.

Many materials recovered in the archaeological record are chronologically sensitive. Setting a specific date for 1MB61 is of limited value, however establishing a relative date for the site is necessary for it to be considered in historical context and to aid in a functional assessment. The closed context site of Old Mobile (1702-1711) is
valuable as a benchmark in this effort to establish relative dating for 1MB61.

Two specific artifact groups were chosen from the assemblage at 1MB61 for the chronological analysis: brick and imported tobacco pipes. Numerous brick fragments were recovered during excavations. Bricks from Dauphin Island and other French Colonial sites differ, mostly with respect to thickness. Thickness increased over time. Although other interesting questions were raised by the analysis of bricks from 1MB61, the chronological indication from the analysis is that 1MB61 dates later than Old Mobile.

Tobacco pipes are perhaps more sensitive chronological indicators than bricks. Several attributes were analyzed such as bowl shape and size, angle between bowl and stem, finish and decoration of stems, maker's marks, and stem bore diameter. Only two nearly intact pipe bowls were recovered from the site, one funnel shape probably of Dutch manufacture and one with a shape more similar to English examples. The angle between the bowl and the stem indicates that the Dutch pipe was probably manufactured prior to 1710, while the English example was probably manufactured after 1710.

At 1MB61 several decorated bowl rim fragments were recovered, a trait that became more common by the mid-seventeenth century. Decoration of bowl rims and pipe stems increased over time, as did the increased use of
makers marks. In all instances the analysis of these traits suggest that 1MB61 dates later than Old Mobile.

At Old Mobile all bowl bases show the presence of spurs, whereas at 1MB61 four of the eleven did not. Spurs found at the base of bowls were gradually omitted over time. Again, on the basis of the presence/absence of spurs, 1MB61 dates after Old Mobile.

The analysis of maker's marks also suggests the later date for 1MB61. Several "RT" marked bowl fragments were recovered at 1MB61, however none were found at Old Mobile. These were produced by the Robert Tippet family from England between 1660 and 1755. The style of the mark at 1MB61 indicates that it was used around the middle of the production period, or about 1710.

Stem lengths increased over time as wires used to bore the center holes decreased in diameter. J. C. Harrington realized that the evolution of bore diameter could be a useful dating tool. He produced a chart that generalized dates based on tobacco pipe bore diameters for sites of known date. Lewis Binford produced a straight line regression based on Harrington's data.

Harrington also determined that Dutch pipe stem bore diameters tend to be smaller than English examples. At 1MB61, a significant proportion of pipes appear to be of Dutch manufacture. At Old Mobile the percentage appears to be less. However, stem dating will be skewed to a later
date in direct proportion to the amount of Dutch stems in either assemblage.

The Binford dating formula results in a date for 1MB61 of 1734.59 and a date for Old Mobile of 1721.57. The later calculated date suggests that a significant proportion of pipes of Dutch manufacture are present at both sites. By adjusting both dates for the known median occupation date for Old Mobile (1706.5), a date of 1719.52 is obtained for 1MB61.

The conclusion of the chronological analysis of 1MB61 is that the site dates after Old Mobile. It was occupied during the second decade of the French period on Dauphin Island (1712-1722) after which it was abandoned. 1MB61 is therefore placed in this historical context, and must be considered accordingly.

Site Function

Site function relies on the analysis of historical documents and archaeological data. Historical records and maps may suggest site function that can be tested with archaeological data.

The analysis of chronology places the primary period of activity at 1MB61 during the second decade of the eighteenth century. Historical maps are valuable as graphic representations of an area at a specific time. While the earliest map of Dauphin Island (1712) is mostly diagrammatic, maps after 1717 are more specific. A 1717
map of the island provides a planimetric, detailed view that reveals the disposition of buildings and other features. A stockade (fort) is shown in the vicinity of 1MB61. The 1718 map of Dauphin Island is possibly the most valuable produced during the period as it depicts geographical features similar to modern maps. Various features such as buildings, roads, gun batteries, and the stockade are also indicated. However, the legend is missing from this map. Fortunately, a 1717-1720 map offers a detailed view of features on the island and is keyed to a specific legend. By combining information for these three maps, a map was produced which locates and identifies cultural features on Dauphin Island during 1717-1720.

Major geographical features were used to transpose the drawing to a current U.S.G.S. map of the island. The area of the stockade was enlarged and superimposed over a current subdivision map. The results confirm that the stockade and related structures were present at 1MB61 during 1717-1720.

Historical records also document the construction and disposition of fortifications on Dauphin Island. As early as 1704, Bienville realized the strategic value of the island and that a fort was needed for its defense. However, funds and other priorities within the colony prevented its construction.
Gun batteries on the sand dunes were the only fortifications on the island during the first decade. The military contingent was small or non-existent at times. The Jamaican attack in 1710 again focused attention on the need to strengthen fortifications on Dauphin Island. The first stockade was built around 1711 of pine or cedar posts. It had four bastions and no parapet with an enclosure of approximately 100 feet square containing four rectangular buildings.

The stockade soon began to rot as all wooden structures in the colony were prone to do. A permanent brick or stone fort was considered, but cost and logistics prevented the project from being fulfilled. The original stockade was replaced by another of similar construction at the same location in about 1717.

The analysis of specific artifacts recovered at 1MB61 such as cannon balls and military equipment suggest a military site function. However, pattern recognition is key to understanding the activities that took place on the site.

Bricks are the most prevalent artifact recovered at 1MB61. A large number of nails and spikes are also present. Historic Indian pottery comprises a significant proportion of the assemblage, although European ceramics and glass are scarce. Significant quantities of imported tobacco pipes indicate that the activity was widespread at the site.
Lead shot, musket balls, and gun flints were found. Buttons and glass trade beads are also represented.

Generalized observations concerning artifact frequencies at 1MB61 provide some useful information regarding site function, however they become more meaningful when compared with other sites or components so that the pattern between groups can be evaluated within a larger context. Artifacts result from specific activities and, therefore, may be grouped into activity groups for the purpose of analysis.

Stanley South (1977) has developed this procedure to analyze British Colonial sites. He has identified a Carolina Pattern and a Frontier Pattern. The Frontier Pattern bears some similarity to artifact patterns at 1MB61, more so than the Carolina Pattern. This is particularly evident in the Kitchen and Architectural groups.

South used cluster analysis to derive patterns between artifact activity groups and found that ceramic ratios are higher for domestic sites than for military sites. 1MB61 conforms more closely to the military and Frontier Pattern than to the domestic or Carolina Pattern.

Analysis of structural features revealed by excavations at 1MB61 indicates the end of a typical post-on-sill building adjoined by a line of large posts at an oblique angle at the southeast corner. This association of posts and wall features suggests an unconventional
structure, possibly part of the stockade. Buildings were used at Old Mobile to form portions of the outside wall of the stockade enclosure. The structural features at 1MB61 may therefore be the end of a bastion, abutted at the southeast corner by a portion of the stockade wall. Additional excavations on Lot 110 are required to clarify this interpretation.

No evidence exists that the site ever contained the warehouse(s). To the contrary, historic maps suggest that the warehouses remained near their original site in the village north of the rowboat lagoon. No evidence was found in historic records or archaeological data that 1MB61 ever had a domestic function other than that of the soldiers that lived on the site or that any private settler ever had a residence on the site. The conclusion of the functional analysis at 1MB61 is that the site served a military function and contained a stockade and related buildings. 

Other Implications Concerning the Soldiers at 1MB61

During their first decade (1701-1711) on Mobile Bay the inhabitants of the French colony were forced to become self-sufficient due to the lack of support from France. While food was the most pressing problem for the survival of the colony, the accumulation of personal wealth was the ambition of the individual colonist. Trade provided the answer to both of these ends. Indian alliances helped to maintain security for the colony and provided through trade
deer skins, furs, and surplus food. The colonists also harvested timber for planks and produced beef, chickens, eggs, and vegetables. These goods, attained through trade with Indians and from the local environs, were the surplus commodities traded or sold to the Spanish and passing ships at Dauphin Island or at ports in the Caribbean or in Mexico. In the process, scarce European goods were obtained as well as Spanish specie. This portable currency provided the means for individual accumulation of wealth.

Political and economic conditions changed from the openness of the first decade to more restrictive policies during the second. The War of Spanish Succession (1702-1713) had opened Spanish Colonial ports, however by 1714 this trade was officially closed. Also, beginning in 1712 economic conditions changed in the colony when Antoine Crozat was granted a monopoly on all trade within the colony. The historical record is not clear as to the success of his policies in controlling trade during the period.

The archaeological record can, in many cases, determine origin for an article, and thereby imply trade. The diversity of origin for artifacts found in numerous English, Dutch, Spanish, as well as French colonial contexts demonstrates the ineffectiveness of official trade barriers. At LMB61, ceramics of Spanish, Hispanic Colonial, Dutch, German, and French origins are represented. The
diversity of this assemblage suggests that the trade restrictions of the second decade were ineffective.

Even though the European ceramic assemblage at 1MB61 is diverse, the quantity of these artifacts is small. Significant amounts of historic Indian pottery are evident at 1MB61. Indian pottery functioned to replace scarce European ceramics for food preparation, serving, and storage. The scarcity of expensive European ceramics and the small number of silver coins recovered at 1MB61 reflect the lack of affluence of the soldiers that occupied the site. Low socio-economic status and restricted mobility limited the individual soldier from participating in the trade network available to other colonists.

Soldiers were poorly paid, less than one-third the average artisan in the colony. Money and supplies often did not arrive from France for years, resulting in no pay or support for the soldiers. In 1713 Lamothe Cadillac described them as a pitiful group dressed in rags.

And yet, despite their status, soldiers maintained relationships with Indians as slaves, servants, and wives. Many of these Indians were brought to the colony as slaves from other regions of the Mississippi Valley. The taking of slaves was common among the Indians, and English traders encouraged the practice. Indian slaves were present in the
French colony from the early days at Fort Maurepas. With the passing years, attitudes toward Indian slaves changed. By 1708, many officers and other single male inhabitants of the colony had Indian women "servants" and by 1716 the practice had spread to almost all the soldiers and officers on Dauphin Island. Although La Vente, the curate at Mobile, disapproved of the presence of these Indian women living with single French men, he sanctioned marriage between them. However, his personal attitudes about these women are revealed in his suggestions that Frenchmen should marry "whiter" Indians of "good blood" as they were "... more laborious, cleverer, neater..."

Pressure for cultural change was certainly present in these relationships. Acculturation is reflected in the adaptations that are incorporated into another culture in a non-traditional manner. Pottery reflects cultural patterns in the decisions of its makers. Colono-Indian pottery recovered at 1MB61 was produced by Indian women using their traditional pottery technology, however they incorporated features and produced vessel forms not typical of their culture. Historic Indian pottery recovered at 1MB61 was used to supplement scarce European ceramics. Numerous Indian cultures are represented from throughout the region by the pottery types present. These may have been exchanged through regional trade. Cultural change by the Indian women living in these French households is
demonstrated by their use and acceptance of Indian pottery from outside their cultural traditions. They also accepted European ceramics as well as Colono-Indian wares.

Historical evidence suggests that officials such as D'Artaguette and Cadillac saw Indian women as influencing the lives of French men. However, the archaeological record at 1MB61 does not indicate that the French soldiers experienced any appreciable cultural change. On the other hand, Indian cultural traditions were severely challenged. They lived in French buildings, saw their children baptized in French religion, prepared food in European vessels, used Colono-Indian substitutes that they had themselves produced, and raised their children within the French culture of the colony. Certainly, French culture altered as a result of these relationships, but these changes are well-hidden within the stronger and more pervasive attitudes used to maintain French cultural tradition in the early colony in Louisiana.

The Future of the Cultural Resource

1MB61, the stockade, is only one of the components on Dauphin Island that deserves further research. The village site remains mostly intact, although the eastern end was damaged slightly by a condominium development in the 1960s. Other components, such as the concessions of Arnaud and Graveline are within residential areas, however some lots still lie undeveloped. Other unidentified components are
indicated on historic maps. 1Mb61 is within a residential area. All of these sites will be severely impacted within the next few years by development.

Stowe and Lumpkin (1993) tested the most significant French Colonial site on Dauphin Island in the summer of 1993, the village. Numerous shovel tests revealed a diverse and significant number of European artifacts from the French period at three sites (Figure 8.1). The cultural layer in these areas is approximately 36 inches deep (Stowe and Lumpkin 1993:11). The sites are in low areas between the numerous small sand dunes that cover much of the site. Shovel testing on the dunes did not yield artifacts, however shifting sands that filled the rowboat lagoon have deposited at least three to four meters of sand on most of the village site. Only deep testing could be expected to reveal the cultural level of the original village in these areas.

The threat to the village site is imminent. A condominium project, De Soto Landing (Figure 8.1), is in its first phase of development. An access road has been built over the primary dune line and all beach front lots have been sold. Road and utility construction has started.
Figure 8.1 De Soto Landing condominium Master Plan with location of archaeological sites identified by Stowe and Lumpkin, 1993.

When the 1718 map is superimposed over the development (Figure 8.2) the true extent of the loss may be visualized. If the next phase of development north of the access road proceeds, only one small portion of the village will remain
Figure 8.2 Village drawing from the 1718 map superimposed over the De Soto Landing condominium development.

in the northeast corner (Stowe site #2). Ironically, "De Soto's" path of destruction may continue at the French village of Port Dauphin. All is not lost, but time is critical. The fate of the village site, and all archaeological sites of the French Colonial period on Dauphin Island, will be decided within this decade.
Conclusion

This research has focused on the archaeological site at Dauphin Island 1MB61. Questions regarding chronology and function have been clarified. The site had a military function. It was occupied primarily during the second decade of the French Colonial period on Mobile Bay. A small stockade was built in 1711, and replaced on the site about 1717. Its occupants, for the most part were common soldiers and their families. As a group, they were at the lowest socio-economic position of any in the colony. This affected their access to trade and must have also influenced many other aspects of their lives. The Indian women that lived on 1MB61 were culturally impacted by their interpersonal relationships with French men, however little evidence exists that French culture was much affected. Most importantly, the value of preserving and studying this cultural resource has been demonstrated. In comparing data from 1MB61 and other sites, patterns in the archaeological record will reveal the activities of the daily lives of the people who survived and evolved to shape French Louisiana.
BIBLIOGRAPHY

Alexander, L.T.

Brain, Jeffrey P.

Brasseauz, Carl A.

Cottier, John D.
1992 Personal communication. Auburn University, Auburn, Alabama.

1994 Personal communication. Auburn University, Auburn, Alabama.

Curren, C. B.

Curruth, Amy

Deagan, Kathleen

Door, F.H.W. Friederich

Drovin, Pierre
1990 *Les Pipes a fumer de Place-Royale Mario Sauard*. Gouvernement du Quebec.

193
Duco, Don
1981 The Clay Tobacco Pipe in Seventeenth-Century 
Netherlands. In The Archaeology of the Clay Tobacco 
Pipe, V. Europe 2, part ii. Edited by Peter Daver. 
BAR International Series.

Escoffier, Francis, and Jay Higginbotham
1974 A Voyage to Dauphin Island in 1720: The Journal of 
Beret de la Clue. Museum of the City of Mobile, 
Mobile, Alabama.

Farnsworth, Paul
1992 Missions, Indians, and Cultural Continuity. 
Historical Archaeology. 26(1):22-36.

Friederich, A. W. N.
1975 Pijpelogie Vorm, Versiering en Datering van de 
Hollandse Kleipijp. A. W. N. Monographe No. 2. 
Archaeologische Werkgemeenschap voor Nederland, 
Voorburg.

Fuller, Richard S., and Noel R. Stowe
1984 A Proposed Typology for Late Shell Tempered Ceramics 
in Mobile Bay/Mobile--Tensaw Delta Region. 
Archaeology in Southwest Alabama. edited by C.B. 
Curren, Jr. pp.45-93. Alabama--Tombigbee Regional 
Commission, Camden, Alabama.

Giraud, Marcel
XIV, 1698-1715. Louisiana State University Press, 
Baton Rouge, Louisiana.

1987 A History of Louisiana. Vol. 5. The Company of the 
Indies, 1723-1731. Louisiana State University Press, 
Baton Rouge, Louisiana.

Goggin, John M.
1968 Spanish Majolica in the New World. Yale University 
Publications in Anthropology Number 72. Department 
of Anthropology, Yale University.

Gould, Elizabeth Barrett
1988 From Fort to Port: An Architectural History of 
Mobile, Alabama, 1711-1918. The University of 
Alabama Press, Tuscalossa, Alabama.

Grant, Ethan A.
1992 Fort Toulouse and the North American Southeast, 1700- 
1764. Gulf Coast Historical Review. 6-15.
Hamilton, Jennifer F.A., and Kevin Lunn

Hamilton, Peter J.

Harris, Donald A., and Jerry J. Nielsen

Higginbotham, Jay

1977 *Old Mobile: Fort Louis de la Louisiane, 1702-1711.* Published by Museum of the City of Mobile, Mobile, Alabama.

Hodder, Ian

Hoffman, Paul E.

Holmes, Jack D. L.


Kaijser, I.

Knight, Vernon J.
Larrabee, Edward Mc M.

Le Maire, M.

Le Page Du Pratz, Antoine S.
1774 The History of Louisiana. T. Becket, London.

MacLean, Alison

Maduell, Charles R. Jr.

McWilliams, Richebourg Gaillard


Mueller, Diane Silvia

1994 Personal communication. University of South Alabama, Mobile, Alabama.

Neitzel, Robert S.

Noel Hume, Ivor


Oswald, Adrian

Padgett, Thomas J.

Parker, James W.

Poesch, Jessis J.

Potter, Catherine

1994 Personal communication. University of South Alabama, Mobile, Alabama.

Raphael, Maurice
Rowland, Dunbar, and Albert Godfred Sanders, eds.  
1927-32 *Mississippi Provincial Archives, French Dominion.*  
Vols.1-3. Press of the Mississippi Department of Archives and History, Jackson, Mississippi.

Rowland, Dunbar, Albert G. Sanders, and Particia K. Galloway, eds.  
1984 *Mississippi Provincial Archives, French Dominion.*  
Vols. 4-5. Louisiana State University Press, Baton Rouge, Louisiana.

Schrire, Carmel, James Deetz, David Lubinsky, and Cedric Poggenpoel  
1990 *The Chronology of Oudepost 1, Cape, as Inferred from an analysis of Clay Pipes.*  
*Journal of Archaeological Science* 17(3). 269-300.

Sheldon, Craig T., Jr., and John W. Cottier  
1983 *Origins of Mobile: Archaeological Excavation at the Courthouse Site, Mobile, Alabama.*  
*Auburn University Archaeological Monograph* 5. Auburn University, Auburn, Alabama.

Smith, Steven D., Philip G. Rivet, Kathleen M. Byrd, and Nancy W. Hawkins.  
1983 *Louisiana’s Comprehensive Archaeological Plan.*  
Division of Archaeology. Baton Rouge, Louisiana.

South, Stanley  
1977 *Method and Theory in Historical Archaeology.*  

Stowe, Noel Read  

1993 *Stones and Bones.* Alabama Archaeological Society.  
35(11):5

1994 Personal communication. University of South Alabama, Mobile, Alabama.

Stowe, Noel Read and Rebecca N. Lumpkin  
Swanton, John R.

Taylor, Joe Gray
1963 *Negro Slavery in Louisiana.* The Louisiana Historical Association, Baton Rouge, Louisiana.

Walker, Iain C.

1977 *Clay Tobacco Pipes, with Particular Reference to the Bristol Industry.* *Parks Canada, History and Archaeology* Minister of Supply and Services, Canada.

Walthall, John A.


Walthall, John A., and Thomas E. Emerson, eds.
1984 *Calumet and Fleur-de-lys. Archaeology of Indian and French Contact in the Midcontinent.* Smithsonian Institution Press, Washington, D.C.

Waselkov, Gregory A.
1984 *Fort Toulouse Studies.* *Auburn University Monograph 9.* Auburn University at Montgomery, Alabama.


1994 Personal communication. University of South Alabama, Mobile, Alabama.


White, David M. 1965 *The "Mystery Fort" Site in Bon Secour, Alabama: Excavations 1964-65.* Unpublished manuscript on file at the University of South Alabama Archaeological Research Laboratory, Mobile, Alabama.

George W. Shorter, Jr. received his B.A. in Landscape Architecture in 1967. He is a principal in the firm of Crowe-Shorter Associates, Inc. in Mobile, Alabama.

In 1992, Shorter entered the M.A. program in anthropology at Louisiana State University and received his degree in the summer of 1995. He has received the William Haag award for the best paper presented by an M.A. student: Port Dauphin: Cradle of French Colonial Settlement in Louisiana presented at the 1994 meeting of The Society for Historical Archaeology, Vancouver, Canada. In 1994 he also received the Graduate Student Research Award presented by the Center for French and Francophone Studies at Louisiana State University for the study of French culture.

His field experience includes work in 1991 with Auburn University at Fusihatche, an historic Creek Indian village near Montgomery, Alabama. In the summer of 1992, he was graduate assistant in the Louisiana State University field school at Oakley Plantation near St. Francisville, Louisiana. He served in the summer of 1993 as graduate field director for Dr. Paul Farnsworth during the Louisiana State University field school at Promised Land plantation, New Providence, Bahamas. In the summer of 1994, he served as field assistant to Dr. John Cottier at Fusihatche during the Auburn University field school. Currently, he is working as a field archaeologist with the Center for
Archaeological Studies, University of South Alabama. The French warehouse site at Dog River is the current project for the center. His research interests are in colonial contact, particularly the French Colonial period on Mobile, Bay.
Candidate: George W. Shorter, Jr.

Major Field: Anthropology

Title of Thesis: The Archaeological Site of Port Dauphin (1MB61): Its Role in the French Colony on Mobile Bay

Approved:

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

Date of Examination:

1 November 1994